

**UNITED STATES PATENT AND TRADEMARK OFFICE**

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**BEFORE THE PATENT TRIAL AND APPEAL BOARD**

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COMCAST CABLE COMMUNICATIONS, LLC,  
Petitioner,

v.

PROMPTU SYSTEMS CORPORATION,  
Patent Owner.

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Case IPR2018-00344  
Patent 7,047,196

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**DECLARATION OF CHRISTOPHER SCHMANDT IN SUPPORT OF  
PETITIONER'S REPLY TO PATENT OWNER'S RESPONSE**

I, Christopher Schmandt, declare as follows:

1. I make this declaration based upon my own personal knowledge and, if called upon to testify, would testify competently to the matters stated herein.

2. I have been asked by petitioner Comcast Cable Communications, LLC to provide my opinions in response to certain arguments and assertions made in the Patent Owner's Response (Paper 20) and the supporting declaration provided by John Tinsman (Ex. 2033).

**I. THE PRIOR ART DISCLOSES "RECEIVING SAID BACK CHANNEL TO CREATE A RECEIVED BACK CHANNEL"**

3. In this section, I respond to the Patent Owner's argument that I improperly analyzed the elements of claims 1 and 27 of the '196 Patent that recite "receiving said back channel to create a received back channel." In particular, I am responding to the arguments on pages 10-13 and 19-20 of the Patent Owner's Response (Paper 20) and paragraphs 33-37 and 46 of the Tinsman Declaration (Ex. 2033).

4. Patent Owner and Mr. Tinsman argue that I "never address how any of the references, Julia, Nazarathy, or Quigley, creates a received back channel." Paper 20 at 10; Tinsman Decl. ¶¶ 33, 36 (Ex. 2033). I disagree. I specifically addressed how Julia discloses this element of claim 1 in Paragraphs 311 and 312 of my initial declaration (Ex. 1019).

5. As I explained, the back channel (i.e., "said back channel") is the

upstream communication channel of network 106 disclosed in Julia. Ex. 1019 ¶¶ 307, 311. I also explained that Julia discloses that multiple users may send voice input data simultaneously using the back channel of network 106 to remote server 108. Ex. 1019 ¶¶ 307, 311. When the remote server receives these signals over the back channel of network 106, it is “receiving said back channel to create a received back channel,” as recited in claim 1. Ex. 1019 ¶¶ 311-312.

6. Patent Owner and Mr. Tinsman argue that the element of “receiving said back channel to create a received back channel” is actually two elements: (i) receiving a back channel (ii) and creating a received back channel, which they refer to as “a second element.” Paper 20 at 10; Tinsman Decl. ¶ 33 (Ex. 2033). They do not offer any explanation of their understanding of the “received back channel” or what they mean when asserting that it is a “second element.” Nor do they cite any support in the patent specification to suggest that the back channel is somehow created or transformed into a distinct network element called a “received back channel.” I have reviewed the ’196 Patent specification and there is no support for the argument that this claim language describes converting the back channel to a different network element called a “received back channel.”

7. The only reference to a “received back channel” in the patent specification that does not merely recite the same phrase used in the claim states: “The received identified speech channels are based upon a received back channel

at the wireline node from multiple user sites coupled to the network.” ’196 Patent at 22:47-50 (Ex. 1001). This description is consistent with my understanding that the patent uses the phrase “received back channel” to refer to the network back channel carrying voice commands from multiple different users after it has been received by a central wireline node for voice processing.

8. In my opinion, the received back channel is not a different and distinct “element” of the network, as Patent Owner and Mr. Tinsman assert. Instead, the back channel disclosed in the ’196 Patent, and as disclosed in Julia, is part of a two-way interactive network that is capable of carrying upstream communications (e.g., from a set-top box to a cable head-end). When the systems disclosed in the ’196 Patent and in Julia are receiving voice data over that network back channel, they are “receiving said back channel to create a received back channel.” The received back channel is “created” in the sense that it has been “received” by the speech processing system. In my opinion, a person of ordinary skill in the art would understand the “receiving” element of claim 1 in this way, and it is the understanding I employed in my original analysis of the ’196 Patent.

9. Patent Owner and Mr. Tinsman also argue that I “mapped” the “received back channel” to “a type of data.” Paper 20 at 13; Tinsman Decl. ¶ 36. I disagree. I did not equate the received back channel with a type of data for purposes of my analysis. Patent Owner and Mr. Tinsman appear to be confused by

a sentence in my initial declaration that reads as follows: “The network server 108 therefore ‘receives’ the back channel to ‘create a received back channel’ (the data coming in from the multiple network users from via network 106).” Ex. 1019

¶ 311. I disagree that this sentence (if fairly read in view of the rest of my declaration) suggests that I equated the “received back channel” with “data.”

Certainly, that was not my intent. The parenthetical reference to “data” coming in from multiple network users on two-way interactive network 106 was intended to identify the disclosure in Julia showing that this claim element is met. The received back channel is not data; instead it is the upstream communications channel that carries the signals containing the data in the form of voice commands from multiple user sites once it has been received by the speech processing system. In my opinion, a person of ordinary skill in the art would understand the “receiving” element of claim 1 in this way, and it is the understanding I employed in my analysis of the ’196 Patent.

## **II. THE PRIOR ART DISCLOSES “PARTITIONING SAID RECEIVED BACK CHANNEL INTO A MULTIPLICITY OF RECEIVED IDENTIFIED SPEECH CHANNELS”**

10. In this section, I respond to the Patent Owner’s argument that I improperly analyzed the element of claims 1 and 27 of the ’196 Patent that recite “partitioning said received back channel into a multiplicity of received identified speech channels.” In particular, I am responding to the arguments on pages 14-15

and 19-20 of the Patent Owner's Response (Paper 20) and paragraphs 38-43 and 46 of the Tinsman Declaration (Ex. 2033).

11. Patent Owner and Mr. Tinsman argue that the disclosures in Nazarathy and Quigley of "partitioning an upstream channel" should be ignored because I did not show "that either Nazarathy or Quigley disclose partitioning data, as [my] mapping of 'received back channel' would require." Paper 20 at 14-15; Tinsman Decl. ¶ 40 (Ex. 2033). I disagree. As I explained above in Paragraph 9, I did not map the "received back channel" to "data" for purposes of my analysis.

### **III. THE PRIOR ART DISCLOSES "PROCESSING SAID MULTIPLICITY OF SAID RECEIVED IDENTIFIED SPEECH CHANNELS TO CREATE A MULTIPLICITY OF IDENTIFIED SPEECH CONTENT"**

12. In this section, I respond to the Patent Owner's argument that I improperly analyzed the elements of claims 1 and 27 of the '196 Patent that recite "processing said multiplicity of said received identified speech channels to create a multiplicity of identified speech content." In particular, I am responding to the arguments on pages 17-20 of the Patent Owner's Response (Paper 20) and paragraph 44 and 46 of the Tinsman Declaration (Ex. 2033).

13. Patent Owner and Mr. Tinsman argue that my analysis of this element "conflates a signal with data." Paper 20 at 17; Tinsman Decl. ¶ 44 (Ex. 2033). I disagree with their criticism, but also observe that Mr. Tinsman and Patent Owner appear to be applying a rigid distinction between signals and data that is incorrect

in the technological area of the '196 Patent.

14. In a two-way interactive network, as described in the '196 Patent and in Julia, signals are used to carry data. For example, the user can issue a voice command. The speech command is digitized and becomes data that the system will transmit using electrical or optical signals sent to the central wireline node/server on the network's back channel over, for example, coaxial cable or fiber optics. The wireline node/server processes the received signal to extract the data carried on it so that the spoken command can be recognized by voice recognition processing located at the wireline node/server. The reference to signals and data in this explanation, as in the discussion of this element in my original declaration, does not "conflate" the two, but instead recognizes the interrelated nature of signals and data in network communications technology. Simply put, signals are the way that data is transmitted; without the signal, there is no transmission, and without the data, the signal is only noise.

#### **IV. THE PRIOR ART DISCLOSES VOICE-CONTROLLED FINANCIAL TRANSACTIONS AS RECITED IN CLAIMS 5, 6, 31, AND 32**

15. In this section, I respond to the Patent Owner's argument that Julia combined with Gordon or Banker does not disclose the voice-controlled financial transactions recited in dependent claims 5, 6, 31, and 32. In particular, I am responding to the arguments on pages 24-26 of the Patent Owner's Response (Paper 20). I disagree with Patent Owner's arguments for a number of reasons.

16. Patent Owner argues that I relied only on Julia for the first element of claims 5, 6, 31, and 32. I disagree. I explained how Julia, Banker, and Gordon each disclose the first “assessing” step of these claims.

17. In particular, I explained how Julia discloses the “assessing” step of claim 5 in paragraph 345 of my original declaration (Ex. 1019). I explained how Banker discloses the “assessing” step of claim 5 (and the second “billing” step) in paragraph 348 of my original declaration. I explained how Gordon discloses the “assessing” step of claim 5 (and the “billing” step) in paragraph 349 of my original declaration.

18. I explained how Julia discloses the “assessing” step of claim 6 in paragraph 351 of my original declaration (Ex. 1019). I explained how Banker discloses the “assessing” step of claim 6 in paragraph 352 of my original declaration. I explained how Gordon discloses the “assessing” step of claim 6 in paragraph 353 of my original declaration.

19. I explained how Julia discloses the “assessing” step of claim 31 in paragraph 406 of my original declaration (Ex. 1019). I explained how Banker discloses the “assessing” step of claim 31 (and the “billing” step) in paragraph 409 of my original declaration. I explained how Gordon discloses the “assessing” step of claim 31 (and the “billing step”) in paragraph 409 of my original declaration.

20. I explained how Julia discloses the “assessing” step of claim 32 in



paragraph 411 of my original declaration (Ex. 1019). I explained how Banker discloses the “assessing” step of claim 32 in paragraph 412 of my original declaration. I explained how Gordon discloses the “assessing” step of claim 32 in paragraph 413 of my original declaration.

21. Patent Owner also argues that Julia does not disclose “creat[ing] a financial consequence identified as to said user site.” Paper 20 at 24. I disagree. Julia describes a voice-controlled system for obtaining video and other content for display to viewers. One embodiment is a coaxial cable network with set-top box and voice-enabled remote control. Julia at 3:45-55, 4:31-35 (Ex. 1012). Julia then states:

Further, practitioners may choose to implement the each of the various embodiments described above on any number of different hardware and software computing platforms and environments and various combinations thereof, including, by way of just a few examples: a general-purpose hardware microprocessor such as the Intel Pentium series; operating system software such as Microsoft Windows/CE, Palm OS, or Apple Mac OS (particularly for client devices and client-side processing), or Unix, Linux, or Windows/NT (the latter three particularly for network data servers and server-side processing), and/or proprietary information access platforms such as Microsoft’s WebTV or the Diva Systems video-on-demand system.

Julia at 6:47-59. This passage informs a person of ordinary skill in the art that the Julia voice-control system can be implemented on “the Diva Systems video-on-

demand system.” A person of ordinary skill in the art would recognize from this disclosure that the Julia system can be used to “create a financial consequence” by implementing the Julia voice-control system on a Diva Systems video-on-demand system. As I stated in my initial declaration, a person of ordinary skill in the art would understand that that pay-per-view and video-on-demand functionality provided by the Diva system would require a purchase (i.e., “a financial consequence”). Ex. 1019 ¶ 345.

22. Patent Owner argues that I “cannot equate ‘pay-per-view and video-on-demand’ because they are not the same thing.” Paper 20 at 25. A person of ordinary skill in the art would not have understood these terms to rigidly define mutually exclusive features in a television system, as Patent Owner asserts. For instance, a person of ordinary skill in the art in 2000 would have understood that a video rental system (for example, in a hotel room) could be referred to either as “video-on-demand” or as “pay-per-view.”

23. In any event, I did not need to equate one with the other. In my initial declaration, I stated that a person of ordinary skill in the art would know that the Diva Systems system provided pay-per-view functionality. I have reviewed portions of the transcript of the deposition of Paul Cook, the founder of Diva Systems, who confirmed that Diva Systems provided pay-per-view functionality. Cook Dep. at 22:2-13, 249:6-17 (Ex. 1024). Further, the reference to Diva

Systems in Julia would have led a person of ordinary skill in the art to review Diva Systems' patents such as the Gordon patent I discussed in my original declaration. Gordon discloses that the Diva system provided pay-per-view functionality, which Gordon refers to as "a la carte" viewing. Gordon at 9:26-10:9, Fig. 3B (Ex. 1016). In Gordon, if a desired video is outside of the user's subscription plan, the system prompts the user "with an 'a la carte' purchase option" that allows the viewer "to purchase and view the a la carte selection." Gordon at 9:56-63.

24. In connection with the argument about equating pay-per-view and video-on-demand, Patent Owner also states that "Netflix subscribers can watch as many videos on-demand as they please; they do not need to pay per view." Paper 20 at 25. This assertion misses the point. The claims do not recite or require "pay per view"; instead, they recite creating a "financial consequence" for which the user is billed. Netflix subscribers have to pay to become subscribers, and if they do so using the Julia voice-control system they would be creating a "financial consequence" for which they will be billed. Indeed, Gordon explicitly describes the process for selecting such a paid "subscription-on-demand" service, as I explained in my initial declaration. Ex. 1019 ¶¶ 130, 185, 197, 260, 276, 349, 357, 409, 425. A person of ordinary skill in the art in 2000 would have understood that both video-on-demand subscription services (like Netflix, although it did not exist in 2000) and pay-per-view services create a financial consequence for the user.

### **Acknowledgement of Oath**

I declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1101 of Title 18 of the United States Code.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Chris Schmandt", written in a cursive style.

Christopher Schmandt

Dated: December 13, 2018