UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Cox Communications
Petitioner
v.

Entropic Communications, LLC.
Patent Owner

Inter Partes Review No.
IPR2024-00578

Patent No. 9,825,826
Filing Date: November 23,2015
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PETITIONER'S REPLY TO PATENT OWNER'S PRELIMINARY RESPONSE

Petitioner submits this Reply pursuant to the Board's authorization (email on June 20, 2024) to address whether the Renken provisional ("Provisional") discloses a Central Management Controller ("CMC") at the CATV network headend. The Provisional discloses that the CMC is located at the headend, and Petitioner relied on that disclosure to demonstrate support for the analogous disclosures in the Renken utility.

Claim element 1H of the '826 patent recites, in part, "controlling the transmission of network management messages back to said headend." Patent Owner concedes that the Renken utility discloses that the CMC can be located at the headend. POPR at 20. Specifically, the CMC 7 "may or may not be co-located with the CMTS 3" at the headend. Ex. 1005 at 8:40-43. Thus, as Patent Owner also concedes, since either or both the CMTS or CMC may be located at the headend, transmitting messages to either satisfies element 1H.

The cited portions of the Provisional include similar disclosures and thus support the Petition's arguments.[1] And Patent Owner's focus on claim element 1H

[1] As is clear from, for example, the quotations on page 14 of the Petition, Petitioner's cites to the Provisional throughout the Petition refer to the internal page numbers of the Provisional rather than the Bates numbers.

in a vacuum is improper; the claim and references must be read as a whole.

Claim element 1A recites, in part, "a receiver coupled to a . . . headend." The Petition, addressing element 1A notes,"'DOCSIS 3.0 compliant cable modems' for network monitoring are used to receive and transmit video and data to a cable operator's head end. . . ." Petition at 30 (citing Provisional at 1, 5, 6). The cited portions of the Provisional describe DOCSIS measurement-capable cable modems ("MCCM") (page 1) and the various types of measurements performed by them (pages 5 and 6). The Provisional specifically discloses, "[t]he DOCSIS connection would provide the necessary communication path for the CMC to direct the MCCM as to which measurement to perform." Provisional at 1. The Provisional also states, "[t]his invention consists of one or more of these measurement-capable cable modems (MCCM) being directed by remote control from a central measurement controller (CMC)" and "[o]ptionally when required, the CMC communicates with the Cable Modem Termination System (CMTS). . . ." *Id.* Thus, like the Renken utility, the Provisional describes that the CMC directs the MCCM over DOCSIS, i.e., is located at the head end, or does so through the CMTS. This is the same disclosure, stated somewhat differently, as appears in the Renken utility cited above and is thus not "matter conceived after the Renken provisional was filed" as Patent Owner asserts. POPR at 20. Thus, the Provisional supports the disclosure on which the Petition relies.

Taken together, these excerpts demonstrate that messages are sent to the head end, where the CMC is located. Moreover, the newly-submitted evidence from Patent Owner confirms how a POSITA would understand the disclosure in the Provisional. For example, the Provisional discloses that "DOCSIS 3.0 compliant cable modems provide multiple downstream receivers and ***upstream transmitters***." Provisional at 1 (emphasis added). Patent owner introduced the reference *DOCSIS® Best Practices and Guidelines: Proactive Network Maintenance Using Pre-equalization (Ver. 2)*. Ex. 2008. Patent Owner's reference defines the term "upstream" in the DOCSIS context as "[t]he direction of RF signal transmission ***from subscriber to headend***." Ex. 2008 at 15 (emphasis added); *see also* Ex. 2007 at 24. Thus, a POSITA would have recognized that the MCCM described in the Provisional is transmitting messages from the MCCM upstream to the headend where the CMC is located. This understanding of the Provisional is confirmed throughout its disclosure. *See, e.g.,* Provisional at 1 ("DOCSIS 3.0 compliant cable modems provide multiple … upstream transmitters."); at 3 ("If a transmitter is not currently being used by the CM for data transmit, it can be used to perform sweep style measurements to the headend."); at 8 ("Upon completion of the measurement plan, the cable modem will send the results to the CMC.").

Thus, the cited disclosures in the Provisional establish that the modems transmit messages to the headend as the claims recite.

Respectfully submitted,

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CERTIFICATE OF SERVICE

The undersigned hereby certifies that on the date below a copy of this **Petitioner Reply to Patent Owner's Preliminary Response** has been served on Patent Owner by filing through the P-TACTS System, as well as by delivering a copy via electronic mail to the following:

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