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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

VISA INC.,
Petitioner,

v.

CORTEX MCP, INC.,
Patent Owner.

Case No. IPR2024-00490
U.S. Patent No. 11,329,973

PATENT OWNER'S PRELIMINARY RESPONSE

TABLE OF CONTENTS

I. INTRODUCTION 1

II. BACKGROUND 7

A. The Problems With Early Mobile Payment Systems 7

B. The ’973 Patent 8

C. Cortex And Visa 10

D. File History 11

E. Oborne (EX1011) 15

F. Stafford (EX1012) 19

G. Purves (EX1013) 20

III. LEVEL OF ORDINARY SKILL IN THE ART 21

IV. CLAIM CONSTRUCTION 21

V. GROUNDS 1-2 BASED ON OBORNE ARE NOT REASONABLY LIKELY TO PREVAIL 22

A. The Petition Fails To Establish Oborne Taught Or Suggested Verification By An Issuing Agency (All Claims) 23

1. Oborne Did Not “Disclose” Verification 23

2. The Petition Fails To Establish How, Or Demonstrate Any Motivation, To Modify Oborne To Include Verification By An Issuing Agency 26

B. The Petition Cannot Meet Its Burden By Mapping Both The “OVER Engine”/“Processor” And “Issuing Agency” On The Same Token Server In Oborne (All Claims) 29

C. Visa Does Not Meet Its Statutory Mandate By Proffering Grounds 1-2 Based On A Claim Construction Of "OVER File" It Refuses To Endorse (All Claims) 32

VI. THE COMBINATION OF STAFFORD AND PURVES IN GROUNDS 3-4 DOES NOT ESTABLISH OBVIOUSNESS 33

A. Stafford Did Not Disclose Verification Of Its Key Signatures 35

B. Purves Did Not Teach Or Suggest Verification Of A Virtual Representation Of A Credential 36

C. Visa Does Not Establish A Motivation To Modify Stafford's Credential Release Platform With Card Images From Purves' Wallet Enrollment System..... 39

VII. INSTITUTION SHOULD BE DENIED BECAUSE VISA'S PETITION IS CUMULATIVE OF ART THE EXAMINER CONSIDERED..... 41

A. The Grounds Are Cumulative Over The Art Considered During Prosecution 42

1. Factors (a)-(b): the "similarities and material differences" and "cumulative nature" of the asserted art and the prior art evaluated during examination..... 43

2. Factor (d) the extent of the overlap between the arguments made during examination and the manner in which petitioner relies on the prior art..... 45

B. Visa Shows No Material Error By The Office 45

VIII. CONCLUSION 47

TABLE OF AUTHORITIES

Page No(s).

Absolute Dental Servs. v. Watson Guide IP,
IPR2023-00177, 2023 WL 5047049 (P.T.A.B. May 4, 2023) 39

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832 F.3d 1355 (Fed. Cir. 2016) 27, 28

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IPR2021-00419, 2021 WL 3039219 (P.T.A.B. July 19, 2021) 42

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IPR2020-00124, 2020 WL 2206972 (P.T.A.B. May 5, 2020) 47

Cisco Sys. v. Centripetal Networks,
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56 F.4th 1363 (Fed. Cir. 2023) 27

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815 F.3d 1356 (Fed. Cir. 2016) 37

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IPR2018-00019, 2018 WL 1897623 (P.T.A.B. Apr. 18, 2018) 33

Johnson & Johnson Surgical Vision v. Alcon,
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22 F.4th 1369 (Fed. Cir. 2022) 30, 32

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IPR2022-01482, Paper 8 (P.T.A.B. Apr. 20, 2023) 37

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755 F.2d 158 (Fed. Cir. 1985) 39

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829 F.3d 1364 (Fed. Cir. 2016) 32

Metalcraft of Mayville v. Toro Co.,
848 F.3d 1358 (Fed. Cir. 2017) 26, 28, 29, 40

Nespresso USA, Inc. v. K-fee Sys. GmbH,
IPR2021-01221, Paper 11 (P.T.A.B. May 6, 2022) 46

Palo Alto Networks v. BT Ams.,
IPR2023-00888, Paper 12 (P.T.A.B. Apr. 1, 2024) 26, 29, 40

Realtime Data v. Iancu,
912 F.3d 1368 (Fed. Cir. 2019) 21

Ruiz v. A.B. Chance,
357 F.3d 1270 (Fed. Cir. 2004) 28

Sandoz v. Acerta Pharma,
IPR2023-00478, 2023 WL 5167505 (P.T.A.B. Aug. 7, 2023) 41

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97 F.4th 882 (Fed. Cir. 2024) 28

Xerox v. Bytemark,
IPR2022-00624, 2022 WL 3648989 (P.T.A.B. Aug. 24, 2022) 29, 39

OTHER AUTHORITIES

37 C.F.R. § 42.65 ..... 29, 39

37 C.F.R. § 42.104 33

35 U.S.C. § 103 39

35 U.S.C. § 312 37

35 U.S.C. § 325 ..... 42, 45, 47

TABLE OF EXHIBITS

Exhibit No.	Description
2001	U.S. Patent No. 9,996,835 to Visa
2002	U.S. Patent Publication No. 2007/0208665 to Ohara ("Ohara")
2003	U.S. Patent No. 8,540,149 to Chu ("Chu")
2004	Defendant Visa Inc.'s Invalidity Contentions, *Cortex MCP, Inc. v. Visa Inc.*, Case No. 5:23-CV-05720 (N.D. Cal. Mar. 15, 2024)
2005	U.S. Patent Publication No. 2009/0307756 to Kang ("Kang")
2006	U.S. Patent Publication No. 2012/0240204 to Bhatnagar et al., ("Bhatnagar")
2007	Cortex's Preliminary Claim Constructions and Extrinsic Evidence (Patent L.R. 4-2), *Cortex MCP, Inc. v. Visa Inc.*, Case No. 5:23-CV-05720 (N.D. Cal. Apr. 19, 2024)
2008	Visa Inc.'s Preliminary Claim Constructions and Evidence Pursuant to Patent L.R. 4-2, *Cortex MCP, Inc. v. Visa Inc.*, Case No. 5:23-CV-05720 (N.D. Cal. Apr. 19, 2024)

I. INTRODUCTION

During his many years in electronic payments, inventor Shaunt Sarkissian searched for a way to revolutionize mobile payments and unlock their potential. In 2012, he founded Cortex and devised a new platform that pioneered secure, seamless, and versatile digital transactions. Mr. Sarkissian's invention allowed two parties to conduct transactions with verified user credentials without either sharing their actual credentials or communicating directly with an issuing agency. For example, a customer could buy coffee at her local Starbucks on her phone without providing her actual Wells Fargo credit card number, and neither the customer nor Starbucks would need to contact Wells Fargo to complete the transaction:

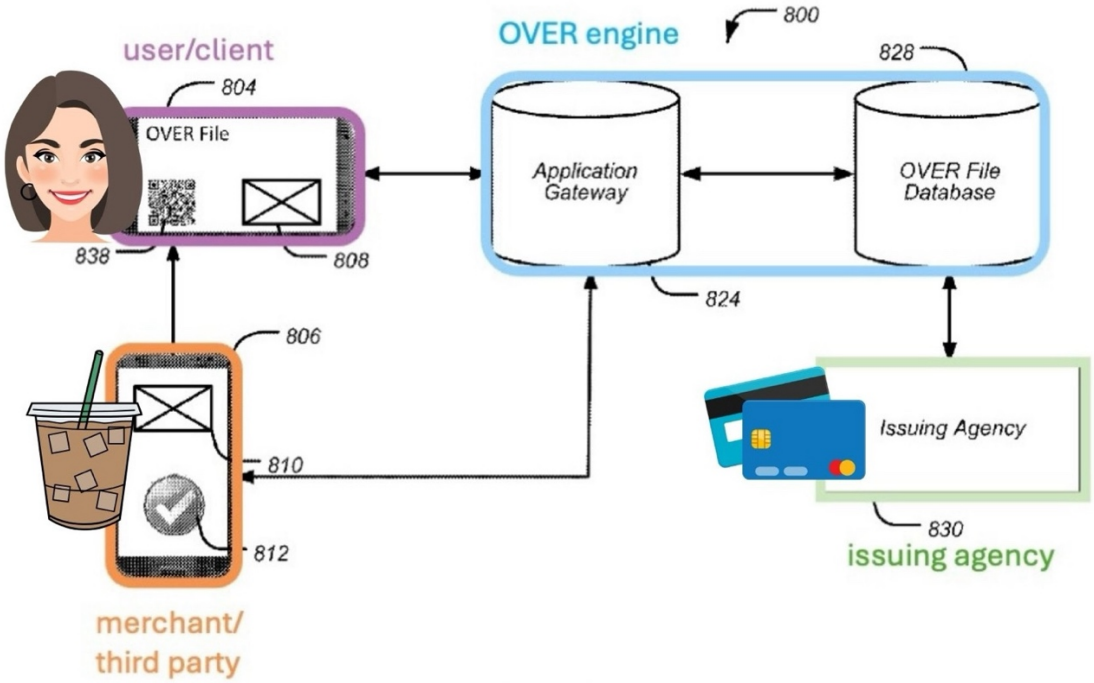


Fig. 11

Cortex's '973 Patent

EX1004 at Fig. 11 (annotated).

As shown above, the ’973 Patent taught secure verification through an independent database called an “**OVER engine**” separate from the **user**, **merchant**, or **agency** (*e.g.*, Wells Fargo) that issued the credential. This OVER engine generates virtual representations of credentials (rather than the credential itself) which can be used as a secure file format for the safe storage and verification of consumer credentials.

Initially Visa was particularly interested in Mr. Sarkissian’s invention and held business meetings in 2013 and 2016 to discuss a potential business relationship and “synergies” with Cortex. Instead of partnering with Cortex, Visa launched the Visa Token Service and later pursued its own U.S. patents on a remarkably similar design to Cortex’s platform, complete with an **issuing agency**:

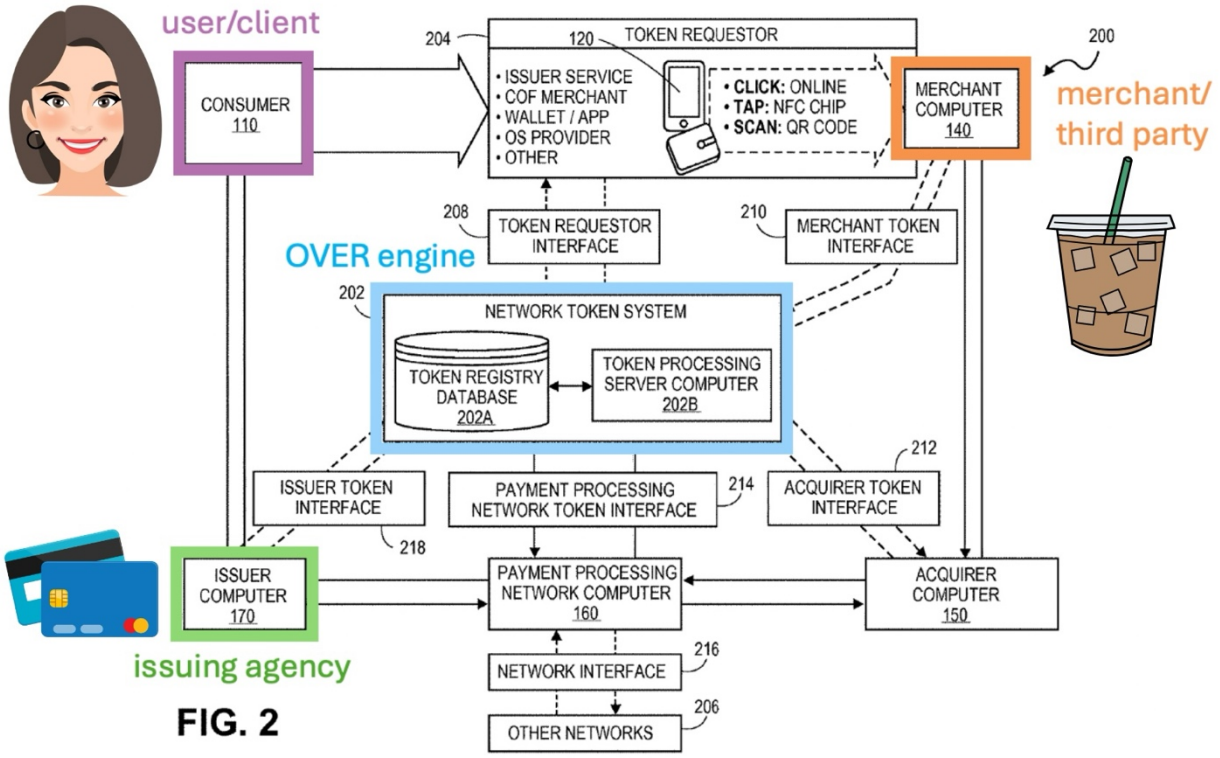


FIG. 2

Petitioner Visa's Later Patent

EX2001 (Visa '835 Pat) at Fig. 2 (annotated).

Cortex responded by filing suit, accusing Visa of stealing its patented technologies. Although the district court litigation is well underway, Visa waited until almost the 1-year deadline before filing five separate IPR petitions challenging Cortex's patents based on combinations of the same references: Oborne, Stafford, Purves, and Neafsey. Yet Visa is unwilling to give up any of its options, pressing the identical validity challenges in the district court and offering no *Sotera* stipulation:

5.	U.S. Patent Publication No. 2012/0316992 to Timothy W. Oborne ("Oborne"), filed June 7, 2012, and published on December 13, 2012. VISA_00000555.
6.	U.S. Patent Publication No. 2009/0271321 to Grant Stafford ("Stafford"), published on October 29, 2009. VISA_00000444.
7.	U.S. Patent Publication No. 2013/0054454 to Thomas Purves et al. ("Purves"), filed September 21, 2012, and published on February 28, 2013. VISA_00000679.
8.	U.S. Patent Publication No. 2013/0212248 to Jeffrey Scott Neafsey et al. ("Neafsey"), filed February 13, 2013 and published on August 15, 2013. Neafsey claims priority to U.S. Provisional Patent Application No. 61/598,219, filed February 13, 2012. VISA_00000425.

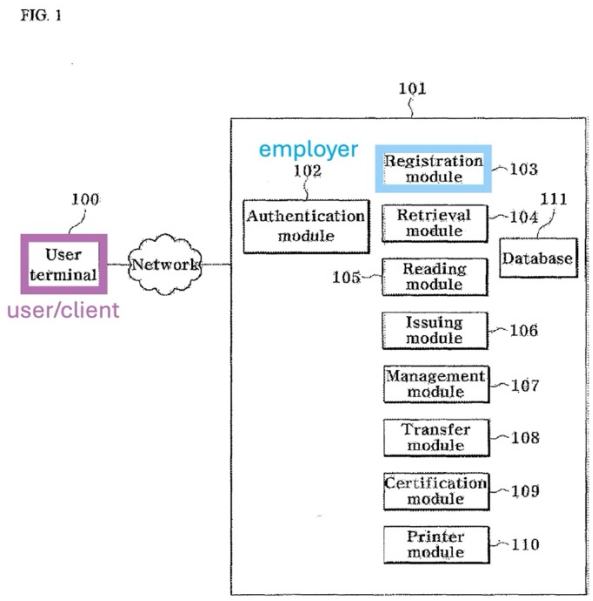
EX2004 (Invalidity Contentions) at 3 (annotated).

This Petition challenges Claims 1-17 of the '973 Patent, a continuation from the same family of patents as U.S. Patent No. 9,251,531 ("'531 Parent Patent") and the other Cortex patents Visa challenges in parallel IPRs. *See* IPR2024-00486, -00487, -00488, -00489. Visa's Petition falls short of establishing a reasonable likelihood that Visa will prevail here. In fact, the Petition's cited references are no better than what the Examiner identified during prosecution.

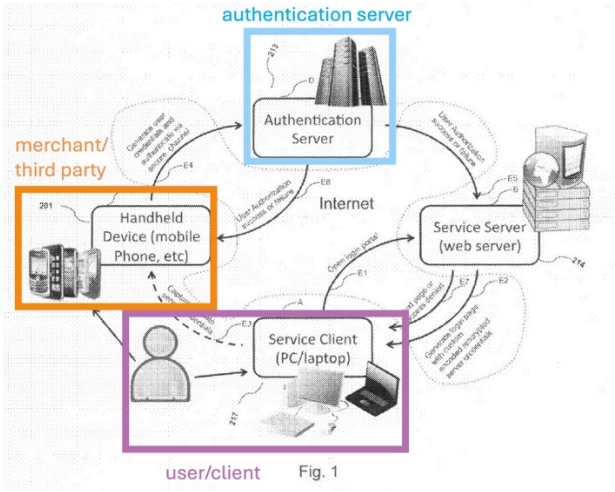
During examination of the '973 Patent, the Examiner thoroughly vetted Cortex's application by conducting two rounds of searches, rejecting the claims, engaging in an interview with Cortex, and requiring a terminal disclaimer to the '531 Parent Patent. Cortex explained that the Examiner's cited references, Kang and Bhatnagar, did not teach many claimed features including "an OVER file comprising a virtual representation of the credential that has been verified by an issuing agency

to be an official representation of the credential…." EX1010 at 66-67; *see id.* at 64-69. The Examiner allowed the claims, explaining that "Applicant's replies make evident the reasons for allowance." *Id.* at 19-20. Indeed, neither Kang nor Bhatnagar show any **issuing agency** at all:

<u>Considered by Examiner</u>



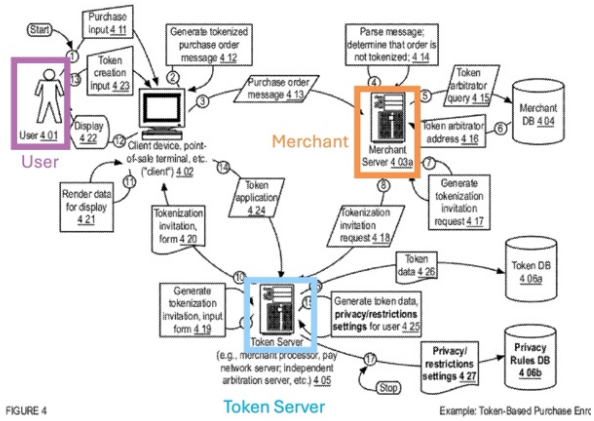
Kang
EX2005, Fig. 1 (annotated)



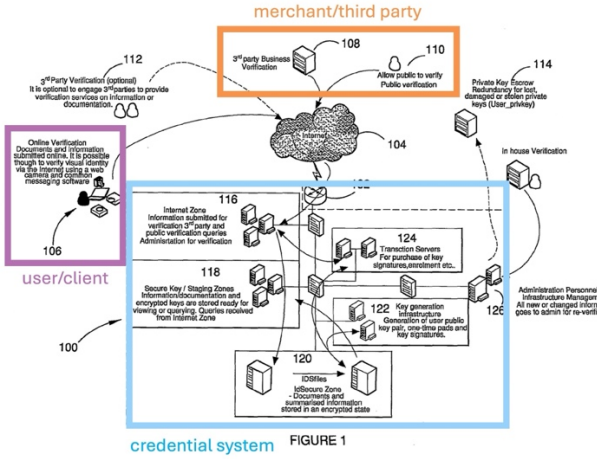
Bhatnagar
EX2006, Fig. 1 (annotated)

Visa's Petition fares no better, relying on the Oborne and Stafford references that do not satisfy the claims or teach the same "issuing agency" limitation that the Examiner found was missing during prosecution:

Visa's Petition



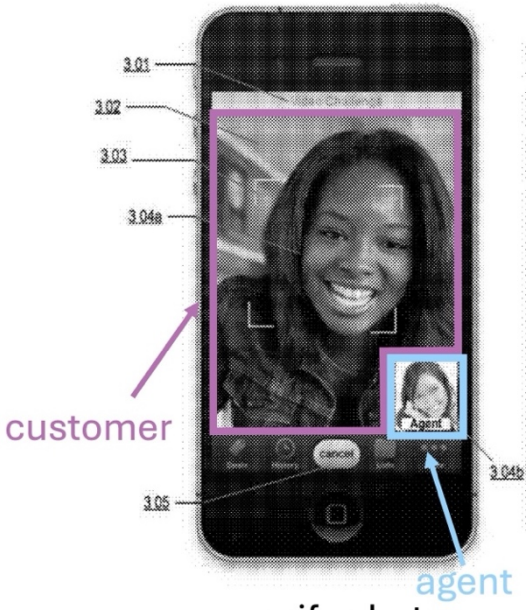
Oborne
EX1011, Fig. 4 (annotated)



Stafford
EX1012, Fig. 1 (annotated)

Grounds 1-2 rely on an antiquated mobile wallet patent to Oborne. Not only did Oborne lack any verification of the virtual representation of the credential by an issuing agency, but Oborne's mobile wallet was hardly a secure payment system. Because Oborne was flexible about operating the token server, its system was a fraudster's dream.

Indeed, Oborne sought to address its security shortcomings by contacting consumers, including by a video call, to authorize specific purchases. Oborne apparently did not appreciate that most people would not be quite that enthusiastic about a security-check video call (shown at right) first



verify chat

Oborne Fig. 3A

thing in the morning before their Starbucks. EX1011 at Fig. 3A (excerpted and annotated).

Stafford is even more far afield. Unlike the '973 Patent that facilitates transactions with parties never exchanging actual credentials, there is no dispute that Stafford expressly "***distributes*** sensitive credential information to third parties." EX1005 ¶120; *see also* Pet. at 6.[1] Unsurprisingly, Stafford lacked any verification by an issuing agency of a virtual representation of a credential. Indeed, following Stafford's teachings and handing over actual copies of a credit card and driver's license to Starbucks to get that coffee is also a nonstarter, unless you would like to add inviting identity theft to your usual order.

The Petition fails to meet its burden here. Oborne and Stafford, the primary references that Visa presents, simply retread the same clunky, insecure systems the Examiner already considered the first time around. Trial is not warranted here.

II. BACKGROUND

A. The Problems With Early Mobile Payment Systems

Before Cortex's patents, numerous obstacles hampered the adoption of existing wallet technologies. Despite the rapid growth of smartphones, mobile payments and mobile wallet systems lagged behind. One issue with prior systems

[1] All emphasis added unless otherwise noted.

was data security. Existing payment systems were "highly fragmented and insecure," creating the threat of stolen payment information, fraud, and identity theft during electronic transactions. EX1004 at 1:40-53.

These systems also failed to gain traction with consumers and merchants because existing payment methods such as credit cards proved ill-suited for storage on mobile devices. For example, early mobile-wallet applications required "secure element chips" to be physically embedded into user devices to ensure the security of the stored data. EX1018 ¶8. Most phones, including iPhones, did not include these chips, *id.*, and hardware manufacturers were not inclined to change their devices to include them. Because these applications required specialized hardware and/or substantial changes in both user and merchant behavior, they proved less user-friendly than the status quo of credit and debit cards. *Id*.

B. The '973 Patent

Cortex's patents, including the '973 Patent, overcame these problems. The '973 Patent describes a novel method for storing digital credentials and enabling secure digital transactions on mobile devices while protecting a user's sensitive information. EX1004 at Abstract, 1:31-33, 4:3-27.

Cortex's new OVER file system involves four primary parties, a **user**/**client**, an OVER file generation and verification engine ("**OVER engine**"), an **issuing agency**, and a **merchant**/**third party**:

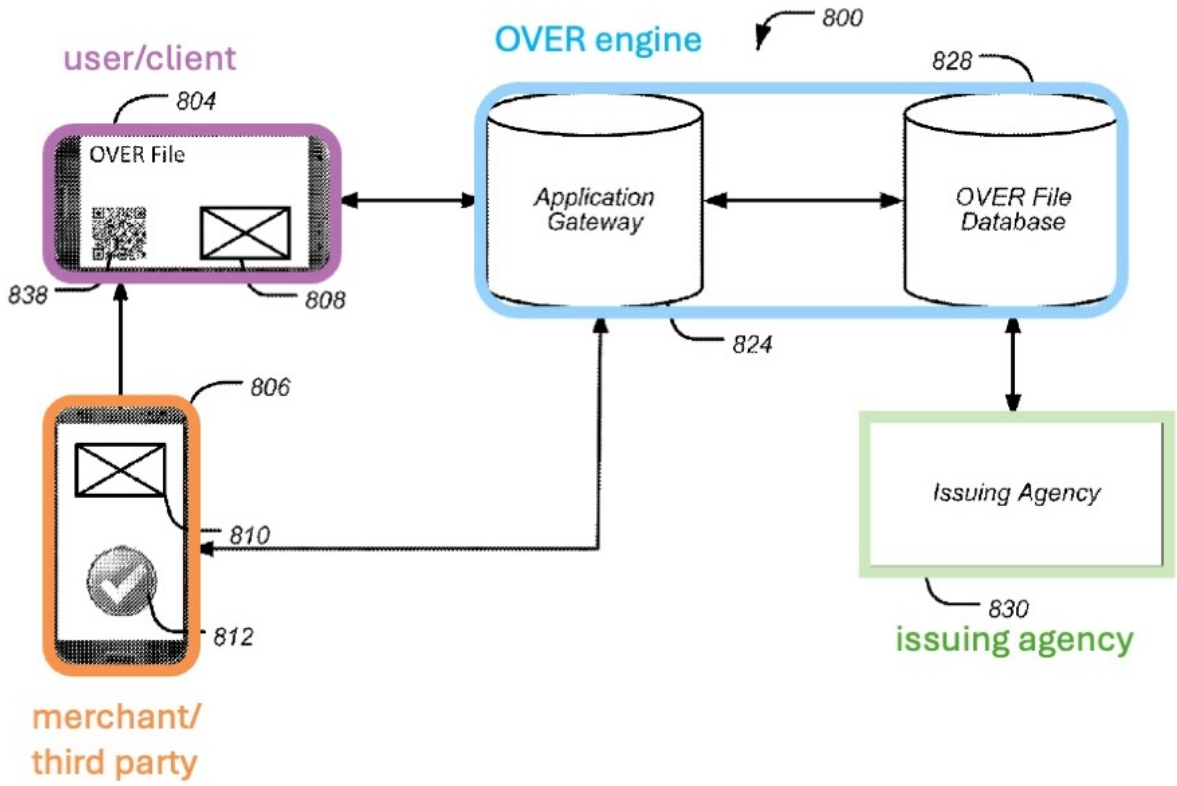


Fig. 11

EX1004 at Fig. 11 (annotated).

The ’973 Patent describes the generation of an electronic representation of a user credential, such as a credit card, that is verifiable through an independent database separate from the agency that issued the credential. *E.g.*, EX1004 at 4:3-10, 12:14-17, 14:50-54. This officially verifiable electronic representation, or OVER file, replaces the sensitive data (*i.e.*, a credit card account number or drivers’ license number) in a user credential with a unique secondary credential that contains no such sensitive data. *E.g.*, *id*. at 10:10-15. OVER files can be stored on users’ smartphones and scanned by third parties (such as merchants accepting payment) for

seamless transactions because they have been pre-verified by issuing agencies (such as banks or the DMV). *E.g.*, *id*. at 4:10-18, 6:17-23. To increase security, each OVER file is specific to a user's device. *Id*. at 7:21-56.

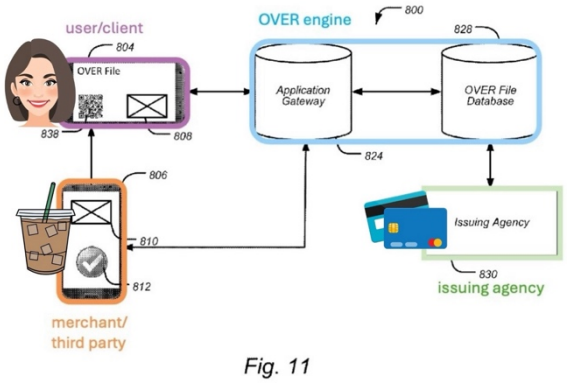
The '973 Patent teaches an initial step where the user requests an OVER file representing the credential from an independent database, the OVER engine. *E.g.*, EX1004 at 4:46-49. The OVER file is verified by the agency that issued the credential and specific to the user's mobile device. *E.g.*, *id*. at Fig. 2, 12:10-17, 7:21-46. Later when the user attempts to use the OVER file in a point-of-sale transaction, the verified credential in the OVER file is sent to the OVER engine and obviates the need for users or merchants to communicate with the issuing agency (card issuer or bank). *E.g.*, *id*. at Fig. 3, 8:49-67. Conducting transactions with an OVER file—which has no exploitable meaning or value outside of the OVER file system and separate from the user's device—eliminates the risk of identity theft or fraud in electronic transactions, bolstering trust and heightening security. *E.g.*, *id*. at 7:32-46.

C. Cortex And Visa

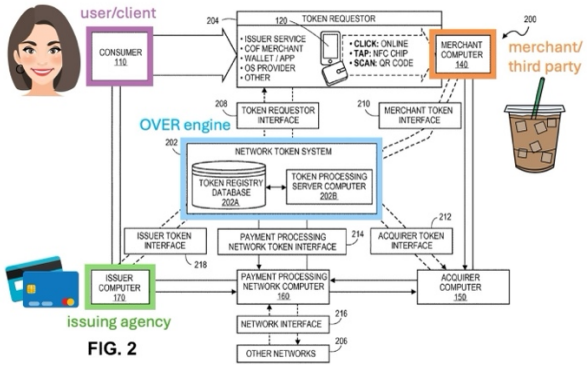
Cortex was founded in 2012 by inventor and payment industry veteran Shaunt M. Sarkissian. EX1018 ¶¶1, 11. After Cortex filed the '531 Parent Patent, Visa initially was very interested in Mr. Sarkissian's invention. Cortex met with Visa subsidiary CyberSource Company in July 2013 to discuss a possible business

relationship. *Id.* ¶10. Under NDA, Cortex gave a detailed presentation of its platform and described the OVER file technology. *Id.* Cortex told CyberSource it had filed the ’531 Parent Patent that would be useful for Visa’s mobile commerce business. *Id.*

Visa reached out again in 2016 through its head of innovation, seeking more information about Cortex’s technologies to explore potential “synergies” between the two companies. EX1018 ¶11. But rather than partnering with Cortex, Visa launched the Visa Token Service and obtained its own U.S. patents on a remarkably similar design to Cortex’s platform:



Cortex’s Patent
’973 Patent, Fig. 11 (annotated)



Visa’s Later Patent
EX2001, Fig. 2 (annotated)

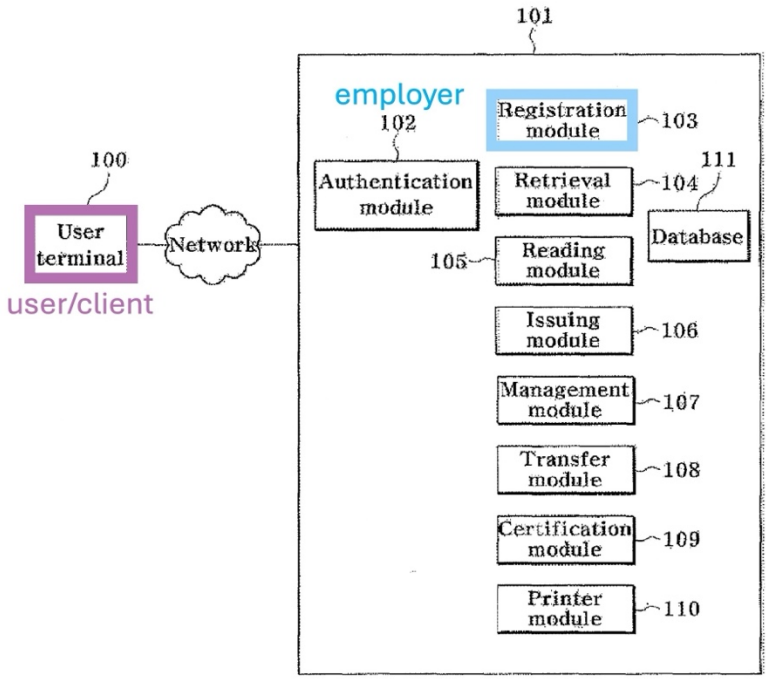
D. File History

The same Examiner evaluated both the ’531 Parent Patent and the application that issued as the ’973 Patent challenged here. *Compare* EX1004 at 1 (“Primary Examiner – Wasika Nipa”) *with* EX1001 at 1 (“Assistant Examiner – Wasika Nipa”).

After Cortex filed the ’973 Patent application, the Examiner issued an office action rejecting all pending claims. EX1010 at 81-109. The Examiner rejected the pending claims for obviousness-type double patenting over the ’531 Parent Patent. *Id.* at 82-86.

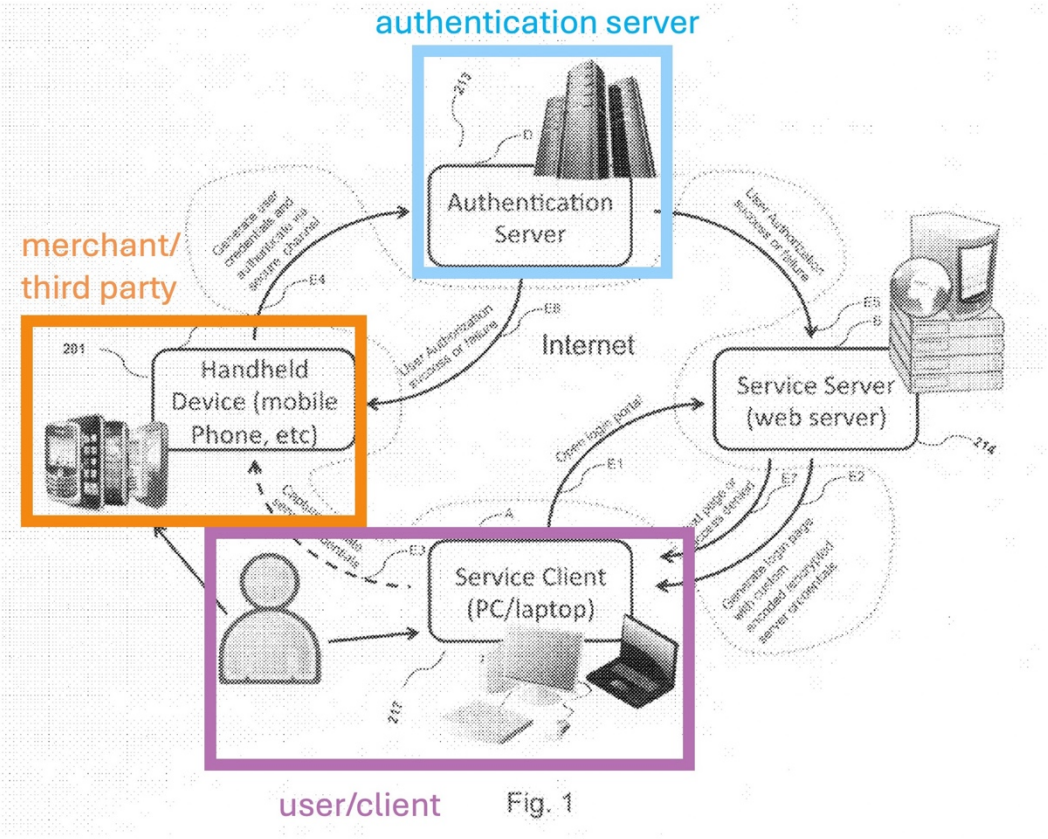
The Examiner also rejected the claims as obvious over U.S. Patent Application Publication No. 2009/0307756 to Kang (EX2005) and U.S. Patent Application Publication No. 2012/0240204 to Bhatnagar (EX2006). EX1010 at 81-109; *see* Pet. at 4-5. As shown below, for Claim 1, the Examiner included Kang’s registration module in her mapping of the claimed “OVER file generation request.” EX1010 at 88. The Examiner mapped Kang’s paragraph 71 to the claimed “transmitting, to the OVER file storage client device of the user, the OVER file in response to the OVER file generation request.” *Id.* (citing Kang, EX2005 ¶71); *see also* EX2005 ¶¶71-72 (sending information to user and user terminal 100).

FIG. 1



EX2005 (Kang) at Fig. 1 (annotated).

As shown below, the Examiner mapped Bhatnagar's user device to the claimed "OVER file storage client device," EX1010 at 89 (citing Bhatnagar, EX2006 ¶43), Bhatnagar's portable communication device to the "OVER file third-party client verifying device," *id.* (citing EX2006 ¶¶ 43, 46, 48), and Bhatnagar's authentication server to the claimed "OVER engine," *id.* (citing EX2006 ¶46).



EX2006 (Bhatnagar) at Fig. 1 (annotated).

After receiving the office action, Cortex filed a formal response on January 27, 2022 where it amended the claims and requested allowance. EX1010 at 57-69. In its response, Cortex explained why the claimed invention differs from the prior art, including that the prior art fails to disclose "an OVER file comprising a virtual representation of the credential that has been verified by an issuing agency to be an official representation of the credential," among other reasons. *Id.* at 66-67.

Cortex filed a terminal disclaimer. *Id.* at 39. Prior to allowing the claims, the Examiner initiated an interview where she proposed additional claim amendments.

Id. at 22. Cortex accepted the amendments and the Examiner allowed the claims. *Id.* at 12-21. The Examiner's "reasons for allowance[]" stated that Cortex's "replies make evident the reasons for allowance":

> ***EXAMINER'S REASONS FOR ALLOWANCE***
>
> 3. Claims 1-3, 5-11 and 13-19 have been allowed. The following is an examiner's statement of reasons for allowances:
>
> The Applicant's replies make evident the reasons for allowance, satisfying the "record as a whole" proviso of the rule 37 CFR 1.104(e). The grounds of claim rejection was reconsidered and withdrawn based on the substance of applicant's amendments, remarks and arguments (see remarks, filed on 01/27/2022, pages 8-12) and the proposed examiner's amendment, as such the reasons for allowance are in all probability evident from the record and no statement is deemed necessary (see MPEP 1302.14).

Id. at 19-20. Cortex pointed out that a "virtual representation of the credential that has been verified by an issuing agency," was not present in the prior art. *Id*. at 66-67. This was the same limitation the Examiner flagged as not satisfied by the prior art in her earlier allowance of the '531 Parent Patent. EX1007 at 20.

E. Oborne (EX1011)

Grounds 1-2 of the Petition are principally based on U.S. Patent Publication 2012/0316992 to Oborne. Pet. at 14-51.

Oborne described a rudimentary payment system for token-based purchase orders that it called the "PPT." EX1011 at Abstract, ¶22. As shown in Figure 1A below, Oborne's "PPT is capable of routing requests" locally so "that the user's identifying information is not sent abroad unnecessarily." EX1011 ¶24. Oborne also taught ensuring that payments were processed in "an appropriate locality" if "a payment request originates from a country (e.g., European Union) requiring that the highest levels of privacy be maintained." *Id*.

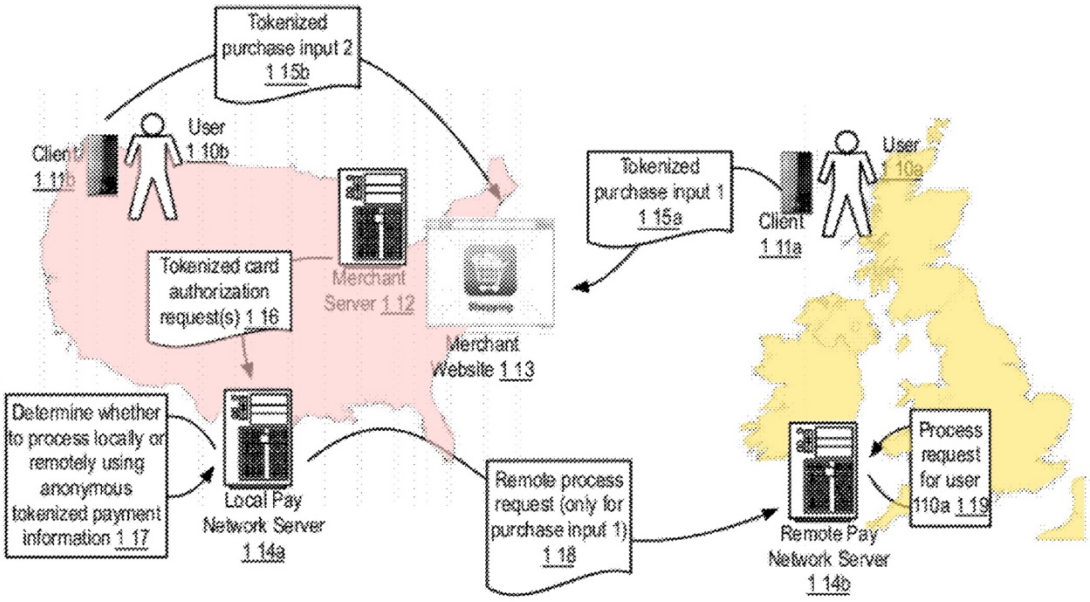
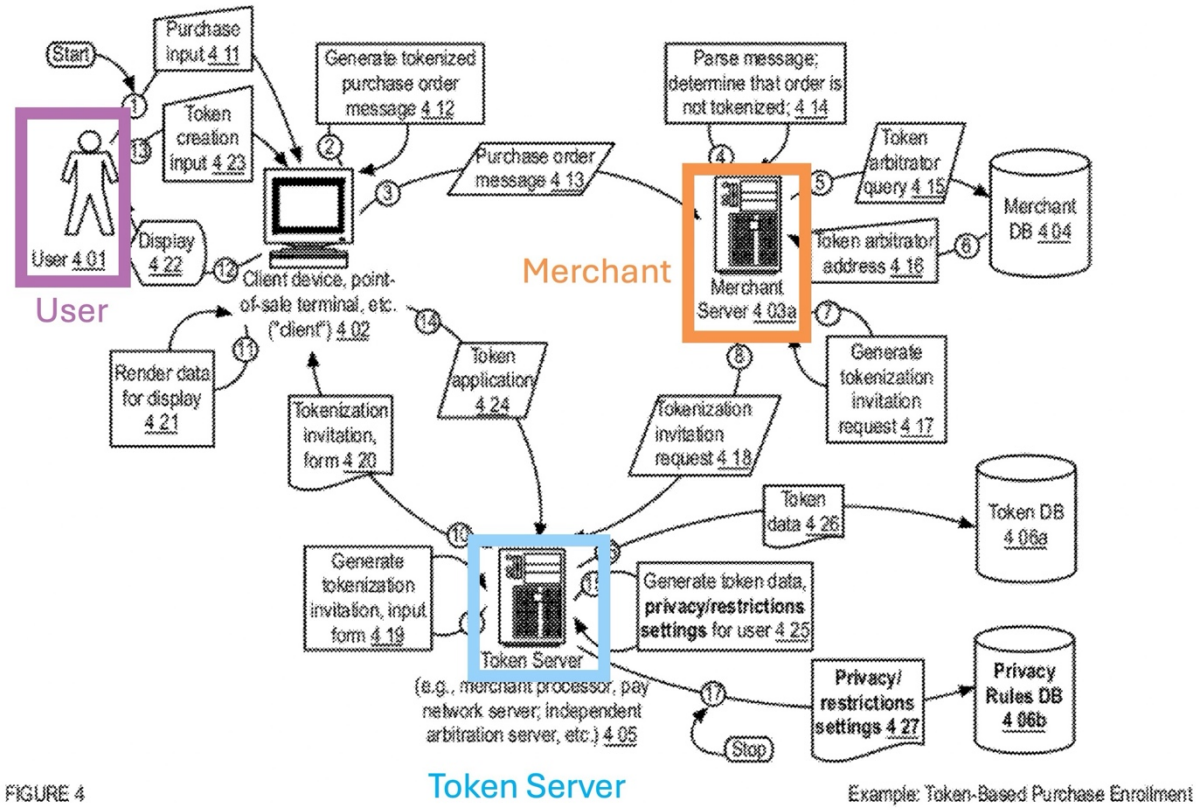


FIGURE 1A Example: Payment Tokenization

EX1011 at Fig. 1A (annotated).

Oborne taught enrolling in its PPT involved three main entities: a "user" (**purple**), a "merchant" (**orange**), and a "token server" (**blue**), as shown in Figure 4 below:



EX1011 at Fig. 4 (annotated).

Oborne's Figure 5 below showed the role played by each of them in creating tokens. EX1011 ¶45, Fig. 5. When the user wanted to make a purchase, it "generated [a] purchase order message to the merchant server" who communicated with the "token server" and generated a "tokenization invitation request." *Id.* ¶45.

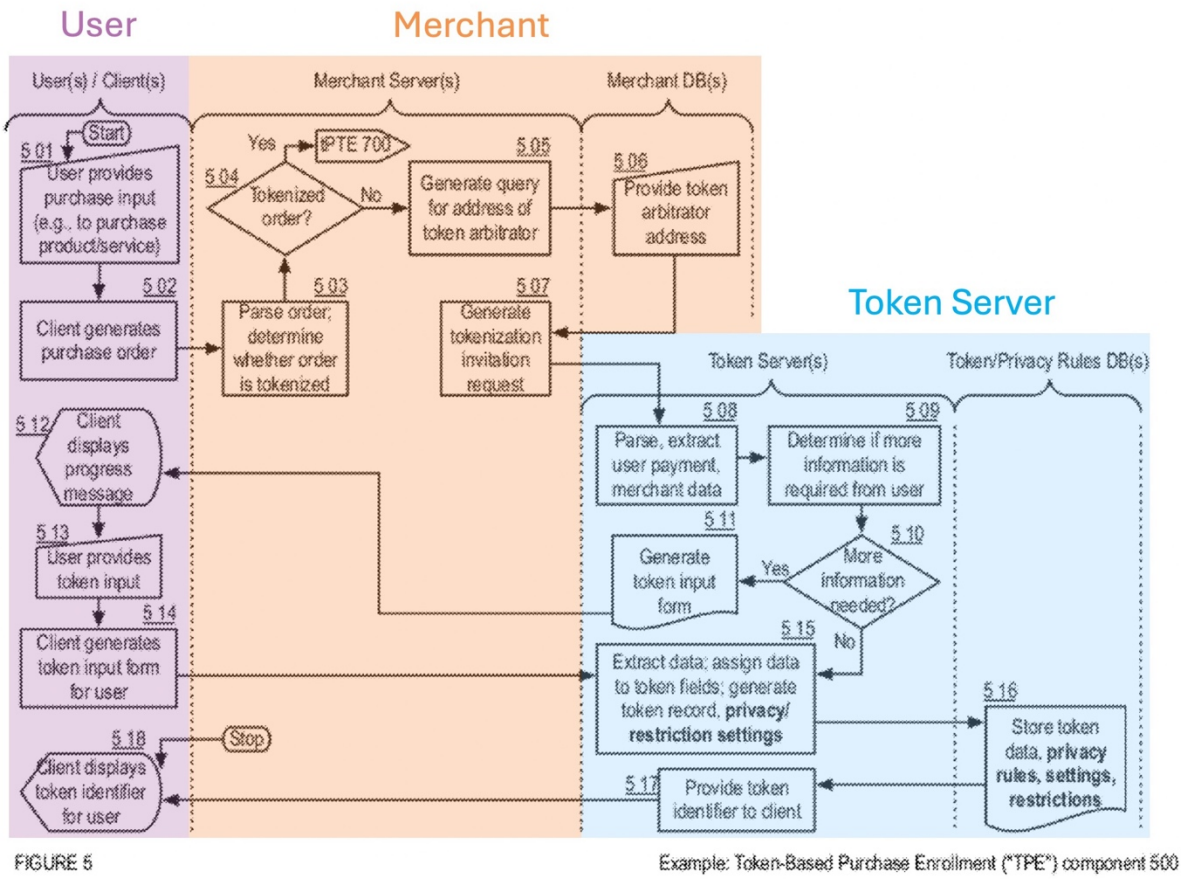
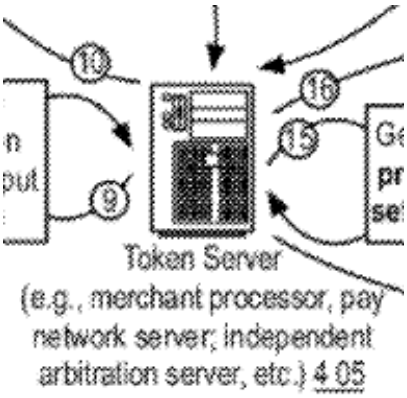


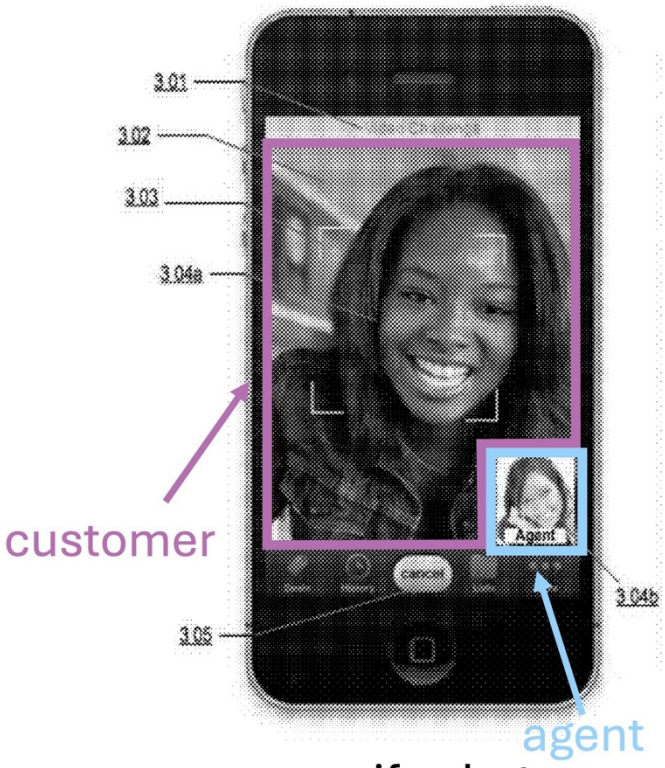
FIGURE 5 Example: Token-Based Purchase Enrollment ("TPE") component 500

EX1011 at Fig. 5 (annotated).

As shown at right, Oborne also taught that "the token server may be part of the merchant system (e.g., a merchant process), or part of the payment network (e.g., a pay network server), or an independent server operating in conjunction" with them. EX1011 ¶53, Fig. 4 (excerpted).



Because tokens could be generated by different entities, Oborne taught users being "queried for authentication" of the token. EX1011 ¶54. A user would be contacted using "a 'VerifyChat' feature for fraud prevention." *Id*. This involved messaging, "voice chat," or "video chat." *Id*. As shown at right, Oborne's video chat required the user to "present him/her-self via a video chat" so a "customer service representative" could "manually determine the authenticity of the user." *Id.* ¶54, Fig. 3A (excerpted and annotated).



verify chat

Oborne Fig. 3A

F. Stafford (EX1012)

Grounds 3-4 rely on U.S. Patent Publication 2009/0271321 to Stafford. Pet. at 51-80. Unlike the '973 Patent, there is no dispute that Stafford taught a system for "distribut[ing] sensitive credential information." Pet. at 6; *see also* EX1012 at Abstract. These credentials included an individual's "credit history, employment history, club memberships, [and] educational history." EX1012 ¶53. Stafford

mentioned "tokens," but there's no dispute that Stafford's "tokens" are physical devices (USB keys). EX1005 ¶121; *see also* EX1012 ¶96.

First, an individual (or "entity" in Stafford's parlance) "submits their credential information or documentation to the system." EX1012 ¶64. The actual credential was stored securely. *Id*. ¶¶67-70. When the individual wanted to release their credentials to a third party, she "logs on to the website and elects to 'release' information." *Id.* ¶74. Sensitive information "can only be released after confirmation by the entity as well as the generation (and purchase) of key signatures" which were "hash value[s]." *Id*. ¶75. Stafford explained these key signatures were single-use "one-time pads." *Id*.; *see also id*. ¶124 ("Used IdSecPads… are removed from the system after use to prevent signature re-use."). After the key signatures were purchased and created, Stafford's system moved the credential to a staging zone for release. *Id*. ¶¶92-93. After the third-party was given a key signature, it could retrieve a copy of the individual's credential. *Id*. ¶¶115-26.

G. Purves (EX1013)

Grounds 2-4 also rely on U.S. Patent Publication 2013/0054454 to Purves. Pet. at 40-80. Purves taught "facilitat[ing] the enrollment of payment accounts in a consumer's virtual wallet" using what it termed a Wallet Service Enrollment Platform or WSEP. EX1013 at Abstract. Users provided their account information to a wallet service provider for enrollment. *Id*. ¶35, Fig. 20b; *see also id*. at Fig. 20a,

¶¶102-04. Purves showed credit card images to assist the user in enrolling accounts into Purves' virtual wallet. *Id*. ¶¶102-04.

III. LEVEL OF ORDINARY SKILL IN THE ART

Visa proposes that a person of ordinary skill:

> would typically have a bachelor's degree in computer science, computer engineering, or a related field, with at least two years of work involving electronic payment systems, network authentication systems, or related areas.

Pet. at 9 (citing EX1005 ¶¶74-79).

The Board need not determine the level of ordinary skill in the art to deny institution here. *Johnson & Johnson Surgical Vision v. Alcon*, IPR2021-01003, 2021 WL 6338373, at *4 (P.T.A.B. Nov. 23, 2021). If trial is ordered, Cortex reserves the right to address the level of ordinary skill.

IV. CLAIM CONSTRUCTION

The Petition proposed constructions for the terms "OVER file" and "verified by an issuing agency." Pet. at 11-13. The parties already have exchanged claim constructions in the district court. EX2007-EX2008.

For purposes of denying institution and finding that Visa has not met its burden to show a reasonable likelihood of prevailing, Cortex submits that the Board does not need to construe any terms of the Challenged Claims. *Realtime Data v. Iancu*, 912 F.3d 1368, 1375 (Fed. Cir. 2019) ("The Board is required to construe

'only those terms… that are in controversy, and only to the extent necessary to resolve the controversy.'" (alteration in original) (quoting *Vivid Techs. v. Am. Sci. & Eng'g*, 200 F.3d 795, 803 (Fed. Cir. 1999)). Cortex reserves the right to assert claim construction positions if trial is ordered.

V. GROUNDS 1-2 BASED ON OBORNE ARE NOT REASONABLY LIKELY TO PREVAIL

Visa does not sustain its burden on Grounds 1-2 for any of the following independent reasons:

First, it fails to show that Oborne taught or suggested verification of an issuing agency as required by all Challenged Claims 1-17. Visa points to nothing in Oborne showing the issuer provided any verification of Oborne's tokens. Its Petition also fails to establish how or why one of skill would modify Oborne to fill in the gap, let alone with a reasonable expectation of success. Its argument that modifying Oborne would be "routine" reeks of hindsight.

Second, lacking verification by an issuing agency, Visa improperly maps the separate claim requirements of an "OVER engine"/"processor" and "issuing agency" on the same thing—Oborne's token server. Because it fails to show that Oborne met these separate requirements, its challenge further fails.

Third, Visa fails to meet its burden to show unpatentability based on a construction of "OVER file" it refuses to endorse.

A. The Petition Fails To Establish Oborne Taught Or Suggested Verification By An Issuing Agency (All Claims)

Challenged Claims 1-17 all require verification by "an issuing agency." EX1004 at 22:1-5, 23:23-27, 24:44-48 (independent Claims 1, 8, 16: "an OVER file comprising a virtual representation of the credential that has been ***verified by an issuing agency*** to be an official representation" of the credential). Visa asserts that "Oborne teaches or at least suggests" verification by an issuing agency. Pet. at 21 (Claim 1); *see id*. at 38-39, 45 (relying on Claim 1 arguments for limitations in Claims 8 and 16). Oborne did neither, and Visa simply has not sustained its burden for these grounds.

1. Oborne Did Not "Disclose" Verification

Oborne did not disclose verification by an issuing agency. Visa asserts Oborne's "token is a virtual representation of a credential" as claimed in the '973 Patent. Pet. at 20. It argues that Oborne satisfied verification by an issuing agency because "any entity can operate as the token server" so it speculates the "token may be provided by… the agency that issued the credential." *Id*. at 21-22 (citing EX1011 ¶¶29, 47-48, 53, 58).

This falls short of meeting Visa's burden. The Petition string-cites five paragraphs from Oborne to claim "the agency that issued the credential" in Oborne provided the token. *See* Pet. at 21-22 (citing EX1011 ¶¶29, 47-48, 53, 58). It then

argues that Oborne taught verification when the issuing agency purportedly "generat[ed] the token and provid[ed] it to the user to represent the credential it has issued." *Id*. at 22. But none of these five paragraphs show an issuing agency providing tokens, let alone issuer verification as claimed in the '973 Patent. *See id*. at 21-22 (citing EX1011 ¶¶29, 47-48, 53, 58).

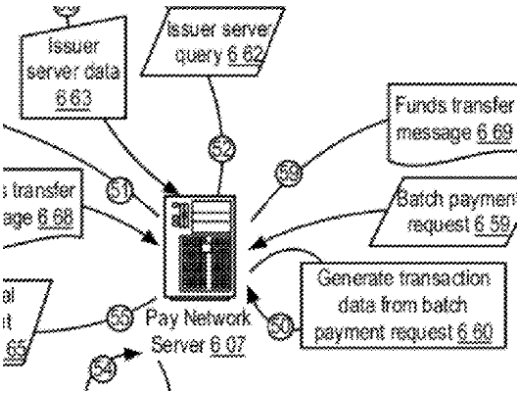
Paragraph 29 provides examples of how "a user may be able to control the attributes of each token" via "a web interface" in Figures 2A-2B. EX1011 ¶29. It says nothing about verification by an issuing agency. *See id*.

Paragraphs 47-48 generally discussed Oborne's "token server" in Figure 5. EX1011 ¶¶47-48. These paragraphs do not describe an issuing agency (for example, a bank) that issued a credential, but refer instead to the entity that issued the token, explaining: "[f]or example, ***the source of the token (e.g., issuer***, acquirer, independent token arbitrator) may first obtain assurance that funds" are available. *Id.* ¶47. This is consistent with Oborne's other teachings that its "issuer" was the entity that issued the token, not the bank issuing the credential itself. *E.g.*, *id.* ¶25 ("In such implementations, ***the issuer of the token*** may be the only entity other than the user to know the actual personal and/or financial information of the user.").

Paragraph 53 says that "[i]n various implementations, the token server may be part of the merchant system" or "part of the payment network" or "an independent server operating in conjunction with the merchant, issuer, acquirer, and payment

network." EX1011 ¶53. Like the Petition's other citations, this paragraph simply explains that the "token server may ***issue***, e.g., 619, a user issuer query to a database, e.g., token database 606, using the payment token as [a] search term in the query." *Id.* Oborne's query was a simple lookup carried out by the token server itself, not any verification by a bank or independent issuing agency. *Id.* Likewise, Oborne taught the token database's "issuer data response" merely "includ[ed] instructions… on how to proceed with payment processing for the transaction." *Id.* Payment processing at the back end is distinct from the claimed requirements that an issuing agency verify the virtual representation when it is created. EX1004 at 22:1-5, 23:23-27, 24:44-48. Whether the token server is run by the merchant system, payment network, or independently, this paragraph says nothing about a bank or independent agency that issued the credential verifying the token. EX1011 ¶53.

Finally, the Petition cites to Oborne's paragraph 58 description of Figures 6A-6E stating "the pay network server may generate a query, e.g., 635, for issuer server(s) corresponding to the payment token" because "the user's payment token may be linked to one or more issuer financial institutions" that issued the user's accounts. EX1011 ¶58. First, this request in Oborne was issued by a "pay network server" 607 in Figure 6C (shown at right), not Oborne's token server



605 in Figures 6A-6B that the Petition maps to the OVER engine. EX1011 ¶57 ("[T]he token server may provide the token data… to a pay network server…."), Fig. 6C (excerpted). Second, this paragraph just describes a "query"—Oborne never said the issuer servers provided any initial verification of a token, let alone to Oborne's token server. *See* EX1011 ¶58.

None of these five paragraphs support the Petition's contention that a bank or issuing agency provided tokens in Oborne, let alone that Oborne "teaches" or renders obvious the verification by an issuing agency required by Claims 1-17. Pet. at 21-22. The Petition's theory that Oborne "teaches" verification is plainly unsupported.

2. The Petition Fails To Establish How, Or Demonstrate Any Motivation, To Modify Oborne To Include Verification By An Issuing Agency

Because Oborne never expressly taught verification of Oborne's tokens by an issuing agency, *supra* § V.A.1, Visa alternately argues that this limitation is obvious over Oborne alone, Pet. at 22. But Visa fails to meet its burden to show either "how or why" one of skill would have modified Oborne to teach this aspect of the claimed invention. *See, e.g.*, *Metalcraft of Mayville v. Toro Co.*, 848 F.3d 1358, 1367 (Fed. Cir. 2017) ("Without any explanation as to how or why the references would be combined to arrive at the claimed invention, we are left with only hindsight bias that *KSR* warns against."); *Palo Alto Networks v. BT Ams.*, IPR2023-00888, Paper 12 at 5-6 (P.T.A.B. Apr. 1, 2024) (Petitioner bears "burden to articulate both a *reason why*

[and] explain[] *how* [the art] would be modified to render the limitation obvious." (emphasis in original)).

Because the Petition never establishes that Oborne taught verification by an issuing agency, Visa was required to explain ***how*** to modify Oborne to supply the claimed verification. Citing only Dr. Shamos, Visa offers only the conclusory assertion that it would be "obvious for an issuer, upon generating the token, to verify" it. Pet. at 22 (citing EX1005 ¶¶211-12). The Petition provides nothing about how issuer verification would work in Oborne, and cannot meet its burden. *See id.*; *In re Google*, 56 F.4th 1363, 1367 (Fed. Cir. 2023) (remanding obviousness finding for lacking "any discussion of *how* such a modification would be accomplished" (emphasis in original)). "[R]easoned analysis and evidentiary support" are "especially [important] when dealing with a limitation missing from the prior art references specified." *Arendi S.A.R.L. v. Apple*, 832 F.3d 1355, 1362 (Fed. Cir. 2016).

Visa further fails to show ***why*** one of skill would have been motivated to modify Oborne to include the missing limitation of "a virtual representation of the credential that has been verified by an issuing agency to be an official representation" of the credential. EX1004 at 22:1-5. The Petition offers only the conclusory assertion, without any supporting explanation or citation, that verification was "a routine step." *See* Pet. at 22 (citing EX1005 ¶¶211-12); EX1005

¶212 (Shamos: verification "would be a routine step"). Just because something is routine, or known, does not meet Visa's burden to show a motivation to modify Oborne. *Virtek Vision Int'l v. Assembly Guidance Sys.*, 97 F.4th 882, 888 (Fed. Cir. 2024) (reversing obviousness finding: "It does not suffice to simply be known. A reason for combining must exist."); *Metalcraft*, 848 F.3d at 1367; *Arendi*, 832 F.3d at 1366 (rejecting "conclusory generalizations" to supply "a key limitation of the '843 patent… missing from the prior art reference").

Visa also asserts that adding verification "would increase confidence that the token legitimately represented the credential." Pet. at 22 (citing EX1005 ¶¶211-12); EX1005 ¶212 (same). Dr. Shamos states the obvious: that "forged or altered tokens in the marketplace would create problems." EX1005 ¶212. Indeed, that is exactly the problem the '973 Patent sought to address: "Current platforms are insecure and carrying digital credentials increases the risk of identity theft or fraud in transactions. What is needed is [a] secure system" for "generating and ***verifying***" credentials. EX1004 at 1:49-59. Visa's hindsight approach of using the '973 Patent as a roadmap does not show a motivation to combine. *Ruiz v. A.B. Chance*, 357 F.3d 1270, 1275 (Fed. Cir. 2004) ("This form of hindsight reasoning, using the invention as a roadmap to find its prior art components, would discount the value of combining various existing features or principles in a new way to achieve a new result—often the very definition of invention.").

Visa's citations to Dr. Shamos add nothing because he essentially repeats the Petition. *Compare* Pet. at 21-22 *with* EX1005 ¶¶211-12; *Xerox v. Bytemark*, IPR2022-00624, 2022 WL 3648989, at *6 (P.T.A.B. Aug. 24, 2022) (precedential) ("verbatim" declaration testimony is "entitled to little weight"); 37 C.F.R. § 42.65(a).

Finally, Visa concludes with a two-sentence argument, asserting it would be obvious to modify Oborne "as a matter of course" if Cortex argues "the claim requires that the credential, rather than the token, be verified by the issuer." Pet. at 22. Cortex has not proffered that, or any, claim construction in this brief. *Supra* § IV. Nor has Visa or Dr. Shamos met their burden to provide a supported explanation how or why one of skill would modify Oborne to include this feature. *See, e.g.*, *Metalcraft*, 848 F.3d at 1367; *Palo Alto*, IPR2023-00888, Paper 12 at 5-6.

B. The Petition Cannot Meet Its Burden By Mapping Both The "OVER Engine"/"Processor" And "Issuing Agency" On The Same Token Server In Oborne (All Claims)

Challenged Claims 1-17 separately require an "OVER engine" (or "processor") and an "issuing agency." EX1004 at 21:60-22:5 (Claim 1), 23:11-53 (Claim 8), 24:36-48 (Claim 16).

Method Claims 1 and 16 require "an officially verifiable electronic representation (OVER) generation and verification engine," while Claim 8 is directed to an apparatus with a "processor." *See id.* The Petition asserts the OVER

engine and processor perform similar functions, arguing "Claims 1 and 16 are generally written from the perspective of an 'OVER engine'" and that the "apparatus" Claim 8 includes "instructions configured to program a processor to perform similar limitations." Pet. at 4.

"Where a claim lists elements separately, 'the clear implication of the claim language' is that those elements are 'distinct component[s]' of the patented invention." *Becton, Dickinson & Co. v. Tyco Healthcare Grp.*, 616 F.3d 1249, 1254 (Fed. Cir. 2010) (alteration in original) (citation omitted); *Kyocera Senco v. Int'l Trade Comm'n*, 22 F.4th 1369, 1382 (Fed. Cir. 2022). Yet the Petition blithely ignores the claim language, improperly mapping both the claimed "OVER engine"/"processor" and "issuing agency" onto the same "token server" in Oborne. *See* Pet. at 14-33 (Ground 1), 40-41 (Ground 2).

<u>OVER engine/processor mapping</u>. Each of the challenged claims require an "OVER engine" or "processor." *See* EX1004 at 21:60-22:5 (Claim 1), 23:11-54 (Claim 8), 24:36-48 (Claim 16). In Ground 1, the Petition argues "Oborne teaches an *OVER… engine*" in Claim 1 because its "system includes a '***token server***.'" Pet. at 15-16 (limitation 1.1) (first italics in original) (citing EX1011 ¶53). Again and again, the Petition points to Oborne's token server to satisfy the "OVER engine" claim limitations. For example:

- "generating" step 1.3: met by "Oborne['s]… ***token server***" creating "a data record and data structure for a token." Pet. at 20.
- "transmitting… the OVER file" step 1.4: identifying "Fig. 5… step 517," which is performed by "***Token Server(s)***" in Figure 5. Pet. at 23-24 (reproducing EX1011 at Fig. 5).
- "verifying" step 1.6: performed by "***token server***." Pet. at 27.
- "transmitting… an authentication message" step 1.7: performed by "***token server***." Pet. at 29-30; *see also id*. at 30-31.

The Petition takes a similar approach for Claims 8 and 16. Pet. at 38-39, 45 (relying on Claim 1 arguments for limitations in Claims 8 and 16).

Issuing agency mapping. Claims 1, 8, and 16 require another entity: a "virtual representation of the credential that has been verified by an ***issuing agency*** to be an official representation" of the credential. EX1004 at 22:1-5, 23:23-27, 24:44-48. The Petition tries to gloss over this distinction. Instead of identifying a separate issuing agency to meet the "verified" claim limitation, Visa again points to Oborne's token server that it already identified as satisfying the "OVER engine" limitations, arguing "the token would be verified by the issuing agency" because "Oborne teaches that any entity can operate as the token server." Pet. at 21; *id*. at 38-39, 45 (Visa relying on Claim 1 arguments for limitations in Claims 8 and 16).

The claims requiring the distinct "OVER engine"/"processor" and "issuing agency" create a presumption that they are distinct components of the invention. *Becton*, 616 F.3d at 1254; *Kyocera*, 22 F.4th at 1382. The Petition never acknowledges, let alone justifies, its mapping of the separately claimed "OVER engine"/"processor" and "issuing agency" onto the same "token server" in Oborne. Pet. at 21-22. Nor does it attempt to overcome the presumption by pointing to anything in the claims or written description showing the claimed "OVER engine"/"processor" and "issuing agency" are one and the same. *Kyocera*, 22 F.4th at 1382 (presumption not overcome). Visa admits that the '973 Patent "involves interactions between three parties." Pet. at 2. Assigning Oborne's token server every role in what Visa admits is a multi-actor play does not meet its burden to show unpatentability here.

C. Visa Does Not Meet Its Statutory Mandate By Proffering Grounds 1-2 Based On A Claim Construction Of "OVER File" It Refuses To Endorse (All Claims)

The Petition does not meet its burden on Grounds 1-2 by proffering a claim construction that neither Visa nor Dr. Shamos assert is correct.

"In an *inter partes* review, the burden of persuasion is on the petitioner to prove unpatentability by a preponderance of the evidence, and that burden never shifts to the patentee." *In re Magnum Oil Tools*, 829 F.3d 1364, 1375 (Fed. Cir. 2016) (cleaned up). Visa must establish "[h]ow the challenged claim is to be

construed" and "[h]ow the construed claim is unpatentable." 37 C.F.R. § 42.104(b)(3)-(4).

The Petition exclusively asserts unpatentability in Grounds 1-2 based on a construction of "OVER file" as "encompassing a file comprising a token." Pet. at 13; *see also* Pet. at 14 (applying construction in Ground 1). However, Visa and Dr. Shamos assert this construction is unsupported. Pet. at 12 (Visa: "The '973 Patent does not describe that tokens may be either an OVER file or a part of an OVER file…"); EX1005 ¶86 (Shamos: "The '973 patent does not discuss tokens or describe that tokens may be either an OVER file or a part of an OVER file…").

Visa cannot demonstrate a reasonable likelihood of success here by proffering claim constructions that it asserts are incorrect. *See, e.g.*, *Hologic v. Enzo Life Scis.*, IPR2018-00019, 2018 WL 1897623, at *3-4 (P.T.A.B. Apr. 18, 2018) (denying institution: grounds "based on a different construction that Petitioner considers to be erroneous" insufficient under 37 C.F.R. § 42.104); *Ebates Performance Mktg. v. IBM*, IPR2022-00439, 2022 WL 5048425, at *5 (P.T.A.B. Oct. 3, 2022).

VI. THE COMBINATION OF STAFFORD AND PURVES IN GROUNDS 3-4 DOES NOT ESTABLISH OBVIOUSNESS

As with Grounds 1-2, the Stafford grounds also do not satisfy an "OVER file comprising a virtual representation of the credential that has been verified by an issuing agency to be an official representation" of the credential required by all

Challenged Claims 1-17. EX1004 at 22:1-5, 23:23-27, 24:44-48 (independent Claims 1, 8, and 16). Visa predicates Grounds 3-4 on its proposed construction of "'OVER file'… encompassing a file comprising an image of (or associated with) the credential." Pet. at 13 (adopting this construction for "grounds 3-4"). Even under Visa's own construction, the combination of Stafford and Purves does not establish unpatentability of any claim.

Despite asserting that both Stafford and Purves "teach[]" this limitation, the Petition fails to meet its burden to show that either one does. Pet. at 58-60. The Petition points to nothing in Stafford showing verification of the key signature or hash value, which it points to as the claimed "virtual representation of the credential." It also references card images in Purves' wallet enrollment system, but the Petition never establishes that Purves' card images were the claimed OVER file. Unlike the claimed "OVER file," the Petition never shows that Purves' card images were shared with a third-party merchant. Visa also fails to muster a reason to combine Stafford's credential release platform with Purves' wallet enrollment system, particularly when Stafford's key signature hash values were used once and then discarded. Because the combination of Stafford and Purves does not render obvious the claim as a whole, the Petition does not meet its burden.

A. Stafford Did Not Disclose Verification Of Its Key Signatures

The Petition asserts that Stafford expressly taught the claimed "OVER file comprising a virtual representation of the credential that has been verified by an issuing agency." Pet. at 58-60. Citing three paragraphs in Stafford, Visa argues that "Stafford teaches that its encrypted credentials may be verified by the issuer…." *Id*. at 58-59 (citing EX1012 ¶¶62, 65, 67).

But that is not what the claims require. Instead, the claims recite verification of an OVER file which comprises "a ***virtual representation***" of a "credential." EX1004 at 22:1-5, 23:23-27, 24:44-48. The Petition asserts that Stafford's "hash value" was the virtual representation of the credential, yet presents no argument or evidence showing that Stafford's hash value was verified by an issuing agency. *See* Pet. at 58 (Stafford's "hash value thus acts as a virtual credential representation of the stored credential…"). The Petition essentially concedes that the hash value was not verified in Stafford, pivoting in the very next sentence to assert that Stafford's "encrypted credentials" themselves "may be verified." *Id*. at 58-59.

Indeed, none of the three paragraphs cited by Visa discuss hash values, let alone show verification of Stafford's hash value. *See* Pet. at 58-59 (citing EX1012 ¶¶62, 65, 67).

- Stafford's paragraph 62 says nothing about hash values, instead discussing Stafford's "administration sub-system" for scanning or uploading hardcopy

credential documents. EX1012 ¶62. Its reference to the subsystem performing "verification" of "stored information" says nothing about hash values or what information is specifically verified. *Id*.

- Paragraph 65 in Stafford generally discuses "verification" including "verification of individual documents." EX1012 ¶65. This paragraph also never mentions hash values, and Visa concedes it only teaches verifying an actual "credential," not a virtual representation of the credential. Pet. at 60 (citing EX1012 ¶65).
- Paragraph 67 fares no better with nothing about hash values, instead discussing what happens after a document is "verified as authentic." EX1012 ¶67.

B. Purves Did Not Teach Or Suggest Verification Of A Virtual Representation Of A Credential

The Petition points to Purves to satisfy this limitation, but Purves also comes up short. Pet. at 59-60.

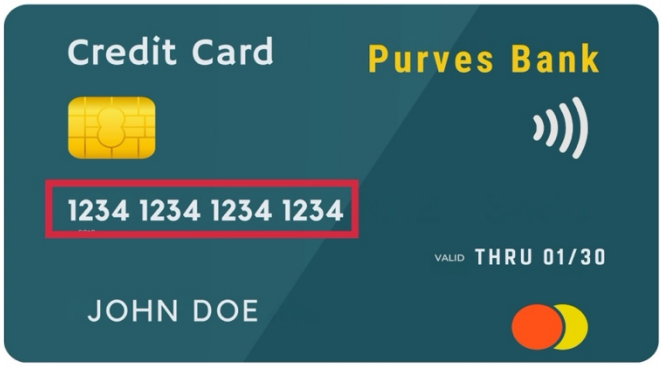
The Petition claims that Purves "teaches" an OVER file. Pet. at 59-60. Grounds 3-4 are premised on Visa's proposed claim construction of "OVER file" as "encompassing a file comprising an image of (or associated with) the credential." Pet. at 13 (adopting this "interpretation of 'OVER file'" for "grounds 3-4"). Purves did not satisfy this requirement even under Visa's own construction.

Visa solely bears the burden of proof to specifically identify where the art purportedly teaches all limitations of the claimed invention. *Harmonic v. Avid Tech.*, 815 F.3d 1356, 1363 (Fed. Cir. 2016) (Petitioner bears "the burden from the onset to show with particularity why the patent it challenges is unpatentable."); 35 U.S.C. § 312(a)(3); *LG Elecs. v. Constellation Designs*, IPR2022-01482, Paper 8 at 14 (P.T.A.B. Apr. 20, 2023) (denying institution because "the Petition does not sufficiently identify how [the reference] teaches the 'optimized' limitation in the independent claims"). Yet the Petition identifies nothing in Purves purportedly satisfying the "OVER file" claim limitation. *See* Pet. at 59-60. Instead, Visa argues that Purves taught a user device being "sent an image of a credential such as a credit card, to conveniently represent a real credential." Pet. at 59.

Even under Visa's construction, Purves' card image cannot satisfy the claimed "OVER file" because Purves only taught using card images to assist a consumer in enrolling or using a virtual wallet. All challenged claims have other requirements for the OVER file, including receiving a third-party "verifying request" based on a "Near Field Communication (NFC)" or "Bluetooth" "protocol-based communication associated with the OVER file." EX1004 at 22:9-14 (Claim 1), 23:31-38 (Claim 8), 24:52-58 (Claim 16). The Petition points to nothing in Purves showing that its credit card images were used for any of that.

The Petition cites seven paragraphs from Purves, but none of those showed Purves' card images satisfying the claim requirements of an OVER file. Pet. at 59 (citing EX1013 ¶¶85, 102, 108-09, 111-12, 122). Instead, the card images were merely shown to a consumer to assist in enrolling in, or using, a virtual wallet. *See id*. Paragraph 102 simply discusses a "window 2001 for linking payment accounts to a virtual wallet." EX1013 ¶102. As shown below, unlike the '973 Patent which sought to protect the actual credential, Purves taught sending the actual credit card account number(s) to the virtual wallet:

```
Host: www.merchant.com
Content-Type: Application/XML
Content-Length: 667
<?XML version = "1.0" encoding = "UTF-8"?>
<reference_creation_request>
    <timestamp>2013-02-22 15:22:43</timestamp>
    <user_details>
        <user_name>JDoe@gmail.com</user_name>
        <password>Tomcat123</password>
    </user_details>
    <new_reference>
        <refname>New Business Card</refname>
        <type>reference_payment</>
        <card_num>1234123412341234</card_num>
        <contract_trms>234.99,immediate|40.00,permonth
        </contract_trms>
    </new_reference>
</reference_creation_request>
```



EX1013 ¶99 (excerpted and annotated); *see also id*. ¶102.

Paragraph 108 provided more description, with paragraphs 109 and 111-12 referencing embodiments where Purves "retrieve[d] an image for the card" to assist the consumer with enrolling in a virtual wallet. EX1013 ¶¶108-09, 111-12. Paragraph 85 discussed the "control panel" which "may display an image of the

card" but never taught that the card image is shared with anyone except the customer. EX1013 ¶85.

Visa again cites to Dr. Shamos' declaration, Pet. at 59 (citing EX1005 ¶297), but he offers nothing more. His testimony should be given no weight because he merely repeats Visa's attorney argument without any further explanation or evidence. *Compare* EX1005 ¶297 *with* Pet. at 59; *Xerox*, 2022 WL 3648989, at *6 ("conclusory and unsupported" declaration testimony "is entitled to little weight"); 37 C.F.R. § 42.65(a).

C. Visa Does Not Establish A Motivation To Modify Stafford's Credential Release Platform With Card Images From Purves' Wallet Enrollment System

As explained, neither Stafford nor Purves taught an "OVER file comprising a virtual representation of the credential that has been verified by an issuing agency." *Supra* § VI.A-B. Because this limitation is not taught or suggested by the combination of Stafford and Purves, Petitioner has failed to show "the claimed invention as a whole would have been obvious." 35 U.S.C. § 103; *Litton Indus. v. Solid State Sys*., 755 F.2d 158, 164 (Fed. Cir. 1985) ("It is elementary that the claimed invention must be considered as a *whole* in deciding the question of obviousness." (emphasis in original)); *Absolute Dental Servs. v. Watson Guide IP*, IPR2023-00177, 2023 WL 5047049, at *4 (P.T.A.B. May 4, 2023) (citing *Litton*, 755 F.2d at 164).

Because the Petition again fails to show how or why one of skill would have modified Stafford and Purves to supply the missing limitation, it also fails to meet its burden as to Grounds 3-4. *See, e.g.*, *Metalcraft*, 848 F.3d at 1367; *Palo Alto*, IPR2023-00888, Paper 12 at 5-6.

Visa argues it would have been obvious to use Purves' "images representing a credential" in Stafford "to remind users which credential the key signature represents" and allow "quick selection" among them. Pet. at 59-60. This purported combination is nonsensical. Purves taught a virtual wallet containing different payment methods that could be selected among. EX1013 ¶85. The Petition has not shown that Stafford's one-time key signatures also worked that way.

Instead, Stafford only created the key signatures ***after*** the user had "select[ed] files or information for release" and "determin[ed] who pays for the service," either the user or recipient. EX1012 ¶84, Fig. 2. Stafford's key signatures were single-use, with a paid "one time pad" used to release information to a specific recipient. *Id.* ¶88 ("For sensitive files, a highly secure symmetric or similar encryption process e.g. ***a one time pad***, is used…"); *see also id.* ¶¶93, 95. Because the Petition has not established that Stafford used its key signatures repeatedly, Visa's statement that it would ease selection of a key signature that is never reused withstands no scrutiny.

Because Visa never establishes that Stafford's system ever selected between its one-time-use key signatures, it fails to show any motivation to combine it with

Purves. *Cisco Sys. v. Centripetal Networks*, IPR2018-01655, 2019 WL 2004230, at *8 (P.T.A.B. May 6, 2019) (rejecting motivation when "it is unclear why or how" the proposed benefit "would be useful or advantageous").

The Petition fails to meet its burden for Grounds 3-4.

VII. INSTITUTION SHOULD BE DENIED BECAUSE VISA'S PETITION IS CUMULATIVE OF ART THE EXAMINER CONSIDERED

The Petition should be discretionarily denied because it provides nothing beyond the art already considered by the Examiner during multiple rounds of prior art searching and rejections. At the end of this process, the Examiner agreed with Cortex that the prior art did not teach the claimed "virtual representation of the credential that has been verified by an issuing agency…," among other limitations. EX1010 at 20; *see also id.* at 66-68.

The Petition presents nothing contradicting the Examiner's finding. Visa's references also fail to render obvious the '973 Patent, including because they do not teach or suggest verification of the "virtual representation" of a credential by an issuing agency. *Supra* §§ V.A, VI.A-VI.B. Contrary to Visa's cursory argument, Pet. at 81, because the Oborne and Stafford grounds are merely cumulative of what the Examiner already considered, the Board should exercise its discretion to deny institution, s*ee, e.g.*, *Sandoz v. Acerta Pharma*, IPR2023-00478, 2023 WL 5167505, at *6 (P.T.A.B. Aug. 7, 2023) (denying institution under *Advanced Bionics* and

finding the petition reference "cumulative to the teaching in Smyth and Evarts relied on by the Examiner" during prosecution).

In determining whether it should decline institution under Section 325(d), the Board applies a two-part framework: (1) "whether the same or substantially the same art previously was presented to the Office," and (2) "whether the petitioner has demonstrated that the Office erred in a manner material to the patentability of challenged claims." *Advanced Bionics v. MED-EL Elektromedizinische Geräte*, IPR2019-01469, 2020 WL 740292, at *3 (P.T.A.B. Feb. 13, 2020) (precedential).

A. The Grounds Are Cumulative Over The Art Considered During Prosecution

In the first part of *Advanced Bionics*, the Board considers "the similarities and material differences between the asserted art and the prior art involved during examination, the cumulative nature of the art, and the overlap of the arguments presented." *BMW of N. Am. v. Stragent*, IPR2021-00419, 2021 WL 3039219, at *5 (P.T.A.B. July 19, 2021) (citing *Advanced Bionics*, 2020 WL 740292, at *4). In doing so, the Board has found *Becton Dickinson* factors (a), (b), and (d) useful. *Advanced Bionics*, 2020 WL 740292, at *4 (citing *Becton, Dickinson v. B. Braun Melsungen*, IPR2017-01586, 2017 WL 6405100, at *6 (P.T.A.B. Dec. 15, 2017) (precedential)). Each of the *Becton Dickinson* factors demonstrate that Visa's grounds are cumulative over the art already considered by the Office.

1. Factors (a)-(b): the "similarities and material differences" and "cumulative nature" of the asserted art and the prior art evaluated during examination

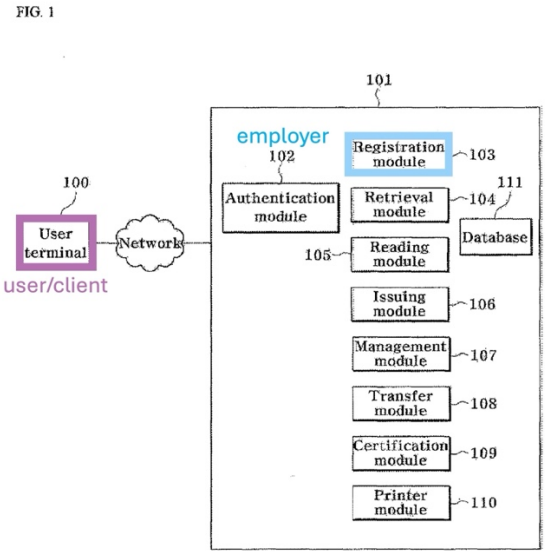
Visa relies on art that is both materially similar and cumulative of the art already considered during prosecution. Like the Examiner's cited art, none of the Petition's references taught an "issuing agency" verifying a "virtual representation."

Visa acknowledges that "[t]he Examiner referred to the Applicant's arguments in lieu of providing reasons for allowance." Pet. at 5. Among other things, Cortex argued in seeking allowance that the prior art failed to disclose "an OVER file comprising a virtual representation of the credential that has been verified by an issuing agency." EX1010 at 66-67. Yet Visa's Petition does not disclose that limitation either.

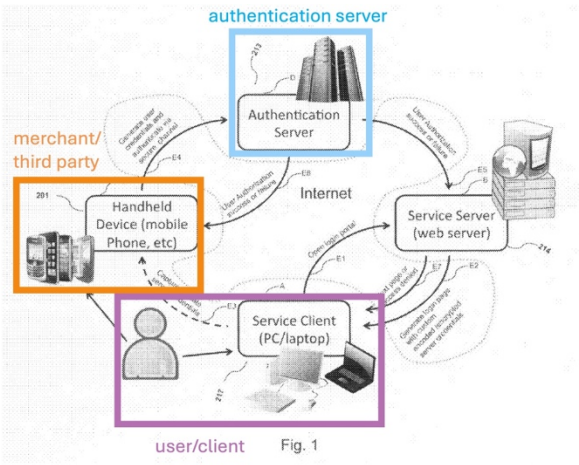
As explained, none of its Oborne or Stafford grounds teach verification of a "virtual representation" of a credential by an issuing agency. *Supra* §§ V.A, VI.A-B. That is the same deficiency that the Examiner found in the Kang and Bhatnagar references she identified after multiple rounds of searching. EX1010 at 20, 66-68; *see also id*. at 33-36, 114-18 (search reports). And the same claim limitation was also missing from the Ohara and Chu references the Examiner identified for the '531 Parent Patent, *see* EX1007 at 20, to which the '973 Patent is terminally disclaimed, *see* EX1010 at 39.

As shown below, *none* of the references cited in either the file history or Visa's petition taught an **issuing agency** that provided verification as claimed in the '973 Patent.

References Considered by Examiner

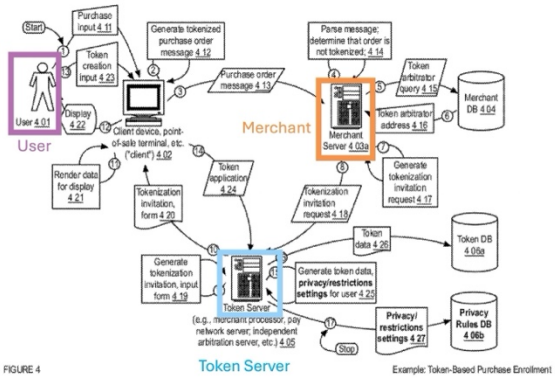


Kang
EX2005, Fig. 1 (annotated)

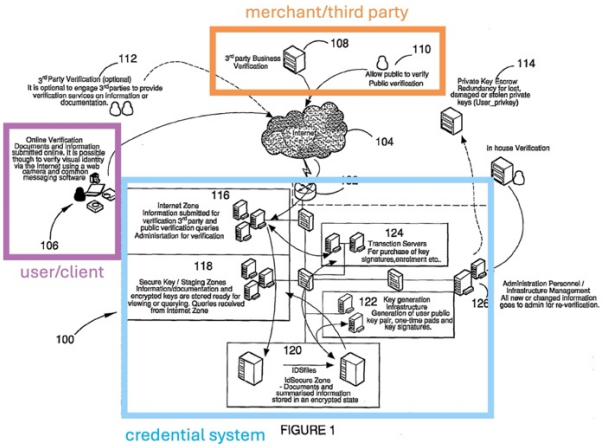


Bhatnagar
EX2006, Fig. 1 (annotated)

References In Visa's Petition



Oborne
EX1011, Fig. 4 (annotated)



Stafford
EX1012, Fig. 1 (annotated)

Because the Petition's references are merely cumulative of what the Examiner already considered, undertaking another trial based on cumulative art is unwarranted here.

2. Factor (d) the extent of the overlap between the arguments made during examination and the manner in which petitioner relies on the prior art

The Examiner allowed the claims based on Cortex's responses during prosecution that the prior art did not teach several limitations including "an OVER file comprising a virtual representation of the credential that has been verified by an issuing agency to be an official representation of the credential…." EX1010 at 20, 66-67. The Petition does not fill in the gap or present any new reference that shows this claimed feature. *Supra* §§ V.A, VI.A-B. Because Visa's arguments overlap with the disclosure of the references already considered during prosecution, this further supports discretionary denial under 35 U.S.C. § 325(d).

B. Visa Shows No Material Error By The Office

Under part two of *Advanced Bionics*, Visa has the burden "to make a showing of material error" in the Petition; otherwise, "the Director generally will exercise discretion not to institute *inter partes* review." 2020 WL 740292, at *3. The Petition's single sentence on material error does not seriously argue that the Examiner improperly allowed the claims. *See* Pet. at 81.

Visa knows exactly why the Examiner allowed the claims. In fact, it cites the Notice of Allowability and Cortex's Office Action Response in its Petition. Pet. at 5 (citing EX1010 at 14-20, 64-68). Despite acknowledging the Examiner allowed the claims based on Cortex's responses during prosecution, Pet. at 5, Visa's petition presents no art that teaches or suggests the invention of the '973 Patent, including this very claim limitation. *Supra* §§ V.A, VI.A-B.

Instead, Visa offers only a single sentence asserting that the Examiner's "allowance constituted material error" based on "the discussion in the grounds" of its Petition. Pet. at 81. Its sentence is facially inadequate: "[t]o the extent Petitioner argues that its discussion of the grounds itself demonstrated error by the Office, … we find that argument insufficient to establish reversible error" under *Advanced Bionics*. *Nespresso USA, Inc. v. K-fee Sys. GmbH*, IPR2021-01221, Paper 11 at 22 (P.T.A.B. May 6, 2022).

Merely disagreeing with the Examiner's allowance is also insufficient to establish material error. "If reasonable minds can disagree regarding the purported treatment of the art or arguments, it cannot be said that the Office erred in a manner material to patentability." *Advanced Bionics*, 2020 WL 740292, at *3. Instead, Visa must go much further to show the Examiner erred so significantly it "rises to the level of a clear and material error about which reasonable minds could not disagree."

Boragen v. Syngenta Participations, IPR2020-00124, 2020 WL 2206972, at *13 (P.T.A.B. May 5, 2020). It hasn't.

Recognizing the Examiner allowed the claims for a specific reason and then filing a Petition that presents no art contradicting the Examiner's finding only confirms that the Examiner got it right the first time. *See, e.g.*, *Advanced Bionics*, 2020 WL 740292, at *3 ("At bottom, this framework reflects a commitment to defer to previous Office evaluations of the evidence of record unless material error is shown.").

Because the Petition presents references that are cumulative of the art the Examiner already considered, the Board should exercise its discretion under 35 U.S.C. § 325(d) to deny trial here.

VIII. CONCLUSION

For any of these reasons, the Board should deny institution of the Petition.

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Dated: May 6, 2024

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CERTIFICATE OF COMPLIANCE

Pursuant to 37 C.F.R. § 42.24(d), the undersigned certifies that foregoing **PATENT OWNER'S PRELIMINARY RESPONSE** exclusive of the parts exempted as provided in 37 C.F.R. § 42.24, contains 8,345 words and therefore complies with the type-volume limitations of 37 C.F.R. § 42.24.

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CERTIFICATE OF SERVICE

The undersigned certifies that pursuant to 37 C.F.R. § 42.6(e), a true copy of the foregoing **PATENT OWNER'S PRELIMINARY RESPONSE** and **EXHIBITS 2001-2008** are being served electronically on May 6, 2024 to the following lead and backup counsel for Petitioner to the following email addresses:

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