

**IN THE UNITED STATES DISTRICT COURT
FOR THE SOUTHERN DISTRICT OF NEW YORK**

CASSIOPEIA IP LLC,

Plaintiff,

v.

HITACHI AMERICA, LTD.

Defendant.

C.A. No. 1:19-CV-06029-JMF

TRIAL BY JURY DEMANDED

AMENDED COMPLAINT FOR INFRINGEMENT OF PATENT

COMES NOW, Cassiopeia IP LLC (“Cassiopeia” or Plaintiff), through the undersigned attorneys, and respectfully alleges, states, and prays as follows:

NATURE OF THE ACTION

1. This is an action for patent infringement under the Patent Laws of the United States, Title 35 United States Code (“U.S.C.”) to prevent and enjoin defendant Hitachi America, Ltd. (hereinafter “Defendant”), from infringing and profiting, in an illegal and unauthorized manner and without authorization and/or of the consent from Cassiopeia, from U.S. Patent No. 7,322,046 (the “’046 patent”, attached hereto as Exhibit “A”) pursuant to 35 U.S.C. §271, and to recover damages, attorney’s fees, and costs.

THE PARTIES

2. Plaintiff Cassiopeia is a Texas entity with its principal place of business at 6205 Coit Rd Ste 300-1017, Plano, Texas 75024.

3. Upon information and belief, Defendant is a corporation organized under the laws of New York, having a principal place of business at 50 Prospect Ave., Tarrytown, New York 10591. Upon information and belief, Defendant may be served with process at the same address.

JURISDICTION AND VENUE

4. The Court has subject matter jurisdiction over this action pursuant to 28 U.S.C. §§1331 and 1338(a) because the action arises under the Patent Laws of the United States, 35 U.S.C. §§ 1 et seq.

5. This Court has personal jurisdiction over Defendant by virtue of its systematic and continuous contacts with this jurisdiction, including residing in New York, as well as because of the injury to Cassiopeia, and the cause of action Cassiopeia has risen, as alleged herein.

6. Defendant is subject to this Court's specific and general personal jurisdiction pursuant to due process and/or the New York Long Arm Statute, *N.Y. Civ. Pract. L. R. 302*, due at least to its substantial business in this forum, including: (i) at least a portion of the infringements alleged herein; and (ii) regularly doing or soliciting business, engaging in other persistent courses of conduct, and/or deriving substantial revenue from goods and services provided to individuals in New York and in this judicial district.

7. Venue is proper in this judicial district pursuant to 28 U.S.C. § 1400(b) because Defendant resides in this District.

FACTUAL ALLEGATIONS

8. On January 22, 2008, the United States Patent and Trademark Office ("USPTO") duly and legally issued the '046 patent, entitled "Method and system for the secure use of a network service" after a full and fair examination. (Exhibit A).

9. Cassiopeia is presently the owner of the patent, having received all right, title and interest in and to the '046 patent from the previous assignee of record. Cassiopeia possesses all rights of recovery under the '046 patent, including the exclusive right to recover for past infringement.

10. The '046 patent contains two independent claims and five dependent claims. Defendant commercializes, inter alia, methods that perform all the steps recited in at least one claim of the '046 patent.

11. The invention claimed in the '046 patent comprises a method for secure use of a network service using a blackboard on which all usable services are entered.

12. The method allows a user to securely use services not previously listed on said blackboard.

13. The technology embodied by the '046 patent improved networks services at the time of the invention by providing a secure way to use network services that were not previously recognized on said network.

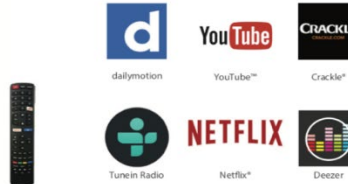
DEFENDANT'S PRODUCTS

14. Defendant offers products, such as the "HITACHI M55N6 and LE32M4S9" models, and the Roku-enabled "HITACHI 65R80" model. (the "Accused Instrumentalities"), that enable secure use of a network service (e.g., casting via DIAL onto various applications on the TV) using a blackboard (e.g., a software/hardware component that stores all available devices and applications you can cast to) on which all usable services (e.g., DIAL casting/streaming devices and applications) are entered, as recited in the preamble of claim 1 of the '046 patent and as shown on Defendant's website¹. For example, the Accused Instrumentalities support casting from a smartphone via DIAL. As shown below, the Accused Instrumentalities come preloaded with Netflix and YouTube applications which utilize DIAL for casting.

¹ http://www.hitachi-america.us/products/consumer/tv/docs/tvs/mx/alpha-smart-tv/M55N6_Specification.pdf, last visited July 29, 2019.
http://www.hitachi-america.us/products/consumer/tv/docs/tvs/4k-hdr-hitachi-roku-tv/65R80_Specification.pdf, last visited July 29, 2019.

M55N6
 Clase de 55" 138,78 cm diagonal / 55" Class 54.64" diagonal

HITACHI
 Inspire the Next



The Hitachi Alpha Smart TV Series combines a stunning HDTV viewing experience with an amazing range of entertainment applications. With Apps like Netflix, YouTube and Crackle you can choose to watch movies and TV episodes. The Facebook and Twitter Apps allow you to connect with your friends and family easily using the TV remote control. Watch HDTV with the ultimate in entertainment convenience and the brilliant picture quality you expect from Hitachi.

SPECIAL BUY



Hitachi Alpha 32" Class HD (720p) LED Smart TV (LE32M4S9)

★★★★ 48 reviews Hitachi Walmart # 555384525

\$199.76

Free delivery

Arrives by Friday, Aug 2

Or get it by Thu, Jul 25 with faster delivery

[More delivery & pickup options](#)

Add-on services (0 Selected) [Select Options](#)

Available Options: Walmart Protection Plan.

Featured APPs

- **Opera TV Browser:** Opera TV browser is a TV browser specially developed by Opera for smart TVs. After clicking the icon to enter the browser home page, you can input a URL to browse a web page. You can also add your favourite websites on the home page.
- **Netflix:** With Netflix, you can instantly stream thousands of your favourite TV shows and movies right to your TV set.
- **Facebook:** TV client of Facebook social networking application. After clicking the icon and entering the application, users can browser contents and communicate online via the TV.
- **YouTube:** The world's largest video sharing site. After you click the icon and enter the site, you can view a variety of videos.

HITACHI
Inspire the Next

HITACHI • Roku TV

65R80 65" Class (64.53" Diagonal)

4K HDR
HIGH DYNAMIC RANGE

Powerful Mobile App

Super simple remote

500,000+ Movies and TV episodes.

Thousands of Streaming Channels

Hitachi Roku TV Content Experience

Widest Selection - 500,000+ movies and TV shows
Thousands Streaming Channels and Apps*.
New channels added continuously
Search across top streaming channels
USB Media¹ Player: Photos, music & video
¹Supported files only, see owner's guide

Simple Home Screen
Cable, satellite, or over-the-air TV;
streaming channels, gaming console,
and other devices front-and-center.

Powerful Mobile Device Support

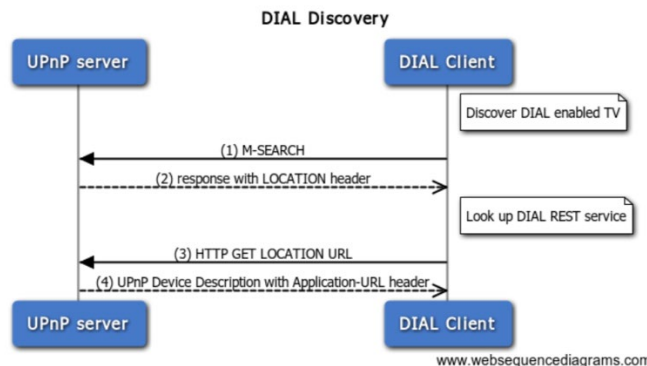
- Remote Control
- Voice Search
- Cast photos, videos & music
- Direct casting for Netflix and YouTube apps.

15. As recited in the first step of claim 1, the Accused Instrumentalities practice detecting a service (e.g., casting via DIAL) which has not yet been entered on the blackboard (e.g., the accused product's software component which comprises, among other things, the list of services). For example, a DIAL client (e.g. a smartphone) will send out an M-SEARCH to discover DIAL enabled TVs/servers. In response, the DIAL enabled TV will send a response with a location header that includes an HTTP URL that hold an UPnP description of the TV. The DIAL client

(e.g. a smartphone) will then send an HTTP GET message to the HTTP URL in the location header. If the HTTP GET is sent to the correct HTTP URL originally provided by the DIAL enabled TV, the TV will send the DIAL client (e.g. a smartphone) a DIAL REST SERVICE URL that identifies the services (e.g. applications that can be used such as Netflix or YouTube) a client can utilize. The applications will be represented as resources identified by URLs known as Application resource URLs. As such, the DIAL REST SERVICE will then be added to a list of available services that was previously not discovered².

5 DIAL Service Discovery

The DIAL Service Discovery protocol is based on SSDP (Simple Service Discovery Protocol) version 1.1 as defined in UPnP [1] and HTTP [2] and is illustrated in the following figure:



5.1 M-SEARCH request

A DIAL client that wishes to discover DIAL servers SHALL send an M-SEARCH request as defined in Section 1.3.2 of [1] over UDP to the IPv4 multicast address 239.255.255.250 and UDP port 1900 including the Search Target header (ST) with the following value defined by this specification:

```
urn:dial-multiscreen-org:service:dial:1
```

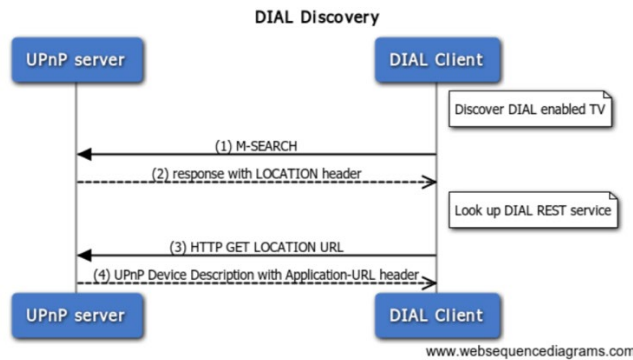
16. As recited in the second step of claim 1, the Accused Instrumentalities practices executing a first check to determine whether use of the service is allowed. For example, a DIAL client sends out an M-SEARCH that defines particular services that the client is looking for. A UPnP device will only respond to this request if they provide services that the client is searching

² <http://www.dial-multiscreen.org/dial-protocol-specification/DIAL-2ndScreenProtocol-1.7.1.pdf?attredirects=0&d=1>, last visited July 29, 2019.

for. This serves as a first check that ensures that the services provided by a DIAL server responding to the client can in fact be used by the client.

5 DIAL Service Discovery

The DIAL Service Discovery protocol is based on SSDP (Simple Service Discovery Protocol) version 1.1 as defined in UPnP [1] and HTTP [2] and is illustrated in the following figure:



5.1 M-SEARCH request

A DIAL client that wishes to discover DIAL servers SHALL send an M-SEARCH request as defined in Section 1.3.2 of [1] over UDP to the IPv4 multicast address 239.255.255.250 and UDP port 1900 including the Search Target header (ST) with the following value defined by this specification:

```
urn:dial-multiscreen-org:service:dial:1
```

17. As recited in the third step of claim 1, the Accused Instrumentalities practices entering the service in the blackboard only if it is determined that use of the service is allowed. For example, the system utilized by the Accused Instrumentalities will only enter the service (e.g. access to a DIAL server and its services) in the blackboard (e.g., a software/hardware component that stores all available devices and applications you can cast to) only if it is determined that the use of the service is allowed (e.g. the server/service responding to a client request matches the service defined in the request).

18. As recited in the fourth step of claim 1, the Accused Instrumentalities practice loading an interface driver (e.g., the Application Resource URL that identifies an application will be used by the client to send an HTTP GET request) related to the service on the blackboard (e.g. the client's receipt of a DIAL REST SERVICE URL that identifies the services that can be provided by a DIAL server/TV and which further contains Application Resource URLs). For

example, a DIAL client (e.g. a smartphone) will send out an M-SEARCH to discover DIAL enabled TVs/servers. In response, the DIAL enabled TV will send a response with a location header that includes an HTTP URL that holds an UPnP description of the TV. The DIAL client (e.g. a smartphone) will then send an HTTP GET message to the HTTP URL in the location header. If the HTTP GET is sent to the correct HTTP URL originally provided by the DIAL enabled TV, the TV will send the DIAL client (e.g. a smartphone) a DIAL REST SERVICE URL that identifies the services (e.g. applications that can be used such as Netflix or YouTube) a client can utilize. The applications will be represented as resources identified by URLs known as Application Resource URLs.

19. As recited in the fifth step of claim 1, the Accused Instrumentalities practice extending the loaded interface driver (e.g., the Application Resource URL that identifies an application will be used by the client to send an HTTP GET request) on the blackboard (e.g., a software/hardware component that stores all available devices and applications you can cast to) with at least one security function (e.g., a check to determine that an HTTP GET request is valid and that the Application Name included in the request is recognized) to form a secured interface driver (e.g., upon validation that an HTTP GET request is valid and that an Application Name is recognized, the system will allow the client to load the desired application on the DIAL server/TV). For example, the Accused Instrumentalities load an interface driver by providing a DIAL REST Service that contains Application Resource URLs. The DIAL REST Service and its contained Application Resource URLs are considered an interface driver because they allow for the DIAL client to interface with the DIAL server/TV. The interface driver, in this case the DIAL REST Service and its contained Application Resource URLs, are extended with a security function when the Application Resource URL is further combined with an HTTP GET request which is than

subject to a validation of the request itself and the Application Name it contains. If the validations are successful, the DIAL server will execute the desired application (e.g. Netflix or YouTube) and send a confirmation of the execution.

20. As recited in the sixth step of claim 1, the Accused Instrumentalities practice loading the secured interface driver (e.g. upon validation of an HTTP GET request and its contained Application Name, the DIAL server/TV will launch a desired application (e.g. Netflix or YouTube) that will then allow a DIAL client (e.g. a smartphone) to cast a program onto the application (e.g. the Netflix or YouTube application on a DIAL server/TV) using said client device) related to the service prior to the first use of the service. For example, the DIAL protocol outlines that an application, as it exists on a DIAL enabled TV, will be launched after the successful validation of an HTTP GET request and its contained Application Name. The TV version of the application must be launched before casting services can be used.

21. As recited in the seventh step of claim 1, the Accused Instrumentalities practice executing a second check by a second security function prior to the use of the service to determine if use of the service is allowed by a user (e.g. before the application can be used on the DIAL server/TV, the user must be logged into their account on the DIAL server/TV's version of the application as well).

22. The elements described in paragraphs 14-21 are covered by at least claim 1 of the '046 patent. Thus, Defendant's use of the Accused Instrumentalities is enabled by the method described in the '046 patent.

COUNT I
(DIRECT INFRINGEMENT OF THE '046 PATENT)

23. Plaintiff realleges and incorporates by reference the allegations set forth in paragraphs 1 to 22.

24. Defendant has, prior to launching the Accused Instrumentalities in the United States, performed internal testing with said Accused Instrumentalities.

25. In violation of 35 U.S.C. § 271, Defendant is now, and has been directly infringing the '046 patent.

26. Defendant has had knowledge of infringement of the '046 patent at least as of the service of the present complaint.

27. Defendant has directly infringed and continues to directly infringe at least claim 1 of the '046 patent by using, at least through internal testing, the Accused Instrumentalities without authority in the United States, and will continue to do so unless enjoined by this Court. As a direct and proximate result of Defendant's direct infringement of the '046 patent, Plaintiff has been and continues to be damaged.

28. By engaging in the conduct described herein, Defendant has injured Cassiopeia and is thus liable for infringement of the '046 patent, pursuant to 35 U.S.C. § 271.

29. Defendant has committed these acts of infringement without license or authorization.

30. As a result of Defendant's infringement of the '046 patent, Cassiopeia has suffered monetary damages and is entitled to a monetary judgment in an amount adequate to compensate for Defendant's past infringement, together with interests and costs.

31. Cassiopeia will continue to suffer damages in the future unless Defendant's infringing activities are enjoined by this Court. As such, Cassiopeia is entitled to compensation for any continuing and/or future infringement up until the date that Defendant is finally and permanently enjoined from further infringement.

COUNT II
(INDIRECT INFRINGEMENT OF THE '046 PATENT)

32. Plaintiff realleges and incorporates by reference the allegations set forth in paragraphs 1 to 31.

33. In violation of 35 U.S.C. § 271, Defendant is now, and has been indirectly infringing the '046 patent.

34. Defendant has had knowledge of infringement of the '046 patent at least as of the service of the present complaint.

35. Defendant has indirectly infringed and continues to indirectly infringe at least claim 1 of the '046 patent by actively inducing its respective customers, users, and/or licensees to directly infringe by using the Accused product. Defendant engaged or will have engaged in such inducement having knowledge of the '046 patent. Furthermore, Defendant knew or should have known that its action would induce direct infringement by others and intended that its actions would induce direct infringement by others. For example, Defendant sells, offers to sell and advertises the Accused Instrumentalities through websites or digital distribution platforms that are available in New York, specifically intending that its customers use it in an infringing manner. For example, at least through instruction manuals or customer support services related to the Accused Instrumentalities, Defendant instructs its customers to directly infringe the '046 patent specifically intending that its customers use the Accused Instrumentalities. Furthermore, Defendant's customers' use of the Accused Instrumentalities is facilitated by the invention described in the '046 patent. As a direct and proximate result of Defendant's indirect infringement by inducement of the '046 patent, Plaintiff has been and continues to be damaged.

36. By engaging in the conduct described herein, Defendant has injured Cassiopeia and is thus liable for infringement of the '046 patent, pursuant to 35 U.S.C. § 271.

37. Defendant has committed these acts of infringement without license or authorization.

38. As a result of Defendant's infringement of the '046 patent, Cassiopeia has suffered monetary damages and is entitled to a monetary judgment in an amount adequate to compensate for Defendant's past infringement, together with interests and costs. Cassiopeia will continue to suffer damages in the future unless Defendant's infringing activities are enjoined by this Court. As such, Cassiopeia is entitled to compensation for any continuing and/or future infringement up until the date that Defendant is finally and permanently enjoined from further infringement.

DEMAND FOR JURY TRIAL

39. Cassiopeia demands a trial by jury of any and all causes of action.

PRAYER FOR RELIEF

WHEREFORE, Cassiopeia prays for the following relief:

- a. That Defendant be adjudged to have directly infringed the Patents-In-Suit either literally or under the doctrine of equivalents;
- b. An accounting of all infringing sales including, but not limited to, those sales not presented at trial;
- c. That Defendant, its officers, directors, agents, servants, employees, attorneys, affiliates, divisions, branches, parents, and those persons in active concert or participation with any of them, be permanently restrained and enjoined from directly infringing the Patent-In-Suit;
- d. An award of damages pursuant to 35 U.S.C. §284 sufficient to compensate Cassiopeia for the Defendant's past infringement and any continuing or future infringement up until the date that Defendant is finally and permanently enjoined from further infringement, including compensatory damages;

e. An assessment of pre-judgment and post-judgment interest and costs against Defendant, together with an award of such interest and costs, in accordance with 35 U.S.C. §284;

f. That Defendant be directed to pay enhanced damages, including Cassiopeia's attorneys' fees incurred in connection with this lawsuit pursuant to 35 U.S.C. §285; and

g. That Cassiopeia have such other and further relief as this Court may deem just and proper.

Dated: August 2, 2019

Respectfully Submitted,

Law Office of Nicholas Loaknauth, P.C.
/s/Nicholas Loaknauth
Nicholas Loaknauth (#4908828)
nick@loaknauthlaw.com
1460 Broadway
New York, New York 10036
Telephone: (212) 641-0745

Eugenio J. Torres-Oyola
USDC No. 215505
Ferraiuoli LLC
221 Plaza, 5th Floor
221 Ponce de León Avenue
San Juan, PR 00917
Telephone: (787) 766-7000
Facsimile: (787) 766-7001
Email: etorres@ferraiuoli.com

Jean G. Vidal Font
USDC No. 227811
Ferraiuoli LLC
221 Plaza, 5th Floor
221 Ponce de León Avenue
San Juan, PR 00917
Telephone: (787) 766-7000
Facsimile: (787) 766-7001
Email: jvidal@ferraiuoli.com

ATTORNEYS FOR PLAINTIFF

CASSIOPEIA IP LLC