

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

Paper No. 19

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte JUDAH LEVINE

Appeal No. 1998-2466
Application No. 08/508,747

HEARD: October 17, 2001

Before URYNOWICZ, DIXON, and LEVY, Administrative Patent Judges.
LEVY, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal under 35 U.S.C. § 134 from the examiner's final rejection of claims 1, 6, and 7¹. Claims 2-5 and 8-12 are objected to as depending from rejected claims.

BACKGROUND

¹ An amendment filed subsequent to the final rejection (Paper No. 10, filed September 15, 1997 has been entered by the examiner (Paper No. 11, filed September 22, 1997).

Appellant's invention relates to a system and method for time-stamping and signing a digital message. An understanding of the invention can be derived from a reading of exemplary claim 1, which is reproduced as follows:

1. A machine-implemented method for time-stamping and signing a digital message to establish the date and time when said message was received by a first machine, comprising the machine implemented steps of:

providing for the inputting of said message into said first machine;

providing for the coordination of the time of said first machine with Universal Coordinated Time (UTC);

providing for the addition of a time-stamp to said message, said time stamp being the Universal Coordinated Time (UTC) at which said first machine receives said message;

providing a procedure for checking the time accuracy of said first machine to verify the time accuracy of the time-stamp;

providing for the computation of a hash code for the time-stamped message with a specific hashing procedure;

providing for the computation of a digital signature for the hashed time-stamped message utilizing a private key; and

providing for outputting the signed hashed time-stamped message.

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

Haber et al. (Haber)
1992

5,136,647

Aug. 4,

Tysen et al. (Tysen)
1996

5,497,422

Mar. 5,

Claims 1, 6, and 7 stand rejected under 35 U.S.C. § 103 as being unpatentable over Haber in view of Tysen.

Rather than reiterate the conflicting viewpoints advanced by the examiner and appellant regarding the above-noted rejections, we make reference to the examiner's answer (Paper No. 15, mailed April 14, 1998) for the examiner's complete reasoning in support of the rejections, and to appellant's brief (Paper No. 14, filed January 23, 1998) for appellant's arguments thereagainst. Only those arguments actually made by appellant have been considered in this decision. Arguments which appellant could have made but chose not to make in the brief have not been considered. See 37 CFR 1.192(a).

OPINION

In reaching our decision in this appeal, we have carefully considered the subject matter on appeal, the rejection advanced by the examiner, and the evidence of obviousness relied upon by the examiner as support for the rejection. We have, likewise, reviewed and taken into consideration, in reaching our decision, appellant's arguments set forth in the brief along with the examiner's rationale in

support of the rejections and arguments in rebuttal set forth in the examiner's answer.

It is our view, after consideration of the record before us, that the evidence relied upon and the level of skill in the particular art would not have suggested to one of ordinary skill in the art the invention as set forth in claims 1, 6, and 7. Accordingly, we reverse.

In rejecting claims under 35 U.S.C. § 103, it is incumbent upon the examiner to establish a factual basis to support the legal conclusion of obviousness. See In re Fine, 837 F.2d 1071, 1073, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). In so doing, the examiner is expected to make the factual determinations set forth in Graham v. John Deere Co., 383 U.S. 1, 17, 148 USPQ 459, 467 (1966), and to provide a reason why one having ordinary skill in the pertinent art would have been led to modify the prior art or to combine prior art references to arrive at the claimed invention. Such reason must stem from some teaching, suggestion or implication in the prior art as a whole or knowledge generally available to one having ordinary skill in the art. Uniroyal, Inc. v. Rudkin-Wiley Corp., 837 F.2d 1044, 1051, 5 USPQ2d 1434, 1438 (Fed. Cir.

1988); Ashland Oil, Inc. v. Delta Resins & Refractories, Inc., 776 F.2d 281, 293, 227 USPQ 657, 664 (Fed. Cir. 1985); ACS Hosp. Sys., Inc. v. Montefiore Hosp., 732 F.2d 1572, 1577, 221 USPQ 929, 933 (Fed. Cir. 1984). These showings by the examiner are an essential part of complying with the burden of presenting a prima facie case of obviousness. Note In re Oetiker, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992). If that burden is met, the burden then shifts to the applicant to overcome the prima facie case with argument and/or evidence. Obviousness is then determined on the basis of the evidence as a whole. See id.; In re Hedges, 783 F.2d 1038, 1039, 228 USPQ 685, 686 (Fed. Cir. 1986); In re Piasecki, 745 F.2d 1468, 1472, 223 USPQ 785, 788 (Fed. Cir. 1984); and In re Rinehart, 531 F.2d 1048, 1052, 189 USPQ 143, 147 (CCPA 1976).

The examiner's position (final rejection, page 2) is that:

Haber discloses a time stamping method whereby a trusted outside agency is provided a document from various "authors" for digital time stamping and authentication purposes. The document is time stamped by the agency, operated on by a hash function, and digitally signed with the trusted agency's private key for authentication of both the

document and the time stamp, see column 6, lines 1-24. Haber discloses a method whereby a chain of certificates are generated to "back-up" the time stamp, or otherwise fix the order in which the time stamped certificates are generated, i.e. any document that is time stamped must have the time and order in the chain of certificates correct for authentication. Tysen teaches that the time stamp is coordinated with UTC, see column 12, line 60. It would have been obvious to one of ordinary skill in the art at the time the invention was made to time stamp a document with the time coordinated to UTC as taught in Tysen in the trusted agency disclosed in Haber in order to provide a common time reference for all users.

From our review of the record, we agree with appellant (brief, page 12) that the teachings of Haber and Tysen would not have suggested steps or means for checking the time accuracy of the machine time to verify the time accuracy of the time-stamp. Appellant acknowledges (brief, page 10) that Haber utilizes hashing of the time-stamped message and a digital signature in a manner similar to that used by appellant. However, appellant asserts (id.) that Haber utilizes a different approach to verify the date and time when a message is received by the time-stamp authority. Haber's approach is to relate the time of receipt of the message to the time of receipt of the previous and subsequent messages, in order to show the veracity of the time-stamp. Appellants

assert (id.) that in Haber, the "accuracy of the time stamp is not discussed nor is it checked by any means or technique." Appellants point out (brief, page 15) that by providing an accurate time-stamp and continually verifying its accuracy, it is not necessary to provide a chain of time stamps as in Haber.

We find that Haber (col. 4, lines line 6-11) the time-stamp receipt includes the "current time." Haber (col. 4, lines 11-33) proves the veracity of the time-stamp of document D_k by comparing the time-stamp of D_k with the time-stamp of previous document D_{k-1} and subsequent document D_{k+1} ; i.e., as long as the time-stamp of D_k is between the times of documents D_{k-1} and D_{k+1} , Haber considers the time-stamp of D_k to be correct. However, Haber does not verify the time indicated by the clock in order to determine if the clock reflects accurate time. From the disclosure of Haber, we find that the phrase "current time" refers to the time indicted by the system clock, which may or may not reflect accurate time. Thus, we do not agree with the examiner's assertion (answer, page 3) that Haber discloses "checking the time accuracy of said first machine to verify the accuracy of the time-stamp."

With regard to Tysen, appellant acknowledges (brief, page 11) that Tysen utilizes a UTC time stamp. However, appellant asserts (id.) that Tysen does not discuss the line of code (col. 12, line 60) which makes reference to UTC, and provides "no means or technique for checking whether the time of their machine remains an accurate UTC time after it is once set."

Appellant acknowledges (brief, page 19) that the examiner is correct that the time of the signature in Tysen is part of the causal chain because it is contained in the certificate. However, appellant asserts (id.) that in Tysen, time is not verified or certified in any way. We observe that Tysen additionally refers to UTC time (col. 12, lines 21 and 22) with respect to the certificate validity "not before" and "not after" set UTC times. However, Tysen is silent as to verifying the accuracy of the time, and provides no explanation of how the UTC time is obtained. From the disclosure of Tysen of using UTC time, we agree with appellant (brief, page 20) that the time referred to is the time stored in the system computer when an operation is performed. We consider the time of the system computer to be initially set to UTC time, but find no teaching or suggestion that Tysen

thereafter checks the accuracy of the time in the system computer.

From the teachings of Haber and Tysen, we find that since UTC time is the official time of the United States, that a skilled artisan would have been motivated to use UTC time as the "correct time" of Haber, as it is the most accurate time available. We agree with the examiner that the teachings of Haber and Tysen can be combined to suggest the limitation of coordinating the time of the first machine with UTC as recited in independent claims 1 and 7, because upon setting the system computer to UTC time, at least initially, the system computer time will be coordinated with UTC. In addition, with regard to claim 1, we therefore also find that the time-stamp will reflect UTC time. Claims 1 and 7, however, require more. Appellants assert (brief, page 23) that:

Since it is clear that even if Haber et al. used UTC time as did Tysen et al., they still lack a procedure for checking the time accuracy of the machine to detect whether it continues to state UTC time.

We agree, based upon our analysis, supra, of Haber and Tysen, that both Haber and Tysen are missing the claim limitation of

checking the time accuracy of the first machine to verify the time accuracy of the time-stamp. Accordingly, we find that the examiner has failed to establish a prima facie case of obviousness of the claimed invention. The rejection of claims 1, 6, and 7 under 35 U.S.C. § 103 is therefore reversed.

CONCLUSION

To summarize, the decision of the examiner to reject claims 1, 6, and 7 under 35 U.S.C. § 103 is reversed.

REVERSED

STANLEY M. URYNOWICZ, JR.)	
Administrative Patent Judge)	
)	
)	
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)	BOARD OF PATENT
JOSEPH L. DIXON)	APPEALS
Administrative Patent Judge)	AND
)	INTERFERENCES
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STUART S. LEVY)	
Administrative Patent Judge)	

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CHARLES E. ROHRER
P.O. BOX 20067
BOULDER, CO 80308

APPEAL NO. 1998-2466 - JUDGE LEVY
APPLICATION NO. 08/508,747

APJ LEVY

APJ DIXON

APJ URYNOWICZ

DECISION: **REVERSED**

Prepared By: GJH

DRAFT TYPED: 28 Jun 02

FINAL TYPED: