

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent of: John J. Giobbi Attorney Docket No.: 42342-0137IP1
U.S. Patent No.: 8,886,954
Issue Date: November 11, 2014
Appl. Serial No.: 13/710,109
Filing Date: December 10, 2012
Title: BIOMETRIC PERSONAL DATA KEY (PDK)
AUTHENTICATION

SUPPLEMENTAL DECLARATION OF DR. PATRICK TRAYNOR

I declare that all statements made herein on my own knowledge are true and that all statements made on information and belief are believed to be true, and further, that these statements were made with the knowledge that willful false statements and the like so made are punishable under Section 1001 of Title 18 of the United States Code.

Date: 11 May 2025

By: 
Patrick G. Traynor, Ph.D.

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I. INTRODUCTION

1. I have been retained by Fish & Richardson, P.C., on behalf of Microsoft Corp. (“**Petitioner**”), as an independent expert consultant in *inter partes* review (“**IPR**”) proceeding IPR2024-00846 before the United States Patent and Trademark Office (“**PTO**”). I understand that this declaration will be submitted in support of the Petitioner Reply to Patent Owner’s Response (“**POR**”) to the Petition for IPR of the U.S. Patent No. 8,886,954 (“**’954 Patent**”).

2. This declaration (“**Supplemental 954 Declaration**”) supplements, and is intended to be read in conjunction with, my earlier declaration in support of Microsoft’s Petition in IPR2024-00846. I will refer to my earlier declaration in IPR2024-00846 as the “**First 954 Declaration**” or “**MSC-1003**.” In my First 954 Declaration, I address many topics, including (but not limited to) my background and qualifications, the level of skill in art, an overview of the ’954 Patent, claim construction, certain legal standards explained to me by Microsoft’s counsel, and a detailed analysis of the prior art against the ’954 Patent’s claims. The opinions and explanations expressed in my First 954 Declaration apply equally here.

3. In writing this 954 Supplemental Declaration, I have considered the following: my own knowledge and experience, including my teaching and work experience in the above fields; and my experience of working with others involved

in those fields. I have also reviewed at least the following materials, in addition to other materials I cite in this declaration:

- MSC-1032: U.S. Pat. No. 5,913,040 (“Rakavy”)

4. I have no financial interest in either party or in the outcome of this proceeding. I am being compensated for my work as an expert on an hourly basis at a rate of \$650 per hour for all tasks involved. My compensation is not dependent on the outcome of these proceedings or on the content of my opinions.

5. The analysis and opinions expressed in my first declarations fully explain why each and every feature of the '954 Patent's Challenged Claims is provided in the prior art. As I previously described with reference to the applied prior art and corroborating references, the Challenged Claims (claims 1-29) would have been obvious to a POSITA. I understand that Patent Owner has considered my opinions and offered their own, some of which are inconsistent with my view. Below, I provide further testimony in response to Patent Owner's arguments. In responding to Patent Owner's arguments, I have analyzed various publications and materials including materials cited in my First 954 Declaration and additional materials in this Supplemental 954 Declaration. The fact that I may not have addressed all of Patent Owner arguments should not be interpreted as agreement with them.

II. THE PATENT OWNER RESPONSE FAILS TO REBUT THE PETITION'S OBVIOUSNESS GROUNDS

6. In the POR, the Patent Owner argues that:

- 1) The Board's construction of the "third-party trusted authority"¹ should include implicit constructions of the "*transaction*" and "*principal parties*," such that the "transaction" is "allowing the user access to the application" and the "principal parties" are a) a user being allowed access and b) an application being accessed" (POR, 2, 3); and
- 2) Three examples of Burger's disclosure noted in the Petition do not render obvious the "access message" limitation (features [1.5], [12.3], [16.3]-[16.4], [22.2]) under Ground 1.

7. As I explain in more detail below, Patent Owner's understanding of the "third-party trusted authority" is based on a misunderstanding/mischaracterization of the claim language that is inconsistent with the plain reading of the claim.

¹ Patent Owner's Response fails to recite the correct claim language in the '954 patent. Specifically, the '954 patent recites a "third party that operates a trusted authority," not a "third-party trusted authority," which is recited in related US Patent No. 8,352,730. To avoid confusion, I will refer to the "third party that operates a trusted authority" as the "third-party trusted authority" in this paper.

Moreover, Patent Owner's understanding does not appear to have any support in the specification of the '954 patent or prosecution history.

8. As for the three examples that I had provided in my first declaration that exemplify how aspects of Burger's disclosure render obvious the "access message" feature, Patent Owner's arguments address their own version of the examples and do not actually address the examples I described. MSC-1003, ¶¶[106]-[119]. In addition, Patent Owner attempts to distinguish the claims from these examples based on Patent Owner's flawed construction of the "third-party trusted authority," which was not adopted by the Board and has no basis in the claims or the intrinsic record. Paper 8 (Institution Decision), 9-11. For these reasons which I explain in more detail below, I found Patent Owner's arguments unpersuasive and incorrect. Therefore, it is still my opinion that the Challenged Claims of the '954 patent are obvious.

III. PATENT OWNER'S UNDERSTANDING OF "THIRD-PARTY TRUSTED AUTHORITY" IS INCORRECT

9. In the Institution Decision (Paper 8), the Board held that the plain and ordinary meaning of "third-party trusted authority" is "a trusted authority that is an entity separate from the parties to a transaction." Paper 8, 9; Pet., 3. Microsoft's counsel informed me that this construction was consistent with earlier IPR

proceedings, IPR2021-01444 and IPR2024-00233. I agree with the Board's construction and had applied it in my first declaration.

10. In contrast, Patent Owner signals a disagreement with the Board and contends that the Board's construction should have a further *implicit* construction, specifically that 1) the "transaction" is that of "allowing a user access to an application," and 2) the parties to the transaction are (a) "the user being allowed access" and (b) "the application being accessed." POR, 3. Patent Owner argues that this construction is supported by the claim language. Patent Owner is incorrect for several reasons.

11. First, Patent Owner is inconsistent with the claim language. For example, claim 1 (and similarly [12.3], [16.3]-[16.4], [22.2]) of the '954 patent recites, among other features:

receiving, at an application, an access message from the trusted authority indicating that the trusted authority successfully authenticated the one or more codes and other data values sent to the third party and allowing the user access to the application.

MSC-1001, 10:23-28.

12. Claim 16 recites a similar limitation but divides the feature into two steps, namely:

receiving, at an application, an access message from the trusted authority indicating that the trusted authority successfully authenticated the one or more codes and other data values to the third party; and
in response to receiving the access message, allowing the biometrically verified user access to the application.

MSC-1001, 11:42-44.

13. The plain reading of the independent claims makes clear that Patent Owner's implied construction has no support in the claim language. For instance, the claims do not claim that a transaction includes the "allowing" operation such that one would understand the transaction in the Board's construction of a "third-party trusted authority" to be limited to the "allowing" operation.

14. The "allowing the user access to the application" feature is simply another feature recited in the claims that may or may not be part of the transaction. Claim 16, for instance, recites that the "allowing" is performed in response to receiving the access message. It is the "receiving" feature that includes the "third-party trusted authority," which invokes a transaction by virtue of the Board's construction, not the "allowing" feature that is performed in response to the "receiving" feature. Patent Owner's incorrect implied constructions creates a link between the "receiving" and "allowing" steps that does not exist. In addition,

Patent Owner did not offer any evidence, other than attorney argument, to explain why such a link should exist.

15. Patent Owner seemingly recognizes the lack of support in the specification for its construction, and therefore turns to a purported legal theory that the claim language should control over the specification. However, as I understand it, the issue here is not whether the claim language controls over embodiments in the specification (as Patent Owner would have it). *See* POR, 6, 7. Instead, it is that Patent Owner is creating a link between claim features that does not exist and interpreting the claims in a manner that is not supported by the specification. Indeed, there is no basis for a POSITA to understand that the transaction would be limited to “allowing a user access to an application.”

16. Second, Patent Owner’s implied construction lacks intrinsic support. The ’954 patent mentions the word “transaction” once in the context of a “bank transaction[],” which is similar to the prior art mapping presented by the Petitioner. MSC-1001, 1:31; Pet., 35 (“Obtaining payment information or authorization for charging a credit card or bank account”). Patent Owner fails to properly explain why a POSITA would have understood the transaction, which is part of the Board’s construction of “third-party trusted authority,” to be limited to “allowing a user access to an application.” Indeed, as I noted in the previous paragraph, a POSITA would not have made such a connection.

17. Without intrinsic support, Patent Owner turns to mischaracterizing the Board’s statements and the ’954 patent disclosure. For example, in the POR, Patent Owner points to the Board’s statement in IPR2024-00232 as allegedly describing that the specification includes “an embodiment in which the ‘third-party trusted authority’ is a third-party with respect to a transaction having as principal parties a user being allowed access and an application being accessed.” POR, 3-4. But the Board’s statement, while correct, represents only part of the Board’s understanding. Immediately after the section quoted by Patent Owner, the Board also provided other examples in which the transaction was not an “allowing” operation between the user and the application. *Google LLC v. Proxense, LLC*, IPR2024-00232, Paper 10, 11 (“In another preferred embodiment of the ’730 patent^[2], trusted key authority 320 plays an active role in transactions, e.g., verifying to a grocery store that a biometric key presented by a customer is legitimate, thereby allowing the transaction to proceed. *Id.* at 5:42–56, Figs. 3-4.

² Presumably, Patent Owner turns to a 730 IPR because the 730 patent has the same specification and similar claim features as the ’954 patent. To the extent the Board agrees, then the other embodiment of the ’730 patent discussed by the Board in IPR2024-00232, and noted in this page would also apply to the ’954 patent.

However, despite the trusted key authority's active participation, the parties to such a transaction are the customer and the grocery store, not trusted key authority 320"). Patent Owner does not explain why it ignores the other embodiments discussed by the Board. Moreover, even in the quoted remarks from IPR2024-00232, the Board does not state that the transaction is "allowing," and carefully articulates that the user and application are principal parties only in a particular example. *Id.* ("Although the trusted key authority *in this example* is not a principal party to the transaction (*here, those parties are the user and the application*), it is an active participant in facilitating the transaction.") Thus, even the Board's earlier statements do not support Patent Owner's construction.

18. Finally, Patent Owner's understanding of "parties" is based on its understanding of "transaction" and thus rises and falls with Patent Owner's alleged implicit construction of "transaction." Here, because the transaction is not limited to "allowing a *user* access to an *application*," the parties to the transaction are also not necessarily limited to the "user" and the "application."

19. For at least the foregoing reasons, Petitioner submits that the Board should reject Patent Owner's implicit construction of "transaction" and "parties."

IV. BURGER RENDERS OBVIOUS THE CHALLENGED CLAIMS

A. BURGER’S “FINANCE” EXAMPLE RENDERS OBVIOUS THE ACCESS MESSAGE FEATURES

20. In my First 954 Declaration, I had explained that “Burger contemplates several possible transactions between different parties,” and provides different examples with Burger’s pocket vault holder being the “first party.” MSC-1003, ¶¶[104]-[107]. Under the finance example (referred to by Patent Owner as the “first example”), the “second party” is a financial media issuer 112, such as a bank or credit card company, the “third party” is a party that operates the network server, the “trusted authority” is network server 114, as a whole, or, in some cases, a portion (a controller 402 and database 406) of the network server, and the “transaction” is obtaining payment information or authorization for charging a credit card or bank account. MSC-1003, ¶[106]. Patent Owner contends that this finance example “relies on conclusory statements devoid of any articulated reasoning and rational underpinning” and “would render the prior art inoperable.” I disagree for the following reasons.

21. Patent Owner’s entire argument is based on a fundamental misunderstanding /mischaracterization of the finance example. POR, 7-16. Patent Owner conflates the “approval” for charging a financial account in a transaction, with an approval

to use sensitive information to ultimately conduct a financial transaction. For instance, under the finance example, I had previously explained that:

It would have been obvious that an application in the Pocket Vault would have received an access message from the controller 402 of the network server (“receiving, at an application, an access message from the trusted authority”) *to allow users access to the application after the controller 402 and database 406 of the network server authenticated the Pocket Vault ID* that was sent to the network server so that the Pocket Vault *grants access to a user and displays sensitive information (e.g., credit or debit card info) for conducting a transaction.*

MSC-1003, ¶[115]; Pet., 45 (Emphasis added).

22. In another instance, I explained that “[t]his may particularly be the case *when a credit or debit card just needs to be displayed by the Pocket Vault or token* coupled to the Pocket Vault,” which could then allow a vendor to manually key in the card number. MSC-1003, ¶[115]; POR, 9; MSC-1005, ¶[320].

Authenticating a Pocket Vault ID to receive an access message that would then allow the Pocket Vault to display sensitive card information used to pay for a purchase is part of a financial transaction between the Pocket Vault holder and the vendor. MSC-1005, ¶¶[105], [102], [109], [155]-[159], [242], [255], [679]. As

explained in my First 954 Declaration, the party running the network server may operate as “*a third-party that operates a trusted authority*” in a transaction between the Pocket Vault holder and a retailer. MSC-1003, ¶[113]; MSC-1005, FIG. 19, ¶[0474]; FIGS. 24, 25, 27; ¶¶[0511]-[513], [320], [158], [95].

23. Including a step that authorizes a display of sensitive information is beneficial, in part, because it prevents an unauthorized person (e.g., stranger) from picking up the Pocket Vault and easily viewing sensitive information. Effectively, such a method for conducting a transaction would involve at least two approvals (e.g., access messages)—one for displaying the sensitive information, and another for approving any transaction cost—thereby providing data security for the Pocket Vault.

24. Patent Owner’s arguments distinguishing between the “approval” and the “authorization” in a transaction are moot/irrelevant because Petitioner’s mapping does not rely upon the type of approval Patent Owner is mapping Burger to. POR, 11-15. Thus, the notion that somehow approval for a transaction in Petitioner’s mapping is received “prior to the release of the credit card or debit card information” is also misplaced. POR, 11. Ultimately, because Patent Owner fails to address the actual prior art mapping in my First 954 Declaration and the Petition, Patent Owner’s arguments fail.

**B. BURGER’S “ADVERTISING” EXAMPLE RENDERS
OBVIOUS THE ACCESS MESSAGE FEATURES**

25. Under the advertising example (referred to by Patent Owner as the “second example”), the “second party” is an advertiser, the “third party” is a party that operates the network server, the “trusted authority” is network server 114, as a whole, or, in some cases, a portion (a controller 402 and database 406) of the network server, and the “transaction” is obtaining advertisement content or related information. MSC-1003, ¶¶[105]-[107], [111]-[113]; POR, 41. Patent Owner’s argument that the advertising example does not render the claims obvious fails for several reasons.

26. First, Patent Owner’s arguments are not rooted in the claim language. As an example, Patent Owner alleges that “Petitioner, however, disregards the specific transaction recited in the claims as to make the ‘third-party trusted authority’ a third party with respect to any user accessing an application and any other party with whom the user is transacting.” POR, 15-16. But the claims do not recite any specific transaction let alone the word “transaction.” Notably, the Board’s construction of the third-party trusted authority also does not impose any limitation on the type of transaction that is necessary to satisfy the claim. Patent Owner’s argument is based on its improper implicit construction (alleging that a “transaction” involving the third-party trusted authority should be limited to the

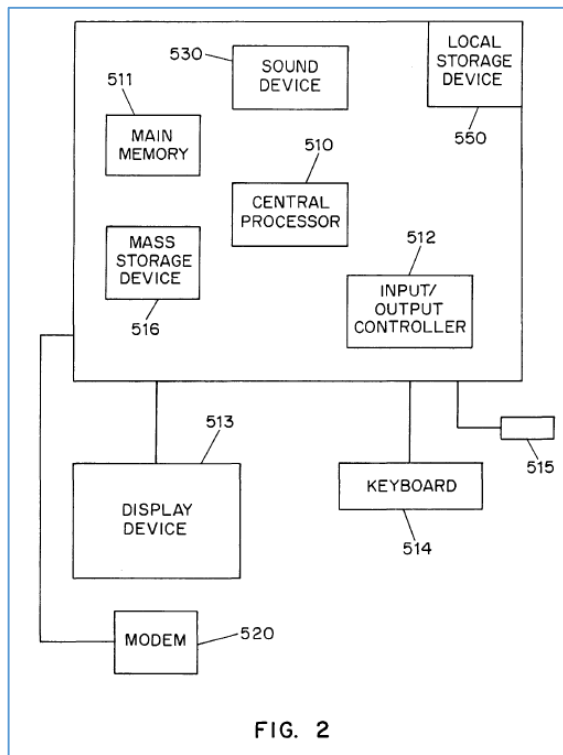
“allowing” operation), which fails for the reasons I already noted above. Patent Owner’s argument thus rises and falls with Patent Owner’s improper construction.

27. Second, Patent Owner incorrectly contends that the advertising example equates two separately identified elements (i.e., the third-party trusted authority and the application). POR, 16-20. In support of its improper characterization, Patent Owner points to several examples in which the network server 114 stores information for the advertisers and “acts as a conduit for advertisers by storing ads and delivering them to Pocket Vaults.” POR, 17-19. Without any supporting rationale or supporting evidence, Patent Owner concludes from this disclosure that such storage means that the network server 114 “operat[es] as a shared hard drive or some form of file sharing software upon which advertisements can be placed by advertisers and retrieved later by Pocket Vaults.” POR, 18-19. Incorrect.

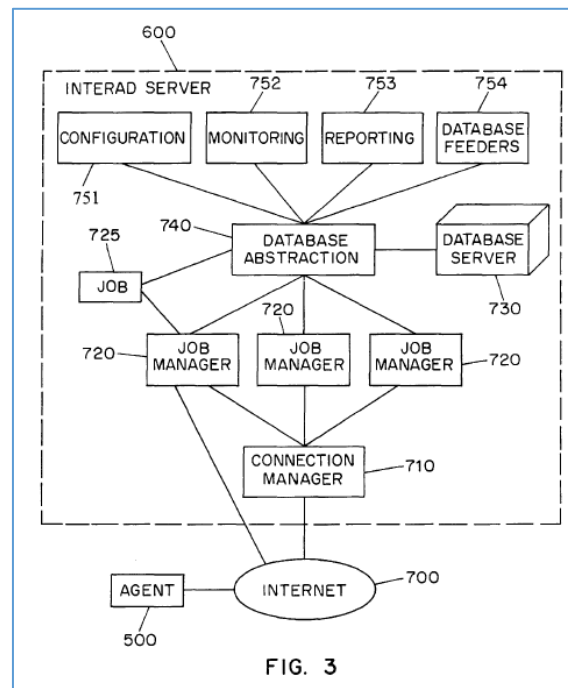
28. Nothing in the ’954 patent prevents the third-party trusted authority to store information associated with the first and second party to a transaction. Indeed, if such a narrow view were taken, the claims would not make sense because the third-party trusted authority stores device ID, which is information associated with a device involved in a transaction. In Burger, simply because the network server 114 stores some information to facilitate a transaction with an advertiser does not mean that the network server 114 is one of the two parties in a transaction involving an advertiser and a user that receives and views advertisements from the

advertiser. MSC-1005, ¶¶[111], [117], [237]. Such an understanding is consistent with the Board’s decision in IPR2024-00232, which explains that the third-party trusted authority may be an active participant in a transaction. IPR2024-00232, Paper 10 at 11 (“Although the trusted key authority in this example is not a principal party to the transaction (here, those parties are the user and the application), it is an active participant in facilitating the transaction”).

29. More, servers, like the network server, regularly gather material to be presented to their users from multiple sources. Such common configurations do not make the intermediary providers of that content the same entity as the owner of the website or the application on a user device. As an example, US Patent No. 5,913,040 describes a system in which an advertiser provides an advertisement to a client/local computer through a network server. MSC-1032, 4:38-65, FIG. 1. The network server includes several software modules such as job manager 720, job 725, database server 730, which can be used “to select and download Advertisements 50 [stored on the database server 730]; collect feedback from the Local Computer 500; check the user's participation and any awards from contests, etc.; and upgrades and installs the Local Computer 500 software versions.” MSC-1032, 6:4-30. These modules cannot be found on the client/local computer. *Compare* MSC-1032, FIG. 2, 4:46-5:5 *with Id.*, FIG. 3, 6:4-65.



MSC-1032, FIG. 2.
(showing local computer modules)



MSC-1032, FIG. 3.
(showing network server modules)

30. Patent Owner's argument is also problematic because it conflates the different types of software that would be used in a network server 114 and the Pocket Vault. For instance, the purported software in the network server 114 would allow the network server 114 to communicate with a particular advertiser and store information from that advertiser. In contrast, the purported software or application in the Pocket Vault is the software that allows the Pocket Vault to receive advertisement data and configure and display the advertisement on the network server 114 (which may not have software for displaying the

advertisement). Thus, the application in the Pocket Value, which is what Petitioner relies upon for its prior art mapping (*see* Pet., 36, 39-42, 52; MSC-1005, FIG. 10) should not be conflated with software on the network server, as Patent Owner contends.

31. For at least the foregoing reasons, Patent Owner's arguments with respect to the advertising example also fail.

C. BURGER'S "HOTEL" EXAMPLE RENDERS OBVIOUS THE ACCESS MESSAGE FEATURES

32. Under the hotel example (referred to by Patent Owner as the "third example"), the "second party" is a non-financial media issuer 110 such as a hotel card key issuer, library, building management for company, the "third party" is a party that operates the network server 114, the "trusted authority" is network server 114, as a whole, or, in some cases, a portion (a controller 402 and database 406) of the network server 114, and the "transaction" is obtaining authorization to enter a secure building or facility. MSC-1003, ¶¶[105]-[107], [111]-[113]. Patent Owner argues that this example fails because in Burger, the hotel room key is downloaded from the hotel's website and not from the network server 114, and thus Burger does not teach receiving an access message from the third-party trusted authority. POR, 20-21. Wrong.

33. I had previously explained that in the hotel example, the application would be the “keyless lock” and the transaction would be entering a hotel room, such that a “room key (showing the hotel logo) is downloaded and displayed, and the Pocket Vault can be used to unlock the guest’s hotel room.” MSC-1003, ¶¶[118]-[119], [106]-[107]. Burger’s paragraph 679, reproduced in part below, provides the details:

The following typical scenario involves distribution of hotel room key cards to hotel guests who make room reservations over the Internet. ... Next, *the prospective hotel guest may link to the network server 114 (while staying within the hotel's website)*, and follow on-screen instructions for downloading the key card for his/her room onto the Pocket Vault 102 (e.g., to ensure that the Pocket Vault 102 is interfaced with the pocket vault interface unit 302, *and to ensure that the Pocket Vault holder has activated the Pocket Vault 102* by the appropriate security mechanism such as a thumbprint for bio-metric ID verification). After downloading is complete, the display 216 of the Pocket Vault 102 may include an icon for the hotel room key (e.g., the hotel's logo), along with the icons for media previously loaded.

MSC-1005, ¶[679]. (Emphasis added).

34. It is clear from the foregoing disclosure that Burger teaches that the user links with the network server 114 to download the key. *Id.* And while linking with the network server 114, the network server 114 sends an encrypted approval message when the Pocket Vault ID is authenticated, as previously explained. MSC-1005, ¶¶[517]-[527], [182]-[186], FIGS. 24, 25. Burger even offers as an option that the network server 114 can store information, such as a website, issued and provided by media issuers (such as a non-financial issuer like a hotel), and provide the website for access to the user, e.g., to download a room key. MSC-1005, ¶¶[365], [371], [381], [467], [539], [556], [559], [560]. Accordingly, Patent Owner's assertion that because a user, in some cases, downloads the key from a website (and not the network server) is wrong. As noted above and consistent with the Board's decision in IPR2024-00232, Petitioner's mapping does not fail simply because the network server may be a participant in the transaction. IPR2024-00232, Paper 10, 11.

35. For at least the foregoing reasons, Patent Owner's arguments with respect to the hotel example also fail.

V. CONCLUSION

36. For all the reasons I have noted in the foregoing paragraphs, claims 1-29 of the '954 Patent are obvious in view of the references discussed above.