

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

VISA INC.,
Petitioner,

v.

CORTEX MCP, INC.,
Patent Owner.

Case No. IPR2024-00486
Patent No. 9,251,531

AUTHORIZED RESPONSE TO DIRECTOR REVIEW REQUEST

I. INTRODUCTION

On August 20, 2025, Patent Owner Cortex filed its Director Review request, disputing the Board’s finding that claims 1, 3-6, 8-18, and 21-33 of the ’531 patent were obvious. Paper 32 (Request). The Director authorized this response. EX3100.

In the Request, Patent Owner disputes the Board’s finding of obviousness—and specifically the Board’s finding that Osborne (EX1011) disclosed the “verification claim limitation” of the independent claims—as an “out-of-the-blue decision.” Request, 1. The Request complains that the Board departed on a “frolic and detour” by looking to paragraph 47’s disclosure of pre-funding tokens in finding the verification limitation disclosed. *Id.* But the Request does not dispute that the Petitions (Paper 2; *see also* IPR2024-00487, Paper 2)¹ cited to paragraph 47 of Osborne as teaching this limitation. The Request does not dispute that the Institution Decision (ID, Paper 8) cited to and discussed paragraph 47 as showing the limitation’s obviousness. The Request does not dispute that Osborne’s pre-funding disclosure was briefed extensively by both sides during trial. Instead,

¹ IPR2024-00486 and IPR2024-00487 were consolidated at institution. The Petitions applied similar arguments to corresponding claim elements. Representative citations to the 486-Petition’s discussion of step 1.3 are provided herein.

Patent Owner raises a factual dispute about Osborne's content that is divorced from its own trial arguments, the Board's final written decision, and Osborne itself.

The Request should be denied as it is premised on a new factual dispute about the content of the prior art that Patent Owner never raised during trial. Contrary to the Request's characterization of the Board's final written decision, the only new theory here is Patent Owner's. Never in trial did Patent Owner argue that the timing of Osborne's issuer verification of tokens would fail to satisfy the verification limitation recited in the independent claims. Patent Owner's belated new theory, raised for the first time in its Director Review Request, is thus forfeited. Moreover, while the Director need not reach the merits of Patent Owner's new theory, that theory is inconsistent with the disclosure of the prior art.

Accordingly, Patent Owner's Director Review Request should be denied.

II. BACKGROUND

Each independent claim of the '531 patent recites a similar limitation relating to verification of a virtual representation in an OVER file. For example, step 1.3 of representative claim 1 recites "generating, by a processor of the OVER engine, 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, based on the information associated with the credential of the user." The Request only disputes the Board's finding that Osborne teaches this limitation.

The Petitions explained how Osborne generates an OVER file (a token) comprising a virtual representation of a credential as recited in this step. *See, e.g.*, 486-Pet., 21-23. The Request does not dispute the Board’s finding that Osborne teaches such an OVER file. Rather, the Request only disputes the Board’s finding that the token “compris[es] a virtual representation of the credential that has been verified by an issuing agency to be an official representation of the credential.” *See* Request, 4. The Petitions cited to Osborne’s disclosure of generating tokens, and specifically cited to paragraph 47 as teaching the verification recited in step 1.3. *See, e.g.*, 486-Pet., 22-23 (citing, *inter alia*, EX1011, ¶47); *see also id.*, 21 (citing EX1011, ¶¶47-48 and Fig. 5 as providing the process of token generation). Paragraph 47 describes generation of a token, provides an example token data structure, and includes the following language describing issuer verification of the token:

In some implementations, each token may be pre-funded. For example, the source of the token (e.g., issuer, acquirer, independent token arbitrator) may first obtain assurance that funds have been uniquely and exclusively allocated for the token from the source to which the token points. Thus, in some implementations, the token may be pre-funded and pre-authorized for up to (or in the alternative, for exactly) a predefined amount of a purchase transaction.

EX1011, ¶47.

At institution, the Board agreed that Osborne taught the verification step,

citing disclosure in Osborne including paragraph 47 as teaching issuer verification of the generated token. ID, 21-24 (citing, inter alia, EX1011, ¶47).

The Patent Owner Response (Paper 14, POR) extensively addressed the disclosure in Osborne paragraph 47. See POR, 13-15. Unlike the instant Request, the POR did not argue that there was any deficiency in the *timing* of Osborne’s verification; instead, the POR argued that paragraph 47 of Osborne did not disclose any verification whatsoever. See POR, 14 (“While Visa cites five paragraphs in Osborne as showing an ‘issuer’ being the ‘token server,’ 486-Pet. at 22-23 (citing EX1011 ¶¶29, 47-48, 53, 58); 487-Pet. at 23-24 (same), it does not point to any disclosure in these paragraphs of an ‘issuer’ performing any kind of verification step.”); see also *id.*, 15 (asserting “Osborne’s token server (no matter who operates it) generates a token ***without any verification step.***” (emphasis original) (citing EX1011, ¶47, Fig. 5)).

In the Reply (Paper 18), Visa again pointed to paragraph 47 as disclosing the verification step of limitation 1.3, contrary to Patent Owner’s assertions in the POR. See Reply, 3-4 (citing EX1011, ¶47). In particular, the Reply noted that paragraph 47 had been cited on page 22 of the 486-Petition as teaching the verification limitation, pointing out that it expressly “teaches obtaining ‘assurance’ of sufficient funds from the issuer for pre-funded tokens.” Reply, 4; see also *id.*, 6 (citing 1011, ¶47 as teaching “obtaining ‘assurance’ of sufficient funds” for a

token).

In the Sur-Reply (Paper 26), Patent Owner only addressed paragraph 47's disclosure with regard to dependent claim limitations. Rather than addressing the specific disclosure and arguments advanced in the Petitions and Reply, Patent Owner repeated its broad assertions that Osborne failed to teach any issuer verification whatsoever. *See* Sur-Reply, 3 (“Devoid of disclosure, Visa cannot sustain its argument that ‘Osborne teaches’ issuing agency verification.”). Again, Patent Owner did not dispute the timing of Osborne's teachings to obtain assurance of available funds exclusively allocated to a token.

In the final written decision (Paper 31), the Board cited paragraph 47 of Osborne, reproducing the same passage quoted above, and concluding that “Osborne discloses that the issuing agency verifies the token.” FWD, 25-26. The Board also rejected Patent Owner's claim that Visa's reliance on this disclosure constituted a “new argument on reply,” noting that “[t]he Petition specifically cited to paragraph 47 of Osborne to meet the ‘verified by an issuing agency’ language in limitation 1.3”; that the “Reply permissibly fleshed out that argument in response to Patent Owner's Response by further explaining how the ‘pre-authorization’ and ‘pre-funding’ portions of paragraph 47 supported Petitioner's position”; and that Patent Owner had the opportunity to respond in its Sur-Reply “but failed to do so with any specificity.” FWD, 27-28.

In sum, the disclosure relied on by the Board to find that Osborne taught element 1.3 was cited in the Petition as teaching that element and was extensively briefed during trial. At no point prior to its Director Review request did Patent Owner raise any dispute regarding the timing of the verification step in relation to Osborne's disclosure.

III. LEGAL STANDARD

Director Review requests are “limited to decisions presenting (a) an abuse of discretion, (b) important issues of law or policy, (c) erroneous findings of material fact, or (d) erroneous conclusions of law.” Director Review Process § 2.B (<https://www.uspto.gov/patents/ptab/decisions/director-review-process>). Patent Owner ties its Request to the highly deferential abuse of discretion standard. *See* Request, 3-4; *see also id.*, 11.

IV. ARGUMENT

A. Patent Owner Fails to Show That the FWD Injected a New Obviousness Theory

Patent Owner argues that the Board “injected” a new obviousness theory when it explained its reasoning regarding why paragraph 47 of Osborne disclosed the verification limitation recited in element 1.3. *See* Request, 4. Specifically, Patent Owner asserts that the Board described Osborne's token verification process as having two steps: (1) “generate a token,” and (2) verify the token “by obtaining assurance that the funds have been uniquely and exclusively allocated for the token

from the source to which the token points.” Request, 6 (quoting FWD, 27 (quoting EX1011, ¶47)).

Patent Owner does not dispute that Osborne’s paragraph 47 was cited for this limitation in the Petitions. *See, e.g.*, 486-Pet., 22-23. Nor does Patent Owner dispute that the disclosure in paragraph 47, including the issue of pre-funding, was briefed extensively by both sides during the trial stage. *See, e.g.*, Reply, 3-4. Nor does Patent Owner dispute that the Board’s decision was based on the same content cited in the Petitions. Nor does Patent Owner dispute that the Board accurately characterized paragraph 47 as describing generation of a token and obtaining an assurance of funds allocation to that token.

Instead, Patent Owner asserts that the Board must have been advancing a new theory because Visa “never mentioned a two-step process,” and instead “was silent as to Osborne’s order of credential checking versus token generation.” Request, 6-7. However, as noted above, Patent Owner never argued that the claim limitation required any particular ordering, nor did it assert that Osborne’s token funding process failed to satisfy whatever time-ordering Patent Owner now thinks is required by the claim. Indeed, even after the Reply reemphasized paragraph 47 and quoted the portions describing pre-funding and pre-authorization as teaching element 1.3’s verification limitation (*see* Reply, 3-4), Patent Owner never suggested that the order in which this process occurred differed in any way from

what was required in the claim. Indeed, as the Board correctly observed, “Patent Owner had the opportunity to respond to this argument in its Sur-reply, but failed to do so with any specificity.” FWD, 28.

At bottom, Patent Owner’s argument in the Request is a factual dispute regarding the disclosure in Osborne, raised for the first time after final written decision. Patent Owner was well aware that Osborne’s token generation and verification process described in paragraph 47 was asserted against limitation 1.3. Patent Owner had ample opportunity during trial to raise any concerns regarding the timing of the process for verifying tokens that Osborne describes. Having foregone such opportunities, Patent Owner should not be permitted to raise them for the first time after issuance of the final written decision.

B. The Request Fails to Show a Violation of the AIA, Board Rules, or the APA

The Request asserts that the Board’s finding that Osborne paragraph 47 taught the verification limitation of element 1.3 violated Board rules under the AIA or violated the APA. Request, 8-11. However, neither of these assertions holds up to scrutiny.

Regarding the AIA and Board rules, the only rule the Request points to are the requirements that a petition must “specify where each element of the claim is found in the prior art” and identify with particularity “the evidence that supports the grounds.” 37 C.F.R. § 42.104(b)(4); 35 U.S.C. §312(a)(3); see Request, 8-9.

The Petitions identified paragraph 47 of Osborne as teaching a token generation process that satisfied element 1.3. *See* 486-Pet., 21, 22-23. The Board relied on that same paragraph, among others, as teaching a token generation process that satisfied element 1.3. *See* FWD, 25-27 (also citing EX1011, ¶¶29, 53, and 58 as providing this limitation); 486-Pet., 21-23 (citing EX1011, ¶¶29, 47-48, 53, and 58 as teaching this limitation). Thus, the Petitions specified where this claim element was found in Osborne, and the Board agreed that this portion of Osborne taught the corresponding claim limitation. There is no violation of the AIA or any Board rule in such a finding.

The Request also quotes *Mastercard Inc. v. OV Loop, Inc.* as stating that “the Board should limit itself to the teachings on which Petitioner relies.” Request, 3 (quoting *Mastercard*, IPR2023-01289, Paper 41 at 3 (Jun. 10, 2025)). This citation is irrelevant to Patent Owner’s argument. *Mastercard* involved a decision in which the Board’s reasoning was unclear; the quoted portion in the Request was an instruction of how the Board should clarify its reasoning on remand. *See Mastercard*, Paper 41 at 3. There is no alleged lack of clarity here. But regardless, there is no question that the Board did limit itself to the teachings on which Petitioner relied: each paragraph—including the only disputed paragraph, ¶47—that the Board relied on for the verification step was cited in the Petitions for that limitation. *See* FWD, 25-27; 486-Pet., 21-23.

With regard to the APA, Patent Owner complains that it “was not on notice of the Board’s two-step theory,” which allegedly “deprived it of adequate notice and an opportunity to respond.” Request, 9. However, the characterization of a “two-step theory” is one advanced by Patent Owner, for the first time in this Request.

The APA does not require that the Board describe its reasoning in identical words to those used in the petition. Where the Board “relied on the same references, the same disclosures, and the same obviousness theories advanced by the petition and debated by the parties,” there is no APA violation, even if the Board’s reasoning for reaching its conclusion differs from the parties’ characterizations. *Arthrex, Inc. v. Smith & Nephew, Inc.*, 935 F.3d 1319, 1328 (Fed. Cir. 2019). The Federal Circuit has held that “the Board’s analysis was not ‘new’ in a way that deprived [the patent owner] of the required notice” so long as “the ‘thrust’ of the Board’s analysis did not depart from” what Petitioner had pointed to. *IGT v. Zynga Inc.*, 144 F.4th 1357, 2025 U.S. App. LEXIS 18103 at *30-31 (Fed. Cir. 2025). Indeed, the Board can meet this standard even if it relies on different disclosure that that cited by Petitioner. *See id.* Here, the “thrust” of the argument advanced in the Petitions’ Osborne grounds for this limitation was that Osborne paragraph 47 (among other disclosure in Osborne) taught the verification limitation recited in element 1.3. The Board came to the same conclusion, citing

the same disclosure.

Patent Owner had the opportunity to respond, but it forfeited the time-ordering arguments that it raises now by failing to timely advance them during trial. While Patent Owner cites to the oral argument transcript as purporting to show that the Board's reasoning constituted a new theory (Request, 10-11), it was only *Patent Owner's counsel* who characterized the Board's question as a new theory.

Accordingly, Patent Owner fails to show that the Board's reasoning violated the notice requirements of the APA.

C. The Board's Finding of Obviousness Is Supported by Substantial Evidence

As explained above, Patent Owner never raised any arguments regarding order-of-operations for Osborne's token generation and verification disclosure, nor did it argue that the claim imposed any restrictions related to such time ordering. Patent Owner's arguments related to its "two-step" theory are thus forfeited.

Regardless, to the extent the Director has any interest in considering the merits of Patent Owner's arguments, they are easily dismissed. Patent Owner argues that because Osborne describes its tokens as being "pre-funded" or "pre-authorized," Osborne "expressly contradicts the Board's finding," which Patent Owner characterizes as "post-funding tokens." Request, 11-12.

However, Patent Owner's argument amounts to a mere word game. The term

“post-funding” appears nowhere in Osborne and was never used during trial or in the final written decision. Rather, it is a term Patent Owner has introduced for the first time in its Request, which appears to interpret the term to refer to a token for which, after the token is generated, the token source has obtained an assurance from the issuer that funds will be available and allocated to the token. By use of the prefix “post,” Patent Owner seeks to imply that it must be incompatible with Osborne’s “pre-funded” tokens. But of course, Osborne says nothing of the sort. Osborne discloses that the token may be “pre-funded and pre-authorized for up to” the amount of a “purchase transaction.” EX1011, ¶47. There is nothing to indicate that Osborne’s use of the prefix “pre” implies any temporal arrangement beyond the authorization occurring prior to the transaction.

Stripped of Patent Owner’s mischaracterization, substantial evidence supports the Board’s conclusion that Osborne teaches the limitations recited in element 1.3. The claim element merely requires generation of an “OVER file comprising a virtual representation” of a credential that has been “verified by an issuing agency to be an official representation of the credential.” Patent Owner does not dispute that Osborne teaches generation of a token, which is an “OVER file” comprising a virtual representation of a credential. Paragraph 47 of Osborne discloses that the entity that generates the token can “obtain assurance that funds have been uniquely and exclusively allocated for the token from the source to

which the token points.” EX1011, ¶47. As the Board correctly found, this passage indicates that Osborne obtains verification that the token is an official representation of the credential, which is a credential issued by the issuer—i.e., the “source to which the token points.” See FWD, 27 (concluding from this passage that “Osborne discloses verifying that the **token** including the XML bank account information in its data structure (the virtual representation of the bank account information) is valid, not merely that bank account information, standing alone, is valid.” (emphasis original)).

Patent Owner also asserts that “Osborne did not disclose verification of a token” because “it is impossible for there to be a verification of something that does not yet exist.” Request, 13-14. This again is an argument Patent Owner concocts only at this late stage—never during trial did Patent Owner argue that verifying something is impossible prior to its existence. Regardless, as explained above, Osborne expressly discloses obtaining assurances that funds are “uniquely and exclusively allocated for the token” that is to be used in place of the underlying credential—that is, obtaining a verification that the token is an official representation of the credential. EX1011, ¶47. Thus, even if Patent Owner’s new assertion were presumed to be true, that would merely mean that paragraph 47 of Osborne teaches that the token did exist when the verification occurred. So regardless of whether Patent Owner’s new argument is credited, substantial

evidence still supports the Board's conclusion that claims 1, 3-6, 8-18, and 21-33 were obvious over Osborne.

Accordingly, Visa respectfully requests that Patent Owner's request for Director Review be denied.

Respectfully submitted,

Date: August 28, 2025

/ Matthew A. Argenti /
Matthew A. Argenti, Lead Counsel
Reg. No. 61,836

CERTIFICATE OF SERVICE

I certify that the foregoing Authorized Response to Director Review Request was served on this 28th day of August, 2025, on Patent Owner at the following electronic service addresses:

Douglas R. Wilson
Michelle E. Armond
Yue Han
ARMOND WILSON LLP
doug.wilson@armondwilson.com
michelle.armond@armondwilson.com
amy.han@armondwilson.com
ipr@armondwilson.com

Respectfully submitted,

Date: August 28, 2025

/ Matthew A. Argenti /
Matthew A. Argenti, Lead Counsel
Reg. No. 61,836