The opinion in support of the decision being entered today was *not* written for publication in and is *not* binding precedent of the Board.

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte NANCY C. CHEUNG and RUPINDER S. KATARIA

Appeal 2007-0717
Application 09/993,277
Technology Center 2100

Decided: May 18, 2007

Before HUBERT C. LORIN, STUART S. LEVY and ANTON W. FETTING, *Administrative Patent Judges.*

FETTING, *Administrative Patent Judge.*

DECISION ON APPEAL

STATEMENT OF CASE

This appeal from the Examiner's rejection of claims 1-20, the only claims pending in this application, arises under 35 U.S.C. § 134. We have jurisdiction over the appeal pursuant to 35 U.S.C. § 6.

We AFFIRM.

The Appellants invented a way of routing a communication to one of a plurality of geographically distributed communication devices determined to be proper for handling the communication, and more specifically of receiving a message submitted by a user to a server, such as a web server, wherein the server autonomously routes such a message to one of a plurality of geographically distributed email servers determined to be appropriate for handling the message based at least in part on a characteristic associated with such email server that corresponds to a characteristic of the user, such as the email server being located in a geographical location in which the language of such geographic location is common to that of the user (Specification 1-2). An understanding of the invention can be derived from a reading of exemplary claim 1, which is reproduced below.

> 1. A method of routing email messages to an appropriate one of a plurality of distributed email servers for handling by personnel assigned to such appropriate one without requiring human intervention for said routing, the method comprising:
>
> receiving an email message at a first server;
>
> executing software on said first server to autonomously determine characteristic information of a user having submitted information included in said email message;
>
> executing software on said first server to autonomously select an appropriate one of a plurality of distributed email servers for receipt of said email message based at least in part on said determined characteristic information of said user; and
>
> executing software on said first server to autonomously route said email message to the selected email server.

This appeal arises from the Examiner's Final Rejection, mailed July 7, 2005. The Appellants filed an Appeal Brief in support of the appeal on December 1, 2005, and the Examiner mailed an Examiner's Answer to the Appeal Brief on August 9, 2006. A Reply Brief was filed on August 31, 2006.

PRIOR ART

The prior art references of record relied upon by the Examiner in rejecting the appealed claims are:

Tarbotton	US 6,757,830 B1	Jun. 29, 2004 (Oct. 3, 2000)
Miloslavsky	US 6,732,156 B2	May 4, 2004 (effectively filed Feb. 6, 1997)

REJECTION[1]

Claims 1-20 stand rejected under 35 U.S.C. § 103(a) as obvious over Miloslavsky and Tarbotton.

ISSUES

The issues pertinent to this appeal are

- Whether the rejection of claims 1-20 under 35 U.S.C. § 103(a) as obvious over Miloslavsky and Tarbotton is proper.
    - Whether the art applied shows or suggests routing email messages to an appropriate one of a plurality of distributed email servers (All claims; Br. 10-26; Reply Br. 2-10).

[1] The Final Rejection included a rejection under 35 U.S.C. § 112, second paragraph, which was withdrawn (Answer 3).

- Whether the art applied shows or suggests routing from a web server or default server (claims 2, 4 and 14; Br. 17-18 and 22).
- Whether the art applied shows or suggests a web server creating an email message to communicate the submitted information (claim 5; Br. 18-19).
- Whether the art applied shows or suggests messages that contain characteristic information regarding user language, location, or country (claims 7-8, 10-12, and 18; Br. 19-24).

In particular, Appellants contend that Miloslavsky teaches routing the emails from the email server 102 to a client computer based on the user logged onto the client computer, and thus, Miloslavsky is not concerned with routing of an email message to an appropriate one of a plurality of email servers, but instead addresses how, once an email message is received at an email server, to route the email message to one of a plurality of different clients of the email server (Br. 13-14). Appellants further contend that applying Miloslavsky to email servers would change its principle of operation and that Tarbotton does not require separate e-mail servers for each recipient and that merely because support persons may be located in different remote areas does not require separate e-mail servers for those persons to be able to receive e-mails. (Br. 15-16).

FACTS PERTINENT TO THE ISSUES

The following Findings of Fact (FF), supported by a preponderance of evidence, are pertinent to the above issues.

01. Miloslavsky involves a system for routing an e-mail to one of a plurality of support persons in a processing center. The system comprises an e-

mail server for receiving the e-mail from a sender, an information extractor for extracting relevant information from the e-mail, and a router for routing the e-mail. In one embodiment, the system contains a database for storing information related to all persons who can answer e-mails. The system also comprises a statistic server (also called stat-server) for storing the history of all activities in the system. The router can make routing decisions based on the information stored in the database and the stat-server. (Miloslavsky, col. 2, ll. 24-39).

02. Miloslavsky's system uses user information such as address portions, time, date, and email content keywords to route the email (Miloslavsky, col. 4, ll. 30-59).

03. One aspect of Miloslavsky is that it routes email to the most qualified and available support persons. (Miloslavsky, col. 3, ll. 26-28).

04. These selection criteria for the most qualified and available persons include expertise, language ability, activities, work load, language of incoming email, subject matter of incoming email, information about the sender, overall activities and urgency. (Miloslavsky, col. 5, ll. 1-19).

05. Tarbotton shows that multiple servers are frequently involved in email communication, including sender email servers and relay email servers, in addition to recipient email servers (Tarbotton, Fig. 1, col. 5, ll. 30-37).

06. As the examiner noted, corporate recipients may be located in different geographically diverse areas, particularly those corporate recipients who outsource provision of technical information across multiple countries, which would require different email servers to serve all of the areas. (Answer 4-7).

07. Thus, such corporate recipients would route email messages to an appropriate one of a plurality of distributed email servers according to the country of the most qualified and available person. (FF 03).

08. The information extraction and routing taught by Miloslavsky applies to each email flagged to go through its process, and as such, the process is not sensitive to whether it is performed at the last email server in the chain or to an earlier email server in the chain.

09. A person of ordinary skill in the art of programming email software would be familiar with software coding techniques, such as object oriented programming, in which processes, known as methods, are equally applicable to those hierarchical elements sharing the relevant characteristics, known as objects within related classes, such as email routing methods to various email servers.

10. Therefore, a person of ordinary skill in the art would have immediately envisioned Miloslavsky's techniques as applicable anywhere along an email process chain.

11. Therefore, because a person of ordinary skill in the art would have recognized that Tarbotton's showing of multiple email servers would imply a need to accommodate Miloslavsky's technique to multiple email servers and the realization that Miloslavsky's is applicable anywhere in an email chain, the combined art applied would have suggested routing email messages to an appropriate one of a plurality of distributed email servers.

12. Miloslavsky shows email being generated at a computer (Miloslavsky, Fig. 1).

13. Web mail, which relies on a web server, is a notoriously old and well known mechanism for generating email at a computer, as argued by the Examiner (Answer 5). Also, a relay email server as shown in Tarbotton is a web server in that it serves the distribution of internet web traffic.

14. Similarly, a default server, being a server that is employed if no alternate routing is employed, is notoriously old and well known (Answer 5). Also, Miloslavsky requires that all email to be routed using its criteria go through one server to perform the data extraction. Such a server would be a default server.

15. Thus, a person of ordinary skill in the art would have immediately envisioned web mail as a mechanism for generating the email in Miloslavsky, and thus routing from a web server.

16. Similarly, a person of ordinary skill in the art would have immediately envisioned a default mail server as a mechanism for generating the email in Miloslavsky, and thus routing from a web server.

17. Further, whether the server is a web server or default server does not functionally affect the method steps that are claimed in claims 1-14.

18. Miloslavsky's criteria for selecting the appropriate recipient suggests using the language, country or location to apply the criteria, because language skills and availability are dependent upon language, country and location.

PRINCIPLES OF LAW

These claims are under rejection for obviousness. A claimed invention is unpatentable if the differences between it 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." 35 U.S.C. § 103(a) (2000); *In re Kahn*, 441 F.3d 977, 985 (Fed. Cir. 2006) (citing *Graham v. John Deere Co*., 383 U.S. 1, 13-14, (1966)). In *Graham*, the Court held that that the obviousness analysis begins with several basic factual inquiries: "[(1)] the scope and content of the prior art are to be determined; [(2)] differences between the prior art and the claims at issue are to be ascertained; and [(3)] the level of ordinary skill in the pertinent art resolved." 383 U.S. at 17. After ascertaining these facts, the obviousness of the invention is then determined "against th[e] background" of the *Graham* factors. *Id*. at 17-18.

The Supreme Court has provided guidelines for determining obviousness based on the Graham factors. *KSR Int'l v. Teleflex Inc*., 127 S. Ct. 1727, 82 USPQ2d 1385 (2007). "[a] combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results. 127 S. Ct. at 1731, 82 USPQ2d at 1395. "When a work is available in one field of endeavor, design incentives and other market forces can prompt variations of it, either in the same field or a different one. If a person of ordinary skill can implement a predictable variation, §103 likely bars its patentability." *Id*. For the same reason, "if a technique has been used to improve one device, and a person of ordinary skill in the art would recognize that it would improve similar devices in the same way, using the technique is obvious unless its actual application is beyond that person's skill." *id.* "Under the correct analysis, any need or problem

known in the field of endeavor at the time of invention and addressed by the patent can provide a reason for combining the elements in the manner claimed." 127 S. Ct. at 1732, 82 USPQ2d at 1395.

ANALYSIS

Claims 1-20 rejected under 35 U.S.C. § 103(a) as obvious over Miloslavsky and Tarbotton.

From the Findings of Fact, *supra*, we conclude that

- The art applied shows or suggests routing email messages to an appropriate one of a plurality of distributed email servers (FF 11) (All claims; Br. 10-26; Reply Br. 2-10).
- The art applied shows or suggests routing from a web server or default server (FF 15& 16) (claims 2, 4 and 14; Br. 17-18 and 22).
- The art applied shows or suggests a web server creating an email message to communicate the submitted information (FF 15) (claim 5; Br. 18-19).
- The art applied shows or suggests messages that contain characteristic information regarding user language, location, or country (FF 18) (claims 7-8, 10-12, and 18; Br. 19-24).

The Appellants contend primarily that Miloslavsky only routes to end users rather than to an email server and that Tarbotton does not necessarily show that routing among Miloslavsky's recipients necessitates routing through multiple email servers. However, "[u]nder the correct analysis, any need or problem known in the field of endeavor at the time of invention and addressed by the patent can provide a reason for combining the elements in the manner claimed." (S*ee KSR, supra*). Certainly it was known at the time of the invention that call centers

spanned the globe and would require multiple email servers to serve all their staff (FF 06).

From the above conclusions we are not convinced of reversible error on the part of the Examiner. Accordingly we sustain the Examiner's rejection of claims 1-20 under 35 U.S.C. § 103(a) as obvious over Miloslavsky and Tarbotton.

DECISION

To summarize, our decision is as follows:

- The rejection of claims 1-20 under 35 U.S.C. § 103(a) as obvious over Miloslavsky and Tarbotton is sustained.

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

AFFIRMED

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