

Exhibit A-1

Invalidity Chart for U.S. Patent Application Pub. No. 2012/0016932 (“de Castro 932”) over U.S. Patent No. 9,210,254

U.S. Patent Application Pub. No. 2012/0016932 (“de Castro 932”) was published January 19, 2012. de Castro qualifies as prior art to U.S. Patent No. 9,210,254 (“the ’254 Patent”) at least under AIA 35 U.S.C. § 102(a)(1). de Castro 932 discloses and/or renders obvious one or more of claims 1, 2, 6, 7, 8, 12, 13 and 14 of the ’254 Patent alone and/or in combination with other references, as set forth in the chart below. To the extent de Castro 932 does not disclose one or more limitations of the claims, such limitations would have been inherent and/or it would have been obvious to combine the disclosures of de Castro 932 with the knowledge of one of ordinary skill in the art and/or with one or more other references, including as identified in Appendix A, to render the claims at-issue in the ’254 Patent invalid.

Defendant Cisco Systems Inc. (“Cisco”) incorporates in this chart all applicable qualifications, clarifications, and other statements made in Cisco’s Invalidity Contentions. This invalidity claim chart is based on Cisco’s present understanding of claims 1, 2, 6, 7, 8, 12, 13 and 14 and Plaintiff Zilkr Cloud Technologies, LLC’s (“Zilkr”) apparent construction of the claims, as set forth in Zilkr’s Infringement Contentions. These invalidity assertions are not an admission that Cisco concedes or acquiesces to any claim construction(s) implied or suggested by Zilkr the associated infringement claim charts. Nor is Cisco asserting any claim construction positions through these charts, including whether the preamble is a limitation. Cisco also does not concede or acquiesce that any asserted claim satisfies the requirements of 35 U.S.C. §§ 112 or 101, and submits these invalidity contentions only to the extent Zilkr’s assertions may be understood.

The excerpts cited herein are exemplary. For any claim limitation, Cisco may rely on excerpts cited for any other limitation and/or additional excerpts not set forth fully herein to the extent necessary to provide a more comprehensive explanation for a reference’s disclosure of a limitation. Where an excerpt refers to or discusses a figure or figure items, that figure and any additional descriptions of that figure should be understood to be incorporated by reference as if set forth fully herein. To the extent any cell lacks citations to the charted reference(s), this should not be taken as an admission that the reference(s) do(es) not disclose the corresponding limitation but rather indicates that Cisco does not presently have sufficient information regarding the charted reference(s) based on Cisco’s present understanding of the claim limitation.

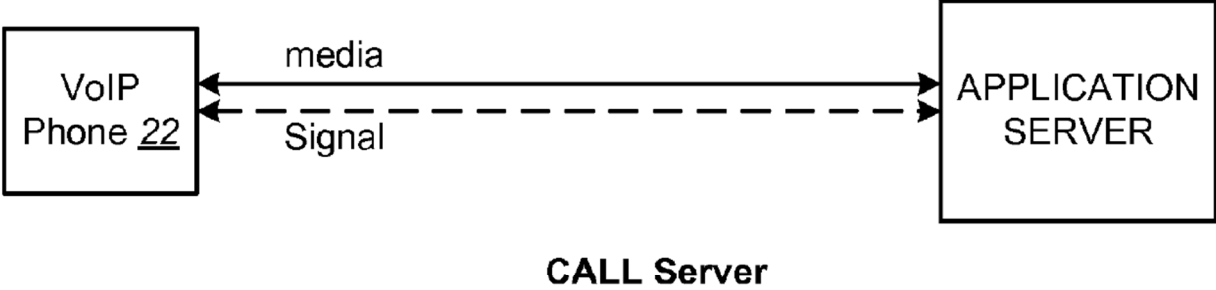
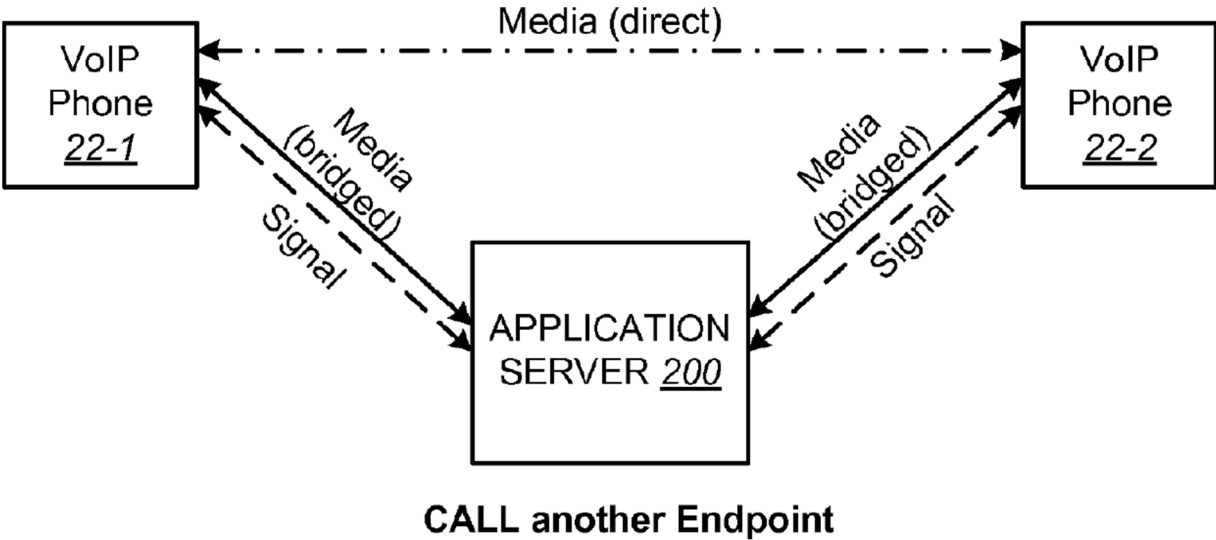
These invalidity contentions are not an admission by Cisco that the accused products or components, including any current or past version of the products or components, are covered by, or infringe the asserted claims, particularly when these claims are properly construed and applied.

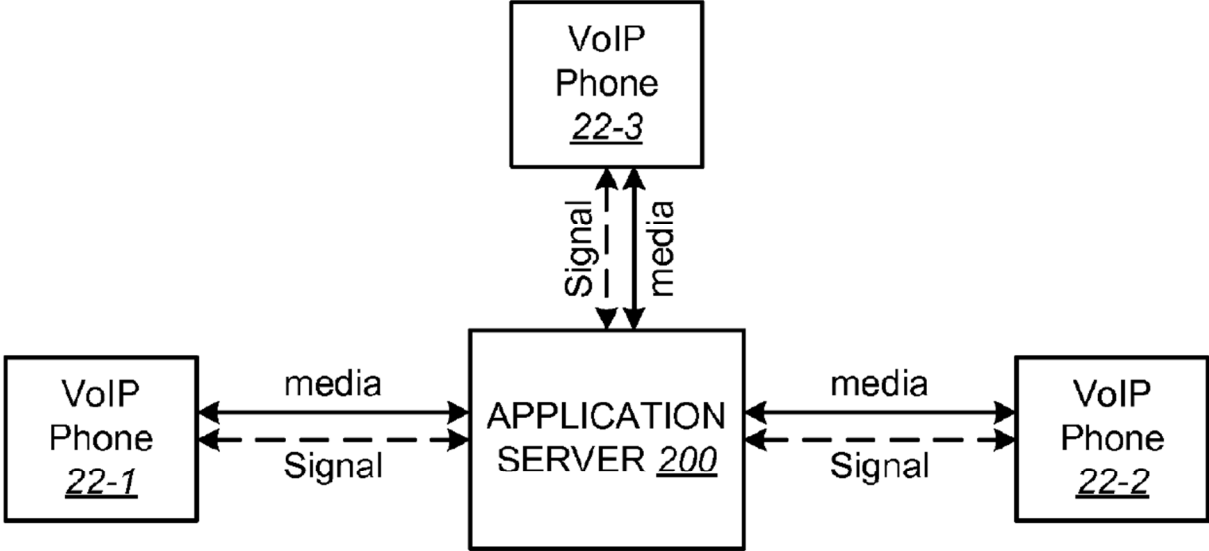
1. Claim 1.

Claim 1 of the '254 Patent	U.S. Patent Publication 2012/0016932 (“de Castro 932”)
1[p]. A telephone system comprising:	de Castro 932 discloses a telephone system comprising the following claim elements below. <i>See, e.g.,</i> de Castro 932 at [0002]: [0002] The present invention relates to telecommunication and a networked computer telephony system, and more particularly to a system and method for providing a telephony-enabled service via a message-based API interface. To the extent it is found that de Castro 932 does not expressly disclose this limitation, the limitation is inherent. And to the extent it is found that de Castro 932 does not anticipate this claim, de Castro 932 renders it obvious, standing alone, in combination with the knowledge of a person of ordinary skill in the art, and/or in combination with one or more other prior art references identified in the Cover Pleading or herein, for the reasons identified in the Cover Pleading. A person of ordinary skill in the art would have been motivated to combine de Castro 932 with any of the other prior art references identified in the Cover Pleading or herein with a reasonable expectation of success because each of these references contains familiar elements within the similar fields of endeavor to address similar known problems, according to known methods which would yield predictable results.
[a] a database; and	de Castro 932 discloses a database. <i>See, e.g.,</i> de Castro 932 at [0007]: [0007] This type of telephony platform allows very powerful yet simple telephony applications to be built and deployed on the Internet. The following are some examples of the telephony applications deployed on this platform. A “Follow me, find me” application sequentially calls a series of telephone numbers as specified by a user until one of the numbers answers and then connects the call. Otherwise, it does something else such as takes a message or sends e-mail or sends the call to a call center, etc. In another example, a Telephonic Polling application looks up from a database the telephone numbers of a population to be polled. It then calls the numbers in parallel, limited only by the maximum number of concurrent sessions supported, and plays a

Claim 1 of the '254 Patent	U.S. Patent Publication 2012/0016932 (“de Castro 932”)
	series of interactive voice prompts/messages in response to the called party's responses and records the result in a database, etc. In another example, a Help Desk application plays a series of interactive voice prompts/messages in response to the called party's responses and possibly connects the call to a live agent as one option, etc. In yet another example, a Stock or Bank Transactions application plays a series of interactive voice prompts/messages in response to the called party's responses and conducts appropriate transactions with a backend database or web application, etc. <i>See, e.g., de Castro 932 at [0010]:</i> [0010] FIG. 1 illustrates schematically a communication application environment. The communication application environment 10 includes one or more client interacting with a communication application server 200 in an application platform 100. The application platform 100 hosts an application specified by an application script 210 coded in object-oriented software. The communication application server 200 includes a browser 220 for interpreting and executing the application script 210. The execution of the application script invokes one or more server-side components 310 in the application server 200. Among the clients and the communication server, these components 310 provide services for call control, media control with one or more media server 230 and interactions with back-end systems 240 such as databases, and business logic and legacy systems such as CRM (Customer Relationship Management) and ERP (Enterprise Resource Planning). One example of the platform is to host an IVR application which interacts with voice, text messaging and other clients in a multi-channel environment. <i>See, e.g., de Castro 932 at [0019]:</i> [0019] In the traditional web paradigm, a user agent in the form of a client machine running a web browser makes a request to a web server. The web server returns a response to the request. The communication is taking place under the HTTP (Hypertext Transfer Protocol). Specifically, the web browser requests a web resource such as a web page as specified by an URL from a web server. Typically the web server responds by returning the requested web page. The web page may contain text content with embedded instructions for the browser to render the text in the web page. In more sophisticated applications, a web page is often generated dynamically by

Claim 1 of the '254 Patent	U.S. Patent Publication 2012/0016932 (“de Castro 932”)
	employing server-side programs and may incorporate content as queried results from backend databases. Thus, some of the content are not hard-coded on the web page but are generated and rendered dynamically by the web server. The server-side programs may also serve to post data from the client to the backend databases. <i>See, e.g.,</i> de Castro 932 at [0130]: [0130] FIG. 19 illustrates the main information maintained in the registry of the communication API gateway. The XMPP server 540 in the communication API gateway 500 mediates between the plurality of communication application servers 200 (each having an XMPP server 458) in the service domain 201 and the plurality of API clients 630 (each having an XMPP client not shown explicitly). The XMPP server 540 conducts federation by referencing the information in the registry 520, which registers the communication application servers 200 in the service domain and the customers' applications in the customer/developer domain 601. Also logged are the properties and status associated with each communication application server 200 and the properties and status associated with each API clients 630. To the extent it is found that de Castro 932 does not expressly disclose this limitation, the limitation is inherent. And to the extent it is found that de Castro 932 does not anticipate this claim, de Castro 932 renders it obvious, standing alone, in combination with the knowledge of a person of ordinary skill in the art, and/or in combination with one or more other prior art references identified in the Cover Pleading or herein, for the reasons identified in the Cover Pleading. A person of ordinary skill in the art would have been motivated to combine de Castro 932 with any of the other prior art references identified in the Cover Pleading or herein with a reasonable expectation of success because each of these references contains familiar elements within the similar fields of endeavor to address similar known problems, according to known methods which would yield predictable results.
[b] a server coupled to the database, wherein the server is utilized by a first provider to provide a first service to a first user, wherein the first service is	de Castro 932 discloses a server coupled to the database, wherein the server is utilized by a first provider to provide a first service to a first user, wherein the first service is telephone service, and wherein the telephone service is associated with a first telephone number. <i>See, e.g.,</i> de Castro 932 at fig. 2A, 2B:

Claim 1 of the '254 Patent	U.S. Patent Publication 2012/0016932 ("de Castro 932")
telephone service, and wherein the telephone service is associated with a first telephone number;	 FIG. 2A is a diagram of a CALL Server. It shows a box labeled "VoIP Phone <u>22</u>" on the left and a box labeled "APPLICATION SERVER" on the right. A solid double-headed arrow labeled "media" connects the two boxes. A dashed double-headed arrow labeled "Signal" also connects the two boxes.  FIG. 2B is a diagram of a CALL another Endpoint. It shows three boxes: "VoIP Phone <u>22-1</u>" on the left, "VoIP Phone <u>22-2</u>" on the right, and "APPLICATION SERVER <u>200</u>" in the center. A dashed double-headed arrow labeled "Media (direct)" connects VoIP Phone 22-1 and VoIP Phone 22-2. Solid double-headed arrows labeled "Media (bridged)" connect VoIP Phone 22-1 to APPLICATION SERVER 200 and VoIP Phone 22-2 to APPLICATION SERVER 200. Dashed double-headed arrows labeled "Signal" also connect VoIP Phone 22-1 to APPLICATION SERVER 200 and VoIP Phone 22-2 to APPLICATION SERVER 200.

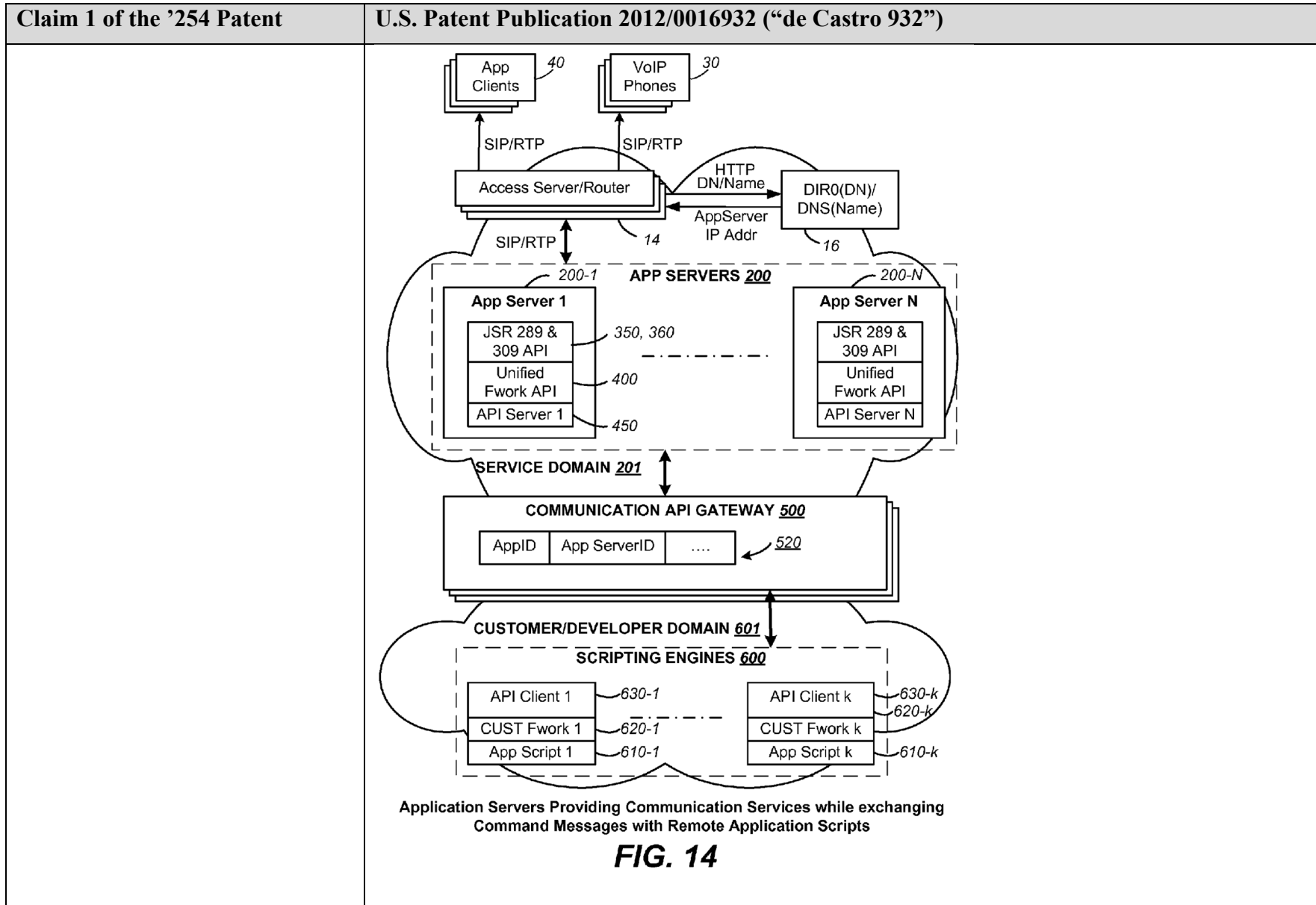
Claim 1 of the '254 Patent	U.S. Patent Publication 2012/0016932 (“de Castro 932”)
	<i>See, e.g., de Castro 932 at fig. 2C:</i>  CALL Conference FIG. 2C <i>See, e.g., de Castro 932 at [0003]:</i> [0003] Two major telecommunication networks have evolved worldwide. The first is a network of telephone systems in the form of the Public Switched Telephone System (PSTN). This network was initially designed to carry voice communication, but later also adapted to transport data. The second is a network of computer systems in the form of the Internet. The Internet has been designed to carry data but also increasingly being used to transport voice and multimedia information. Computers implementing telephony applications have been integrated into both of these telecommunication networks to provide enhanced communication services. For example on the PSTN, computer telephony integration has provided more functions and control to the POTS

Claim 1 of the '254 Patent	U.S. Patent Publication 2012/0016932 (“de Castro 932”)
	(Plain Old Telephone Services). On the Internet, computers are themselves terminal equipment for voice communication as well as serving as intelligent routers and controllers for a host of terminal equipment. <i>See, e.g., de Castro 932 at [0010]:</i> [0010] FIG. 1 illustrates schematically a communication application environment. The communication application environment 10 includes one or more client interacting with a communication application server 200 in an application platform 100. The application platform 100 hosts an application specified by an application script 210 coded in object-oriented software. The communication application server 200 includes a browser 220 for interpreting and executing the application script 210. The execution of the application script invokes one or more server-side components 310 in the application server 200. Among the clients and the communication server, these components 310 provide services for call control, media control with one or more media server 230 and interactions with back-end systems 240 such as databases, and business logic and legacy systems such as CRM (Customer Relationship Management) and ERP (Enterprise Resource Planning). One example of the platform is to host an IVR application which interacts with voice, text messaging and other clients in a multi-channel environment. <i>See, e.g., de Castro 932 at [0019]:</i> [0019] In the traditional web paradigm, a user agent in the form of a client machine running a web browser makes a request to a web server. The web server returns a response to the request. The communication is taking place under the HTTP (Hypertext Transfer Protocol). Specifically, the web browser requests a web resource such as a web page as specified by an URL from a web server. Typically the web server responds by returning the requested web page. The web page may contain text content with embedded instructions for the browser to render the text in the web page. In more sophisticated applications, a web page is often generated dynamically by employing server-side programs and may incorporate content as queried results from backend databases. Thus, some of the content are not hard-coded on the web page but are generated and rendered dynamically by the web server. The server-side programs may also serve to post data from the client to the backend databases.

Claim 1 of the '254 Patent	U.S. Patent Publication 2012/0016932 (“de Castro 932”)
	<i>See, e.g.,</i> de Castro 932 at [0130]: [0130] FIG. 19 illustrates the main information maintained in the registry of the communication API gateway. The XMPP server 540 in the communication API gateway 500 mediates between the plurality of communication application servers 200 (each having an XMPP server 458) in the service domain 201 and the plurality of API clients 630 (each having an XMPP client not shown explicitly). The XMPP server 540 conducts federation by referencing the information in the registry 520, which registers the communication application servers 200 in the service domain and the customers' applications in the customer/developer domain 601. Also logged are the properties and status associated with each communication application server 200 and the properties and status associated with each API clients 630. <i>See, e.g.,</i> de Castro 932 at [0014]-[0016]: [0014] FIG. 2A illustrates a client in the form of a VoIP phone calling the communication application server. For example, the communication application server 200 hosts an IVR and the VoIP phone 22 calls the IVR. Call signaling and media are exchanged between the VoIP phone 22 and the application server 200. [0015] FIG. 2B illustrates a first VoIP phone calling a second VoIP phone. As a third-party call controller, the application server 200 controls the call between the first and second phones. A call connection is established between the first phone 22-1 and the application server 200. Another call connection is established between the second phone 22-2 and the application server 200. The two calls are then joined at the application server to allow the first phone to talk to the second phone. In this scenario, media can be handled in one of two modes. In the bridged mode, media exchanged between the two phones are routed through the application server. In the direct mode, the media is exchanged directly between the two phones. [0016] FIG. 2C illustrates three phones in conference. In this scenario, each phone establishes a call to the application server. The three calls are then joined or mixed at the application server to provide a conference facility.

Claim 1 of the '254 Patent	U.S. Patent Publication 2012/0016932 (“de Castro 932”)
	<i>See, e.g.,</i> de Castro 932 at [0102]: [0102] FIG. 13 illustrates a typical implementation of deploying communication applications on an IP network such as the internet. A plurality of application platforms 100 is deployed on the network to provide communication services when hosting any number of communication applications defined by the application scripts 210. Clients such as VoIP phones 30, application clients 40 and other terminal equipment is able to access a specific communication application by calling a dialed number or an URL. The call is routed by an access server/router 14 into the IP network 10 to an application platform, such as application platform 1. The routing is performed by looking up a directory service DIR0 16 with the IP address/dialed number in order to return the address of an available application platform with the necessary resources to execute the specific communication application. Once application platform 1 is selected, the application server in the platform will retrieve the application script 210 for the specific application associated with the dialed number. This is accomplished by looking up another directory service DIR1 18 for a pointer to the URL of the application script. For example, the dialed number may be associated with application script 1 and it is retrieved into the application platform 1. <i>See, e.g.,</i> de Castro 932 at [0139]-[0141]: [0139] The Rayo protocol primarily deals with calls. Inbound calls originate from the PSTN or via SIP and are offered to Rayo clients via XMPP using a Jabber Identifier (JID). Each call is in turn represented by its own unique JID allowing a two way conversation between the Rayo client and the server that's handling the call signaling and media. JID Format [0140] The JID follows a specific format. In XMPP the JID is constructed as <node>@<domain>/<resource> For Rayo, the <node> portion of the JID always represents the call ID. The <resource>, when present, represents the affected command ID. Incoming Calls [0141]

Claim 1 of the '254 Patent	U.S. Patent Publication 2012/0016932 (“de Castro 932”)
	<pre> <!-- Message comes from the Call's JID --> <presence to='16577@app.Rayo.net/1' from='9f00061@call.Rayo.net/1'> <offer xmlns='urn:xmpp:Rayo:1' to='tel:+18003211212' from='tel:+13058881212'> <!-- Signaling (e.g. SIP) Headers --> <header name=' Via' value='192.168.0.1' /> <header name='Contact' value='192.168.0.1' /> </offer> </presence> </pre> To the extent it is found that de Castro 932 does not expressly disclose this limitation, the limitation is inherent. And to the extent it is found that de Castro 932 does not anticipate this claim, de Castro 932 renders it obvious, standing alone, in combination with the knowledge of a person of ordinary skill in the art, and/or in combination with one or more other prior art references identified in the Cover Pleading or herein, for the reasons identified in the Cover Pleading. A person of ordinary skill in the art would have been motivated to combine de Castro 932 with any of the other prior art references identified in the Cover Pleading or herein with a reasonable expectation of success because each of these references contains familiar elements within the similar fields of endeavor to address similar known problems, according to known methods which would yield predictable results.
[c] wherein the server is configured to: receive a request to provision a second service for the first user, wherein the second service is provided by a second provider, and wherein the second provider is different than the first provider;	de Castro 932 discloses wherein the server is configured to: receive a request to provision a second service for the first user, wherein the second service is provided by a second provider, and wherein the second provider is different than the first provider. <i>See, e.g.,</i> de Castro 932 at fig. 14:



Claim 1 of the '254 Patent	U.S. Patent Publication 2012/0016932 (“de Castro 932”)
	<i>See, e.g.,</i> de Castro 932 at [0006]- [0012]: [0006] An example platform for easy deployment of telephony applications is described in U.S. Pat. No. 6,922,411, which entire disclosure is incorporated herein by reference. Essentially, a networked telephony system allows users to deploy on the Internet computer telephony applications associated with designated telephone numbers. The telephony application is easily created by a user in XML (Extended Markup Language) with predefined telephony XML tags (e.g. VoiceXML) and easily deployed on a website. The telephony XML tags include those for call control and media manipulation. A call to anyone of these designated telephone numbers may originate from anyone of the networked telephone system such as the PSTN (Public Switched Telephone System), a wireless network, or the Internet. The call is received by an application gateway center (AGC) installed on the Internet. Analogous to a web browser, the AGC provides facility for retrieving the associated XML application from its website and processing the call accordingly. [0007] This type of telephony platform allows very powerful yet simple telephony applications to be built and deployed on the Internet. The following are some examples of the telephony applications deployed on this platform. A “Follow me, find me” application sequentially calls a series of telephone numbers as specified by a user until one of the numbers answers and then connects the call. Otherwise, it does something else such as takes a message or sends e-mail or sends the call to a call center, etc. In another example, a Telephonic Polling application looks up from a database the telephone numbers of a population to be polled. It then calls the numbers in parallel, limited only by the maximum number of concurrent sessions supported, and plays a series of interactive voice prompts/messages in response to the called party's responses and records the result in a database, etc. In another example, a Help Desk application plays a series of interactive voice prompts/messages in response to the called party's responses and possibly connects the call to a live agent as one option, etc. In yet another example, a Stock or Bank Transactions application plays a series of interactive voice prompts/messages in response to the called party's responses and conducts appropriate transactions with a backend database or web application, etc. [0008]

Claim 1 of the '254 Patent	U.S. Patent Publication 2012/0016932 (“de Castro 932”)
	The latter examples are generally referred to as self-help applications. In the voice context, a self-help application is referred to as IVR. IVR refers to Interactive Voice Response and is a technology that automates interaction with telephone callers. Enterprises are increasingly turning to IVR to reduce the cost of common sales, service, collections, inquiry and support calls to and from their company. [0009] IVR solutions enable users using voice as a medium or other form of inputs through a voice channel to retrieve information including bank balances, flight schedules, product details, order status, movie show times, and more from any telephone. Additionally, IVR solutions are increasingly used to place outbound calls to deliver or gather information for appointments, past due bills, and other time critical events and activities. [0010] FIG. 1 illustrates schematically a communication application environment. The communication application environment 10 includes one or more client interacting with a communication application server 200 in an application platform 100. The application platform 100 hosts an application specified by an application script 210 coded in object-oriented software. The communication application server 200 includes a browser 220 for interpreting and executing the application script 210. The execution of the application script invokes one or more server-side components 310 in the application server 200. Among the clients and the communication server, these components 310 provide services for call control, media control with one or more media server 230 and interactions with back-end systems 240 such as databases, and business logic and legacy systems such as CRM (Customer Relationship Management) and ERP (Enterprise Resource Planning). One example of the platform is to host an IVR application which interacts with voice, text messaging and other clients in a multi-channel environment. [0011] The communication application platform provides a third-party call control between any numbers of clients 20, 22, 30. The application script 210 defines the communication application 300 and directs how a call is to be handled. For example, when a user makes a call through a voice client such as a handset 20 or a VoIP phone 22 to the IVR, the voice application script 210 associated with the call number is retrieved. The browser 220 executes or renders the retrieved voice application script to allow the user to interact with the voice application 300. [0012]

Claim 1 of the '254 Patent	U.S. Patent Publication 2012/0016932 (“de Castro 932”)
	Communication of Multimedia information among endpoints and a third-party call controller generally require call control and media control. <i>See, e.g.,</i> de Castro 932 at [0114]- [0116]: [0114] FIG. 14 illustrates a network architecture suitable for practicing the present invention. Essentially, the network is considered as comprising a service domain 201 and a customer/developer domain 601. [0115] In the service domain 201 is a plurality of communication application servers 200, such as App Server 1 to App Server N. As in FIG. 13, the communication application servers 200 provide telephony and communication services to applications and allows application clients 40 such as, for example, VoIP phones to access the applications hosted in the communication application servers. [0116] Similar to that shown in FIG. 13, application clients such as VoIP phones 30, is able to access a specific communication application by calling a dialed number or an URL. The call is routed by an access server/router 14 into the IP network 10 to one of the communication application servers 200, such as App server 1. The routing is performed by looking up a directory service DIR0 16 with the IP address/dialed number in order to return the address of the communication application server executing the specific communication application. <i>See, e.g.,</i> de Castro 932 at [0039]: [0039] In a preferred embodiment, the communication application server is among a group of similar communication application servers on the network to provide telephony and communication services to a plurality of customers with application scripts hosted on scripting engines. One or more communication API gateway for the group of communication application servers is deployed on the network to serve as a messaging broker between the plurality of customers with application scripts and the group of communication application servers. <i>See, e.g.,</i> de Castro 932 at [0130]:

Claim 1 of the '254 Patent	U.S. Patent Publication 2012/0016932 (“de Castro 932”)
	[0130] FIG. 19 illustrates the main information maintained in the registry of the communication API gateway. The XMPP server 540 in the communication API gateway 500 mediates between the plurality of communication application servers 200 (each having an XMPP server 458) in the service domain 201 and the plurality of API clients 630 (each having an XMPP client not shown explicitly). The XMPP server 540 conducts federation by referencing the information in the registry 520, which registers the communication application servers 200 in the service domain and the customers' applications in the customer/developer domain 601. Also logged are the properties and status associated with each communication application server 200 and the properties and status associated with each API clients 630. To the extent it is found that de Castro 932 does not expressly disclose this limitation, the limitation is inherent. And to the extent it is found that de Castro 932 does not anticipate this claim, de Castro 932 renders it obvious, standing alone, in combination with the knowledge of a person of ordinary skill in the art, and/or in combination with one or more other prior art references identified in the Cover Pleading or herein, for the reasons identified in the Cover Pleading. A person of ordinary skill in the art would have been motivated to combine de Castro 932 with any of the other prior art references identified in the Cover Pleading or herein with a reasonable expectation of success because each of these references contains familiar elements within the similar fields of endeavor to address similar known problems, according to known methods which would yield predictable results.
[d] responsive to receiving the request: create a mapping from the first telephone number to a second identifier (ID), wherein the second ID is utilized by the second provider to identify the first user;	de Castro 932 discloses responsive to receiving the request: create a mapping from the first telephone number to a second identifier (ID), wherein the second ID is utilized by the second provider to identify the first user. <i>See, e.g.,</i> de Castro 932 at figure 13:

Claim 1 of the '254 Patent	U.S. Patent Publication 2012/0016932 ("de Castro 932")
	Application Platform having App Servers Providing Communication Services while Processing Application Scripts FIG. 13 <i>See, e.g., de Castro 932 at [0102]-[0104]:</i> [0102] FIG. 13 illustrates a typical implementation of deploying communication applications on an IP network such as the internet. A plurality of application platforms 100 is deployed on the network

Claim 1 of the '254 Patent	U.S. Patent Publication 2012/0016932 (“de Castro 932”)
	to provide communication services when hosting any number of communication applications defined by the application scripts 210. Clients such as VoIP phones 30, application clients 40 and other terminal equipment is able to access a specific communication application by calling a dialed number or an URL. The call is routed by an access server/router 14 into the IP network 10 to an application platform, such as application platform 1. The routing is performed by looking up a directory service DIR0 16 with the IP address/dialed number in order to return the address of an available application platform with the necessary resources to execute the specific communication application. Once application platform 1 is selected, the application server in the platform will retrieve the application script 210 for the specific application associated with the dialed number. This is accomplished by looking up another directory service DIR1 18 for a pointer to the URL of the application script. For example, the dialed number may be associated with application script 1 and it is retrieved into the application platform 1. [0103] Once the “dialed” application script 1 is retrieved into the application platform 1, the application server 200 (see also FIG. 1 and FIG. 4) will process the script. First a browser, compatible with the language the script, will interpret or compile the script into execution codes which will invoke the class objects and make function calls to the unified API. The execution is performed in a Java virtual machine supported by the application server 200. [0104] In this manner, communication applications such as voice-centers, IVR, voice-enabled self-help applications web bots can be deployed by such an application platform on the internet by leveraging web-like technologies and practices and employing standards-based protocol and languages. Variations of such communication platforms and network architecture of communication resources have been disclosed in U.S. Pat. No. 6,922,411, United States Patent Application Publication No. US 2011/0046960, and U.S. patent application Ser. No. 13/088,396 filed on Apr. 17, 2011, the entire disclosure of said publications and Applications are incorporated herein by reference. <i>See, e.g., de Castro 932 at [0116]:</i> [0116] Similar to that shown in FIG. 13, application clients such as VoIP phones 30, is able to access a specific communication application by calling a dialed number or an URL. The call is routed by

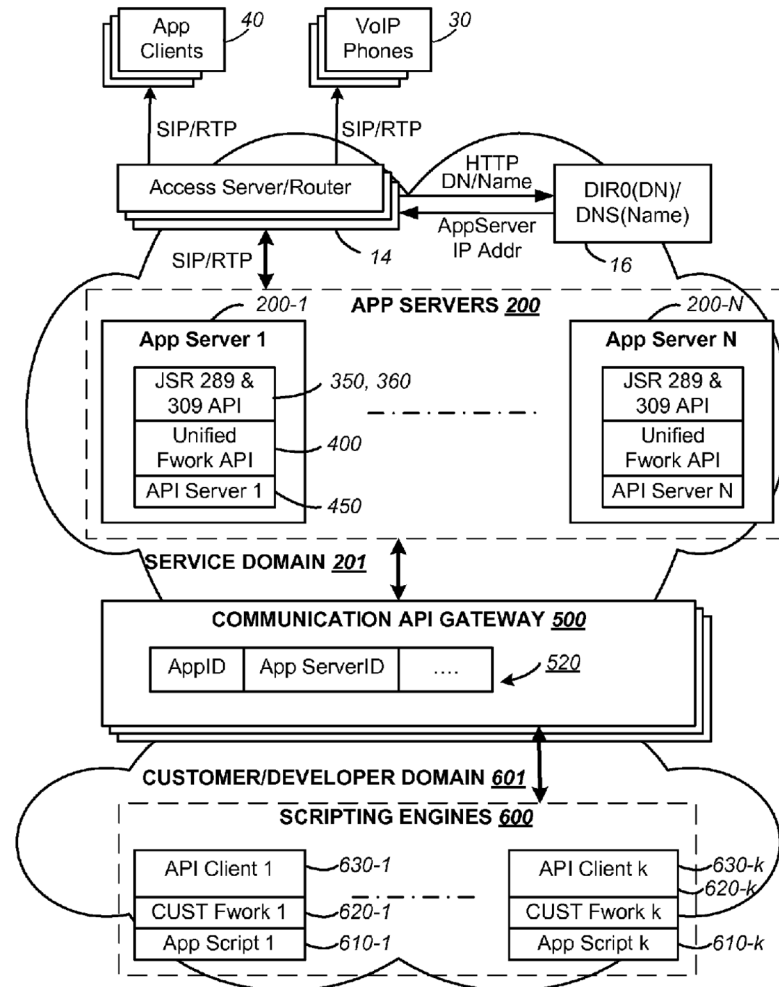
Claim 1 of the '254 Patent	U.S. Patent Publication 2012/0016932 (“de Castro 932”)
	an access server/router 14 into the IP network 10 to one of the communication application servers 200, such as App server 1. The routing is performed by looking up a directory service DIR0 16 with the IP address/dialed number in order to return the address of the communication application server executing the specific communication application. <i>See, e.g., de Castro 932 at [0124]-[0126]:</i> [0124] The call manager 260 manages the cooperation among the modules. When a call 1 is received into the communication application server 200, the call manager register the Call ID into a call ID registry 262 and start a call actor 1 270-1, and similarly for call 2, . . . , and call i. As command messages from the API clients 630 (see FIG. 14) are received by the application server 200, they are identified with a call actor and queued in an associated message queue 272, which are then applied to the call in order. As will be described in more detail later, the API server parses out the command in each message for execution in turn on the associate call actor. [0125] The admin module 280 includes sub modules such as a monitoring module 282, a statistics modules 284, a QoS (Quality of Service) modules 286 and Billing module 288. [0126] FIG. 16 illustrates in more detail the callID stored in the callID registry shown in FIG. 15. Essentially it includes a GUID (Globally Unique Identifier) and a server IP address. In this way, the call and the handling communication application server are readily identified. <i>See, e.g., de Castro 932 at [0139]-[0141]:</i> [0139] The Rayo protocol primarily deals with calls. Inbound calls originate from the PSTN or via SIP and are offered to Rayo clients via XMPP using a Jabber Identifier (JID). Each call is in turn represented by its own unique JID allowing a two way conversation between the Rayo client and the server that's handling the call signaling and media. JID Format [0140] The JID follows a specific format. In XMPP the JID is constructed as <node>@<domain>/<resource>

Zilkr v Cisco Systems, Inc.
Eastern District of Texas No. 2:22-cv-00166-JRG-RSP

Claim 1 of the '254 Patent	U.S. Patent Publication 2012/0016932 (“de Castro 932”)
	For Rayo, the <node> portion of the JID always represents the call ID. The <resource>, when present, represents the affected command ID. Incoming Calls [0141] <pre><!-- Message comes from the Call's JID --> <presence to='16577@app.Rayo.net/1' from='9f00061@call.Rayo.net/1'> <offer xmlns='urn:xmpp:Rayo:1' to='tel:+18003211212' from='tel:+13058881212'> <!-- Signaling (e.g. SIP) Headers --> <header name=' Via' value='192.168.0.1' /> <header name='Contact' value='192.168.0.1' /> </offer> </presence></pre> <i>See, e.g., de Castro 932 at fig. 14:</i>

Claim 1 of the '254 Patent

U.S. Patent Publication 2012/0016932 ("de Castro 932")



Application Servers Providing Communication Services while exchanging
 Command Messages with Remote Application Scripts

FIG. 14

Claim 1 of the '254 Patent	U.S. Patent Publication 2012/0016932 (“de Castro 932”)
	<i>See, e.g.,</i> de Castro 932 at [0006]- [0012]: [0006] An example platform for easy deployment of telephony applications is described in U.S. Pat. No. 6,922,411, which entire disclosure is incorporated herein by reference. Essentially, a networked telephony system allows users to deploy on the Internet computer telephony applications associated with designated telephone numbers. The telephony application is easily created by a user in XML (Extended Markup Language) with predefined telephony XML tags (e.g. VoiceXML) and easily deployed on a website. The telephony XML tags include those for call control and media manipulation. A call to anyone of these designated telephone numbers may originate from anyone of the networked telephone system such as the PSTN (Public Switched Telephone System), a wireless network, or the Internet. The call is received by an application gateway center (AGC) installed on the Internet. Analogous to a web browser, the AGC provides facility for retrieving the associated XML application from its website and processing the call accordingly. [0007] This type of telephony platform allows very powerful yet simple telephony applications to be built and deployed on the Internet. The following are some examples of the telephony applications deployed on this platform. A “Follow me, find me” application sequentially calls a series of telephone numbers as specified by a user until one of the numbers answers and then connects the call. Otherwise, it does something else such as takes a message or sends e-mail or sends the call to a call center, etc. In another example, a Telephonic Polling application looks up from a database the telephone numbers of a population to be polled. It then calls the numbers in parallel, limited only by the maximum number of concurrent sessions supported, and plays a series of interactive voice prompts/messages in response to the called party's responses and records the result in a database, etc. In another example, a Help Desk application plays a series of interactive voice prompts/messages in response to the called party's responses and possibly connects the call to a live agent as one option, etc. In yet another example, a Stock or Bank Transactions application plays a series of interactive voice prompts/messages in response to the called party's responses and conducts appropriate transactions with a backend database or web application, etc. [0008]

Claim 1 of the '254 Patent	U.S. Patent Publication 2012/0016932 (“de Castro 932”)
	The latter examples are generally referred to as self-help applications. In the voice context, a self-help application is referred to as IVR. IVR refers to Interactive Voice Response and is a technology that automates interaction with telephone callers. Enterprises are increasingly turning to IVR to reduce the cost of common sales, service, collections, inquiry and support calls to and from their company. [0009] IVR solutions enable users using voice as a medium or other form of inputs through a voice channel to retrieve information including bank balances, flight schedules, product details, order status, movie show times, and more from any telephone. Additionally, IVR solutions are increasingly used to place outbound calls to deliver or gather information for appointments, past due bills, and other time critical events and activities. [0010] FIG. 1 illustrates schematically a communication application environment. The communication application environment 10 includes one or more client interacting with a communication application server 200 in an application platform 100. The application platform 100 hosts an application specified by an application script 210 coded in object-oriented software. The communication application server 200 includes a browser 220 for interpreting and executing the application script 210. The execution of the application script invokes one or more server-side components 310 in the application server 200. Among the clients and the communication server, these components 310 provide services for call control, media control with one or more media server 230 and interactions with back-end systems 240 such as databases, and business logic and legacy systems such as CRM (Customer Relationship Management) and ERP (Enterprise Resource Planning). One example of the platform is to host an IVR application which interacts with voice, text messaging and other clients in a multi-channel environment. [0011] The communication application platform provides a third-party call control between any numbers of clients 20, 22, 30. The application script 210 defines the communication application 300 and directs how a call is to be handled. For example, when a user makes a call through a voice client such as a handset 20 or a VoIP phone 22 to the IVR, the voice application script 210 associated with the call number is retrieved. The browser 220 executes or renders the retrieved voice application script to allow the user to interact with the voice application 300. [0012]

Claim 1 of the '254 Patent	U.S. Patent Publication 2012/0016932 (“de Castro 932”)
	Communication of Multimedia information among endpoints and a third-party call controller generally require call control and media control. <i>See, e.g.,</i> de Castro 932 at [0114]- [0115]: [0114] FIG. 14 illustrates a network architecture suitable for practicing the present invention. Essentially, the network is considered as comprising a service domain 201 and a customer/developer domain 601. [0115] In the service domain 201 is a plurality of communication application servers 200, such as App Server 1 to App Server N. As in FIG. 13, the communication application servers 200 provide telephony and communication services to applications and allows application clients 40 such as, for example, VoIP phones to access the applications hosted in the communication application servers. <i>See, e.g.,</i> de Castro 932 at [0130]: [0130] FIG. 19 illustrates the main information maintained in the registry of the communication API gateway. The XMPP server 540 in the communication API gateway 500 mediates between the plurality of communication application servers 200 (each having an XMPP server 458) in the service domain 201 and the plurality of API clients 630 (each having an XMPP client not shown explicitly). The XMPP server 540 conducts federation by referencing the information in the registry 520, which registers the communication application servers 200 in the service domain and the customers' applications in the customer/developer domain 601. Also logged are the properties and status associated with each communication application server 200 and the properties and status associated with each API clients 630. To the extent it is found that de Castro 932 does not expressly disclose this limitation, the limitation is inherent. And to the extent it is found that de Castro 932 does not anticipate this claim, de Castro 932 renders it obvious, standing alone, in combination with the knowledge of a person of ordinary skill in the art, and/or in combination with one or more other prior art references identified in the Cover Pleading or herein, for the reasons identified in the Cover

Zilkr v Cisco Systems, Inc.
Eastern District of Texas No. 2:22-cv-00166-JRG-RSP

Claim 1 of the '254 Patent	U.S. Patent Publication 2012/0016932 (“de Castro 932”)
	Pleading. A person of ordinary skill in the art would have been motivated to combine de Castro 932 with any of the other prior art references identified in the Cover Pleading or herein with a reasonable expectation of success because each of these references contains familiar elements within the similar fields of endeavor to address similar known problems, according to known methods which would yield predictable results.
[e] activate the second service with the second provider utilizing the second ID as a user ID for the first user; and	de Castro 932 discloses activate the second service with the second provider utilizing the second ID as a user ID for the first user. <i>See, e.g.,</i> de Castro 932 at figure 13:

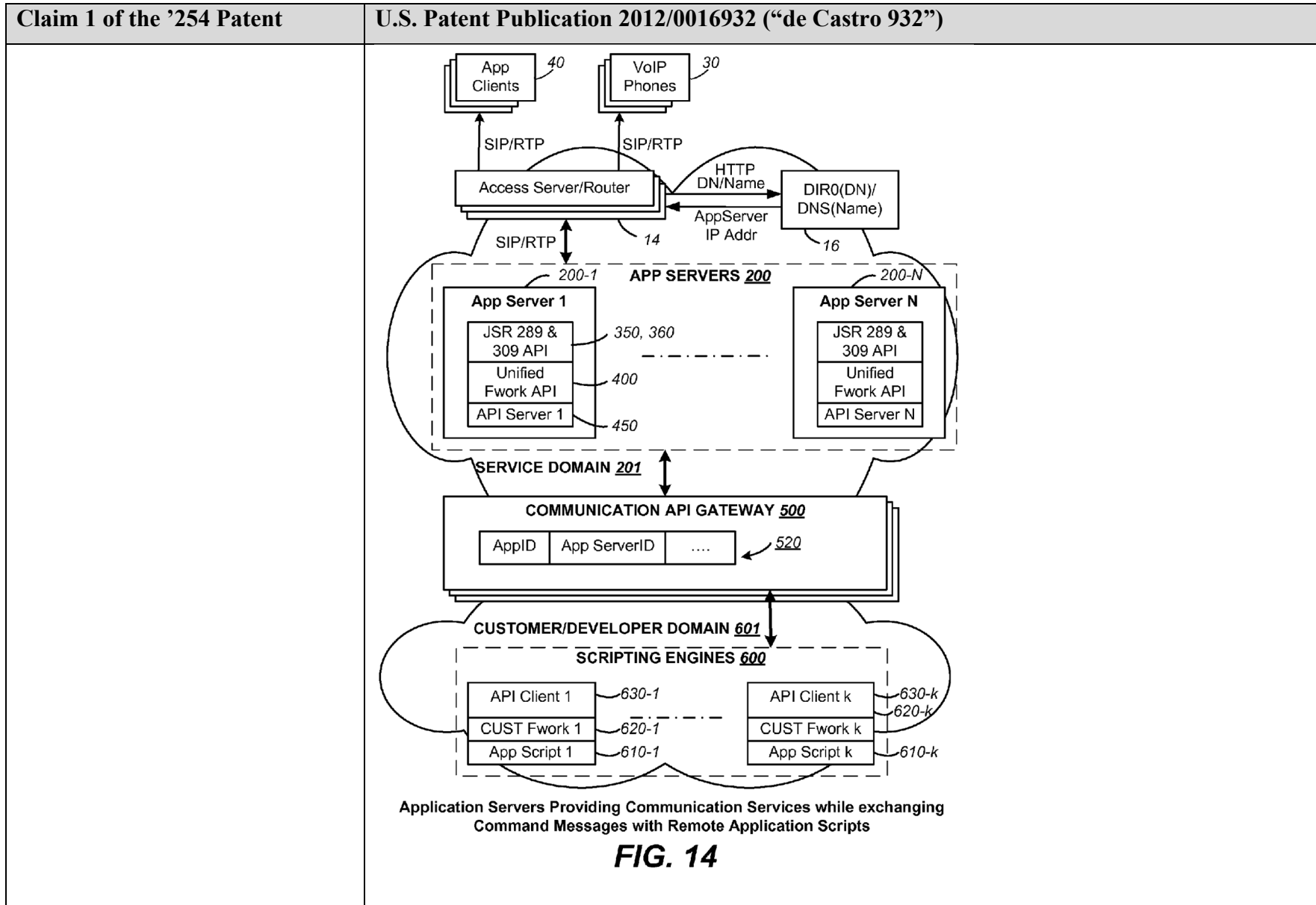
Claim 1 of the '254 Patent	U.S. Patent Publication 2012/0016932 ("de Castro 932")
	Application Platform having App Servers Providing Communication Services while Processing Application Scripts FIG. 13 <i>See, e.g., de Castro 932 at [0102]-[0104]:</i> [0102] FIG. 13 illustrates a typical implementation of deploying communication applications on an IP network such as the internet. A plurality of application platforms 100 is deployed on the network

Claim 1 of the '254 Patent	U.S. Patent Publication 2012/0016932 (“de Castro 932”)
	to provide communication services when hosting any number of communication applications defined by the application scripts 210. Clients such as VoIP phones 30, application clients 40 and other terminal equipment is able to access a specific communication application by calling a dialed number or an URL. The call is routed by an access server/router 14 into the IP network 10 to an application platform, such as application platform 1. The routing is performed by looking up a directory service DIR0 16 with the IP address/dialed number in order to return the address of an available application platform with the necessary resources to execute the specific communication application. Once application platform 1 is selected, the application server in the platform will retrieve the application script 210 for the specific application associated with the dialed number. This is accomplished by looking up another directory service DIR1 18 for a pointer to the URL of the application script. For example, the dialed number may be associated with application script 1 and it is retrieved into the application platform 1. [0103] Once the “dialed” application script 1 is retrieved into the application platform 1, the application server 200 (see also FIG. 1 and FIG. 4) will process the script. First a browser, compatible with the language the script, will interpret or compile the script into execution codes which will invoke the class objects and make function calls to the unified API. The execution is performed in a Java virtual machine supported by the application server 200. [0104] In this manner, communication applications such as voice-centers, IVR, voice-enabled self-help applications web bots can be deployed by such an application platform on the internet by leveraging web-like technologies and practices and employing standards-based protocol and languages. Variations of such communication platforms and network architecture of communication resources have been disclosed in U.S. Pat. No. 6,922,411, United States Patent Application Publication No. US 2011/0046960, and U.S. patent application Ser. No. 13/088,396 filed on Apr. 17, 2011, the entire disclosure of said publications and Applications are incorporated herein by reference. <i>See, e.g., de Castro 932 at [0116]:</i> [0116] Similar to that shown in FIG. 13, application clients such as VoIP phones 30, is able to access a specific communication application by calling a dialed number or an URL. The call is routed by

Claim 1 of the '254 Patent	U.S. Patent Publication 2012/0016932 (“de Castro 932”)
	an access server/router 14 into the IP network 10 to one of the communication application servers 200, such as App server 1. The routing is performed by looking up a directory service DIR0 16 with the IP address/dialed number in order to return the address of the communication application server executing the specific communication application. <i>See, e.g.,</i> de Castro 932 at [0124]-[0126]: [0124] The call manager 260 manages the cooperation among the modules. When a call 1 is received into the communication application server 200, the call manager register the Call ID into a call ID registry 262 and start a call actor 1 270-1, and similarly for call 2, . . . , and call i. As command messages from the API clients 630 (see FIG. 14) are received by the application server 200, they are identified with a call actor and queued in an associated message queue 272, which are then applied to the call in order. As will be described in more detail later, the API server parses out the command in each message for execution in turn on the associate call actor. [0125] The admin module 280 includes sub modules such as a monitoring module 282, a statistics modules 284, a QoS (Quality of Service) modules 286 and Billing module 288. [0126] FIG. 16 illustrates in more detail the callID stored in the callID registry shown in FIG. 15. Essentially it includes a GUID (Globally Unique Identifier) and a server IP address. In this way, the call and the handling communication application server are readily identified. <i>See, e.g.,</i> de Castro 932 at [0139]-[0141]: [0139] The Rayo protocol primarily deals with calls. Inbound calls originate from the PSTN or via SIP and are offered to Rayo clients via XMPP using a Jabber Identifier (JID). Each call is in turn represented by its own unique JID allowing a two way conversation between the Rayo client and the server that's handling the call signaling and media. JID Format [0140] The JID follows a specific format. In XMPP the JID is constructed as <node>@<domain>/<resource>

Zilkr v Cisco Systems, Inc.
Eastern District of Texas No. 2:22-cv-00166-JRG-RSP

Claim 1 of the '254 Patent	U.S. Patent Publication 2012/0016932 (“de Castro 932”)
	For Rayo, the <node> portion of the JID always represents the call ID. The <resource>, when present, represents the affected command ID. Incoming Calls [0141] <pre><!-- Message comes from the Call's JID --> <presence to='16577@app.Rayo.net/1' from='9f00061@call.Rayo.net/1'> <offer xmlns='urn:xmpp:Rayo:1' to='tel:+18003211212' from='tel:+13058881212'> <!-- Signaling (e.g. SIP) Headers --> <header name=' Via' value='192.168.0.1' /> <header name='Contact' value='192.168.0.1' /> </offer> </presence></pre> <i>See, e.g., de Castro 932 at fig. 14:</i>



Claim 1 of the '254 Patent	U.S. Patent Publication 2012/0016932 (“de Castro 932”)
	<i>See, e.g.,</i> de Castro 932 at [0006]- [0012]: [0006] An example platform for easy deployment of telephony applications is described in U.S. Pat. No. 6,922,411, which entire disclosure is incorporated herein by reference. Essentially, a networked telephony system allows users to deploy on the Internet computer telephony applications associated with designated telephone numbers. The telephony application is easily created by a user in XML (Extended Markup Language) with predefined telephony XML tags (e.g. VoiceXML) and easily deployed on a website. The telephony XML tags include those for call control and media manipulation. A call to anyone of these designated telephone numbers may originate from anyone of the networked telephone system such as the PSTN (Public Switched Telephone System), a wireless network, or the Internet. The call is received by an application gateway center (AGC) installed on the Internet. Analogous to a web browser, the AGC provides facility for retrieving the associated XML application from its website and processing the call accordingly. [0007] This type of telephony platform allows very powerful yet simple telephony applications to be built and deployed on the Internet. The following are some examples of the telephony applications deployed on this platform. A “Follow me, find me” application sequentially calls a series of telephone numbers as specified by a user until one of the numbers answers and then connects the call. Otherwise, it does something else such as takes a message or sends e-mail or sends the call to a call center, etc. In another example, a Telephonic Polling application looks up from a database the telephone numbers of a population to be polled. It then calls the numbers in parallel, limited only by the maximum number of concurrent sessions supported, and plays a series of interactive voice prompts/messages in response to the called party's responses and records the result in a database, etc. In another example, a Help Desk application plays a series of interactive voice prompts/messages in response to the called party's responses and possibly connects the call to a live agent as one option, etc. In yet another example, a Stock or Bank Transactions application plays a series of interactive voice prompts/messages in response to the called party's responses and conducts appropriate transactions with a backend database or web application, etc. [0008]

Claim 1 of the '254 Patent	U.S. Patent Publication 2012/0016932 (“de Castro 932”)
	The latter examples are generally referred to as self-help applications. In the voice context, a self-help application is referred to as IVR. IVR refers to Interactive Voice Response and is a technology that automates interaction with telephone callers. Enterprises are increasingly turning to IVR to reduce the cost of common sales, service, collections, inquiry and support calls to and from their company. [0009] IVR solutions enable users using voice as a medium or other form of inputs through a voice channel to retrieve information including bank balances, flight schedules, product details, order status, movie show times, and more from any telephone. Additionally, IVR solutions are increasingly used to place outbound calls to deliver or gather information for appointments, past due bills, and other time critical events and activities. [0010] FIG. 1 illustrates schematically a communication application environment. The communication application environment 10 includes one or more client interacting with a communication application server 200 in an application platform 100. The application platform 100 hosts an application specified by an application script 210 coded in object-oriented software. The communication application server 200 includes a browser 220 for interpreting and executing the application script 210. The execution of the application script invokes one or more server-side components 310 in the application server 200. Among the clients and the communication server, these components 310 provide services for call control, media control with one or more media server 230 and interactions with back-end systems 240 such as databases, and business logic and legacy systems such as CRM (Customer Relationship Management) and ERP (Enterprise Resource Planning). One example of the platform is to host an IVR application which interacts with voice, text messaging and other clients in a multi-channel environment. [0011] The communication application platform provides a third-party call control between any numbers of clients 20, 22, 30. The application script 210 defines the communication application 300 and directs how a call is to be handled. For example, when a user makes a call through a voice client such as a handset 20 or a VoIP phone 22 to the IVR, the voice application script 210 associated with the call number is retrieved. The browser 220 executes or renders the retrieved voice application script to allow the user to interact with the voice application 300. [0012]

Claim 1 of the '254 Patent	U.S. Patent Publication 2012/0016932 (“de Castro 932”)
	Communication of Multimedia information among endpoints and a third-party call controller generally require call control and media control. <i>See, e.g.,</i> de Castro 932 at [0114]- [0115]: [0114] FIG. 14 illustrates a network architecture suitable for practicing the present invention. Essentially, the network is considered as comprising a service domain 201 and a customer/developer domain 601. [0115] In the service domain 201 is a plurality of communication application servers 200, such as App Server 1 to App Server N. As in FIG. 13, the communication application servers 200 provide telephony and communication services to applications and allows application clients 40 such as, for example, VoIP phones to access the applications hosted in the communication application servers. <i>See, e.g.,</i> de Castro 932 at [0130]: [0130] FIG. 19 illustrates the main information maintained in the registry of the communication API gateway. The XMPP server 540 in the communication API gateway 500 mediates between the plurality of communication application servers 200 (each having an XMPP server 458) in the service domain 201 and the plurality of API clients 630 (each having an XMPP client not shown explicitly). The XMPP server 540 conducts federation by referencing the information in the registry 520, which registers the communication application servers 200 in the service domain and the customers' applications in the customer/developer domain 601. Also logged are the properties and status associated with each communication application server 200 and the properties and status associated with each API clients 630. To the extent it is found that de Castro 932 does not expressly disclose this limitation, the limitation is inherent. And to the extent it is found that de Castro 932 does not anticipate this claim, de Castro 932 renders it obvious, standing alone, in combination with the knowledge of a person of ordinary skill in the art, and/or in combination with one or more other prior art references identified in the Cover Pleading or herein, for the reasons identified in the Cover

Zilkr v Cisco Systems, Inc.
Eastern District of Texas No. 2:22-cv-00166-JRG-RSP

Claim 1 of the '254 Patent	U.S. Patent Publication 2012/0016932 (“de Castro 932”)
	Pleading. A person of ordinary skill in the art would have been motivated to combine de Castro 932 with any of the other prior art references identified in the Cover Pleading or herein with a reasonable expectation of success because each of these references contains familiar elements within the similar fields of endeavor to address similar known problems, according to known methods which would yield predictable results.
[f] associate the second service with the first telephone number, wherein the first telephone number is associated with routing and interworking data necessary to utilize the second service.	de Castro 932 discloses associate the second service with the first telephone number, wherein the first telephone number is associated with routing and interworking data necessary to utilize the second service. <i>See, e.g.,</i> de Castro 932 at figure 13:

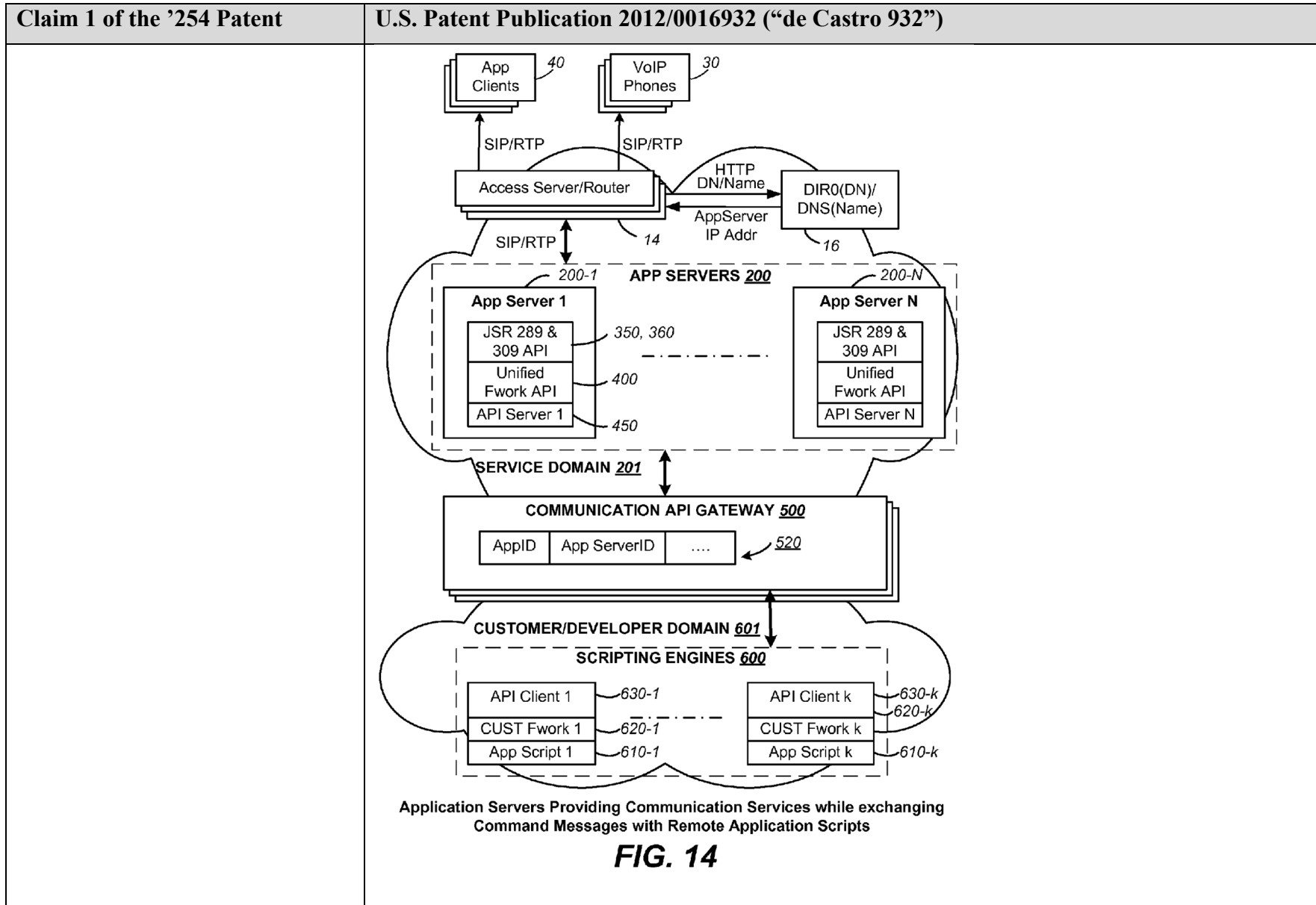
Claim 1 of the '254 Patent	U.S. Patent Publication 2012/0016932 ("de Castro 932")
	Application Platform having App Servers Providing Communication Services while Processing Application Scripts FIG. 13 <i>See, e.g., de Castro 932 at [0102]-[0104]:</i> [0102] FIG. 13 illustrates a typical implementation of deploying communication applications on an IP network such as the internet. A plurality of application platforms 100 is deployed on the network

Claim 1 of the '254 Patent	U.S. Patent Publication 2012/0016932 (“de Castro 932”)
	to provide communication services when hosting any number of communication applications defined by the application scripts 210. Clients such as VoIP phones 30, application clients 40 and other terminal equipment is able to access a specific communication application by calling a dialed number or an URL. The call is routed by an access server/router 14 into the IP network 10 to an application platform, such as application platform 1. The routing is performed by looking up a directory service DIR0 16 with the IP address/dialed number in order to return the address of an available application platform with the necessary resources to execute the specific communication application. Once application platform 1 is selected, the application server in the platform will retrieve the application script 210 for the specific application associated with the dialed number. This is accomplished by looking up another directory service DIR1 18 for a pointer to the URL of the application script. For example, the dialed number may be associated with application script 1 and it is retrieved into the application platform 1. [0103] Once the “dialed” application script 1 is retrieved into the application platform 1, the application server 200 (see also FIG. 1 and FIG. 4) will process the script. First a browser, compatible with the language the script, will interpret or compile the script into execution codes which will invoke the class objects and make function calls to the unified API. The execution is performed in a Java virtual machine supported by the application server 200. [0104] In this manner, communication applications such as voice-centers, IVR, voice-enabled self-help applications web bots can be deployed by such an application platform on the internet by leveraging web-like technologies and practices and employing standards-based protocol and languages. Variations of such communication platforms and network architecture of communication resources have been disclosed in U.S. Pat. No. 6,922,411, United States Patent Application Publication No. US 2011/0046960, and U.S. patent application Ser. No. 13/088,396 filed on Apr. 17, 2011, the entire disclosure of said publications and Applications are incorporated herein by reference. <i>See, e.g., de Castro 932 at [0116]:</i> [0116] Similar to that shown in FIG. 13, application clients such as VoIP phones 30, is able to access a specific communication application by calling a dialed number or an URL. The call is routed by

Claim 1 of the '254 Patent	U.S. Patent Publication 2012/0016932 (“de Castro 932”)
	an access server/router 14 into the IP network 10 to one of the communication application servers 200, such as App server 1. The routing is performed by looking up a directory service DIR0 16 with the IP address/dialed number in order to return the address of the communication application server executing the specific communication application. <i>See, e.g., de Castro 932 at [0124]-[0126]:</i> [0124] The call manager 260 manages the cooperation among the modules. When a call 1 is received into the communication application server 200, the call manager register the Call ID into a call ID registry 262 and start a call actor 1 270-1, and similarly for call 2, . . . , and call i. As command messages from the API clients 630 (see FIG. 14) are received by the application server 200, they are identified with a call actor and queued in an associated message queue 272, which are then applied to the call in order. As will be described in more detail later, the API server parses out the command in each message for execution in turn on the associate call actor. [0125] The admin module 280 includes sub modules such as a monitoring module 282, a statistics modules 284, a QoS (Quality of Service) modules 286 and Billing module 288. [0126] FIG. 16 illustrates in more detail the callID stored in the callID registry shown in FIG. 15. Essentially it includes a GUID (Globally Unique Identifier) and a server IP address. In this way, the call and the handling communication application server are readily identified. <i>See, e.g., de Castro 932 at [0139]-[0141]:</i> [0139] The Rayo protocol primarily deals with calls. Inbound calls originate from the PSTN or via SIP and are offered to Rayo clients via XMPP using a Jabber Identifier (JID). Each call is in turn represented by its own unique JID allowing a two way conversation between the Rayo client and the server that's handling the call signaling and media. JID Format [0140] The JID follows a specific format. In XMPP the JID is constructed as <node>@<domain>/<resource>

Zilkr v Cisco Systems, Inc.
Eastern District of Texas No. 2:22-cv-00166-JRG-RSP

Claim 1 of the '254 Patent	U.S. Patent Publication 2012/0016932 (“de Castro 932”)
	For Rayo, the <node> portion of the JID always represents the call ID. The <resource>, when present, represents the affected command ID. Incoming Calls [0141] <pre><!-- Message comes from the Call's JID --> <presence to='16577@app.Rayo.net/1' from='9f00061@call.Rayo.net/1'> <offer xmlns='urn:xmpp:Rayo:1' to='tel:+18003211212' from='tel:+13058881212'> <!-- Signaling (e.g. SIP) Headers --> <header name=' Via' value='192.168.0.1' /> <header name='Contact' value='192.168.0.1' /> </offer> </presence></pre> <i>See, e.g., de Castro 932 at fig. 14:</i>



Claim 1 of the '254 Patent	U.S. Patent Publication 2012/0016932 (“de Castro 932”)
	<i>See, e.g.,</i> de Castro 932 at [0006]- [0012]: [0006] An example platform for easy deployment of telephony applications is described in U.S. Pat. No. 6,922,411, which entire disclosure is incorporated herein by reference. Essentially, a networked telephony system allows users to deploy on the Internet computer telephony applications associated with designated telephone numbers. The telephony application is easily created by a user in XML (Extended Markup Language) with predefined telephony XML tags (e.g. VoiceXML) and easily deployed on a website. The telephony XML tags include those for call control and media manipulation. A call to anyone of these designated telephone numbers may originate from anyone of the networked telephone system such as the PSTN (Public Switched Telephone System), a wireless network, or the Internet. The call is received by an application gateway center (AGC) installed on the Internet. Analogous to a web browser, the AGC provides facility for retrieving the associated XML application from its website and processing the call accordingly. [0007] This type of telephony platform allows very powerful yet simple telephony applications to be built and deployed on the Internet. The following are some examples of the telephony applications deployed on this platform. A “Follow me, find me” application sequentially calls a series of telephone numbers as specified by a user until one of the numbers answers and then connects the call. Otherwise, it does something else such as takes a message or sends e-mail or sends the call to a call center, etc. In another example, a Telephonic Polling application looks up from a database the telephone numbers of a population to be polled. It then calls the numbers in parallel, limited only by the maximum number of concurrent sessions supported, and plays a series of interactive voice prompts/messages in response to the called party's responses and records the result in a database, etc. In another example, a Help Desk application plays a series of interactive voice prompts/messages in response to the called party's responses and possibly connects the call to a live agent as one option, etc. In yet another example, a Stock or Bank Transactions application plays a series of interactive voice prompts/messages in response to the called party's responses and conducts appropriate transactions with a backend database or web application, etc. [0008]

Claim 1 of the '254 Patent	U.S. Patent Publication 2012/0016932 (“de Castro 932”)
	The latter examples are generally referred to as self-help applications. In the voice context, a self-help application is referred to as IVR. IVR refers to Interactive Voice Response and is a technology that automates interaction with telephone callers. Enterprises are increasingly turning to IVR to reduce the cost of common sales, service, collections, inquiry and support calls to and from their company. [0009] IVR solutions enable users using voice as a medium or other form of inputs through a voice channel to retrieve information including bank balances, flight schedules, product details, order status, movie show times, and more from any telephone. Additionally, IVR solutions are increasingly used to place outbound calls to deliver or gather information for appointments, past due bills, and other time critical events and activities. [0010] FIG. 1 illustrates schematically a communication application environment. The communication application environment 10 includes one or more client interacting with a communication application server 200 in an application platform 100. The application platform 100 hosts an application specified by an application script 210 coded in object-oriented software. The communication application server 200 includes a browser 220 for interpreting and executing the application script 210. The execution of the application script invokes one or more server-side components 310 in the application server 200. Among the clients and the communication server, these components 310 provide services for call control, media control with one or more media server 230 and interactions with back-end systems 240 such as databases, and business logic and legacy systems such as CRM (Customer Relationship Management) and ERP (Enterprise Resource Planning). One example of the platform is to host an IVR application which interacts with voice, text messaging and other clients in a multi-channel environment. [0011] The communication application platform provides a third-party call control between any numbers of clients 20, 22, 30. The application script 210 defines the communication application 300 and directs how a call is to be handled. For example, when a user makes a call through a voice client such as a handset 20 or a VoIP phone 22 to the IVR, the voice application script 210 associated with the call number is retrieved. The browser 220 executes or renders the retrieved voice application script to allow the user to interact with the voice application 300. [0012]

Claim 1 of the '254 Patent	U.S. Patent Publication 2012/0016932 (“de Castro 932”)
	Communication of Multimedia information among endpoints and a third-party call controller generally require call control and media control. <i>See, e.g.,</i> de Castro 932 at [0114]- [0115]: [0114] FIG. 14 illustrates a network architecture suitable for practicing the present invention. Essentially, the network is considered as comprising a service domain 201 and a customer/developer domain 601. [0115] In the service domain 201 is a plurality of communication application servers 200, such as App Server 1 to App Server N. As in FIG. 13, the communication application servers 200 provide telephony and communication services to applications and allows application clients 40 such as, for example, VoIP phones to access the applications hosted in the communication application servers. <i>See, e.g.,</i> de Castro 932 at [0130]: [0130] FIG. 19 illustrates the main information maintained in the registry of the communication API gateway. The XMPP server 540 in the communication API gateway 500 mediates between the plurality of communication application servers 200 (each having an XMPP server 458) in the service domain 201 and the plurality of API clients 630 (each having an XMPP client not shown explicitly). The XMPP server 540 conducts federation by referencing the information in the registry 520, which registers the communication application servers 200 in the service domain and the customers' applications in the customer/developer domain 601. Also logged are the properties and status associated with each communication application server 200 and the properties and status associated with each API clients 630. To the extent it is found that de Castro 932 does not expressly disclose this limitation, the limitation is inherent. And to the extent it is found that de Castro 932 does not anticipate this claim, de Castro 932 renders it obvious, standing alone, in combination with the knowledge of a person of ordinary skill in the art, and/or in combination with one or more other prior art references identified in the Cover Pleading or herein, for the reasons identified in the Cover

Claim 1 of the '254 Patent	U.S. Patent Publication 2012/0016932 (“de Castro 932”)
	Pleading. A person of ordinary skill in the art would have been motivated to combine de Castro 932 with any of the other prior art references identified in the Cover Pleading or herein with a reasonable expectation of success because each of these references contains familiar elements within the similar fields of endeavor to address similar known problems, according to known methods which would yield predictable results.

2. Claim 2.

Claim 2 of the '254 Patent	U.S. Patent Publication 2012/0016932 (“de Castro 932”)
2. The telephone system as recited in claim 1, wherein the server is further configured to associate a plurality of services with the first telephone number, wherein the plurality of services are provided by a plurality of providers different than the first provider, and wherein the plurality of services are utilized by the first user.	de Castro 932 discloses the telephone system as recited in claim 1, wherein the server is further configured to associate a plurality of services with the first telephone number, wherein the plurality of services are provided by a plurality of providers different than the first provider, and wherein the plurality of services are utilized by the first user. <i>See, e.g.,</i> claim 1 citations above. To the extent it is found that de Castro 932 does not expressly disclose this limitation, the limitation is inherent. And to the extent it is found that de Castro 932 does not anticipate this claim, de Castro 932 renders it obvious, standing alone, in combination with the knowledge of a person of ordinary skill in the art, and/or in combination with one or more other prior art references identified in the Cover Pleading or herein, for the reasons identified in the Cover Pleading. A person of ordinary skill in the art would have been motivated to combine de Castro 932 with any of the other prior art references identified in the Cover Pleading or herein with a reasonable expectation of success because each of these references contains familiar elements within the similar fields of endeavor to address similar known problems, according to known methods which would yield predictable results.

3. Claim 6.

Claim 6 of the '254 Patent	U.S. Patent Publication 2012/0016932 (“de Castro 932”)
-----------------------------------	---

Claim 6 of the '254 Patent	U.S. Patent Publication 2012/0016932 (“de Castro 932”)
6. The telephone system as recited in claim 1, wherein the second service is a conferencing application, voice attendant application, or text messaging application.	de Castro 932 discloses the telephone system as recited in claim 1, wherein the second service is a conferencing application, voice attendant application, or text messaging application. See, e.g., claim 1 citations above. To the extent it is found that de Castro 932 does not expressly disclose this limitation, the limitation is inherent. And to the extent it is found that de Castro 932 does not anticipate this claim, de Castro 932 renders it obvious, standing alone, in combination with the knowledge of a person of ordinary skill in the art, and/or in combination with one or more other prior art references identified in the Cover Pleading or herein, for the reasons identified in the Cover Pleading. A person of ordinary skill in the art would have been motivated to combine de Castro 932 with any of the other prior art references identified in the Cover Pleading or herein with a reasonable expectation of success because each of these references contains familiar elements within the similar fields of endeavor to address similar known problems, according to known methods which would yield predictable results.

4. Claim 7.

Claim 7 of the '254 Patent	U.S. Patent Publication 2012/0016932 (“de Castro 932”)
7 A method comprising:	de Castro 932 discloses a method comprising the following claim elements below. To the extent it is found that de Castro 932 does not expressly disclose this limitation, the limitation is inherent. And to the extent it is found that de Castro 932 does not anticipate this claim, de Castro 932 renders it obvious, standing alone, in combination with the knowledge of a person of ordinary skill in the art, and/or in combination with one or more other prior art references identified in the Cover Pleading or herein, for the reasons identified in the Cover Pleading. A person of ordinary skill in the art would have been motivated to combine de Castro 932 with any of the other prior art references identified in the Cover Pleading or herein with a reasonable expectation of

Zilkr v Cisco Systems, Inc.
Eastern District of Texas No. 2:22-cv-00166-JRG-RSP

Claim 7 of the '254 Patent	U.S. Patent Publication 2012/0016932 (“de Castro 932”)
	success because each of these references contains familiar elements within the similar fields of endeavor to address similar known problems, according to known methods which would yield predictable results.
[a] providing a first service to a first user by a first provider, wherein the first service is telephone service, and wherein the first user has a first telephone number;	de Castro 932 discloses providing a first service to a first user by a first provider, wherein the first service is telephone service, and wherein the first user has a first telephone number. <i>See, e.g.,</i> claims 1[p] and 1[b] citations above. To the extent it is found that de Castro 932 does not expressly disclose this limitation, the limitation is inherent. And to the extent it is found that de Castro 932 does not anticipate this claim, de Castro 932 renders it obvious, standing alone, in combination with the knowledge of a person of ordinary skill in the art, and/or in combination with one or more other prior art references identified in the Cover Pleading or herein, for the reasons identified in the Cover Pleading. A person of ordinary skill in the art would have been motivated to combine de Castro 932 with any of the other prior art references identified in the Cover Pleading or herein with a reasonable expectation of success because each of these references contains familiar elements within the similar fields of endeavor to address similar known problems, according to known methods which would yield predictable results.
[b] receiving a request to provision a second service for the first user, wherein the second service is provided by a second provider, and wherein the second provider is different than the first provider;	de Castro 932 discloses receiving a request to provision a second service for the first user, wherein the second service is provided by a second provider, and wherein the second provider is different than the first provider. <i>See, e.g.,</i> claim 1[c] citations above. To the extent it is found that de Castro 932 does not expressly disclose this limitation, the limitation is inherent. And to the extent it is found that de Castro 932 does not anticipate this claim, de Castro 932 renders it obvious, standing alone, in combination with the knowledge of a person of ordinary skill in the art, and/or in combination with one or more other prior art references identified in the Cover Pleading or herein, for the reasons identified in the Cover Pleading. A person of ordinary skill in the art would

Zilkr v Cisco Systems, Inc.
Eastern District of Texas No. 2:22-cv-00166-JRG-RSP

Claim 7 of the '254 Patent	U.S. Patent Publication 2012/0016932 (“de Castro 932”)
	have been motivated to combine de Castro 932 with any of the other prior art references identified in the Cover Pleading or herein with a reasonable expectation of success because each of these references contains familiar elements within the similar fields of endeavor to address similar known problems, according to known methods which would yield predictable results.
[c] responsive to receiving the request: creating a mapping from the first telephone number to a second identifier (ID), wherein the second ID is utilized by the second provider to identify the first user;	de Castro 932 discloses responsive to receiving the request: creating a mapping from the first telephone number to a second identifier (ID), wherein the second ID is utilized by the second provider to identify the first user. <i>See, e.g., claim 1[d] citations above.</i> To the extent it is found that de Castro 932 does not expressly disclose this limitation, the limitation is inherent. And to the extent it is found that de Castro 932 does not anticipate this claim, de Castro 932 renders it obvious, standing alone, in combination with the knowledge of a person of ordinary skill in the art, and/or in combination with one or more other prior art references identified in the Cover Pleading or herein, for the reasons identified in the Cover Pleading. A person of ordinary skill in the art would have been motivated to combine de Castro 932 with any of the other prior art references identified in the Cover Pleading or herein with a reasonable expectation of success because each of these references contains familiar elements within the similar fields of endeavor to address similar known problems, according to known methods which would yield predictable results.
[d] activating the second service with the second provider utilizing the second ID as a user ID for the first user; and	de Castro 932 discloses activating the second service with the second provider utilizing the second ID as a user ID for the first user. <i>See, e.g., claim 1[e] citations above.</i> To the extent it is found that de Castro 932 does not expressly disclose this limitation, the limitation is inherent. And to the extent it is found that de Castro 932 does not anticipate this claim, de Castro 932 renders it obvious, standing alone, in combination with the knowledge of a person of ordinary skill in the art, and/or in combination with one or more other prior art references identified in the Cover Pleading or herein, for the

Claim 7 of the '254 Patent	U.S. Patent Publication 2012/0016932 (“de Castro 932”)
	reasons identified in the Cover Pleading. A person of ordinary skill in the art would have been motivated to combine de Castro 932 with any of the other prior art references identified in the Cover Pleading or herein with a reasonable expectation of success because each of these references contains familiar elements within the similar fields of endeavor to address similar known problems, according to known methods which would yield predictable results.
[e] associating the second service with the first telephone number, wherein the first telephone number is associated with routing and interworking data necessary to utilize the second service.	de Castro 932 discloses associating the second service with the first telephone number, wherein the first telephone number is associated with routing and interworking data necessary to utilize the second service. <i>See, e.g.,</i> claim 1[f] citations above. To the extent it is found that de Castro 932 does not expressly disclose this limitation, the limitation is inherent. And to the extent it is found that de Castro 932 does not anticipate this claim, de Castro 932 renders it obvious, standing alone, in combination with the knowledge of a person of ordinary skill in the art, and/or in combination with one or more other prior art references identified in the Cover Pleading or herein, for the reasons identified in the Cover Pleading. A person of ordinary skill in the art would have been motivated to combine de Castro 932 with any of the other prior art references identified in the Cover Pleading or herein with a reasonable expectation of success because each of these references contains familiar elements within the similar fields of endeavor to address similar known problems, according to known methods which would yield predictable results.

5. Claim 8.

Claim 8 of the '254 Patent	U.S. Patent Publication 2012/0016932 (“de Castro 932”)
8. The method as recited in claim 7, further comprising associating a plurality of services with the first telephone number, wherein the plurality of services	de Castro 932 discloses the method as recited in claim 7, further comprising associating a plurality of services with the first telephone number, wherein the plurality of services are provided by a plurality of providers different than the first provider, and wherein the plurality of services are utilized by the first user.

Claim 8 of the '254 Patent	U.S. Patent Publication 2012/0016932 (“de Castro 932”)
are provided by a plurality of providers different than the first provider, and wherein the plurality of services are utilized by the first user.	<i>See, e.g.</i>, claim 2 citations above. To the extent it is found that de Castro 932 does not expressly disclose this limitation, the limitation is inherent. And to the extent it is found that de Castro 932 does not anticipate this claim, de Castro 932 renders it obvious, standing alone, in combination with the knowledge of a person of ordinary skill in the art, and/or in combination with one or more other prior art references identified in the Cover Pleading or herein, for the reasons identified in the Cover Pleading. A person of ordinary skill in the art would have been motivated to combine de Castro 932 with any of the other prior art references identified in the Cover Pleading or herein with a reasonable expectation of success because each of these references contains familiar elements within the similar fields of endeavor to address similar known problems, according to known methods which would yield predictable results.

6. Claim 12.

Claim 12 of the '254 Patent	U.S. Patent Publication 2012/0016932 (“de Castro 932”)
12. The method as recited in claim 7, wherein the second service is a conferencing application, voice attendant application, or text messaging application.	de Castro 932 discloses the method as recited in claim 7, wherein the second service is a conferencing application, voice attendant application, or text messaging application. <i>See, e.g.</i>, claim 6 citations above. To the extent it is found that de Castro 932 does not expressly disclose this limitation, the limitation is inherent. And to the extent it is found that de Castro 932 does not anticipate this claim, de Castro 932 renders it obvious, standing alone, in combination with the knowledge of a person of ordinary skill in the art, and/or in combination with one or more other prior art references identified in the Cover Pleading or herein, for the reasons identified in the Cover Pleading. A person of ordinary skill in the art would have been motivated to combine de Castro 932 with any of the other prior art references identified in the Cover Pleading or herein with a reasonable expectation of

Claim 12 of the '254 Patent	U.S. Patent Publication 2012/0016932 (“de Castro 932”)
	success because each of these references contains familiar elements within the similar fields of endeavor to address similar known problems, according to known methods which would yield predictable results.

7. Claim 13.

Claim 13 of the '254 Patent	U.S. Patent Publication 2012/0016932 (“de Castro 932”)
13. A non-transitory computer readable storage medium comprising program instructions, wherein when executed the program instructions are operable to:	de Castro 932 discloses a non-transitory computer readable storage medium comprising program instructions, wherein when executed the program instructions are operable to perform the following claim elements below. <i>See, e.g.,</i> claims 1[a] and 1[b] citations above. To the extent it is found that de Castro 932 does not expressly disclose this limitation, the limitation is inherent. And to the extent it is found that de Castro 932 does not anticipate this claim, de Castro 932 renders it obvious, standing alone, in combination with the knowledge of a person of ordinary skill in the art, and/or in combination with one or more other prior art references identified in the Cover Pleading or herein, for the reasons identified in the Cover Pleading. A person of ordinary skill in the art would have been motivated to combine de Castro 932 with any of the other prior art references identified in the Cover Pleading or herein with a reasonable expectation of success because each of these references contains familiar elements within the similar fields of endeavor to address similar known problems, according to known methods which would yield predictable results.
[a] provide a first service to a first user by a first provider, wherein the first service is telephone service, and wherein the first user has a first telephone number;	de Castro 932 discloses provide a first service to a first user by a first provider, wherein the first service is telephone service, and wherein the first user has a first telephone number. <i>See, e.g.,</i> claim 1[b] citations above. To the extent it is found that de Castro 932 does not expressly disclose this limitation,

Claim 13 of the '254 Patent	U.S. Patent Publication 2012/0016932 (“de Castro 932”)
	the limitation is inherent. And to the extent it is found that de Castro 932 does not anticipate this claim, de Castro 932 renders it obvious, standing alone, in combination with the knowledge of a person of ordinary skill in the art, and/or in combination with one or more other prior art references identified in the Cover Pleading or herein, for the reasons identified in the Cover Pleading. A person of ordinary skill in the art would have been motivated to combine de Castro 932 with any of the other prior art references identified in the Cover Pleading or herein with a reasonable expectation of success because each of these references contains familiar elements within the similar fields of endeavor to address similar known problems, according to known methods which would yield predictable results.
[b] receive a request to provision a second service for the first user, wherein the second service is provided by a second provider, and wherein the second provider is different than the first provider;	de Castro 932 discloses receive a request to provision a second service for the first user, wherein the second service is provided by a second provider, and wherein the second provider is different than the first provider <i>See, e.g., claim 1[c] citations above.</i> the extent it is found that de Castro 932 does not expressly disclose this limitation, the limitation is inherent. And to the extent it is found that de Castro 932 does not anticipate this claim, de Castro 932 renders it obvious, standing alone, in combination with the knowledge of a person of ordinary skill in the art, and/or in combination with one or more other prior art references identified in the Cover Pleading or herein, for the reasons identified in the Cover Pleading. A person of ordinary skill in the art would have been motivated to combine de Castro 932 with any of the other prior art references identified in the Cover Pleading or herein with a reasonable expectation of success because each of these references contains familiar elements within the similar fields of endeavor to address similar known problems, according to known methods which would yield predictable results.
[c] responsive to receiving the request: create a mapping from the first telephone number to a second identifier (ID), wherein the second ID is utilized by the second provider to identify the first user;	de Castro 932 discloses responsive to receiving the request: create a mapping from the first telephone number to a second identifier (ID), wherein the second ID is utilized by the second provider to identify the first user <i>See, e.g., claim 1[d] citations above.</i>

Zilkr v Cisco Systems, Inc.
Eastern District of Texas No. 2:22-cv-00166-JRG-RSP

Claim 13 of the '254 Patent	U.S. Patent Publication 2012/0016932 (“de Castro 932”)
	To the extent it is found that de Castro 932 does not expressly disclose this limitation, the limitation is inherent. And to the extent it is found that de Castro 932 does not anticipate this claim, de Castro 932 renders it obvious, standing alone, in combination with the knowledge of a person of ordinary skill in the art, and/or in combination with one or more other prior art references identified in the Cover Pleading or herein, for the reasons identified in the Cover Pleading. A person of ordinary skill in the art would have been motivated to combine de Castro 932 with any of the other prior art references identified in the Cover Pleading or herein with a reasonable expectation of success because each of these references contains familiar elements within the similar fields of endeavor to address similar known problems, according to known methods which would yield predictable results.
[d] activate the second service with the second provider utilizing the second ID as a user ID for the first user; and	de Castro 932 discloses activate the second service with the second provider utilizing the second ID as a user ID for the first user. <i>See, e.g., claim 1[e] citations above.</i> To the extent it is found that de Castro 932 does not expressly disclose this limitation, the limitation is inherent. And to the extent it is found that de Castro 932 does not anticipate this claim, de Castro 932 renders it obvious, standing alone, in combination with the knowledge of a person of ordinary skill in the art, and/or in combination with one or more other prior art references identified in the Cover Pleading or herein, for the reasons identified in the Cover Pleading. A person of ordinary skill in the art would have been motivated to combine de Castro 932 with any of the other prior art references identified in the Cover Pleading or herein with a reasonable expectation of success because each of these references contains familiar elements within the similar fields of endeavor to address similar known problems, according to known methods which would yield predictable results.
[e] associate the second service with the first telephone number, wherein the first telephone number is associated with routing and interworking data necessary	de Castro 932 discloses associate the second service with the first telephone number, wherein the first telephone number is associated with routing and interworking data necessary to utilize the second service.

Claim 13 of the '254 Patent	U.S. Patent Publication 2012/0016932 (“de Castro 932”)
to utilize the second service.	<i>See, e.g.</i>, claim 1[f] citations of above. To the extent it is found that de Castro 932 does not expressly disclose this limitation, the limitation is inherent. And to the extent it is found that de Castro 932 does not anticipate this claim, de Castro 932 renders it obvious, standing alone, in combination with the knowledge of a person of ordinary skill in the art, and/or in combination with one or more other prior art references identified in the Cover Pleading or herein, for the reasons identified in the Cover Pleading. A person of ordinary skill in the art would have been motivated to combine de Castro 932 with any of the other prior art references identified in the Cover Pleading or herein with a reasonable expectation of success because each of these references contains familiar elements within the similar fields of endeavor to address similar known problems, according to known methods which would yield predictable results.

8. Claim 14.

Claim 14 of the '254 Patent	U.S. Patent Publication 2012/0016932 (“de Castro 932”)
14. The non-transitory computer readable storage medium as recited in claim 13, wherein the program instructions are further operable to associate a plurality of services with the first telephone number, wherein the plurality of services are provided by a plurality of providers different than the first provider, and wherein the plurality of services are utilized by the first user.	de Castro 932 discloses the non-transitory computer readable storage medium as recited in claim 13, wherein the program instructions are further operable to associate a plurality of services with the first telephone number, wherein the plurality of services are provided by a plurality of providers different than the first provider, and wherein the plurality of services are utilized by the first user. <i>See, e.g.</i>, claim 2 citations above. To the extent it is found that de Castro 932 does not expressly disclose this limitation, the limitation is inherent. And to the extent it is found that de Castro 932 does not anticipate this claim, de Castro 932 renders it obvious, standing alone, in combination with the knowledge of a person of ordinary skill in the art, and/or in combination with one or more other prior art references identified in the Cover Pleading or herein, for the

Zilkr v Cisco Systems, Inc.
Eastern District of Texas No. 2:22-cv-00166-JRG-RSP

Claim 14 of the '254 Patent	U.S. Patent Publication 2012/0016932 (“de Castro 932”)
	reasons identified in the Cover Pleading. A person of ordinary skill in the art would have been motivated to combine de Castro 932 with any of the other prior art references identified in the Cover Pleading or herein with a reasonable expectation of success because each of these references contains familiar elements within the similar fields of endeavor to address similar known problems, according to known methods which would yield predictable results.