

EXHIBIT B

**THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF KANSAS**

SPRINT COMMUNICATIONS COMPANY L.P.,

Plaintiff,

v.

VONAGE HOLDINGS CORP.,
VONAGE AMERICA, INC.

Defendants.

Case No. 05-2433-JWL

**REBUTTAL EXPERT REPORT OF DR. STEPHEN B. WICKER
REGARDING INFRINGEMENT OF
U.S. PATENT NOS. 6,665,294, 6,298,064, 6,473,429,
6,304,572, 6,633,561, 6,463,052, and 6,452,932**

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an asynchronous communication system configured to receive the second message and the communications and transfer the communications to the selected narrowband switch in response to the second message.

One of ordinary skill would recognize claim 18 as covering calls originating in a broadband packet network and terminating to the PSTN¹. As shown below, examples include “outbound calls” in the Vonage system.

d) A communications system for handling a call having a first message and communications, the communication system comprising:

The Vonage Call Processing Infrastructure supports the transmission of digitized voice between user agent terminal adapters, RTP relays and media gateways. The Vonage Call Processing Infrastructure also supports signaling for setting up and tearing down telephone calls. As such, it constitutes a communications system for handling a call having a first message and communications. See, for example, VON_012502-012572 and VON_012447-012501

e) a processing system external to narrowband switches and configured to receive and process the first message to select one of the narrowband switches and to generate and transmit a second message based on the selected narrowband switch; and

One of ordinary skill would understand a “narrowband switch,” within the context of the patent, to be a device that switches individual communication channels with data rates of up to 64 kbps (e.g., a DS0). This is supported by the written description, as well as extrinsic evidence².

When a provisioned Vonage customer dials a telephone number, the telephone sends dialing signals to the user’s TA. The TA receives the signals, translates them into a SIP Invite message (“the first message”), and sends the Invite message over the Internet (or a private IP network), using SIP over IP, to the Vonage customer’s associated outbound proxy (part of the “processing system”). The outbound proxy is part of the Vonage Call

¹ I note in passing that this claim (and many of the other asserted claims) refers to an “asynchronous communication system.” Mr. Halpern does not assert that this language would not apply to an IP network, or any other type of asynchronous packet network. Instead he imports a limitation from the written description, limiting this broad term to the specific example of ATM. Had Mr. Christie wished to so limit his claims, it would have been a simple matter to use “ATM networks” instead of “asynchronous communication system.” The difference in scope between the two terms would have been obvious to one of skill in the art.

² ISDN has both “narrowband” and “broadband” services. Broadband ISDN is defined as “a service requiring transmission channels capable of supporting rates greater than the primary rate” (i.e. >1.544 or 2.048 Mbs) [ISDN and Broadband ISDN with Frame Relay and ATM, 3rd Edition, by William Stallings, 1995. See also Reference Manual for Telecommunications Engineering, 3rd edition, Roger Freeman, 2002, pg. 2609].

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packets that include the user information and the RTP relay IP address. These IP packets, which include user information and an identifier for routing, are then transferred across the IP network and through the RTP relay. See, e.g., VON_012541-012543.

In my opinion the accused system practices all of the steps of claim 10 of the Christie '294 patent in a NAT'd call scenario as outlined above as well as a non-NAT'd scenario as outlined in my initial report.

Claim 19 reads as follows:

19. A method of transferring a telecommunication signal, the method comprising:

transferring a first signal component including user information from a narrowband communication signal;

and transferring a second signal component including an identifier for routing the user information, wherein the identifier is selected by processing a signaling message, wherein an interworking device receives the narrowband communication signal and a control signal indicating the narrowband communication signal and the identifier, and in response to the control signal, converts the narrowband communication signal into a packet format having the first signal component including the user information and the second signal component including the identifier to form the telecommunication signal.

One of ordinary skill would understand this claim to cover incoming calls – calls from PSTN customers to Vonage customers residing on a broadband network.

f) A method of transferring a telecommunication signal, the method comprising:

In what follows, I will refer to the accused system as the Vonage Call Processing Architecture. This architecture includes proxies and one or more signaling gateways (PGW softswitches) that exchange signaling related to the setting up and tearing down of voice over IP (VoIP) telephone calls. It follows that the Vonage Call Processing Architecture implements a method for transferring telecommunication signals. See, for example, VON_012502-012572.

g) transferring a first signal component including user information from a narrowband communication signal;

One of ordinary skill would interpret “user information” in this limitation as user generated speech or digital information that is to be transmitted to a receiving user. I base this construction on the ordinary meaning of the language, as well as the context of this limitation within the claim. I note, for example, that this “user information” is to be routed under the control of signaling in the next limitation, indicating that user

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connection is used in the header to route voice cells/packets across the network [‘429, at col. 17-31]. The inventors disclosed an ATM cross connect system and corresponding identifiers for providing these virtual connections, but recognized “numerous other techniques for providing virtual connections will be appreciated by one of skill in the art” [Christie ‘429 Patent, 8(61-65)].

It is my opinion that one of skill in the art that would not have construed “identifier” as used in claim 23 of the ‘429 patent so narrowly. In the context of the ‘429 patent, “identifier” should be construed as “a logical address enabling the transport of data through a network.”

On pg. 36, Mr. Halpern concludes that Vonage does not “select an identifier” either literally or equivalently under his construction, i.e., that “identifier” means “VPI or VCI.” His support seems to lie in a purported distinction he draws between the underlying network technology used in the illustrative ATM embodiment of the ‘429 patent and that used by the accused Vonage system. Specifically, Mr. Halpern contends the claim scope should be limited to “ATM cells carried over a pre-provisioned virtual connection” “identified by VPI, VCI, or a combination thereof.” As discussed above, the patent explicitly recognized that “numerous other techniques” were available for providing virtual connections to route information through a network.

In fact, Mr. Halpern appears to recognize that, even given a narrow construction of “identifier,” no substantial differences exist between the IP addresses used in Vonage’s system and the VPI/VCI’s disclosed in the patent. He provides no analysis of the identifiers themselves, but rather states that Vonage’s voice packets travel over the Internet and may “travel a different path to reach the ultimate destination.” He then makes the conclusory statement that “(v)oice packets carried over the Internet are substantially different from the use of ATM cells carried over a pre-provisioned virtual connection.”

To begin with, Mr. Halpern seems unaware that many of Vonage’s switches support MPLS (multi-protocol label switching), which would preclude Vonage’s packets from “travel[ing] a different path to reach the ultimate destination.” In fact, Mr. Halpern has offered no basis for his statement.

Furthermore, it is my opinion that, even given an overly narrow construction of “identifier,” Vonage’s use of an IP address and port number is insubstantially different from the use of VPI/VCI’s as described in the ‘429 patent. Both are used in the packet/cell header to route packets through a network and both enable the packet network to transfer packets/cells without additional call processing and signaling between intermediate network elements. The fact that IP routing *may* result in different paths being taken by the packets constituting a given call has no impact on the fact that an IP Address is an “identifier.” In addition, if an IP address is not an “identifier,” it performs the same function as a VPI/VCI (to route packets through a network), in substantially the same way (information is included in the header of an asynchronous packet to enable routing through the network without additional signaling), with substantially the same

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b) Processor Selects a Second Connection

On pg. 66, Mr. Halpern argues that the Vonage processing system does not select a second connection between telecommunications devices as required by claim 38. This argument is akin to his '561 argument that the processing system does not select a network code. I incorporate my above discussion on that point and conclude that Vonage's processing system meets this claim limitation literally or under the doctrine of equivalents.

c) Processor Transmits Second Message

Mr. Halpern's final argument with respect to the '572 patent is not one of substance. He appears to be claiming that I have an inaccuracy in my report, taking issue with my analysis of the limitation requiring the processing system to send a second message to the second communications device. In my report, I state that this second message is a SIP invite received by the media gateway. According to Mr. Halpern's analysis of the Vonage system on pg. 27 of his report, the message sent to the media gateway is a CRCX message containing the same information contained in a SIP Invite message. Regardless of the name or form of this message, Vonage's media gateway receives a second message from the processing system identifying a second connection. This limitation is literally met by the Vonage system.

d) Additional Limitations

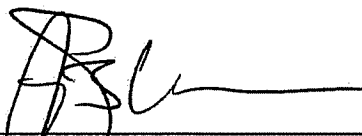
Mr. Halpern does not address additional limitations other than those in the body of his report in Appendix F.

III. CONCLUSION AND RESERVATION OF RIGHTS

I reserve the right to amend and/or supplement the foregoing in accordance with applicable Court rules, orders and procedures. In this and my other reports in this case, I have attempted to present sufficient technical background in response to the issues raised by Vonage's experts. However, I reserve my right, within the guidelines and rules of the Court, to provide tutorials to the Court and jury, including a tutorial and demonstratives on background technology, the patented technology and Vonage's system and related technology.

3/27/07

Date:



Dr. Stephen B. Wicker