

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

FEDEX CORPORATION, and FEDEX OFFICE
AND PRINT SERVICES, INC.
Petitioners

v.

VALTRUS INNOVATIONS LTD.,
Patent Owner

Case No. IPR2026-00039
Patent No. 7,640,332

PATENT OWNER'S PRELIMINARY RESPONSE TO THE PETITION

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PATENT OWNER’S EXHIBIT LIST

No.	Exhibit Description
2001	Memorandum titled “ <i>Director Institution of AIA Trial Proceedings</i> ,” dated October 17, 2025 (“the Director Institution Memo”)
2002	Memorandum titled “Interim Processes for PTAB Workload Management,” dated March 26, 2025 (“the Interim Processes Memo”)
2003	PTAB Proposed Rule 2025-0025
2004	<i>Ex parte</i> Reexamination request filed by NetApp, Inc. in <i>Ex Parte</i> Reexamination No. 90/015,497
2005	Complaint in <i>Valtrus Innovations Ltd. et al v. The Home Depot, Inc. et al.</i> , Case No. 2:25-cv-00081-JRG (E.D. Tex. January 27, 2025)
2006	Second Amended Docket Control Order in <i>Valtrus Innovations Ltd. et al v. The Home Depot, Inc. et al.</i> , Case No. 2:25-cv-00081-JRG (E.D. Tex. January 27, 2025)
2007	First Amended Docket Control Order in <i>Valtrus Innovations Ltd. et al v. FedEx Corporation et al.</i> , Case No. 2:25-cv-00516-JRG (E.D. Tex. May 9, 2025)
2008	Complaint in <i>Valtrus Innovations Ltd. et al v. NetApp, Inc.</i> , Case No. 2:25-cv-00517-JRG (E.D. Tex. May 9, 2025)
2009	Complaint in <i>NetApp, Inc. v. Valtrus Innovations Ltd. et al.</i> , Case No. 1:25-cv-06138 (S.D.N.Y. July 25, 2025)
2010	Complaint in <i>Valtrus Innovations Ltd. et al v. FedEx Corporation et al.</i> , Case No. 2:25-cv-00516-JRG (E.D. Tex. May 9, 2025)
2011	<i>Ex parte</i> Reexamination Order in <i>Ex Parte</i> Reexamination No. 90/015,497
2012	Complaint in <i>Starbucks Corporation v. Valtrus Innovations Ltd. et al.</i> , Case No. 2:25-cv-01859 (W.D. Wash. September 25, 2025)
2013	Docket Navigator Statistics for Judge Gilstrap
2014	Docket Navigator Statistics for EDTX Patent Cases

No.	Exhibit Description
2015	Invalidity Contentions (cover pleading) in <i>Valtrus Innovations Ltd. et al v. The Home Depot, Inc. et al.</i> , Case No. 2:25-cv-00081-JRG (E.D. Tex. January 27, 2025)
2016	Invalidity Contentions (cover pleading) in <i>Valtrus Innovations Ltd. et al v. FedEx Corporation et al.</i> , Case No. 2:25-cv-00516-JRG (E.D. Tex. May 9, 2025)
2017	Declaration of Angela Quinlan
2018	R. Mansinghani, et al., “A Data-Based Look at Ex Parte Reexaminations,” American Bar Association (March 26, 2025)

I. INTRODUCTION

Patent Owner’s Brief in Support of Discretionary Denial (Paper 8, “Discretionary Denial Brief”) laid out a host of reasons why institution of the Petition for *Inter Partes* Review (Paper 2) of U.S. Pat. No. 7,640,332 (“the ’332 Patent”) filed by Fedex Corporation and FedEx Office and Print Services, Inc. (collectively, “FedEx” or “Petitioners”) would be an inappropriate use of Office resources and why discretionary denial of the Petition is accordingly appropriate. Notably, the Director already denied IPR petitions filed by Petitioners that presented substantially similar discretionary considerations.¹ In this Patent Owner Preliminary Response (“POPR”) Patent Owner provides yet more reason to deny the Petition—because the Petition fails to establish a reasonable likelihood of success as to any challenged claim, for multiple reasons.

First, the Petition fails because Petitioners have proffered irreconcilably contrary claim construction positions before this tribunal and the parallel district court, and thus failed to comply with their responsibility to clearly articulate in the

¹ See *FedEx Corporation et al. v. Valtrus Innovations Ltd.*, IPR2025-01490, Paper 20 (Director, December 18, 2025; *FedEx Corporation et al. v. Valtrus Innovations Ltd.*, IPR2025-01491, Paper 17 (Director, December 18, 2025).

Petition “[h]ow the challenged claim is to be construed.”² Specifically, in the Petition, Petitioners purport to be capable of reasonably interpreting the claims under the *Philips* standard and to apply the prior art based on those interpretations. However, to the contrary, in parallel district court litigation, Petitioners have taken the position that numerous challenged terms—including multiple claim terms in all challenged independent claims—are indefinite for “fail[ing] to inform, with reasonable certainty, those skilled in the art about the scope of the invention.” EX2016 at 97-99. This is plainly improper and grounds for denial under Office precedent.

Second, the Petition should be denied because it attempts to supply claim limitations that are otherwise missing from the prior art via vague and conclusory allegations regarding the alleged knowledge of a skilled artisan. This is contrary to PTAB regulations, which require that IPR petitions “must specify where each element of the claim is found in the prior art patents or printed publications relied upon,”³ and is likewise contrary to the Office’s July 31, 2025 memorandum (the

² See 37 C.F.R. § 42.104(b)(3).

³ 37 C.F.R. § 42.104(b)(4).

“July 31 Memo”)⁴ statement that “applicant admitted prior art (AAPA), expert testimony, common sense, and other evidence that is not ‘prior art consisting of patents or printed publications’ (collectively, ‘general knowledge’) ***may not be used to supply a missing claim limitation.***”⁵ Further, the expert testimony that Petitioners rely upon to supply multiple missing limitations merely mimics the attorney argument in the Petition and thus is unreliable and conclusory. Accordingly, independent of the overwhelming case for discretionary denial, the Petition should be denied as failing to establish a reasonable likelihood of success as to any challenged claim.

⁴ See “ENFORCEMENT AND NON-WAIVER OF 37 C.F.R. § 42.104(B)(4) AND PERMISSIBLE USES OF GENERAL KNOWLEDGE IN INTER PARTES REVIEWS,” U.S.P.TO July 31, 2025 (*available at* https://www.uspto.gov/sites/default/files/documents/aapa_memo_final_signed.pdf?utm_campaign=subscriptioncenter&utm_medium=email&utm_source=govdelivery). The July 31 Memo applies to any petition for IPR filed on or after September 1, 2025.” July 31 Memo at 3. Accordingly, it applies here in full.

⁵ All emphasis supplied unless otherwise noted.

II. BACKGROUND

A. The Parallel Proceedings

As explained in the Discretionary Denial Brief, there are host of pending district court actions involving the '332 Patent—including a sixth that was filed after the Discretionary Denial Brief was filed. This multitude of district court proceedings is summarized below:

- *Valtrus Innovations Ltd. et al v. The Home Depot, Inc. et al.*, Case No. 2:25-cv-00081-JRG (E.D. Tex., filed January 27, 2025) (the “Home Depot Action”). Nature of action: Patent infringement action alleging infringement of five patents, including the '332 patent. EX2005. Trial date: October 5, 2026. EX2006, 001.
- *Valtrus Innovations Ltd. et al v. FedEx Corporation et al.*, Case No. 2:25-cv-00516-JRG (E.D. Tex., filed May 9, 2025) (the “FedEx Action”). Nature of action: Patent infringement action alleging infringement of four patents, including the '332 patent. EX2010. Trial date: March 1, 2027. EX2007, 001.
- *Valtrus Innovations Ltd. et al v. NetApp, Inc.*, Case No. 2:25-cv-00517-JRG (E.D. Tex., filed May 9, 2025) (the “NetApp Action”). Nature of action: Patent infringement action alleging infringement of six patents, including the '332 patent. EX2008. Consolidated with Case No. 2:25-cv-00516 for discovery purposes. Trial date: March 1, 2027. EX2007, 001.
- *NetApp, Inc. v. Valtrus Innovations Ltd. et al.*, Case No. 1:25-cv-06138 (S.D.N.Y., filed July 25, 2025) (the “NetApp DJ Action”). Nature of action: Declaratory judgment action alleging non-infringement of six patents, including the '332 patent. EX2009. Trial date: To be determined.

- *Starbucks Corporation v. Valtrus Innovations Ltd. et al.*, Case No. 2:25-cv-01859 (W.D. Wash., filed September 25, 2025) (the “Starbucks DJ Action”). Nature of Action: Declaratory judgment action alleging invalidity and non-infringement of 12 patents, including the ’332 Patent. EX2012. Trial date: To be determined.
- *Google LLC v. Valtrus Innovations Ltd. et al.*, Case No. (N.D. Cal. Filed January 13, 2026) (“the Google Action”). Nature of Action: Declaratory judgment action alleging non-infringement of nine patents, including the ’332 Patent. Trial date: To be determined.

In addition to the foregoing district court proceedings, as discussed in the Discretionary Denial Brief, a request for *ex parte* reexamination that addresses every challenged claim of the ’332 patent is also pending before the Office. See Reexamination Control No. 90/015,539; EX2004.

B. Overview of the ’332 Patent

As explained in the ’332 Patent, grid computing “is a type of parallel and distributed system that enables the sharing, selection, and aggregation of resources distributed across multiple administrative domains based on the resources availability, capacity, performance, cost and users’ quality-of-service requirements.” EX1001, 1:22-27. The inventors of the ’332 Patent recognized that “[g]rid computing is touted as one of the most important and promising paradigms for applications that require long computing times or large storage spaces” and that as a

result “[i]t is attracting a growing number of users to develop larger scale distributed software applications than ever before.” EX1001, 1:12-16.

As of the December 27, 2006 effective filing date of the ’332 Patent, however, there were obstacles to optimal employment of grid computing. For example, “in grid computing environments there can be potentially many containers running several applications and different servers can be running different sets of applications, i.e., the applications can run in multi-vendor and multi-version application server environments.” *Id.*, 1:46-50. As the inventors of the ’332 Patent explain, this “complexity can create a two fold problem in grid computing environment,” with the first problem “being that the information about which server is running what application is dynamic and not static” and the second that “the application containers may be running on different platforms as described above and can require different data transfer mechanisms for hot deployment/redeployment.” *Id.*, 1:50-57. As a result, significant disrupting of the grid system can occur during “service deployment/redeployment,” up to and including “stopping all the running services and applications.” *Id.*, 57-60.

Thus, there was a need in the art for more effective systems for deploying and redeploying applications in a grid computing environment. The ’332 Patent met this need by providing methods and systems, as reflected in the specification and claims of the ’332 Patent, for “tightly integrat[ing] deployment and/or re-deployment

system with grid discovery services.” *Id.*, 2:27-28. Specifically, as reflected in the claims of the ’332 Patent, the inventors of the ’332 Patent developed a method for hot deployment/redeployment that involves “adding a new version of an application release bundle,” using a “discovery services module” to determine which “which of the one or more grid nodes are running an application associated with the added new version of the application release bundle,” notifying and hot deploying/redeploying the new application release bundle using an appropriate plug-in and data transfer protocol.

C. The Claims of the ’332 Patent

The challenged independent claims of the ’332 Patent are set forth below. For convenience, Patent Owner uses the same claim limitation identification convention used by Petitioners in the Petition.

Independent Claim 1

[1.pre] A method for hot deployment and/or redeployment in grid computing environment, wherein the grid computing environment includes one or more grid nodes, comprising:

[1.a] adding a new version of an application release bundle in a repository server;

[1.b] determining by a discovery services module which of the one or more grid nodes are running an application associated with the added new

version of the application release bundle upon adding the new version of the application release bundle in the repository server;

[1.c] notifying a client application manager associated with one or more of the determined grid nodes about adding the new version of the application release bundle along with a type of data transfer protocol to use; and

[1.d] hot deploying/redeploying the new version of the application release bundle on running one or more application servers in an associated grid node using an appropriate hot deployment plug-in based on the data transfer protocol by a respective one of the client application managers.

Independent Claim 9

[9.pre] A computer-readable medium with program code embodied therein for causing when executed, a computer system, to perform a method for hot deployment/redeployment in a grid computing environment comprising:

[9.a] adding a new version of an application release bundle in a repository server;

[9.b] determining by a discovery services module which of the one or more grid nodes are running an application associated with the added new version of the application release bundle upon adding the new version

of the application release bundle in the repository server;

[9.c] notifying a client application manager associated with one or more of the determined grid nodes about adding the new version of the application release bundle along with a type of data transfer protocol to use; and

[9.d] hot deploying/redeploying the new version of the application release bundle on running one or more application servers in an associated grid node using an appropriate hot deployment plug-in based on the data transfer protocol by a respective one of the client application managers.

Independent Claim 14

[14.pre] A computer system comprising: a processing unit; and a memory coupled to the processing unit, the memory having stored therein code for causing, when executed, the processing unit to perform a method comprising:

[14.a] adding a new version of an application release bundle in a repository server;

[14.b] determining by a discovery services module which of the one or more grid nodes are running an application associated with the added new version of the application release bundle upon adding the new version of the application release bundle in the repository server; and

[14.c] notifying a client application manager associated with one or more of the determined grid nodes about adding the new version of the application release bundle along with a type of data transfer protocol to use; and

[14.d] hot deploying/redeploying the new version of the application release bundle on running one or more application servers in an associated grid node using an appropriate hot deployment plug-in based on the data transfer protocol by a respective one of the client application managers.

D. Overview of the Prior Art

1. Henseler (EX1004)⁶

Henseler is directed to a “distributed computing system [that] conforms to a multi-level hierarchical organizational model.” EX1004, Abstract. In Henseler’s system, “[a] user, such as a system administrator, interacts with the control nodes to logically define the hierarchical organization of distributed computing system.” *Id.* Henseler contemplates deployment of “an application governor to deploy an image of a software application to the application node by invoking one or more of the methods of one of the application image objects associated with the software application.” EX1004, ¶0007. Henseler’s “hierarchical” system does not disclose hot

⁶ “Henseler” refers to U.S. Pat. Pub. No. US 2007/0168919.

deployment or redeployment of new applications. Nor as discussed below, does Henseler disclose numerous other required features of the claimed methods and systems. Instead, the Petition relies on impermissibly reading those features into Henseler's disclosure based on alleged general knowledge and conclusory expert testimony.

2. Thyagarajan (EX1006)⁷

Thyagarajan is directed to a “a system and method for the hot deployment of shared modules in systems including application servers.” EX1006, 5:14-16. According to Thyagarajan, “[e]mbodiments may provide a class loader mechanism for hot deployment of modules such as standalone resource adaptor modules (RARs).” *Id.*, 5:17-22. The Petition relies on Thyagarajan principally for its general teachings regarding hot deployment, and it does not remedy the deficiencies in the Petition's reliance on Henseler alluded to above and discussed in more detail below.

3. Kautzleben (EX1007)⁸

Kautzleben is entitled “Management Architecture and Method Employed Within a Clustered Node Configuration.” The Petition relies on Kautzleben exclusively in Ground 2 for certain teachings regarding “monitoring resources and

⁷ “Thyagarajan” refers to U.S. Pat. No. 7,721,277.

⁸ “Kautzleben” refers to U.S. Pat. No. 7,493,624.

components in an environment using managed Java objects called ‘MBeans.’” Pet., 55. Kautzleben, however, does not remedy the deficiencies in the Petition discussed below.

E. The IPR Petition’s Alleged Unpatentability Grounds

Grounds	Claims	Statutory Basis	Prior Art
1	1–5, 7–11, 13–16, 18	§103	Henseler, Thyagarajan
2	1-18	§103	Henseler, Thyagarajan, Kautzleben

III. PETITIONERS HAVE NOT SHOWN A REASONABLE LIKELIHOOD OF PREVAILING ON ANY CHALLENGED CLAIMS

A. Petitioners’ Contrary Claim Construction Positions Before Different Tribunals Warrant Denial of the Petition

In the Petition, Petitioners take the position that they are capable of interpreting the challenged claims of the ’332 Patent under the *Phillips* standard. Specifically, while Petitioners do not propose any specific terms for construction, Petitioners allege that “[t]he analysis below in Section V proves the Challenged Claims obvious under any interpretation reasonably advanced according to the *Phillips* standard.” Pet. 4.⁹ And Petitioners’ expert attests to his understanding that

⁹ “*Phillips*,” of course, refers to the Federal Circuit’s *en banc* decision in *Phillips v. AWH Corp.*, 415 F.3d 1303 (Fed. Cir. 2005).

“for purposes of my analysis in this *inter partes* review proceeding, the terms appearing in the patent claims should be interpreted according to their ‘ordinary and customary meaning.’” EX1003 ¶ 20. In short, the Petition hinges on Petitioners’ position that Petitioners and their expert can interpret the claims under the *Phillips* standard and apply the prior art to the interpreted claims accordingly.

In the parallel district court litigation, however, Petitioners take a very different view of their ability to interpret the claims. Specifically, in invalidity contentions that Petitioners served on November 19, 2025, Petitioners allege that ***no fewer than ten terms of the ’332 patent are indefinite***, claiming that each term is “invalid under 35 U.S.C. § 112 because [the term] fails to inform, with reasonable certainty, those skilled in the art about the scope of the invention.” EX2016, 97-99. These include four terms that appear in (or are substantially identical to terms in) all challenged independent claims. In other words, in this proceeding Petitioners purport to be able to interpret the claims based on the *Phillips* standard with reasonable certainty, and Petitioners unpatentability theories hinge on a POSITA’s understanding of the claim terms and how the prior art allegedly discloses or renders those terms obvious. At the same time, in the district court litigation, Petitioners argue that the very same claim terms “fail[] to inform, with reasonable certainty, those skilled in the art about the scope of the invention.”

These positions are plainly inconsistent. “If a claim is indefinite, the claim, by definition, cannot be construed.” *Enzo Biochem, Inc. v. Applera Corp.*, 599 F.3d 1325, 1332 (Fed. Cir. 2010). Consequently, as a general rule a claim cannot be both indefinite and invalidated by the prior art. *Id.* (“a claim cannot be both indefinite and anticipated”). And there is no indication whatsoever that one of the narrow exceptions to this general rule—such as the presence of *IPXL*-type¹⁰ indefiniteness (*i.e.*, ambiguity as to whether the claim recites a method or apparatus)—is applicable here. *See Samsung Elecs. Am., Inc. v. Prisia Eng'g Corp.*, 948 F.3d 1342, 1355 n.5 (Fed. Cir. 2020) (recognizing *IPXL*-type indefiniteness as a limited exception to the general rule that indefiniteness precludes mapping of the claims to the prior art).

On these facts, the Director’s recent informative decision in *Tesla, Inc. v. Intellectual Ventures II LLC*, IPR2025-00340, Paper 18 (Director Squires November 5, 2025) (“*Tesla*”) establishes that the Petition should be denied. In *Tesla*, the Director granted Director Review, vacated a grant of institution, and ordered that institution be denied, all because of Petitioners’ inconsistent positions regarding indefiniteness. *Tesla*, 2-4. As the Director explained in *Tesla*, “when a petitioner advances different positions before the Board and a district court, that petitioner is

¹⁰ “*IPXL*” refers to *IPXL Holdings, L.L.C. v. Amazon.com, Inc.*, 430 F.3d 1377, 1384 (Fed. Cir. 2005).

required to explain why those different positions are warranted.” *Id.*, 3 (emphasis in original). Here the Petition contains no explanation for the contrary claim construction positions.¹¹

Further, in *Tesla* “Petitioner argued indefiniteness in the district court and then adopted Patent Owner’s plain and ordinary meaning construction from the district court litigation in its Petition.” *Id.*, 4. The facts are materially similar here. In the Petition, Petitioners applied *Phillips* and effectively adopted plain meaning constructions for all terms, while in district court Petitioners argued that the same claim terms were indefinite. As the Director pointed out in *Tesla*, “[a]llowing a petitioner to advance a claim construction before the Board when that petitioner has made inconsistent indefiniteness arguments in district court fails to further, but instead detracts from, the Office’s goal of providing greater predictability and

¹¹ That Petitioners’ invalidity contentions were served after the Petition was filed should not change the analysis. Petitioners presumably were aware of their indefiniteness position when they filed the Petition. Further, the invalidity contentions in which Petitioner FedEx Office and Print Services, Inc. alleged indefiniteness were filed on November 19, 2025—16 days after the Director issued the *Tesla* decision. Thus Petitioners knew or should have known of the implications of their decision to argue indefiniteness in district court.

certainty in the patent system.” *Id.* (citation omitted). Consequently, the Director concluded that “denial of institution is appropriate in this case.” *Id.*

So too here. Petitioners are required by rule to identify “[h]ow the challenged claim is to be construed.” 37 C.F.R. § 42.104(b)(3). Here, however, Petitioners have failed to meet that requirement by conditioning their Petition on a *Phillips* interpretation, while simultaneously arguing that the same claim terms fail to provide reasonable notice of their scope and thus are indefinite.

Petitioners should not be heard to argue, moreover, that they can remedy this situation via stipulation—as they have belatedly offered to do in related IPRs. First, Petitioners have had every opportunity to offer any stipulations that they think are relevant to the Director’s decision to institute, and in fact have already filed a stipulation in this proceeding—one which expressly leaves open Petitioners’ ability to continue to argue indefiniteness in district court. EX1022. Petitioners have long been on notice that Patent Owner would use Petitioners’ inconsistent positions as a reason not to institute, yet choose not to file a more robust stipulation. It would be deeply unfair and prejudicial to Patent Owner if Petitioners’ were permitted to withhold their genuine positions and serially change the issues in the case through belated concessions when things do not appear to be going their way.

Second, there is no indication that Petitioners would ever agree to a stipulation that would actually resolve the central inconsistency between their district court and

IPR positions. Instead, in related IPRs Petitioners have offered to surrender invalidity arguments under § 112 (in the related district court case involving Petitioners) ***only if the Board agrees to institute the IPR***. In other words, Petitioners are not unconditionally giving up either of their inconsistent positions—they are still reserving the right to tell the district court that a POSITA would not be able to understand the claims, even as they tell the Board the opposite. Rather than resolving the issue, such a self-serving stipulation only further underscores Petitioners' gamesmanship. The Petition should be denied for this independent reason.

B. Both Grounds Fail Because They Rely On Impermissible Allegations Regarding General Knowledge

As stated at the outset of this POPR, USPTO regulations are clear—IPR petitions “must specify where each element of the claim is found ***in the prior art patents or printed publications relied upon.***” 37 C.F.R. § 42.104(b)(4) (“Rule 104(b)(4)”). Consequently, “enforcement of Rule 104(b)(4) means that applicant admitted prior art (AAPA), ***expert testimony, common sense, and other evidence that is not ‘prior art consisting of patents or printed publications’...may not be used to supply a missing claim limitation.***” July 31 Memo at 1. It is thus Office policy that “the Board shall deny an IPR petition that fails to comply with Rule 104(b)(4).” *Id.* Here, the Petition’s violations of Rule 104(b)(4) are numerous and significant; accordingly the Petition should be denied for this independent reason.

Indeed, as the non-exhaustive discussion below illustrates, Petitioners resort to general knowledge to supply some aspect of virtually every limitation of independent claim 1.¹²

1. Ground 1

a. Limitation [1.a]: “adding a new version of an application release bundle in a repository server”

Unable to find this limitation in either Henseler or Thyagarajan, Petitioners resort to stitching it together based on conclusory allegations regarding what a POSITA would know. For example, Petitioners repeatedly rely on a POSITA’s alleged knowledge and understanding to convert Henseler’s storing of an “application image” into the claimed “application release bundle.” See Pet., 19 (“As would have been understood and/or obvious to a POSITA, Henseler’s application image instance is an executable collection or **bundle** of bits that includes the components of the application and is used for the purpose of deploying or **releasing** an **application**—an application release bundle.” (emphasis in original)); *id.*

¹² The Petition refers to back to its analysis for claim 1 to supply the corresponding limitations of the other two independent claims. See Pet., 47-48 (claim 9), 51 (claim 14). Accordingly, its unpatentability theories for those other independent claims fail for the same reason.

(“Additionally, a POSITA would have been motivated to further package (bundle) the application image instance as an archive file to facilitate storage and hot deployment, as was conventional and described by Thyagarajan.”). The Petition proceeds to rely on a POSITA’s knowledge to convert Henseler’s “software image repository” into the claimed “repository server,” and then uses the alleged knowledge and understanding of a POSITA to supply the claim requirement for a “new version” of an application release bundle—even though Henseler does not discuss new versions of applications. Pet., 21-22. In short, despite purporting to rely on prior art disclosures, the Petition in fact relies on its allegations regarding what a POSITA would know or understand to supply limitations that are missing from the prior art.

Even if this were otherwise permissible, moreover, the Petition’s attempt to supply missing claim limitations through the knowledge of a POSITA fails because it is supported only by conclusory and unreliable expert testimony. Indeed, Petitioners’ expert Dr. Bajaj parrots the Petition almost exactly throughout, right down to unusual turns of phrase such as “[t]o wit.” This is reflected in the comparison below—which is but one example of many—between the language of the first paragraph of page 22 of the Petition and paragraph 62 of Dr. Bajaj’s declaration (all emphasis in original).

Petition	EX1003, ¶ 62
<p>Henseler further teaches that images within the software image repository can have different versions. <i>E.g.</i>, EX1004, [0142] (“the version of the image”). A POSITA would have appreciated that this rudimentary teaching applies to both software images/instances and application images/instances (<i>an application release bundle</i>). EX1003, ¶62. To wit, Henseler starts by explaining that a software image—which “refers to a complete set of software loaded on an individual computing node to provide an execution environment for one or more applications”—“may include <u>application files</u>.” EX1004, [0045]. And Henseler later discloses the notion of “<u>updating...applications</u>,” which the POSITA would have understood to mean deploying a new version of one or more <u>application files</u> from the initially loaded software image. <i>Id.</i>, [0182]; EX1003, ¶62</p>	<p>Henseler further teaches that images within the software image repository can have different versions. <i>E.g.</i>, EX1004, [0142] (“the version of the image”). A POSITA would have appreciated that this rudimentary teaching applies to both software images/instances and application images/instances (<i>an application release bundle</i>). To wit, Henseler starts by explaining that a software image—which “refers to a complete set of software loaded on an individual computing node to provide an execution environment for one or more applications”—“may include <u>application files</u>.” EX1004, [0045]. And Henseler later discloses the notion of “<u>updating...applications</u>,” which the POSITA would have understood to mean deploying a new version of one or more <u>application files</u> from the initially loaded software image. <i>Id.</i>, [0182].</p>

But for the citations to EX1003 in the Petition, ***the two passages are completely identical***. It is well-settled that such conclusory expert opinion that merely parrots the petition is unreliable and insufficient to support institution. *See Xerox Corp. v. Bytemark Inc.*, IPR2022-00624, Paper 12, at 2 (PTAB Feb. 10, 2023) (designated precedential) (denying institution when expert declaration merely parroted petition and “was conclusory and added little to the assertions the testimony was offered to

support); *TikTok Inc. v. NTech Properties, Inc.*, IPR2024-01339, Paper 9 at 16 (PTAB Feb. 25, 2025) (giving “little or no weight” to the testimony of the petitioner’s expert as the declaration was wholly “conclusory,” “repeat[ing], almost verbatim, the language in the Petition without any further explanation or supporting reasoning or evidence”); *American Airlines, Inc. et al. v. Intellectual Ventures I LLC*, IPR2025-01055, Paper 11 at 18 (PTAB November 21, 2025) (“Petitioner’s only cited support for this conclusory statement is testimony of its own declarant, Dr. Easttom, which merely repeats the conclusory statement verbatim, without any explanation or additional citations to evidence. We give such conclusory, unsupported assertions by Petitioner’s declarant little or no weight.”).

b. Limitation [1.b]: “determining by a discovery services module which of the one or more grid nodes are running an application associated with the added new version of the application release bundle upon adding the new version of the application release bundle in the repository server”

Here again, unable to find in the prior art either the “discovery services module” or the required functionality of identifying one or more grid nodes that are running an application “associated with the added new version of the application release bundle upon adding the new version of the application release bundle in the repository server,” Petitioners resort to manufacturing the limitation based upon alleged knowledge of a POSITA. Indeed, in a classic example of “protesting too

much,” Petitioners’ rely on a strained, four-step explanation for why a POSITA “would have understood Henseler to teach and/or render obvious” this claim limitation. Pet. 24-25. At each step, Petitioners layer on additional assertions regarding what a POSITA would have purportedly known or understood, with the end result being an unpatentability theory built almost entirely on Petitioners’ expert’s conclusory assertions about what a POSITA would allegedly know or understand. *See* Pet. 24-25 (“Accordingly, it would have been apparent and/or obvious to the POSITA..); *id.*, 25 (“Third, as would have been understood and/or obvious to a POSITA....”); *id.* (“a POSITA would have understood this disclosure to mean...”)).

Recognizing these deficiencies in its strained interpretation of Henseler, Petitioners also include a backup theory that abandons all pretense of finding the limitations in Henseler and simply argues that the limitation would be obvious. Pet., 25-26. This is a plain violation of Rule 104(b)(4), and further underscores that limitation [1.b] is in fact absent from both of the two prior art references Petitioners rely upon.

As with limitation [1.a], moreover, huge swathes of Petitioners’ supporting expert testimony simply repeats the content of the Petition verbatim. *Compare* Pet. 23-25 *with* EX1003 ¶¶ 64-69. Given how central Petitioners’ assertions about what a POSITA would purportedly know or read into the prior art are to its unpatentability

theories, the unreliability of its supporting expert testimony is independently sufficient to doom the Petition.

c. Limitation [1.c]: “notifying a client application manager associated with one or more of the determined grid nodes about adding the new version of the application release bundle along with a type of data transfer protocol to use; and”

Petitioners’ reliance on its expert’s assertions to fill gaps in the prior art is even more glaring with respect to limitation [1.c]. Petitioners attempt to contort Henseler’s disclosure of an “application governor 352” that assists with “deploy[ing] the application” into a disclosure of limitation [1.c], even though Henseler says nothing about adding new versions of application release bundles, much less the required notification about adding a new version that includes a “data transfer protocol to use.” Pet. 28-29. Recognizing this, Petitioners simply rely on their expert to read the limitation into Henseler’s far more limited “application governor” feature—once again relying on expert testimony that simply says the exact same thing as the Petition. *Compare* Pet., 29-30 with EX1003 ¶¶ 73-74 (repeating the language of page 29 and the first paragraph of page 30 of the petition verbatim, apart from removal of expert citations). This use of an expert to supply missing claim limitations would be improper even if the expert testimony were reliable, see July 31 Memo at 1, and is wholly unavailing here since the expert’s conclusory testimony adds nothing to the content of the Petition.

Next, unable to find the required notification of a “data transfer protocol” for the “application release bundle” in Henseler, Petitioners pivot to a new obviousness theory that again relies on Petitioners’ expert’s unsupported assertions about what a POSITA would read into the reference. Pet. 30-33. Once again, the cited expert testimony, however, adds nothing—because it simply repeats the assertions in the Petition. *Compare* Pet. 30-33 with EX1003 ¶¶ 74-79. This fails under the extensive authority cited above.

Limitation [1.d]: “hot deploying/redeploying the new version of the application release bundle on running one or more application servers in an associated grid node using an appropriate hot deployment plug-in based on the data transfer protocol by a respective one of the client application managers.”

Petitioners’ violation of Rule 104(b)(4) is perhaps most pronounced with respect to limitation [1.d]. This limitation requires, among other things, use of “an appropriate hot deployment *plug-in based on the data transfer protocol* by a respective one of the client application managers.” The Petition recognizes that neither Henseler nor Thyagarajan disclose the required plug-in. So Petitioners latch on to the presence of the word “plug-in” used with respect to *other features* in Henseler, combined with an allegation that “a POSITA would have understood that plug-ins were well known by the time of the ’332 patent in 2006–07,” and on that basis argues that the limitation would have been obvious. Pet. 36-38. This plainly

violates Rule 104(b)(4) since Petitioners point to no prior art patent or publication that in fact discloses the claimed feature.

The violation is compounded because the Petitioners' expert declaration—its sole “factual” support for what a POSITA would have purportedly known or understood—is once again a verbatim copy of the corresponding portions of the Petition. *Compare* Pet. 33-38 with EX1003 ¶¶ 80-85. As explained above, this is reason alone to deny the Petition.

2. Ground 2

Nothing in Ground 2 resolves the defects outlined above in Ground 1. To the contrary, Petitioners exclusively rely on their arguments from Ground 1 to satisfy limitations [1.a], [1.b], and [1.d]. Pet., 63, 66. Ground 2 thus fails as to those limitations for all the reasons set forth above. As to Limitation [1.c], Petitioners rely on Kautzleben for its general teachings regarding a monitoring system and notifications. *See* Pet., 64-65. But this does not resolve the central defect with the Petitioners' attempted mapping of limitation [1.c]—that there is no disclosure of any notification “about adding the new version of the application release bundle along with a type of data transfer protocol to use.” Even in Ground 2, Petitioners fail to identify any prior patent or printed publication that discloses this feature.

Further, Ground 2 suffers from the same lack of reliable, non-conclusory expert testimony as Ground 1, since Petitioners' expert once again parrots the Petition verbatim. *Compare, e.g.,* Pet. 63-6 with EX1003 ¶¶ 142-145.

IV. CONCLUSION

For all of the reasons explained in the Discretionary Denial Brief and this POPR, Patent Owner respectfully submits that the Director should deny institution of the Petition.

Dated: January 21, 2026

Respectfully submitted,

/Richard J. Botos/

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Counsel for Patent Owner

CERTIFICATE OF SERVICE

I hereby certify that the foregoing PATENT OWNER'S PRELIMINARY RESPONSE TO THE PETITION was served on January 21, 2026, via electronic mail upon counsel of record for Petitioner at the following email addresses:

IPR39898-0051IP1@fr.com
Kenneth W. Darby, Jr.
David Hoffman

Dated: January 21, 2026

/Richard J. Botos/

Richard J. Botos (Reg. No. 32,016)
Counsel for Patent Owner

CERTIFICATE OF COMPLIANCE

I hereby certify that the foregoing PATENT OWNER'S PRELIMINARY RESPONSE TO THE PETITION consists of 5422 words, excluding the table of contents, certificate of service, this certificate of compliance, or table of exhibits. The POPR complies with the type-volume limitation of 14,000 words as mandated in 37 C.F.R. § 42.24. In preparing this certificate, counsel has relied on the word count of the word-processing system used to prepare this paper (Microsoft Word).

Dated: January 21, 2026

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