Paper No. 19

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte PRASAD V. UPADRASTA

Appeal No. 2002-1513
Application No. 08/829,587

ON BRIEF

Before URYNOWICZ, RUGGIERO and LEVY, Administrative Patent Judges.

URYNOWICZ, Administrative Patent Judge.

Decision on Appeal

This appeal is from the final rejection of claims 1, 2, 4-10 and 12-19, all of the claims pending in the application.

The invention pertains to method and apparatus for bi-modal data communication. Claim 1 is illustrative and reads as follows:

1. A method for increasing reliability of data communications based on a quality of service of said communications, said method comprising:

determining if said quality of service is inadequate based upon a threshold;

routing and buffering data communications, if said quality of service is determined to be inadequate, using a reliable network protocol; and

routing data communications using a non-reliable network protocol if quality of service is determined to be adequate.

The reference relied upon by the examiner is:

Hluchyj et al. (Hluchyj) 5,115,429 May 19, 1992

Claims 1, 2, 4-10 and 12-19 stand rejected under 35 U.S.C. § 102(b) as anticipated by Hluchyj.

The respective positions of the examiner and the appellant with regard to the propriety of this rejection are set forth in the examiner's answer (Paper No. 16) and the appellant's brief and reply brief (Paper Nos. 15 and 17, respectively).

Appellant's Invention

Appellant's invention is adequately described at page 5 of the brief.

The Prior Art

The invention of Hluchyj is adequately described in the paragraph bridging pages 5 and 6 of the brief.

We will consider the claims as grouped and argued beginning at page 6, item B, of the brief, in the order set forth by appellant.

Claims 1 and 19

With respect to the rejection of independent claims 1 and 19, appellant argues that the examiner incorrectly equated a data encoding rate or data transmission rate with a network protocol. Appellant also contends that Hluchyj fails to teach a reliable network protocol and an unreliable network protocol.

We do not agree with either of appellant's positions and will sustain the rejection of claims 1 and 19. A network protocol is a set of conventions that governs and controls the interactions between two communicating functional units. Communications Standard Dictionary, Martin H. Weik, D.Sc., Chapman & Hall, Third Edition, New York, N.Y., 1996. The two different sets of conventions that govern and control the interactions between two communicating functional computers (e.g., nodes B and D) that Hluchyj's network utilizes are his protocols. Coders 18 and 26 and the bits identified as FCIB and RCIB are regulated to communicate data between nodes at two different data rates, high and low, at different times. Furthermore, Hluchyj's reliable network protocol is the set of

conventions used to communicate data at the low data rate, which prevents and eliminates congestion, and the non-reliable network protocol is the set of conventions used to communicate data at the high data rate, which causes congestion. We note that at column 1, lines 27-31, the reference teaches that congestion causes voice quality degradation due to the discarding of data packets and increased packet delay time.

Claims 9, 13, 14, 17 and 18

After consideration of the positions and arguments presented by appellant with respect to the group of claims consisting of claims 9, 13, 14, 17 and 18, we have concluded that the rejection should be sustained. We agree in general with the comments made by the examiner. Appellant's argument that Hluchyj fails to provide any teachings or suggestions relevant to the claim limitations of independent claims 9 and 18 requiring "routing data through a reliable network protocol when directed by a quality of service agent and otherwise routing the data through a non-reliable network protocol" has been answered, above, with respect to our decision to sustain the rejection of claims 1 and 19. The argument regarding claims 9 and 18 that Hluchyj fails to provide any teachings or suggestions relevant to the storage of a specified or predefined number of data packets during

transmission using the reliable network protocol is not persuasive because at column 4, lines 66 through column 5, line 38, the reference teaches buffering which permits a limited number of received packets to be temporarily stored prior to being transmitted. See especially column 5, lines 1-3. This storage of packets is done during both fast (unreliable) and slow (reliable) data transmission because the system monitors whether or not excessive network congestion is present. See especially lines 14-17 of column 5.

Claims 13, 14 and 17, each of which depends directly from independent claim 9, are not separately argued by appellant, indicating how they define appellant's invention over the prior art. Accordingly, claims 13, 14 and 17 fall with claim 9. In re Nielson, 816 F.2d 1567, 2 USPQ2d 1525 (Fed. Cir. 1987).

Claim 2

We will sustain the rejection of claim 2. Appellant's argument that Hluchyj fails to teach the step of collecting packets of data as generated by data communications once the data communications are routed through a reliable network service to accumulate a pre-defined number of packets while using the reliable network protocol is unpersuasive essentially for the reason we will sustain the rejection of claims 9 and 18. When

Hluchyj's system is operating in the slow, reliable mode, the buffer is collecting "a defined number of packets" in that it is monitoring when it has stored less than a threshold number for switching to the faster, unreliable mode of transmitting data. That number is reference pointer 42 of Figure 4 or, alternatively, the reference rate or reference number taught at column 7, lines 50-57.

Claim 5

We will sustain the rejection of claim 5. Claim 5, which depends from independent claim 1, is not separately argued by appellant, indicating how it defines appellant's invention over the prior art. Accordingly, claim 5 falls with claim 1. In re Nielson, supra.

Claims 4, 7 and 12

With respect to claim 4, it is argued by appellant that Hluchyj does not teach issuing of a "go-to-live reliable mode" control message.

This argument is not persuasive and we will sustain the rejection of claim 4. Appellant's argument is not commensurate in scope with the claim. The claim recites "…issuing 'go to reliable mode' control message". This language is met by the reference when flags are present in bits RCIB and FCIB as a

control message causing the system to resort to the slow, reliable mode of data transmission.

We will not sustain the rejection of claims 7 and 12. The examiner relies on the disclosure of Hluchyj at column 7, lines 25-57, as anticipating the limitation of claims 7 and 12 of advising a user that quality of service is inadequate. The examiner has not explained what disclosure in the above text meets this function, and we have found no teaching in the reference, either in the portion of Hluchyj relied on by the examiner or anywhere else in Hluchyj, of advising a user that quality of service is inadequate.

Claim 6

We will not sustain the rejection of claim 6. Among other things, claim 6 requires collecting statistics regarding rate of packet loss. In contrast, Hluchyj teaches three alternatives. They are measuring a packet queue, measuring a packet rate, and counting the number of calls in talkspurt. Hluchyj does not specifically teach collecting statistics regarding rate of packet loss. The examiner's position at page 6 of the answer that rate of data is understood as packets with an empty data is not explained, and appears to have no basis in fact. There is simply

no teaching in Hluchyj that packet loss is monitored in his invention.

Claim 8

We will not sustain the rejection of claim 8. The examiner relies on the text of Hluchyj at column 7, lines 35-57, for a teaching of a user initiating the step of routing independent of a determination of quality of service. There is simply no such teaching in the above text.

Claims 10, 15 and 16

We will not sustain the rejection of these claims. Claim 10 requires Real Time Protocol (RTP) or Q.931, claim 15 requires Real Time Control Protocol, and claim 16 requires Transmission Control Protocol. There is no specific teaching of any of these protocols in Hluchyj.

Summary

The rejection of claims 1, 2, 4, 5, 9, 13, 14, 17, 18 and 19 is sustained. The rejection of claims 6, 7, 8, 10, 12, 15 and 16 is reversed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a).

AFFIRMED-IN-PART

STANLEY M. URYNOWICZ JR. Administrative Patent Judge	)
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