United States District Court,
E.D. Virginia, Alexandria Division.

VERIZON SERVICES CORPORATION, et al,
Plaintiffs.
v.
COX FIBERNET VIRGINIA, INCORPORATED, et al,
Defendants.

Sept. 3, 2008.

John Christopher Rozendaal, Kellogg Huber Hansen Todd Evans & Figel PLLC, Charles Bennett Molster, III, Winston & Strawn LLP, Washington, DC, for Plaintiffs.

Craig Crandall Reilly, Law Office Of Craig C. Reilly, Alexandria, VA, for Defendants.

CLAIM CONSTRUCTION OF THE PATENTS-IN-SUIT

CLAUDE M. HILTON**, District Judge.**

This case is before the Court for claim construction. The seven Verizon patents at issue in this case describe technologies essential to providing a large-scale commercial Voice over Internet Protocol ("VoIP") service. The patents fall into four general categories:

-> two *name translation* patents used to ensure that calls go to the intended party and to implement advanced calling features (such as call forwarding)

U.S. Patent No. 6,104,711 (filed Mar. 6, 1997)

U.S. Patent No. 6,282,574 (filed Feb. 24, 2000)

-> two network patents used to implement key service features such as call authorization and billing

U.S. Patent No. 6,137,869 (filed Sep. 16, 1997)

U.S. Patent No. 6,430,275 (filed July 28, 1999)

-> one *gateway* patent used to connect packet-switched networks to a circuit-switched network, such as the traditional telephone network (known as the Public Switched Telephone Network or "PSTN")

U.S. Patent No. 6,292,481 (filed Sep. 16, 1997)

-> two *Quality of Service* ("QoS") patents that ensure that VoIP calls can be delivered with a quality

comparable to calls on the PSTN.

U.S. Patent No. 6,335,927 (filed Nov. 18, 1996)

U.S. Patent No. 6,636,597 (filed June 20, 2001)

The first two groups of patents-the name translation and network patents-were previously litigated before this Court in *Verizon Servs. Corp. v. Vonage Holdings Corp.,* No. 06 Civ. 1782 (E.D.Va.2007)(hereinafter *Vonage*). In that case, this Court reviewed extensive claim construction briefing, heard argument, and issued detailed claim constructions. Constructions on two of those four patents were reviewed on Vonage's appeal, and the appealed constructions were affirmed by the Federal Circuit. Verizon Servs. Corp. v. Vonage Holdings Corp., 503 F.3d 1295 (Fed.Cir.2007). The claim constructions used in the *Vonage* case should apply here as well. Indeed, a major reason for courts (rather than juries) to construe patent claims is to create "certainty through the application of stare decisis." Markman v. Westview Instruments, Inc., 517 U.S. 370, 391 (1996).

As for the three patents not previously litigated, to the extent that the Court construes these claims, the claim terms should be given the meaning that they would have to one of ordinary skill in the art at the time of the invention, using the entire patent as context. *See* Innova/Pure Water, Inc. v. Safari Water Filtration Sys., Inc., 381 F.3d 1111, 1116 (Fed.Cir.2004); Phillips v. AWH Corp., 415 F.3d 1303, 1313, 1317 (Fed.Cir.2005). As in *Vonage,* the Court should reject attempts to "import[ ] limitations from the specification into the claim." Phillips, 415 F.3d at 1323.

U.S. Patent Nos. 6,104,711 ***and*** 6,282,574

The '711 and '574 Patents are considered the Name Translation patents and the Court will address the construction of terms in Claims 1 and 11 of the ' 711 Patent, and of Claim 5 in the '574 Patent.

Construction of the Claims 1 and 11 of the '711 Patent

Claims 1 and 11 of the '711 Patent recite:

1. A server, compromising:

(a) an interface for coupling the server to a system of interlinked **packet data networks** using packet addresses defined in a first protocol;

(b) a central processing unit coupled to the interface;

(c) a data storage system accessible by the central processing unit; and

(d) software running on the central processing unit for processing **a query for translation of a name specified in a second protocol** received via the interface to generate a reply message for transmission via the interface, wherein:

(e) the software controls the central processing unit to include an address conforming to the first protocol and relating to a first destination in the reply message if parameters relating to the query satisfy a first criteria defined in a **routing control record** stored in the data storage system, and

(f) the software controls the central processing unit to include information relating to a second destination in the reply message if parameters relating to the query satisfy a second criteria defined in the routing control record.

11. A server, compromising:

(a) an interface for coupling the server to a system of interlinked **packet data networks** using packet addresses defined in a first protocol;

(b) a central processing unit coupled to the interface;

(c) a data storage system accessible by the central processing unit; and

(d) software running on the central processing unit, causing the server to respond to a **query for translation of a name specified in a second protocol** received via the interface by transmitting a **status query** via the interface to a destination terminal device associated with the name, wherein the software controls the central processing unit to include an address of the destination terminal device conforming to the first protocol in a reply to the query for translation only if the server receives a predetermined reply to the status query from the destination terminal.

The parties disagree about the construction of the following terms Claims 1 and 11 of the '711 Patent. The terms should be constructed as follows:

1. Packet data networks

In the *Vonage* litigation, this Court construed the phrase " *public* packet data networks" in the '711 Patent to mean:

A packet-switched data network that is accessible by and usable by the public for providing packet data transport, such as the Internet, where the network transports packets of data over a non-dedicated circuit to a destination, and each packet includes the source and destination address.

The included term "**packet data networks**" must have the same construction-minus the meaning of "public." The definition should also be clarified to account for the Federal Circuit's recognition, in upholding this construction, that each packet may include multiple source and destination addresses. Verizon, 503 F.3d at 1304-05. The term "packet data network" is construed to mean:

a packet-switched data network, where the network transports packets of data over a non-dedicated circuit to a destination, and each packet includes source and destination addresses.

2. Query for translation of a name

This term was previously construed and is again construed to mean "a request for translation of a name into routing information for a packet data network."

3. Name specified in a second protocol

This term was previously construed and means "an identifier or representation of a party for the purpose of telephony communication ."

4. Routing Control Record

The phrase "**routing control record**" means "data used to control the routing of a customer's telephone calls." The '711 Patent defines the "routing control record" ("RCR") as the data for a customer, such as conditional routing data, that "controls that customer's routing service." '711 Patent, col. 10 l. 42-47, col. 10 l. 55-65.

Cox improperly seeks to add requirements to this Claim, urging that the "routing control record" *must* contain "an address of a first destination, routing information for a second destination and conditions for including in the reply message the address and/or the routing information." This proposal is artificially narrow. For example, it injects the notion of inclusion of a reply message into the definition of an RCR. That confuses what might or might not be done with the routing control information-addressed in other claim language (e.g., how it is used by the central processing unit)-with the information itself. While the RCR *might* include what Cox suggests, there is no basis for concluding that the phrase so *requires*.

5. Status query

The term "**status query**" in Claim 11 is construed to mean "a message to a device requesting a response, based upon which it is possible to determine the device's status." The specification clearly describes the role of the "status query" as follows:

The routine 83 would transmit a query through the public packet data network 51 to the customer's primary terminal asking if that terminal is 'live.' If the terminal responds, then [one address is returned in response to the query for translation]. *If the primary terminal does not respond within a set time period* (e.g. because it is off), then [another address is returned by the device sending the status query].

'711 Patent, col. 11 l. 28-35 (emphasis added). In other words, it is fundamental that the status query requests a response. But a response need not be returned. The specification makes clear that the lack of a response reveals the status of the queried device (i.e ., the device is turned off), and triggers an alternative action (i.e ., the return of another address). *See* id.

Cox's proposed construction does not comport with the claim language, specification, or prosecution history. Cox contends that a status query is "a request for information about the present condition of the destination terminal, for example, whether the terminal is busy or online." But there is no basis in the patent for requiring the status query to specifically request "the present condition of the destination terminal." Additional claim language, beyond the term "status query," specifies a destination terminal as a recipient of the query when that is what the inventor contemplated; a "status query" itself is not limited to the destination terminal. Moreover, Cox's construction may misleadingly suggest that the request sent must expressly ask for information about the recipient device's status. That suggestion is unduly confining. In fact, as explained above, the fact that the destination terminal does not respond-even to a simple ping (a status query)-indicates its status and triggers an action.

Construction of Claim 5 of the '574 Patent

Claim 5 of the '574 Patent recites:

5. A server, compromising

(a) an interface for coupling the server to a system of interlinked **packet data networks** using packet addresses defined in a first protocol;

(b) a central processing unit coupled to the interface;

(c) a data storage system accessible by the central processing unit; and

(d) **software running on the central processing unit, causing the server to formulate and transmit a reply to a query for translation of a name specified in a second protocol, wherein the reply contains a telephone number associated with the name.**

1. "**Packet data network" and "query for translation of a name specified in a second protocol**".

The terms "packet data network" and "query for translation of a name specified in a second protocol" in Claim 5 have the same definitions as in Claims 1 and 11 of the '711 Patent.

2. STEP (d): Software running on the central processing unit, causing the server to formulate a reply to a query for translation of a name specified in a second protocol, wherein the reply contains a telephone number associated with the name.

The term "reply" in the '547 Patent was construed previously and step (d) should be construed to mean:

the software on the central processing unit causes the server to create a reply (which is a message which contains a packet data address and telephone number to a calling device capable of establishing a phone call at least partially through the packet data network) in response to a query for translation of a name.

U.S. Patent Nos. 6,137,869 ***and*** 6,430,275

The '869 and '275 Patents are considered the Network patents and the Court will address the construction of terms in Claims 1 and 2 of the '869 Patent, and of Claims 1, 2, and 28 in the '275 Patent.

Construction of Claim 1 of the '869 Patent ***and Claim 1 of the*** '275 Patent

Claim 1 of the '869 Patent recites:

1. In a hybrid communication network comprising a circuit switched network and a packet switched network connectable to terminals for communication there between, a method of communication session management comprising the steps of:

a) inputting from a calling one of said terminals an address of a called one of said terminals to initiate a communication session there between;

b) **authenticating,** account **validating, pricing,** and authorizing **a communication session between said calling and called terminals from a unitary logical object** connected to the packet switched network, and

signaling said authorization to a **session control object** connected to said circuit switched and packet switched networks;

c) initiating said authorized communication session via said session control object;

d) maintaining by said unitary logical object of a record of the initiation, progress, pricing and termination of said communication session on a substantially real time basis; and

e) determining the address of a lowest cost gateway between said switched network and said packet switched network prior to initiating said connection.

Similarly, Claim 1 of the '275 Patent recites:

1. In a hybrid communication network comprising a switched telephone network and a packet switched network connectable to terminals for communication therebetween, a method of communication session management comprising the steps of:

a) at a **session** control object connected between said switched telephone network and said packet switched network, receiving an address of a called one of said terminals from a calling one of said terminals via the packet switched network, as a request to initiate an audio communication session therebetween via the switched telephone network and the packet switched network;

b) **authenticating with respect to the calling terminal,** account validating for the calling terminal, **pricing,** and authorizing a communication session **between said calling and called terminals from a unitary logical object** connected to the packet switched network;

c) signaling said authorization to the session control object, via said packet switched network;

d) initiating a link for the audio communication session from said session control object via the switched telephone network to the called terminal to enable the audio communication via the switched telephone network and the packet switched network, in response to the authorization of the communication session; and

e) maintaining by said unitary logical object of a record of the initiation, progress, pricing and termination of said audio communication session on a substantially real time basis.

1. Authenticating ... from a unitary logical object

These terms were previously construed and are construed to mean:

Authenticating with respect to a calling terminal ... from a single logical database (including related call processing logic and supporting infrastructure) connected to a packet switched network.

2. Pricing ... from a unitary logical object

These terms were previously construed and are construed to mean:

accessing and/or using information related to the charge for a call, such as usage tracking, decrementing

minutes, or optionally calculating or communicating the charge for these minutes, for a communication session between a calling and called terminal from a unitary logical object.

3. Session control object

The term "**session control object**" is construed to mean "a gateway that connects the circuit-switched and packet switched network." The term "session control object" is synonymous with the term "gateway." Comparing the claim language to the specification confirms this. *Compare* '275 Patent, col.8 l.24-26 ("The Internet Telephony Gateway or ITG 118 connects the packet switched and circuit switched networks.") *with* id., Claim 1 ("a session control object connected between said switched telephone network and said packet switched network"). Dependant Claim 14 provides further support for this approach, stating "said session control object comprises a gateway between said switched telephone network and said packet switched network." Id. at col. 21 l. 36-38.

Cox seeks to add the limitation that the session control object "controls a communication session between terminals on each of those networks." There is no basis for such limitation in the claims or the specification.

Construction of Claim 2 of the ' 869 Patent ***and Claim 2 of the*** '275 Patent

The parties dispute the construction of the sole limitation in these claims: "**unitary logical object is distributed and comprises multiple instances thereof**". The phrase is construed to mean that "the unitary logical object resides on multiple physical devices." This is confirmed by the patent specifications, which state: "the database object is partitioned and may be distributed ... Each partitioned database may then be placed on its own physical system." '275 Patent, col.6 l.46-56. Furthermore, the phrase "**unitary logical object**" is construed as it was in the *Vonage* case; the phrase means "a single logical database that includes related call processing logic and supporting infrastructure (e.g., servers and networks) and manages customer authentication, authorization, account validating, and usage pricing."

Construction of Claim 28 of the '275 Patent

Claim 28 of the '275 Patent recites:

28. In a hybrid communication network comprising a switched telephone network and a packet switched network connectable to terminals for communication therebetween, at least a plurality of said terminals having accounts for use of said hybrid communication network, a method of session management comprising the steps of:

a) receiving from a calling one of said terminals having at least one such account an address of a called one of said terminals and identification of one of said accounts to initiate a communication session;

b) authenticating, validating the identified account, **pricing,** and authorizing **a telephone communication session between said calling and called terminals from an instance of a divided unitary logical object,** said instance being identified by the identified account, said unified logical object being connected to the packet switched network;

c) signaling the authorization to a **session control object** connected to said switched telephone network and said packet switched network;

d) in response to the signaling of the authorization, initiating a telephone communication session from said session control object, through the switched telephone network and the packet switched network; and

e) maintaining by said unitary logical object of a record of the initiation, progress, pricing and termination of said telephone communication session on a substantially real time basis.

1. Instance of a divided unitary logical object

The only term found in Claim 28 that is not found in Claim 1 of the '275 Patent is "**an instance of a divided unitary logical object.**" This term is construed to mean "a physical device on which at least a portion of the unitary logical object resides." This construction comports with the definition found in Claim 2 of the '275 Patent above. As stated above, the patent specification makes clear that "each partitioned database may be placed on its own physical system." '275 Patent, col. 6 l. 52-53. Claim 28 simply refers to one of those physical systems. The phrase "**unitary logical object**" shall be construed as it was in Claim 2 of the '275 Patent as explained above.

U.S. Patent No. 6,292,481

The '481 Patent is considered the Gateway patent and the parties ask the Court to address the construction of terms in Claims 1 and 35 of the ' 481 Patent.

Construction of Claims 1 and 35 of the '481 Patent

Claim 1 of the '481 Patent recites:

1. A method of establishing a communication path between terminals through a packet switched network, a circuit switched network, and at least one interface that interconnects the packet switched network and the circuit switched network, comprising the steps of:

a) requesting from one of said terminals the establishment of said communication path through said interface;

b) searching a first database for the address of a second database containing a table of terminal data which includes identification of said requesting terminal;

c) searching said second database to obtain data regarding said requesting terminal;

d) responsive to data regarding said requesting terminal obtained from said search authorizing the establishment of said communication path; and

e) responsive to said authorization establishing said communication path between terminals through said interface.

Claim 35 of the '481 Patent recites:

35. [a] **A communication system providing telephony communication across combined circuit switched and packet switched networks connectable to terminals for selective communication between said terminals,** [b] a directory object interfaced with said packet switched network and with a plurality of

gateway objects, which **gateway objects provide selectable controlled connectivity between said circuit switched and packet switched networks,** [c] a first **authentication object** having a storage of terminal account information associated therewith, [d] said directory object having associated therewith a table of addresses of authentication objects containing the address of said first authentication object. (bracketed letters added to aid in analysis)

1. Preamble to Claim 1

Cox asks the Court to construct the preamble as a limitation on the claimed invention. This construction is not appropriate here since Cox has failed to show why the Court ought to depart from the established rule that "[g]enerally, the preamble does not limit the claims." Allen Eng'g Corp. v. Bartell Indus., Inc., 299 F.3d 1336, 1346 (Fed.Cir.2002). The Court finds that the terms used in the preamble need no further construction and all terms should be given their plain and ordinary meaning.

2. Sequencing of sub-parts in Claim 1

Cox asks the court to construct the entirety of Claim 1 as requiring a specific sequencing of sub-parts (a) through (e). The Federal Circuit has held that "although **a** method claim necessarily recites the steps of the method in a particular order, as a general rule the claim is not limited to performance of the steps in the order recited, unless the claim explicitly or implicitly requires a specific order." Baldwin Graphic Sys., Inc. v. Siebert, Inc., 512 F.3d 1338, 1345 (Fed.Cir.2008). The parties have already agreed that sub-parts (c), (d) and (e) must be performed in that order. However, it does not follow that step (a) must be preformed before step (b) and step (b) before step (c). Steps (b) and (c) recite searches of databases which can occur at any time. The Court finds that Cox has failed to show that these sections require, either explicitly or implicitly, to be ordered (a) before (b) and (b) before (c). The Court finds that the terms, and lack of terms, related to the sequencing of sub-parts (a) through (e) need no further construction and all terms should be given their plain and ordinary meaning.

3. Claim 1, STEP (a): Requesting from one of said terminals the establishment of said communication path through said interface.

Step (a) is construed to mean "a terminal initiates a call that travels on both the packet switched and circuit switched networks." This follows from the plain meaning of the claim and specification, which makes clear that the terminal requests the establishment of the call. *See, e.g.,* '481 Patent, col. 13 l. 57-60 ("The PC's V/IP software application invokes the C2 Object to set up a call....").

Cox seeks to add limitations to this claim language but the intrinsic evidence does not support the new limitations. First, Cox argues that the communication must be established not merely "through" an interface but rather "by means of" an interface device. The disputed portion of the claim requires that one of the terminals request the establishment of a communication path that will go through the interface (from the packet switched network to the circuit switched network). Packet-to-packet or circuit-to-circuit calls, which do not go through the interface, are not covered by this claim. It appears to the Court that the word "through" requires no construction as urged by Cox.

Second, Cox argues that the terminal must request that the call use a particular interface device. This limitation is inappropriate because here the patent specification states that a directory such as the Intercarrier Addressing and Usage Recording Object-not the terminal device-may determine which gateway to use. *See, e.g.,* '481 Patent, col.31 l.25-27 ("The software application invokes the retail Directory ... a directory of

gateway or ITG addresses, to obtain the IP address of the destination or hop-off ITG."). The patent thus contemplates that only after it is given the address of the appropriate gateway does the calling terminal know where to send its traffic. It appears to the Court that Cox's proposed construction improperly adds limitations to the claim.

4. Claim 35, STEP (a): A communication system providing telephony communication across combined circuit switched and packet switched networks connectable to terminals for selective communication between said terminals.

This phrase is construed to mean "a communication system for managing telephone calls that travel over both the circuit switched and packet switched networks." Cox argues that, since Claim 35 does not use the word "comprising" after the preamble to the claim, this claim covers only communication systems that contain listed steps (a) through (c) and no more. Cox's argument does not comport with the claim language. Nothing in the claim language or the patent limits the claimed invention to a communications system involving only those three steps. The transition word used is "providing" which is not confining in its natural meaning: it indicates only what must be present, regardless of what else is present. *Cf.* Lampi Corp. v. Am. Power Prods., Inc., 228 F.3d 1365, 1376 (Fed.Cir.2000)(holding that "having" as a transitional phrase was open). Further, the claim clearly permits the communications system to include unrecited elements since steps (a) through (c) only discuss a small portion of such a communications system-a directory object and a first authentication object. A communication system by definition and necessity consists of elements beyond these two objects including, but not limited to, telephones, wires, and switches. For the reasons stated above, it is inappropriate for this Court to construe Claim 35 as a closed claim.

5. Claim 35, STEP (b): gateway objects provide selectable controlled connectivity between said circuit switched and packet switched networks

The term "**gateway objects**" is construed to mean "devices that connect the packet switched network to the circuit switched network." The phrase "**selectable controlled connectivity between said circuit switched and packet switched networks**" is construed to mean "the ability to select gateway objects to route calls between the circuit switched and packet switched networks."

Cox attempts to add requirements to this claim which will inappropriately limit the claim. Cox's proposed construction states that the "multiple gateways ... each control a call." This requirement does not exist in the ' 481 Patent since gateways do not control calls; other devices do.

As for the construction of "gateway objects," the specification confirms that "[t]he Internet Telephony Gateway ... connects the packet switched and circuit switched networks." '48l Patent, col. 4 l. 23-25.

6. Claim 35, STEP (c): authentication object

This Court previously construed "authenticating" in the '869 Patent to mean "authenticating with respect to a calling terminal." The '481 Patent is a continuation-in-part to the '869 Patent. Accordingly, similar terms in the two patents should be construed similarly. *See, e.g.,* V-Formation, Inc. v. Benetton Group SpA, 401 F.3d 1307, 1312 (Fed.Cir.2005); Omega Eng'g, Inc., v. Raytek Corp., 334 F.3d 1314, 1334 (Fed.Cir.2003). In deference to this prior construction, the term "**authentication object**" in Claim 1 of the '481 Patent should be construed to mean "a device that authenticates with respect to the calling terminal." This construction tracks the language already construed by this Court for a similar term in a related patent.

U.S. Patent Nos. 6,335,927 ***and*** 6,636,597

The '927 and '597 Patents are considered the Quality of Service patents and the parties ask the Court to address the construction of terms in Claim 1 of the '927 Patent, and of Claim 12 in the '597 Patent.

Construction of Claim 1 of the '927 Patent

Claim 1 of the '927 Patent recites in part:

1. A method for media communication over a hybrid network which includes a circuit switched network and a packet switched network, comprising: receiving a request for a media communication by a **resource management processor** connected to a hybrid network; determining an amount of resources in the hybrid network necessary to obtain a **requested quality of service;** ...

1. Resource management processor

The term "**resource management processor**" should be construed as "a processor that manages all resources across the interconnected circuit switched network and packet switched network." This construction is supported by the plain meaning of the term as used in the claims and the specification. Verizon asks the Court to construe the term "processor" as "device," and "management" as "translate." The Court finds that the terms "processor" and "management" are clear and need no further construction. These terms should be given their plain and ordinary meaning.

Verizon also argues that the phrase "manages *all* resources" (emphasis added) in this construction is at odds with the patent since the patent describes two types of resource management processors-local and global. This argument is unpersuasive for several reasons. First, the relevant part of the specification for this claim describes the Resource Management Model ("RMM") which requires the use of both local and global resource managers to manage resources across the hybrid network. *See* '927 Patent, col.41 l.14-16 ("The Resource Management Model describes the behavior of the LRM [Local Resource Manager] and the GRM [Global Resource Manager] and the logical relationships and interactions between them."). Second, the preamble of Claim 1 requires the method to be for "media communication over a hybrid network." This and other language in Claim 1 confirm that the resource management processor is managing resources across that entire network and the use of the phrase "manages all resources" is appropriate.

2. Requested quality of service

The term "**quality of service**" is construed to mean "the perceived quality of a voice call across the interconnected circuit switched network and packet switched network." A significant aspect of the '927 Patent is the ability to charge different rates for different requested qualities of service. *See* ' 927 Patent, col. 73 l. 47-49; col. 80 l. 45-51. To charge for particular quality of service levels, end-to-end quality of service must be provided, otherwise the voice quality will only be as good as the worst link in the network. *See* '927 Patent, col. 68 l. 9-15. Thus, the overall "services infrastructure [aims to] ensure[ ] the end-to-end quality." '927 Patent, col. 21 l. 12-13. The Court finds that this construction most clearly construes the meaning of the term "quality of service."

The term "**requested quality of service**" is construed to mean "a customer's selected level of 'quality of service' from several possible levels." The requested quality of service must be requested from across the entire hybrid network to guarantee the requested voice quality to the end user. *See* '927 Patent, col .68 l.9-15

(describing that the quality of service is analyzed across the packet switched and circuit switched networks).

The phrase "a customer's selected level" is appropriate since the '927 Patent requires that a customer request the quality of service level, i.e., the customer would select a certain voice quality. *See, e.g.,* '927 Patent, col. 80 l. 49-50. Verizon argues that the '927 Patent provides that the network requests the quality of service and not the customer. It appears to the Court that this is not accurate since, while the resource management processor determines which resources are necessary to obtain the requested quality of service and allocates the resources accordingly, the customer selects the desired quality of service. In fact, the '927 Patent provides two different methods for customers to request a quality of service. First, the customer can include information in his or her user profile to indicate the requested quality of service. *See* '927 Patent, col. 1 l. 29-39; *see also,* Claim 8 of the '927 Patent ("determining the requested quality of service from profile information associated with a caller of the media communication"). Second, the customer can include information in his or her request that indicates the requested quality of service. For example, the customer can call a specific number first that indicates a certain quality of service. *See, e.g.,* '927 Patent, col.80 l.49-51 ("The caller would select a quality level; perhaps by dialing different 800 number services first.").

Construction of Claim 12 of the '597 Patent

Claim 12 of the '597 Patent recites:

12. A method of providing services in a communications network, which comprises the steps of: receiving a request for a service; determining criteria for a **resource** necessary to provide the requested service; searching a **resource data structure** for a set of candidate resources meeting said criteria wherein each resource of said resource data structure comprises a resource identifier, a set of static attributes, and a set of dynamic attributes; **evaluating said set of candidate resources to find a best candidate resource;** and, allocating said best candidate resource to meet said request for service.

1. Resource

The term "**resource**" is construed to mean "a logical or physical unit that provides capabilities of the network." This construction hews most closely to the natural meaning of the word as applied to providing quality of service over a packet switched or hybrid network.

Cox seeks to limit the definition of "resource" to "an electronic device, such as a communication port, a voice response unit, store and forward device, multiplexer, and modem." This construction would add requirements to the claim, thereby improperly limiting this claim's application. A key aspect of the ' 597 Patent is that it involves the dynamic allocation of a wide range of resources-including the electronic devices on Cox's list, but also many other types of network resources that are not electronic devices, such as bandwidth in the network. *See* '597 Patent, col.2 l.13-22. A person of ordinary skill in the art would not consider a resource in a communications network to be limited to just electronic devices that connect to the network, but the various physical and logical resources that exist along the network paths as well.

2. Resource data structure

The term "**resource data structure**" is construed to mean "a searchable collection of information about resources." This construction is the most natural meaning of the term in the context of this claim. Cox seeks to limit the term to "a list of resources contained within a database," but the patent does not limit the relevant "structure" to a "list" within "a database." The patent instead makes clear that the resource data

structure is any searchable grouping of data. *See* '597 Patent, col. 8 l. 24-28; col. 9 l. 6-8.

3. Evaluating said set of candidate resources to find a best candidate resource

This term is construed to mean "choosing the best candidate resource from among a set of two or more candidate resources from the resource data structure based on attributes of the candidate resource." This claim requires that the "best" candidate resource be chosen from one of the candidate resources in the resource data structure. The candidate resources in the set are sorted or ranked such that the best candidate resource from amongst the candidate resources is selected. '597 Patent, col.5 l. 58-60.

Verizon would like the Court to construe this term to mean "assessing available resources to find an appropriate resource to use." This construction fails to limit the evaluation to the set of candidate resources as the claim requires, and thereby improperly broadens this claim. The Court's construction most closely hews to the natural meaning of the term in the claim.

And it is so Ordered.

E.D.Va.,2008.
Verizon Services Corp. v. Cox Fibernet Virginia, Inc.