

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

SAMSUNG ELECTRONICS CO., LTD.;
SAMSUNG ELECTRONICS AMERICA, INC.,
Petitioner

v.

NETWORK-1 TECHNOLOGIES, INC.,
Patent Owner.

Case No. IPR2026-00118
U.S. Patent No. 12,207,094

**PETITIONER'S OPPOSITION TO PATENT OWNER'S
REQUEST FOR DISCRETIONARY DENIAL OF INSTITUTION**

TABLE OF CONTENTS

I.	INTRODUCTION	1
II.	ARGUMENT	2
A.	Settled Expectations Of The Parties Favor Petitioner Not Patent Owner	2
B.	The <i>Fintiv</i> Factors Favor Institution	8
1.	Factor 1: Likelihood of a stay weighs against discretionary denial	9
2.	Factor 2: Trial date weighs against discretionary denial	10
3.	Factor 3: Investment in parallel proceeding weighs against discretionary denial	10
4.	Factor 4: Lack of overlap, given Petitioner’s broader-than <i>Sotera</i> stipulation, weighs against discretionary denial	11
5.	Factor 6: Strong merits of the Petition weighs against discretionary denial	12
C.	Institution Of Petitioner’s IPR Petition Is Appropriate Because The Patent Office Erred During Prosecution	15
D.	Patent Owner’s Remaining Arguments Do Not Justify Discretionary Denial	17
III.	CONCLUSION	18

LIST OF EXHIBITS

Ex. No.	Description
Ex-1001	U.S. Patent No. 12,207,094 (“the ’094 Patent”)
Ex-1002	Declaration of Dr. Paul S. Min
Ex-1003	Curriculum Vitae of Dr. Paul S. Min
Ex-1004	Prosecution History of U.S. Patent No. 12,207,094
Ex-1005	Jaemin Park et al., Secure Profile Provisioning Architecture for Embedded UICC, Int’l Conference on Availability, Reliability & Security 297 (2013) (“Park”)
Ex-1006	GlobalPlatform Card Specification, Version 2.2.1, Public Release (Jan. 2011) (“GlobalPlatform”)
Ex-1007	Pierre E. Abi-Char et al., A Fast and Secure Elliptic Curve Based Authenticated Key Agreement Protocol For Low Power Mobile Communications, Int’l Conference on Next Generation Mobile Applications, Services and Technologies (2007) (“AbiChar”)
Ex-1008	ANSI X9.63 Overview, Key Agreement and Key Transport Using Elliptic Curve Cryptography, Simon Blake-Wilson, Certicom (2000) (“X9.63-Overview”)
Ex-1009	U.S. Patent Pub. No. 2015/0350881 to Weiss (“Weiss”)
Ex-1010	INTENTIONALLY LEFT BLANK
Ex-1011	GlobalPlatform Card Secure Channel Protocol ’11’ Card Specification v2.2 – Amendment F, Version 1.0 (May 2015) (“SCP11”)
Ex-1012	INTENTIONALLY LEFT BLANK
Ex-1013	INTENTIONALLY LEFT BLANK
Ex-1014	INTENTIONALLY LEFT BLANK

Ex. No.	Description
Ex-1015	Declaration of Simon Blake-Wilson, author of ANSI X9.63-Overview
Ex-1016	U.S. Patent No. 9,100,175 (“Nix175”)
Ex-1017	INTENTIONALLY LEFT BLANK
Ex-1018	Declaration of Tono Aspinall of GlobalPlatform, Inc.
Ex-1019	Declaration of Gordan MacPherson of IEEE
Ex-1020	Claim Mapping Table
Ex-1021	Colin Boyd and Anish Mathuria, “Protocols for Authentication and Key Establishment” (Springer, 2003) (“Boyd & Mathuria”)
Ex-1022	Whitfield Diffie & Martin E. Hellman, <i>New Directions in Cryptography</i> , 22 IEEE Trans. Info. Theory 644 (1976).
Ex-1023	NIST, SP 800-57, Recommendation for Key Management: Part 1 — General (Rev. 3) (July 2012)
Ex-1024	NIST, SP 800-38F, Recommendation for Block Cipher Modes of Operation: Methods for Key Wrapping (Dec. 2012).
Ex-1025	NIST, SP 800-56A, Revision 2, Recommendation for Pair-Wise Key Establishment Schemes Using Discrete Logarithm Cryptography (May 2013)
Ex-1026	GlobalPlatform Card Technology, Secure Channel Protocol 03, Card Specification v 2.2 – Amendment D, Version 1.0 (Apr. 2009)
Ex-1027	Reprogrammable SIMs: Technology, Evolution and Implications, Final Report, Ofcom (Sept. 25, 2012)
Ex-1028	ETSI TS 103 383 v12.1.0, “Smart Cards; Embedded UICC; Requirements Specification (Release 12),” (June 2013)

Ex. No.	Description
Ex-1029	Network-1's Infringement Contentions for the '780 Patent, filed on September 30, 2025, as Exhibit A to Network-1 Technologies, Inc.'s P.R. 3-1 Disclosure of Asserted Claims and Infringement Contentions
Ex-1030	U.S. Patent No. 11,916,893
Ex-1031	Chart comparison of '094 Patent claims and '175 Patent claims
Ex-1032	U.S. District Court for the Eastern District of Texas, Judicial Caseload Profile ("Time-to-Trial Statistics")
Ex-1033	<i>Network-1 Techs., Inc. v. Samsung Elecs. Co.</i> , No. 2:25-cv-00667, Dkt. No. 1 (E.D. Tex. June 27, 2025)
Ex-1034	Chart identifying disclosures of digital signatures and key exchange algorithms in the cited prior art.

I. INTRODUCTION

Discretionary denial is not appropriate for at least three reasons. *First*, the parties' settled expectations weigh against discretionary denial. Patent Owner had no settled expectation of validity of the *specific '094 Patent* challenged in this IPR or any of the specific patents challenged in related IPRs. The most Patent Owner can allege is that Petitioner was aware of a *parent* patent to the '094 Patent by 2016. But it is the claims that define the scope of the alleged invention and Patent Owner does not allege infringement of the patent that forms the basis for its settled expectation argument. Instead, Patent Owner had to go back to the Patent Office to obtain a new set of child patents with materially different claims—including the '904 Patent, which issued in January 2025—to have something to assert against Petitioner nine years later. Indeed, the claims of the '094 Patent and its asserted parent patents lack written description support in two material ways, one of which Patent Owner does not even attempt to rebut in its discretionary denial brief. The only settled expectation here is one of non-enforcement.

Second, the *Fintiv* factors weigh in favor of institution and against discretionary denial in this proceeding. Here, the Final Written Decision deadline *leads* the trial date by four days and the time-to-trial statistics for the Eastern District of Texas demonstrate that the trial date is likely to be even later than scheduled, and possibly two months *after* a Final Written Decision is expected. The litigation is also

in its earliest stages. An institution decision is expected well before the *Markman* hearing, fact depositions, and expert reports. Further, Petitioner’s commitment to a broader-than-*Sotera* stipulation negates *any* concern that any issue before the Board in this proceeding will be relitigated in the parallel proceeding.

Third, the Petition raises specific material errors made by the Patent Office during prosecution that should be addressed. Specifically, the Office committed material errors by issuing the challenged ’094 Patent without identifying its written description issues, and without issuing a single prior art rejection, overlooking numerous relevant prior art references cited during prosecution, including all references relied on in the Petition. A proper examination would have revealed that the prior art, including the references presented in the Petition, teaches the same limitations that the Examiner relied on to find patentability.

II. ARGUMENT

A. Settled Expectations Of The Parties Favor Petitioner Not Patent Owner

The Board should deny Patent Owner’s request for discretionary denial in view of the expectations “of the parties.” *See* USPTO “Interim Processes for PTAB Workload Management” (Mar. 26, 2025) at 2. When properly focusing on “[s]ettled expectations of the *parties*,” as Office Guidance requires, it is clear that Petitioner—not the Patent Owner—had the settled expectations.

Patent Owner’s central argument for denial rests on its specious claim of

“settled expectations” of validity of the ’094 Patent based on Petitioner’s alleged pre-suit knowledge by 2016 of the *great-great-great-great-grandparent* patent to the ’094 Patent, the ’175 Patent. Paper 9 at 4-7. Specifically, Patent Owner argues that Petitioner “was made aware of the disclosures of each of the Challenged Patents” during prosecution of Petitioner’s patent applications “when it received a rejection citing” the ancestor’s disclosures. Paper 9 at 5. But Petitioner’s alleged knowledge of the ancestor patent, which includes 12 pages of drawings and 80 columns of text, is irrelevant here; it was never asserted against Petitioner and its claims are materially different from those that are asserted. Significantly, Patent Owner does not allege that Samsung was ever actually aware of the challenged ’893 Patent, which published March 31, 2022, and issued on February 27, 2024.

It is improper to attribute the age or alleged “settled expectations” of the non-asserted, ancestor patents to Petitioner, especially given their materially different claims. The ’094 Patent is a continuation of the ’175 Patent, but as shown in Ex-1031, its claims include important differences. *See* Ex-1031 (comparing ’094 Patent, Cl. 1 to ’175 Patent, Cl. 10). Indeed, as explained in the Petition, the claims of the ’094 Patent go well beyond what the inventor invented and described in the ancestor patents, lacking written description support in two material ways: (1) by reciting both a “first eUICC public key” and a “second eUICC public key,” when the specification only ever discloses a single eUICC private/public key pair; and (2) by

placing no limit on the source of the claimed “symmetric key” received by the eUICC for use in decrypting the MNO’s network access key K, when the specification makes clear that it is the MNO that sends the symmetric key, to ensure that it maintains control over the release of its network access key. *See* Petition at 9-10. Notably, while Patent Owner attempts to dispute Petitioner’s second written description argument,¹ it does not even engage with the first. Paper 9 at 17-18 (arguing that “there is ample written description ... for receiving a symmetric key from a subscription manager,” without presenting any argument that the specification teaches a second eUICC public key). In similar situations, where a patent owner’s settled expectations argument was premised on ancestor patents that did not disclose the challenged claims, the Board has referred the challenge to consideration on the merits. *See, e.g., EvenFlo Co. v. Baby Jogger, LLC*, IPR2025-01140, Paper 9 at 6-7 (PTAB Oct. 8, 2025) (arguing that ancestor patents did not give rise to settled expectations regarding challenged CIP patent’s claims), Paper 12 (PTAB Nov. 20, 2025) (referred for institution).² *See also Dialect, LLC v. Bank of Am., N.A.*, No. 2:24-CV-00207-JRG, 2024 WL 4980794, at *3 (E.D. Tex. Dec. 4,

² This is especially true not only for the ’094 Patent, but also for the related ’780, and ’893 Patents, which are challenged in IPR2026-00114, and -00119, because, like here, Petitioner disputes whether the newly issued claims are even supported by the parent specification that Patent Owner allegedly made Petitioner aware of in 2016-2017. *See id.* at 7. This argument will also be addressed in the discretionary denial papers for those IPRs.

2024) (knowledge of a parent patent insufficient to show knowledge of asserted patent for purposes of willful infringement or inducement).

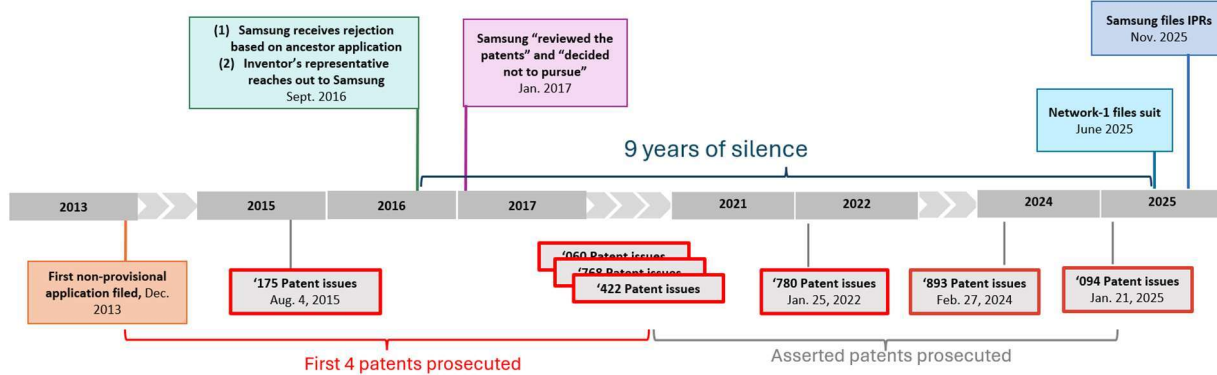
The “settled expectations” inquiry is an equitable consideration tied to the existence of an enforceable patent right. The focus is how long an asserted patent “has been in force.” *Dabico Airport Solutions Inc. v. AXA Power APS*, IPR2025-00408, Paper 21 at 3 (PTAB June 18, 2025) (informative). The Director has found that patents issued less than six years ago “have not been in force for a significant period of time . . . , and, accordingly, Patent Owner has not developed strong settled expectations,” which weighs against discretionary denial. *See, e.g., Samsung Elecs. Co. v. Wilus Inst. of Standards & Tech. Inc.*, IPR2025-00935, Paper 12 at 2 (PTAB Sep. 26, 2025); *Samsung Elecs. Co. v. Wilus Inst. of Standards & Tech. Inc.*, IPR2025-00933, Paper 11 at 3 (PTAB Oct. 10, 2025) (finding “Patent Owner has not developed strong settled expectations” when “challenged patents issued between 2020 and 2023”); *Cambridge Indus. USA, Inc. v. Applied Optoelecs., Inc.*, IPR2025-00434, Paper 11 at 2-3 (PTAB June 26, 2025) (patent that issued in 2019 had “not developed strong settled expectations”); *Berkshire Hathaway Energy Co. v. Birchtech Corp.*, IPR2025-00274, Paper 23 at 2-3 (PTAB July 2, 2025) (same for patents “issued in 2019 and 2020”); *Apple Inc. v. Apex Beam Techs., LLC*, IPR2025-00896, Paper 10 at 3 (PTAB Sept. 3, 2025) (same for patents “issued in 2021-2023”).

Patent Owner’s remaining argument fares no better. Patent Owner argues that

Petitioner learned about the “*inventions* as part of monetization discussions between Samsung and the inventor” in 2016-2017. Paper 9 at 6-7. But Patent Owner provides no actual communications to or from Samsung. Instead, it relies on (1) correspondence between the inventor and his representative, Andrew Bezaitis, where Mr. Bezaitis states “Nothing yet back from ... Samsung” and that he “just sent a note to Dr. Kim at Samsung – an old contact of mine that runs the Networking division” (Ex-2020); and (2) correspondence between Mr. Bezaitis and an individual named Kang Lee, who allegedly “has many high level connections at Samsung.” Ex-2023. The correspondence from Mr. Lee’s g-mail address states that he “received an update from Samsung over the holiday and told me that their lawyers have reviewed the patents and decided not to pursue.” Ex-2023. This is all objectionable hearsay. But again, even if Patent Owner’s allegations are true, the “inventions” that Petitioner allegedly “learned about” were those claimed in the ancestor patents, not the ’094 Patent, which issued much later in 2025, with claims that lack written description support. Significantly, there is no record evidence of attempts to license, commercialize, or otherwise monetize any of the patents at issue.

Indeed, as shown below, Patent Owner asserts only newly issued fifth, sixth, and seventh-generation patents (including the ’094 Patent) from this family, all in force for less than five years, and all suffering from the same written description issue.

The 780/094/893 prosecution timeline



Patent Owner's argument that "Samsung never moved to challenge any patents in the Challenged Patent families prior to November 2025" (Paper 9 at 7) is thus a red herring. It is Patent Owner that delayed nine years after allegedly contacting Petitioner before asserting only newly-issued child patents against Petitioner. It would have been reasonable for one in Petitioner's position to assume this was because Patent Owner understood that the ancestor patents that Petitioner allegedly "decided not to pursue" were not applicable to Petitioner's products or technologies. Indeed, it took nine years for the Patent Owner to obtain the challenged patents between 2022-2025 with markedly different—and unsupported—claims before it could assert them against Petitioner.

Recent precedent makes clear that Patent Owner's non-enforcement negates any settled expectations. For example, the Director referred a petition for consideration in circumstances similar to those here:

Petitioner acknowledges that it was aware of the challenged patent in IPR2025-00856 in 2012, when Patent Owner first contacted Petitioner

about the challenged patent in a letter. Petitioner, however, contends that it “*did not expect enforcement*” of the patent challenged in IPR2025-00856 because it concluded that it did not require a license to the patent and advised Patent Owner of its position, and because Patent Owner did not assert the challenged patent against Petitioner until eleven years after the parties’ discussion about that patent.

Apple Inc. v. Allani, IPR2025-00856, Paper 10 at 3 (PTAB Sept. 4, 2025) (informative). Another IPR petition was referred for consideration on the merits in *Apple Inc. v. Vampire Labs, Inc.*, IPR2025-01215, Paper 9 (PTAB Nov. 20, 2025), after a similar argument in Petitioner’s discretionary denial opposition. *See* Paper 8 at 2 (PTAB Oct. 17, 2025) (“Because Patent Owner ... delayed fifteen years from first contacting Petitioner regarding the claimed technology before filing suit, Patent Owner’s assertion of settled expectations rings hollow.”)).

If anything, in the present case, Petitioner had settled expectations that it would not be sued on these patent families. By remaining silent for nearly a decade after allegedly contacting Petitioner, Patent Owner fostered not an expectation of enforcement, but of acquiescence and non-enforcement. *See Allani*, IPR2025-00856, Paper 10 at 3 (informative). At the same time, the ancestor patents—which lack written description support for the challenged claims—signaled to the public what the inventor’s invention was, and, just as importantly, what it was not, thereby fostering an expectation not of coverage, but of exclusion of the subject matter of the challenged claims.

B. The *Fintiv* Factors Favor Institution

1. Factor 1: Likelihood of a stay weighs against discretionary denial

Patent Owner’s argument that Petitioner’s “motion to stay the parallel District Court Proceeding ... will almost certainly be denied” (Paper 9 at 10-11) is premised on its argument that Judge Gilstrap often denies stay motions (without prejudice) before IPRs are instituted. But the general practice before Judge Gilstrap is for the moving party to renew the stay motion after institution, and for an early-filed motion and institution before *Markman*, which would be the case here, Judge Gilstrap’s record on granting stays is far more favorable. *See, e.g., Communication Techs., Inc. v. Samsung Elecs. Am., Inc.*, No. 2:21-CV-00444-JRG, Dkt. No. 134 at 6 (E.D. Tex. Feb. 2, 2023) (“[W]ith the close of discovery, the claim construction hearing, and the trial setting all in the future, the Court concludes that this factor weighs in favor of a stay.”); *Maxeon Solar Pte. Ltd. v. Canadian Solar Inc.*, No. 2:24-CV-210-JRG, 2025 WL 1811321, at *2 (E.D. Tex. Jul. 1, 2025) (“Given that *inter partes* review ha[s] been instituted on all Asserted Claims of all Asserted Patents on multiple grounds, there is a material likelihood of simplification of the issues in this case. ... Also, the Court has not yet begun the claim construction process, and such hearing is not scheduled until later this summer.” (citation omitted)). Additionally, Judge Gilstrap has granted stays when, as here, the Final Written Decision is expected *before* the trial date. *Maxeon*, 2025 WL 1811321, at *2 (“Given that the PTAB is expected to issue its final written decision [January 14] before this case goes to trial

[January 26, 2026], it is possible if not likely that its decision will simplify the issues in this case ,... this factor weighs in favor of granting a stay.”). Considering this is a six patent case, referral and possible institution may simplify the case substantially. Thus, Factor 1 weighs against discretionary denial.

2. Factor 2: Trial date weighs against discretionary denial

The Final Written Decision for the '094 Patent is expected by June 3, 2027, which is at least four days before the current trial date, June 7, 2027. Additionally, the official time-to-trial statistics for Judge Gilstrap in the Eastern District of Texas demonstrate that the most recent median time-to-trial is 24.5 months, which would place the trial sometime in mid-July 2027—1.5 months after a Final Written Decision is expected. *See* Ex-1032 (Time-to-Trial Statistics); Ex-1033 (Complaint, filed June 27, 2025). As such, it is likely that a Final Written Decision will issue before the trial occurs, “reducing the concern of inconsistent outcomes or significant duplication of efforts.” *Apex Beam*, IPR2025-00896, Paper 10 at 2 (finding discretionary denial “not appropriate” where “the projected final written decision due date ... is November 18, 2026,” “scheduled trial date is December 7, 2026,” and “time-to-trial statistics suggest trial could begin in January 2027”). Thus, Factor 2 weighs against discretionary denial.

3. Factor 3: Investment in parallel proceeding weighs against discretionary denial

There has been little investment in the parallel district court litigation. The

Court has issued no substantive orders related to the patent. Institution will occur over six months before the *Markman* hearing (scheduled for December 14, 2026), and well before the close of fact and expert discovery. Such timing weighs against discretionary denial. *See, e.g., Tesla v. Autonomous Devices*, IPR2023-01172, Paper 21 at 8-9 (PTAB Jan. 8, 2024) (“the District Court has yet to issue a claim construction order addressing any terms of the [] patent,” “fact discovery is ongoing,” and “expert discovery has not begun”); *see also Western Digital Techs., Inc. v. Godo Kaisha IP Bridge 1*, IPR2025-00701, Paper 9 at 2 (PTAB Aug. 14, 2025) (“There has not been significant investment by the parties in the parallel proceeding.”); *Nintendo Co. v. Resonant Sys., Inc.*, IPR2025-00680, Paper 18 at 2 (PTAB Aug. 14, 2025) (same). Thus, Factor 3 weighs against discretionary denial.

4. Factor 4: Lack of overlap, given Petitioner’s broader-than *Sotera* stipulation, weighs against discretionary denial

Petitioner’s broader-than-*Sotera* stipulation mitigates concerns about duplicative efforts, committing not to pursue in the parallel district court litigation “any ground of invalidity raised or that reasonably could have been raised in this proceeding.” Paper 8. It further goes beyond *Sotera* to forgo “any ground arising from 35 U.S.C. §§ 102 or 103 that includes any reference that forms the basis of any ground raised in” the IPR. *Id.* Thus, if instituted, none of the prior art asserted in the Petition will be used in the litigation—even in combination with unpublished system art. As such, there will be no overlap between this proceeding and the parallel

litigation, thereby negating any duplication of effort and inefficiency concerns. Thus, Factor 4 weighs against discretionary denial. *See, e.g., Tesla, Inc. v. Intellectual Ventures II LLC*, IPR2025-00217, Paper 9 at 2 (PTAB June 13, 2025) (informative) (finding that Tesla’s broad *Sotera+* stipulation “counsel[s] against discretionary denial”); *see also Shenzhen Tuozhu Tech. Co. v. Stratasys, Inc.*, IPR2025-00438, Paper 10 at 3 (PTAB July 17, 2025) (“Petitioner has also filed a broad stipulation. . . . Petitioner’s arguments that these factors tip the balance against discretionary denial are persuasive.”); *Wilus*, IPR2025-00933, Paper 11 at 3 (“Petitioner has filed a broad stipulation that reduces the concern of inconsistent outcomes or significant duplication of efforts.”).

Patent Owner incorrectly suggests that Petitioner’s stipulation was not timely filed (Paper 9 at 14-15), when, in fact, it was filed less than a month after a filing date was accorded, providing Patent Owner ample time to address it in its discretionary denial briefing. Petitioner’s timing follows PTAB guidance and falls in line with recently instituted petitions.³

5. Factor 6: Strong merits of the Petition weighs against discretionary denial

Patent Owner incorrectly argues for three pages that the merits of the Petition

³ For example, in IPR2025-01215, a filing date was accorded on June 17, 2025, and petitioner filed its stipulation on August 14, 2025. *See Vampire*, IPR2025-01215, Papers 3 at 6. The IPR was instituted on December 1, 2025. *Id.*, Paper 10.

are weak. This lengthy preview of its POPR arguments contravenes Office guidance, which cautions a patent owner not to use its discretionary denial brief “as an additional opportunity for merits briefing.” Interim Director Discretionary Process § II.C.i (<https://www.uspto.gov/patents/ptab/interim-director-discretionary-process>, last visited 2/25/26). Regardless, even if presented properly, consideration of the merits does not generally weigh into the *Fintiv* assessment except when the other *Fintiv* factors favor denial. See *ResMed Corp. v. Cleveland Medical Devices*, IPR2025-00158, Paper 11 at 13 (PTAB June 13, 2025) (explaining that the merits weigh “neutrally” when “none of the other *Fintiv* factors favor discretionary denial.”) (citing *Fintiv*, Paper 11 at 14-15). Because Patent Owner’s *Fintiv* and settled expectations arguments are especially inapt under the circumstances, the Petition should be referred for proper consideration of the merits.

Moreover, Patent Owner’s arguments on the merits, which attack the references in isolation rather than in the presented combinations and ignore explanations in the petition and expert declaration, are unconvincing. For example, Petitioner explains that the ’094 Patent is not entitled to its priority date because the priority patent (1) does not describe an embodiment with both a “first eUICC public key” and a “second eUICC public key” (Petition at 9), and (2) does not support the independent claim scope that would allow a “symmetric key” to be received from the subscription manager (SM), as opposed to the mobile network operator (MNO).

Petition at 9-10. Patent Owner ignores the first argument entirely, and its response to the second is not credible. As the Petition explains, the '094 Patent introduces the “symmetric key” feature sent by the MNO to address the security problem of the MNO being managed separately from the subscription manager SM, and to thereby enable the MNO to retain control over the mobile device’s ability to decrypt the secure profile sent by the SM. Petition at 4-6. Patent Owner alleges that there is supporting description that the SM can send the symmetric key because there are some embodiments in which the MNO itself functions as the SM. Paper 9 at 17-18. But such embodiments would not include the symmetric key at all (*e.g.*, Ex-1001, 52:3-6) because if the MNO functions as the SM, it already has control of the profile, and a separate symmetric key security mechanism is not necessary. Thus, the specification and priority documents do not support the breadth of the independent claims.

Patent Owner’s other arguments fare no better. For example, Patent Owner’s argument that GlobalPlatform’s Data Encryption Key (“DEK”) received via GlobalPlatform’s key transport option cannot be the claimed “symmetric key” because it is a “static key” that is never transported (Paper 9 at 16) is demonstrably wrong. As the Petition explains, Global Platform’s SCP 10 clearly identifies the DEK as a “session key” that may be transported. Ex-1006, 264 (pdf)/284 (bates) (“The encryption process uses the relevant **data encryption session key (DEK)** for

sensitive data in command messages or for sensitive data in response messages.”)

Thus, because these and other arguments are fundamentally flawed, Factor 6 weighs strongly against discretionary denial.

C. Institution Of Petitioner’s IPR Petition Is Appropriate Because The Patent Office Erred During Prosecution

PTAB review of the ’094 Patent is further warranted, and discretionary denial is inappropriate, because the Office committed specific material errors during the patent’s prosecution. *See, e.g., Microsoft Corp. v. Partec Cluster Competence Ctr. GmbH*, IPR2025-00318, Paper 9 at 3 (PTAB June 12, 2025) (“it is an appropriate use of Office resources to review the potential error”). In particular, the Examiner erred by failing to identify the written description issues discussed above—lack of disclosure of a second eUICC private key, and the absence of any limitation on the origin of the symmetric key—and by failing to properly consider the prior art of record.

Notably, the ’094 Patent issued *without a single prior art rejection*. Ex-1004. In stating the reasons for allowance, the Examiner identified the following claim elements as missing from the prior art: (1) “a first digital signature, generated using a first eUICC private key, wherein the first eUICC private key corresponds to a first eUICC public key”; and (2) “deriving, by the eUICC a profile key using a key exchange algorithm based on at least: (i) the second eUICC private key, and (ii) the recorded subscription manager public key, wherein the profile can also be derived

at the subscription manager system based at least on: (iii) the second eUICC public key, and (iv) the subscription manager private key.” Ex-1004, 0135-39. But both of these elements correspond to well-known conventional processes. *See* Petition, 6. With regard to the first purportedly missing element, Petitioner’s expert, Dr. Min, explained in his supporting declaration that it was common for asymmetric authentication schemes to “rely on digital signatures and Public Key Infrastructure (PKI),” where “[e]ach entity possesses a private signing key and a corresponding public verification key.” Ex-1002 ¶ 59. For the second purportedly missing element, the ’094 Patent itself teaches that it may simply correspond to a Diffie-Hellman key exchange (Ex-1001, Cls. 4-5), which Dr. Min explained is the “most widely used” algorithm for key exchange, dating back to 1976. Ex-1002 ¶ 43. Indeed, these elements were taught by numerous prior art references cited during prosecution of the ’094 Patent, including Park (digital signatures), GlobalPlatform (digital signatures), Abi-Char (Diffie-Hellman key exchange), and X9.63-Overview (Diffie-Hellman key exchange). *See* Ex-1034 (identifying 17 additional cited prior art references disclosing the use of digital signatures, and 23 disclosing the use of the Diffie-Hellman key exchange).

As demonstrated in the Petition, all limitations of independent Claim 1 are taught by the Park-GlobalPlatform-Abi-Char and Park-GlobalPlatform-X9.63-Overview combinations. Petition at 18-44, 58-64. Because the Examiner failed to

properly examine the prior art, including the Park, GlobalPlatform, Abi-Char, and X9.63-Overview references that were before the Examiner during prosecution, the Office erred in allowing the '094 Patent. Instituting the Petition would allow the Board to correct this defective examination process.

D. Patent Owner's Remaining Arguments Do Not Justify Discretionary Denial

Patent Owner argues that Petitioner's "extensive reliance on an expert declaration supports discretionary denial" because it "add[s] little (if any) value to its analysis." Paper 9 at 18-19. But the Petition properly relies on expert testimony to explain the knowledge of a POSITA, and to provide background regarding the technology, citing prior art in support, as required by 37 C.F.R. § 42.65(a). Indeed, the expert declaration provides over twenty-six pages of background on the technology, which is cited throughout the Petition to support specific arguments applying prior art to the claims. *See* Ex-1002 ¶¶29-83.

Detailed and evidence-supported declarations are encouraged by the Board. *See, e.g., Tesla, Inc. v. Charge Fusion Techs., LLC*, IPR2025-00032, Paper 11 at 39 (PTAB May 19, 2025) (characterizing 278 page expert declaration's support of "his extensive explanations ... with citations to dozens of pieces of objective evidence" as "a feature, not a bug of his testimony[]" and "applaud[ing]" the expert and Petitioner for "leav[ing] virtually none of the substance of his testimony unsupported by objective evidence"). Extensive, well-supported expert declarations, like Dr. Paul

S. Min’s declaration here, weigh against discretionary denial. *See, e.g., iRhythm Techs., Inc. v. Welch Allyn, Inc.*, IPR2025-00363, Paper 10 at 2 (PTAB June 6, 2025) (Petitioner’s “rel[iance] on its expert to explain the background knowledge of a [POSITA]” and the expert’s “citations to evidence in support of his statements in the required manner” “weigh[] against discretionary denial”).

III. CONCLUSION

For the foregoing reasons, Petitioner respectfully requests that the Director decline to exercise discretion to deny institution and refer the Petition to a panel to decide whether to institute based on the merits.

Respectfully Submitted,

/s/ William M. Fink

William M. Fink (Reg. No. 72,332)

O’Melveny & Myers LLP

1625 Eye Street, NW

Washington, DC 20006

Telephone: (202) 383-5300

Fax: (202) 383-5414

Email: tfink@omm.com

Attorney for Petitioner

CERTIFICATE OF SERVICE (37 C.F.R. §42.6(e)(1))

The undersigned hereby certifies that the above document was served on March 3, 2026, by filing this document through the Patent Trial and Appeal Board P-TACTS System, as well as delivering a copy via express mail upon the following attorneys of record for the Patent Owner:

Michael F. Heim
R. Allan Bullwinkel
William B. Collier, Jr.
Christopher L. Limbacher
HEIM, PAYNE & CHORUSH, LLP
609 Main St. Suite 3200
Houston, Texas 77002
Telephone: (713) 221-2000
Facsimile: (713) 221-2021
mheim@hpcllp.com
abullwinkel@hpcllp.com
wcollier@hpcllp.com
climbacher@hpcllp.com

Dated: March 3, 2026

By: /s/ William M. Fink
William M. Fink