UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte EMRE BARIS AKSU, IGOR DANILO DIEGO CURCIO,
DAVID LEON, VIKTOR VARSA, and RU-SHANG WANG

Appeal 2008-1820
Application 10/778,941
Technology Center 2400

Decided: December 10, 2008

Before JOSEPH L. DIXON, JEAN R. HOMERE, and
STEPHEN C. SIU, *Administrative Patent Judges*.

SIU, *Administrative Patent Judge*.

STATEMENT OF THE CASE

This is a decision on appeal under 35 U.S.C. § 134(a) from the Examiner's rejection of claims 1-18. We have jurisdiction under 35 U.S.C. § 6(b). We affirm.

The Invention

The disclosed invention relates generally to signaling client packet rate capacity (Spec. 1).

Independent claim 1is illustrative:

> 1. A method of controlling streaming data delivery in a multimedia streaming network having a server for providing the streaming data to a client at a packet data rate, said method comprising:
>
> declaring in a message a maximum data rate capability at the client; and
>
> signaling the message to the server.

The References

The Examiner relies upon the following references as evidence in support of the obviousness rejection:

Higashiyama US 2003/0097460 A1 May 22, 2003

Schulzrinne, H. et al., *Real Time Streaming Protocol (RTSP)*, IETF RFC 2326, Network Working Group, The Internet Society (1998).

Ultralingua Online Dictionary (2007), available at http://ultralingua.com/onlinedictionary/index.html?service=ee&text=bandwidth.

The Rejection

The Examiner rejects claims 1-18 under 35 U.S.C. § 103(a) as being unpatentable over Schulzrinne and Higashiyama.

ISSUES

Issue #1

Appellants assert that "*Higashiyama* does not disclose checking or declaring maximum data rate capability at the client" (App. Br. 10).

The Examiner finds that "*bandwidth*, is broadly interpreted as *capability* as claimed" (Ans. 8).

Did Appellants demonstrate that the Examiner erred in finding that Higashiyama discloses or suggests declaring a maximum data rate capability at the client?

Issue #2

Appellants assert that "in *Higashiyama*, the declarer is the server, not the client" (App. Br. 10).

The Examiner finds that "a client can be a server, and vice versa" (Ans. 9).

Did Appellants demonstrate that the Examiner erred in finding that Higashiyama discloses or suggests that a declarer is the client?

Issue #3

Appellants assert that "*Higashiyama* does not disclose or even suggest a capability profile for indicating the maximum data rate capability" (App. Br. 11).

The Examiner finds that "Higashiyama teaches a capability profile and parameter for indicating the maximum data rate capability in figures 3 and 4" (Ans. 9).

Did Appellants demonstrate that the Examiner erred in determining that Higashiyama teaches a capability profile and parameter for indicating the maximum data rate capability?

Issue #4

Appellants assert that "*Higashiyama* does not disclose or even suggest a capability parameter in the capability profile for indicating the maximum data rate capability" (App. Br. 11).

The Examiner finds that "Higashiyama teaches a capability profile and parameter for indicating the maximum data rate capability in figures 3 and 4" (Ans. 9).

Did Appellants demonstrate that the Examiner erred in finding that Higashiyama teaches or suggests a capability parameter in the capability profile for indicating the maximum data rate capability?

Issue #5

Appellants assert that "neither *Schulzrinne* nor *Higashiyama* discloses indicating the maximum data rate capability in the capability information" (App. Br. 12).

The Examiner states "see abstract of Higashiyama" (Ans. 9).

Did Appellants demonstrate that the Examiner erred in finding that Higashiyama discloses or suggests maximum data rate capability in the capability information?

Issue #6

Appellants assert that "the combined teachings of *Schulzrinne* and *Higashiyama* fail to disclose that the server adjusts the packet data rate according to the maximum data rate capability at the client" (App. Br. 12).

The Examiner finds that "Schulzrinne in view of Higashiyama teaches indicating the maximum data rate capability, therefore teaches the server adjusts the packet data rate accordingly (Higashiyama [0075])" (Ans. 9).

Did Appellants demonstrate that the Examiner erred in finding that Schulzrinne and Higashiyama discloses that the server adjusts packet data rate according to the maximum data rate capability at the client?

Issue #7

Appellants assert that "the combined teachings of *Schulzrinne* and *Higashiyama* fail to disclose indicating the maximum data rate capability in an RTSP header extension" (App. Br. 13).

The Examiner finds that Higashiyama discloses "indicating the maximum data rate capability in an RTSP header extension (Higashiyama [0065])" (Ans. 9).

Did Appellants demonstrate that the Examiner erred determining that Higashiyama discloses or suggests indicating the maximum data rate capability in an RTSP header extension?

FINDINGS OF FACT

The following Findings of Facts (FF) are shown by a preponderance of the evidence.

1. Higashiyama discloses a "pre-configured bandwidth information database" that "has stored therein data indicating a pre-configured bandwidth predetermined according to medium types" (¶[0132]).
2. Higashiyama discloses "data indicating the minimum communication rate, the maximum communication rate, and the maximum communication delay (time) set for each application is stored in the pre-configured bandwidth information database" (¶[0133]).
3. Higashiyama discloses "the data session information extracted from the packet is information on the bandwidth required for the destination IP address/port, the source IP address/port, and the session, for example" (¶[0147]).
4. Higashiyama discloses "the control session analyzing section 6 reads the bandwidth information corresponding to the medium . . . of the data session information from the pre-configured bandwidth information database . . . and performs setting of the bandwidth using the read bandwidth information" (¶[0152]).

5. Higashiyama discloses "data indicating the minimum communication rate, the maximum communication rate, and the maximum communication delay (time) set for each application is stored in the pre-configured bandwidth information database" (¶[0133]).
6. Higashiyama discloses that the "client requests the resource and the start of the RTSP session to the server (RTSP)" (¶[0200]).
7. Higashiyama discloses the apparatus determining "whether or not a required bandwidth included in this data session information is acceptable . . . by referring to used bandwidths" (¶[0160] and ¶[0161]).
8. Higashiyama discloses that the "control session analyzing section 6 recognizes that the bandwidth information of the contents is notified in the above RTSP/SDP packet" (¶[0197]) and "recognizes by the description . . . of the bandwidth information that the session requires the bandwidth with 16 Kbps from the server side to the client" (¶[0198]).
9. Schulzrinne discloses "[t]he 'rtsp' and 'rtspu' schemes" (page 14).
10. Ultralingua Online Dictionary defines the term "bandwidth" as "[a] data transmission rate; the maximum amount of information (bits/second) that can be transmitted along a channel" (page 1).

PRINCIPLES OF LAW

35 U.S.C. § 103(a)

> Section 103 forbids issuance of a patent when "the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains."

KSR Int'l Co. v. Teleflex Inc., 127 S. Ct. 1727, 1734 (2007).

"What matters is the objective reach of the claim. If the claim extends to what is obvious, it is invalid under *§ 103*." *KSR Int'l Co. v. Teleflex, Inc.*, 127 S. Ct. at 1742 (2007). In *KSR*, the Supreme Court emphasized "the need for caution in granting a patent based on the combination of elements found in the prior art," *Id.* at 1739, and discussed circumstances in which a patent might be determined to be obvious. *KSR,* 127 S. Ct. at 1739 (citing *Graham v. John Deere Co.*, 383 U.S. 1, 12 (1966)). The Court reaffirmed principles based on its precedent that "[t]he combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results." *Id.* The operative question in this "functional approach" is thus "whether the improvement is more than the predictable use of prior art elements according to their established functions." *Id.* at 1740.

The Federal Circuit recently recognized that "[a]n obviousness determination is not the result of a rigid formula disassociated from the consideration of the facts of a case. Indeed, the common sense of those

skilled in the art demonstrates why some combinations would have been obvious where others would not." *Leapfrog Enters., Inc. v. Fisher-Price, Inc.*, 485 F.3d 1157, 1161 (Fed. Cir. 2007) (citing *KSR*, 127 S. Ct. 1727, 1739 (2007)). The Federal Circuit relied in part on the fact that Leapfrog had presented no evidence that the inclusion of a reader in the combined device was "uniquely challenging or difficult for one of ordinary skill in the art" or "represented an unobvious step over the prior art." *Id.* at 1162 (citing *KSR*, 127 S. Ct. at 1740-41).

ANALYSIS

Issue #1

Higashiyama discloses an apparatus that determines "data indicating . . . the maximum communication rate . . . for each application" (¶[0133]) and "information on the bandwidth required for the destination IP address/port" is extracted (¶[0147]). Because a "client" broadly but reasonably includes any application or system that accesses another system and the apparatus that determines a maximum communication rate for an application includes an application or system that accesses another system, we find that the apparatus that determines the maximum communication rate of Higashiyama includes a "client." In addition, the maximum communication rate for each application is determined at the "client" of Higashiyama because the apparatus of Higashiyama determines or extracts data indicating a maximum communication rate required. Therefore, we

agree with the Examiner that Higashiyama discloses a maximum data rate capability at a client.

Appellants argue that Higashiyama discloses "a maximum communicat[ion] rate" but does not disclose or suggest "a maximum data rate capability at the client" (Reply Br. 4). However, we find no distinction between the maximum communication rate of Higashiyama and the maximum data rate capability recited in claim 1. Higashiyama discloses the apparatus determining "whether or not a required bandwidth included in this data session information is acceptable . . . by referring to used bandwidths" (¶[0160] and ¶[0161]). If the required bandwidth is not acceptable a control section "returns to the data session information input wait state" (¶[0162]). Hence, a maximum data rate capability is determined at the apparatus of Higashiyama and if the capacity or bandwidth is exceeded, the data session returns to a wait state. The maximum data communication rate of Higashiyama includes a maximum data rate capability as claimed because both the data rate of Higashiyama and the data rate capability as claimed include a maximum data rate that the system is capable of handling.

For at least the aforementioned reasons, we conclude that Appellants have not sustained the requisite burden on appeal in providing arguments or evidence persuasive of error in the Examiner's rejection of claims 1-18 with respect to issue #1.

Issue #2

As set forth above, Higashiyama discloses an apparatus that communicates with a server and determines a maximum communication rate (i.e., a maximum data rate capability). Therefore, we disagree with Appellants that Higashiyama fails to disclose or suggest declaring a maximum data rate capability at a client.

For at least the aforementioned reasons, we conclude that Appellants have not sustained the requisite burden on appeal in providing arguments or evidence persuasive of error in the Examiner's rejection of claims 1-18 with respect to issue #2.

Issue #3

Appellants argue claims 2 and 11 as a single group which stand or fall together. We therefore select independent claim 2 as the representative claim for this group. *See* 37 C.F.R. § 41.37(c)(1)(vii).

As set forth above, Higashiyama discloses determining a maximum data rate capability at a client. In addition, the apparatus of Higashiyama includes "a flow table 2, a traffic management database 3, [and] a pre-configured bandwidth information database by application 4 . . ." (¶[0122]). Because a profile includes a collection of data, we agree with the Examiner that any database or table may constitute a "profile" (or collection of data) as claimed.

For at least the aforementioned reasons, we conclude that Appellants have not sustained the requisite burden on appeal in providing arguments or evidence persuasive of error in the Examiner's rejection of claim 2, and claim 11, which falls therewith with respect to issue #3.

Issue #4

Appellants argue claims 3, 4, 12, and 13 as a single group which stand or fall together. We therefore select independent claim 3 as the representative claim for this group. *See* 37 C.F.R. § 41.37(c)(1)(vii).

We disagree with Appellants' contention for reasons set forth above.

For at least the aforementioned reasons, we conclude that Appellants have not sustained the requisite burden on appeal in providing arguments or evidence persuasive of error in the Examiner's rejection of claim 3, and claims 4, 12, and 13, which fall therewith with respect to issue #4.

Issue #5

Appellants argue claims 5, 6, 14, and 15 as a single group which stand or fall together. We therefore select independent claim 5 as the representative claim for this group. *See* 37 C.F.R. § 41.37(c)(1)(vii).

We disagree with Appellants for reasons set forth above.

For at least the aforementioned reasons, we conclude that Appellants have not sustained the requisite burden on appeal in providing arguments or

evidence persuasive of error in the Examiner's rejection of claim 5, and claims 6, 14, and 15, which fall therewith with respect to issue #5.

Issue #6

Appellants argue claims 7 and 16 as a single group which stand or fall together. We therefore select independent claim 7 as the representative claim for this group. *See* 37 C.F.R. § 41.37(c)(1)(vii).

Higashiyama discloses determining if "a required bandwidth included in this data session information is acceptable" (¶[0160]) and returning "to the data session information input wait state" if the required bandwidth is not acceptable (¶[0161]). If acceptable, data flows in "a flow in a single direction of a packet required to be relayed while guaranteeing a predetermined bandwidth in the relay apparatus" (¶[0168]). Because Higashiyama discloses changing the rate of data flow (i.e., in a wait state vs. data flow while guaranteeing a bandwidth) based on the acceptability of a determined required bandwidth and changing the rate of data flow is equivalent to adjusting a packet data rate, we agree with the Examiner that Higashiyama discloses adjusting a packet data rate.

For at least the aforementioned reasons, we conclude that Appellants have not sustained the requisite burden on appeal in providing arguments or evidence persuasive of error in the Examiner's rejection of claim 7, and claim 16, which falls therewith with respect to issue #6.

Issue #7

Appellants argue claims 9 and 18 as a single group which stand or fall together. We therefore select independent claim 9 as the representative claim for this group. *See* 37 C.F.R. § 41.37(c)(1)(vii).

As set forth above, we agree with the Examiner that Higashiyama discloses a maximum data rate capability. Higashiyama also discloses "the protocol type (for example, RTSP) of the packet (¶[0142]). Because Higashiyama discloses an RTSP protocol type, we disagree with Appellants' contention that Higashiyama fails to teach or suggest an RTSP header extension.

For at least the aforementioned reasons, we conclude that Appellants have not sustained the requisite burden on appeal in providing arguments or evidence persuasive of error in the Examiner's rejection of claim 9, and claim 18, which falls therewith with respect to issue #7.

CONCLUSIONS OF LAW

Based on the findings of facts and analysis above, we conclude that Appellants have failed to demonstrate that the Examiner erred in:

1. finding that Higashiyama discloses or suggests declaring a maximum data rate capability at the client (issue #1),

2. finding that Higashiyama discloses or suggests that a declarer is the client (issue #2),

3. determining that Higashiyama teaches a capability profile and parameter for indicating the maximum data rate capability (issue #3),

4. finding that Higashiyama teaches or suggests a capability parameter in the capability profile for indicating the maximum data rate capability (issue #4),

5. finding that Higashiyama discloses or suggests maximum data rate capability in the capability information (issue #5),

6. finding that Schulzrinne and Higashiyama discloses that the server adjusts packet data rate according to the maximum data rate capability at the client (issue #6), and

7. determining that Higashiyama discloses or suggests indicating the maximum data rate capability in an RTSP header extension (issue #7).

DECISION

We affirm the Examiner's decision rejecting claims 1-18 under 35 U.S.C. § 103(a).

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv).

AFFIRMED

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