

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

SLACK TECHNOLOGIES, LLC. and
SALESFORCE, INC.,
Petitioners,

v.

WRINKL, INC.,
Patent Owner

IPR2024-01489
U.S. Patent No. 11,973,731

**PETITIONERS' REPLY TO PATENT OWNER RESPONSE
FOR *INTER PARTES* REVIEW OF
U.S. PATENT NO. 11,973,731**

TABLE OF CONTENTS

	<u>Page(s)</u>
I. SUMMARY OF ARGUMENT.....	1
II. CLAIM CONSTRUCTION	2
III. COHEN QUALIFIES AS PRIOR ART.....	2
A. PO Has Not Met its Burden of Proof that Each and Every Application in the Chain Provides Written Description Support for the ’731 Patent.	2
B. Cohen Is Prior Art Because There Is a Break in the Asserted Priority Chain From the ’731 Patent to the ’620 Application.....	5
1. The Lack of a Third Pane Subsidiary Thread Disclosure	6
2. The Break in the Green Chain.....	9
C. Boilerplate “Incorporation by Reference” Language Cannot Cure the Break in the Asserted Priority Chain.....	12
D. PO Improperly Attempts to Shift the Burden onto Petitioners	16
IV. CONCLUSION.....	18

TABLE OF AUTHORITIES

	<u>Page(s)</u>
<u>Cases</u>	
<i>Advanced Display Sys., Inc. v. Kent State Univ.</i> , 212 F.3d 1272 (Fed. Cir. 2000)	13, 15
<i>Ariad Pharms., Inc. v. Eli Lilly & Co.</i> , 598 F.3d 1336 (Fed. Cir. 2010)	4
<i>Arthrex, Inc. v. Smith & Nephew, Inc.</i> , 35 F.4th 1328 (Fed. Cir. 2022)	4, 6, 17
<i>Cook Biotech Inc. v. Acell, Inc.</i> , 460 F.3d 1365 (Fed. Cir. 2006)	12
<i>Corephotonics, Ltd. v. Apple Inc.</i> , 84 F.4th 990 (Fed. Cir. 2023)	16
<i>Cozy, Inc. v. Dorel Juvenile Group, Inc.</i> , 678 F. Supp. 3d 225 (D. Mass. 2023)	10
<i>Dynamic Drinkware, LLC v. Nat’l Graphics, Inc.</i> , 800 F.3d 1375 (Fed. Cir. 2015)	4, 16
<i>Harari v. Lee</i> , 656 F.3d 1331 (Fed. Cir. 2011)	13, 14, 15
<i>Hollmer v. Harari</i> , 681 F.3d 1351 (Fed. Cir. 2012)	9
<i>In re Hogan</i> , 559 F.2d 595 (CCPA 1977)	4, 9
<i>In re NTP, Inc.</i> , 654 F.3d 1268 (Fed. Cir. 2011)	3
<i>In re Schneider</i> , 481 F.2d 1350 (CCPA 1973)	4

<i>Lockwood v. Am. Airlines, Inc.</i> , 107 F.3d 1565 (Fed. Cir. 1997)	4
<i>Paice LLC v. Ford Motor Co.</i> , 881 F.3d 894 (Fed. Cir. 2018)	13, 14, 15
<i>PowerOasis, Inc. v. T-Mobile USA, Inc.</i> , 522 F.3d 1299 (Fed. Cir. 2008)	3, 16
<i>Yita LLC v. MacNeil IP LLC</i> , 69 F.4th 1356 (Fed. Cir. 2023)	16
<i>Zenon Envtl., Inc. v. U.S. Filter Corp.</i> , 506 F.3d 1370 (Fed. Cir. 2007)	12, 15

Codes

35 U.S.C. § 102(a)(1).....	10
35 U.S.C. § 120	2, 3

EXHIBIT LIST

<i>Exhibit No.</i>	<i>Description</i>
Exh-1001	U.S. Patent No. 11,973,731 to Cohen
Exh-1002	File History for Application No. 18/535,572
Exh-1003	Declaration of Andrew Cockburn
Exh-1004	<i>Curriculum Vitae</i> of Andrew Cockburn
Exh-1005	U.S. Pub. No. 2017/0134316 (“Cohen”)
Exh-1006	Return of Service in Related Action
Exh-1007	Complaint in Related Action
Exh-1008	Scheduling Order in Related Action
Exh-1009	Provisional Application No. 62/253,229
Exh-1010	Quentin Jones, et al. “Empirical Evidence of Information Overload Constraining Chat Channel Community Interactions.” In Proceedings of the 2008 ACM Conference on Computer Supported Cooperative Work (CSCW ‘08), Association for Computing Machinery, New York, NY, USA, 323–332 (2008)
Exh-1011	U.S. Patent Application No. 15/293,620
Exh-1012	U.S. Patent No. 9,712,466
Exh-1013	U.S. Application No. 15/858,696
Exh-1014	U.S. Patent No. 10,025,475
Exh-1015	U.S. Provisional Application No. 62/666,137
Exh-1016	U.S. Application No. 16/014,578
Exh-1017	U.S. Patent No. 11,388,120
Exh-1018	Thomas F. Stafford and Dennis Gonier, <i>What Americans Like About Being Online</i> , 47 Communications of the ACM, 107, 107–12 (2004)

<i>Exhibit No.</i>	<i>Description</i>
Exh-1019	Petitioners' Reasons for Parallel Petitions and Petition Ranking
Exh-1020	Declaration of Christopher Kao In Support of Petitioners' Unopposed Motion for Admission Pro Hac Vice of Christopher Kao
Exh-1021	Declaration of Brock Weber In Support of Petitioners' Unopposed Motion for Admission Pro Hac Vice of Brock Weber
Exh-1022	Rely Declaration of Andrew Cockburn
Exh-1023	Transcript of Deposition of Kevin C. Almeroth, October 28, 2025
Exh-1024	U.S. Patent App. No. 16/712,952 to Cohen

I. SUMMARY OF ARGUMENT

The Petition establishes that U.S. Patent Publication No. 2017/0134316 (“Cohen”)—the publication of U.S. Patent Application No. 15/293,620 (“’620 Application”), an earlier ancestor of U.S. Patent No. 11,973,731 (“’731 Patent”)—qualifies as prior art. The Patent Owner (“PO”) Response (“POR”) offers no substantive rebuttal, instead merely relying on a separate, co-pending priority chain from the ’731 Patent to the same ’620 Application without demonstrating that each and every application in that chain provides written description support for the claims of the ’731 Patent. *See* Paper 16 (“POR”), 4. The PO has not, and cannot, make this showing.

For example, although PO asserts in a conclusory way that the priority chain is unbroken, a critical link in the chain—the ’412 Application—fails to disclose a key disclosure of the ’731 Patent: the simultaneous display of three panes, with the third pane containing a subsidiary communication thread. *See* POR, 6. This omission breaks the asserted priority chain, defeating PO’s claim to an earlier effective filing date.

Consequently, none of the claims of the ’731 Patent are entitled to the filing dates of any applications preceding U.S. Patent App. No. 16/931,283 (the “’283 Application”), which was filed more than one year after Cohen published. *See* Ex-2013; Exh-1005.

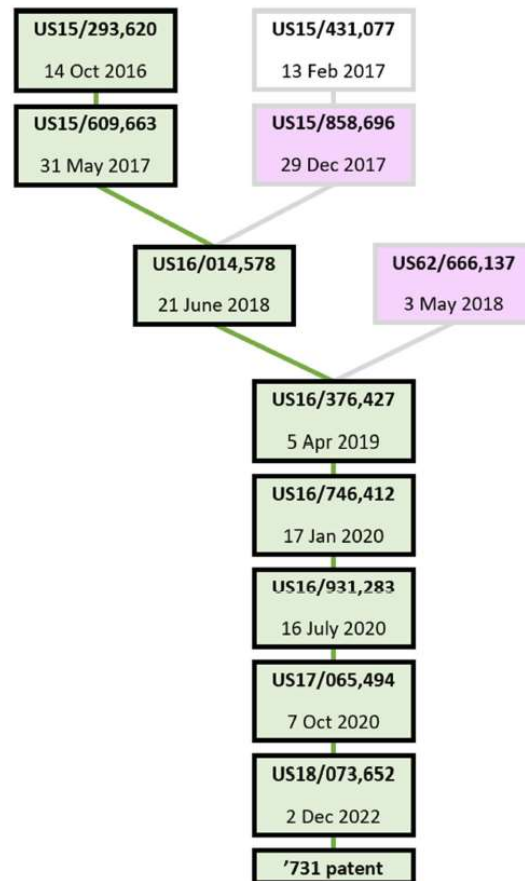
II. CLAIM CONSTRUCTION

PO asserts that no claim constructions are necessary. POR, 6. Petitioners agree and therefore understand all claims to be governed by their plain and ordinary meaning.

III. COHEN QUALIFIES AS PRIOR ART

A. PO Has Not Met its Burden of Proof that Each and Every Application in the Chain Provides Written Description Support for the '731 Patent.

In the POR, PO relies on a series of continuation and continuation-in-part applications forming an alleged priority chain from the '731 Patent to the '620 Application, shown in **green** below, in an attempt to claim the benefit of the '620 Application's filing date under 35 U.S.C. § 120:



POR, 2.

However, patent claims “are not entitled to an earlier priority date merely because the patentee claims priority.” *In re NTP, Inc.*, 654 F.3d 1268, 1276 (Fed. Cir. 2011). The patent owner carries its burden to prove entitlement under § 120 before the appropriate tribunal. *See PowerOasis, Inc. v. T-Mobile USA, Inc.*, 522 F.3d 1299, 1305–06 (Fed. Cir. 2008) (holding that “when neither the PTO nor the Board has previously considered priority, there is simply no reason to presume that claims in a [continuation-in-part] application are entitled to the effective filing date of an earlier filed application”); *Dynamic Drinkware, LLC v. Nat’l Graphics, Inc.*,

800 F.3d 1375, 1380 (Fed. Cir. 2015) (noting that the burden-shifting framework for proving priority entitlement is parallel in district court litigation and *inter partes* reviews).

“[T]o gain the benefit of the filing date of an earlier application under 35 U.S.C. § 120, each application in the chain leading back to the earlier application must comply with the written description requirement of 35 U.S.C. § 112.” *Lockwood v. Am. Airlines, Inc.*, 107 F.3d 1565, 1571 (Fed. Cir. 1997) (emphasis added); *see also In re Hogan*, 559 F.2d 595, 609 (CCPA 1977) (“[T]here has to be a continuous chain of copending applications each of which satisfies the requirements of § 112 with respect to the subject matter presently claimed.” (quoting *In re Schneider*, 481 F.2d 1350, 1356 (CCPA 1973))) (alteration in original). “That means each application in the chain must ‘reasonably convey[] to those skilled in the art that the inventor had possession of the [later-claimed] subject matter as of the filing date.’” *Arthrex, Inc. v. Smith & Nephew, Inc.*, 35 F.4th 1328, 1343 (Fed. Cir. 2022) (citing *Ariad Pharms., Inc. v. Eli Lilly & Co.*, 598 F.3d 1336, 1351 (Fed. Cir. 2010)). This includes the entire “series of intervening continuation, continuation-in-part, and divisional applications.” *Id.* at 1342.

Here, PO merely demonstrates that the earlier U.S. Patent App. No. 15/609,663 (“’663 Application”) satisfies the written description requirement with respect to the claims of the ’731 Patent. POR, 15–63. Yet, PO fails to meet its burden

of proving that each and every application in the asserted **green** chain provides written description support for those claims. *See generally* POR. In fact, PO's own expert has not even reviewed any of the applications in the newly asserted **green** chain to confirm entitlement. *See* Exh-1023, 26:21–28:7, 31:19–32:16. By failing to establish that each link in the chain it relies upon satisfies the written description requirement, PO effectively attempts to shift the burden to Petitioners to determine whether PO is entitled to its alleged priority claim. As discussed below, however, Petitioners have identified a clear break in the **green** chain on which PO relies, defeating PO's assertion of priority to the '620 Application.

B. Cohen Is Prior Art Because There Is a Break in the Asserted Priority Chain From the '731 Patent to the '620 Application

While PO points to the asserted **green** chain connecting the '731 Patent to the '620 Application to allegedly claim the benefit of the '620 Application's filing date under § 120, not every application in that chain provides written description support for the claims of the '731 Patent. For example, the U.S. Patent App. No. 16/746,412 ("'412 Application") in the asserted **green** chain fails to disclose a key feature of the '731 Patent—the simultaneous display of three panes, with the third pane containing a subsidiary communication thread. *See generally* Ex-2014.¹ This

¹ PO has been on notice of this break in the asserted priority chain since the filing of Unified Patents LLC's *Ex Parte* Reexamination Request on October 25, 2024,

feature is central to all four independent claims of the '731 Patent. *See* Exh-1001, Cls. 1, 15, 25, 30.

1. The Lack of a Third Pane Subsidiary Thread Disclosure

The '412 Application, titled *Apparatus and Method for Message Image Reference Management*, primarily teaches referencing objects (e.g., images) and composing direct replies to specific messages, all within a single continuous message stream. *See* Ex-2014, Abstract; 3:45–57. This stands in contrast to the '731 Patent, titled *System and Methods for Subsidiary Channel-Based Thread Communications*, which is directed to creating and displaying simultaneous subsidiary threads that allow users to communicate within distinct thread panes. *See* Exh-1001, Abstract.

Independent Claims 1, 15, and 25 of the '731 Patent each specify that a “third pane” is required to display the “first messaging communication” within a “first subsidiary communication thread” that includes an anchor message and any additional messaging communications, along with an associated sidebar text-entry

which demonstrated that two critical applications in the chain—U.S. Patent App. No. 16/712,952 (“’952 Application”) (Exh-1024) and the '412 Application—fail to disclose the simultaneous display of three panes, with the third pane containing a subsidiary communication thread. *See* Reexamination Control No. 90/019,710, Request For *Ex Parte* Examination of No. Patent 11,973,731, 5–10 (October 25, 2024). There is no “unfair surprise” to PO arising from identification of this specific chain breakage. *See Arthrex*, 35 F.4th at 1345.

field distinct from the channel text-entry field. Ex-2014, Cls. 1, 15, 25. The claims further require that the third pane and its sidebar text-entry field be displayed simultaneously alongside the first pane, second pane, and channel text-entry field. *See id.*, Cl. 1, 15, 25, 30; Exh-1022, ¶16. In contrast, the '412 Application consistently characterizes its interface as a single conversation stream, showing a message and any related or “linked” message sequentially within that same stream. *See* Ex-2014, Abstract; 3:45–57. A user may select a reference object to view or generate a linked message, but the prior message is merely retrieved or overlaid—not displayed concurrently in a separate visual region or pane. *See, e.g., id.*, Figs. 13A–13D, 16A–16F.

Independent Claim 30 of the '731 Patent further requires “rendering of the subsidiary thread communication to a thread communication pane within the communication interface, wherein a list pane, the messaging pane, and the thread communication pane are configured to be rendered within a defined display window as viewable simultaneously” (i.e., three panes). Exh-1022, ¶17. No such rendering of three concurrently viewable panes—where the third pane permits a user to invoke or engage in a subsidiary communication thread—is taught or shown in the '412 Application. *Id.*, ¶17.

At most, the '412 Application discloses a multi-stage interface that allows a user to select an action object which opens a new window or overlay, as shown in

Figures 17C–17D. *See* Ex-2014, Figs. 17C, 17D; Exh-1022, ¶18. However, this does not amount to a “third pane” constituting a subsidiary communication thread. Exh-1022, ¶18. There is no disclosure of a distinct pane dedicated to a subsidiary or thread-based exchange that allows multiple related messages to be created and viewed concurrently within that pane. *Id.*, ¶18. For example, Figures 17C and 17D merely permit a user to invoke a “first action object” to write and save a review—a single, stand-alone interaction unrelated to any ongoing conversational thread. *See* Ex-2014, 25:63–26:9, Figs. 17C, 17D. This process is fundamentally different from initiating or rendering a subsidiary communication thread within a concurrently viewable pane. Exh-1022, ¶18. Even if generously construed, this could be analogized to a temporary overlay or pop-up text-entry field, but not to a concurrently viewable third pane dedicated to subsidiary thread communications. *Id.*, ¶18.

Moreover, the figures consistently depict a unified messaging display occasionally accompanied by an input field for replies or comments. *See, e.g.*, Ex-2014, Figs. 24–33, 45–50. Even in these embodiments, the interface remains a two-region layout (the main message area and a reply/comment overlay), not a third pane displayed side-by-side. Exh-1022, ¶19. The '412 Application explicitly explains that a “further” or “linked” message appears “as part of the continuous stream of messages.” Ex-2014, 3:45–57.

The described “further message” is transmitted and displayed in the same continuous sequence as prior messages. *See id.*, 7:28–53. When a user selects a reference link, the associated content merely replaces or temporarily overlays the existing display rather than appearing in a concurrently viewable pane. *See, e.g., id.*, Figs. 8A–8D, 13A–13D.

Neither the specification nor any figure discloses or illustrates three concurrently viewable panes—such as a third dedicated “thread” pane displayed simultaneously with a main messaging pane and a list pane. Exh-1022, ¶21. All embodiments are limited to sequential or single-pane message displays, optionally with transient overlays. *Id.*, ¶21.

Therefore, a PHOSITA would not understand the ’412 Application to adequately disclose or provide a written description supporting the limitations recited in the independent claims of the ’731 Patent. *Id.*, ¶22.

2. The Break in the Green Chain

Without this key disclosure, the ’412 Application cannot provide the necessary written description support, thereby breaking the continuity required under § 120. *See, e.g., Hollmer v. Harari*, 681 F.3d 1351, 1355 (Fed. Cir. 2012) (“[I]f any application in the priority chain fails to make the requisite disclosure of subject matter, the later-filed application is not entitled to the benefit of the filing date of applications preceding the break in the priority chain.”); *In re Hogan*, 559

F.2d at 609 (finding that claim 15 was only entitled to a 1967 filing date where “the disclosure to support claim 15 appears in the 1953 and the 1967 applications, but not in the 1956 application”); *Cozy, Inc. v. Dorel Juvenile Group, Inc.*, 678 F. Supp. 3d 225, 234 (D. Mass. 2023) (holding that the asserted priority chain was broken because one patent lacked common subject matter with the asserted patents, defeating the attempt to earlier priority claim).

Because this disclosure is missing from the '412 Application, the asserted **green** chain is broken, and the claims of the '731 Patent are therefore entitled to an effective filing date no earlier than July 16, 2020—the filing date of the '283 Application, which is the earliest application PO can rely on following the break in that chain. As the effective filing date postdates Cohen by more than one year, Cohen qualifies as prior art under 35 U.S.C. § 102(a)(1) and, as established in Petitioners' Petition (*see generally* Paper 1) and effectively conceded by PO by its reliance on the defective priority chain including the '620 Application, anticipates all challenged claims of the '731 Patent.

To the extent PO relies on the '952 Application within the '731 Patent's family chain, it likewise fails to disclose the three-pane with subsidiary thread feature. Exh-1022, ¶29. The '952 Application, titled *Apparatus and Method for Message Reference Management*, embodies the same underlying concept as the later '412 Application—a message-referencing framework in which users can identify

portions of prior messages and generate “reference objects” that link those messages within a single continuous message stream. *See* Exh-1024, Abstract. The system then allows the referenced content to be displayed within the same message stream when a link or “display object” is selected. *See id.*, 4:49–5:4; Figs. 4–5. As with the ’412 Application, these features are implemented within a single continuous messaging window that displays a chronological “stream” of messages, rather than multiple concurrently viewable panes. *See id.*, 1:27–41. The figures in the ’952 Application confirm that all communications occur within one unified interface. *See, e.g.*, Figs. 8A–8D, 10A–10C, 11A–11D, and 13A–13D. Messages and any referenced or “linked” messages are shown in the same columnar message stream, occasionally accompanied by a pop-up or overlay (“Ref Pop”) when a user selects a referenced message. *See id.*, 12:38–46. A PHOSITA would understand these pop-ups to be temporary overlays, not a simultaneously viewable pane functioning as a subsidiary communication thread. *See id.*; Exh-1022, ¶25. Nothing in the ’952 Application’s disclosure suggests a multi-pane or side-by-side configuration. *See generally*, Exh-1024; Exh-1022, ¶26. The ’952 Application allows a user to view related messages, images, or other content only through selection-based navigation or temporary overlays, rather than by displaying multiple panes concurrently. Exh-1022, ¶26. Therefore, a PHOSITA would not understand the ’952 Application to

adequately disclose or provide a written description supporting the limitations recited in the independent claims of the '731 Patent. *Id.*, ¶28.

Lastly, PO's expert has not reviewed the '952 Application or any of the provisional applications. Exh-1023, 30:16–31:18.

C. Boilerplate “Incorporation by Reference” Language Cannot Cure the Break in the Asserted Priority Chain

Given the complexity of the '731 Patent's family history, PO argues that the '412 Application's deficiencies are remedied through “incorporation by reference” to another related patent.² POR, 4, 11, 15. That argument, however, fails.

Incorporation by reference “provides a method for integrating material from various documents into a host document ... by citing such material in a manner that makes clear that the material is effectively part of the host document as if it were explicitly contained therein.” *Zenon Envtl., Inc. v. U.S. Filter Corp.*, 506 F.3d 1370, 1378 (Fed. Cir. 2007) (citing *Cook Biotech Inc. v. Acell, Inc.*, 460 F.3d 1365, 1376 (Fed. Cir. 2006) (emphasis added). For example, “[t]o incorporate material by reference, the host document must identify with detailed particularity what specific material it incorporates and clearly indicate where that material is found in the various documents.” *Paice LLC v. Ford Motor Co.*, 881 F.3d 894, 906–07 (Fed.

² Moreover, any purported “incorporation by reference” language fails to satisfy the written description requirement for the same reasons. Section III.B.C, *supra*.

Cir. 2018) (emphasis added) (quoting *Advanced Display Sys., Inc. v. Kent State Univ.*, 212 F.3d 1272, 1282–83 (Fed. Cir. 2000)). In making that determination, “the standard of one reasonably skilled in the art should be used to determine whether the host document describes the material to be incorporated by reference with sufficient particularity.” *Paice*, 881 F.3d at 907 (quoting *Advanced Display*, 212 F.3d at 1282). “Whether and to what extent material has been incorporated by reference is a question of law that we review de novo.” *Id.* (citing *Harari v. Lee*, 656 F.3d 1331, 1334 (Fed. Cir. 2011)).

In the '412 Application, the phrase appears only at the end of a long procedural genealogy paragraph and fails to identify any specific aspect of any prior disclosure. *See id.*, 1:7–54 (“the disclosures of all of which are incorporated by reference herein in their entireties”). It is, at most, a generic catch-all reference that lacks detailed particularity. This is distinguishable from illustrative cases such as *Paice* and *Harari*. 881 F.3d at 907; 656 F.3d at 1335–38. In both of those cases, the Federal Circuit approved stand-alone statements embedded within the substantive body of the specification—each expressly identifying a limited number of prior applications with particularity. *See Paice*, 881 F.3d at 907 (“[The incorporation sentence] states that [the reference] ‘is,’ without qualification, incorporated into the patent application ‘by *this* reference’—i.e., the reference contained in the sentence. The sentence identifies with detailed particularity the specific material subject to

incorporation ([the reference], and not just particular portions thereof) and where that material can be found.”).

In *Harari*, the incorporation language (“the disclosures of the two applications are hereby incorporated by reference”) directly followed specific identification—by filing date, title, and inventors—of the two co-pending applications, and was construed as an unambiguous incorporation of those entire disclosures. 656 F.3d at 1335. The ’412 Application’s language, however, appears only in the preliminary “Cross-Reference to Related Applications” section—outside the substantive description of the invention—and concludes an extensive procedural genealogy referencing numerous continuations, continuations-in-part, and provisional applications. *Cf.* 656 F.3d at 1335; *see* Ex-2014, 1:7–54. Its vague reference to “the disclosures of all of which” provides no indication as to which applications are meant to be incorporated or what material is being imported. Such sweeping and indeterminate phrasing stands in marked contrast to the precise and targeted incorporation statements approved in *Harari*.

Unlike the valid incorporation statements in *Paice* and *Harari*, the omnibus language in the ’412 Application—confined to the preliminary cross-reference section—fails to identify any prior disclosure with the requisite specificity. Accordingly, it cannot operate as a substitute for actual written description support within the priority chain.

Thus, while *Harari* and *Paice* address valid incorporation where clear and unambiguous references are made to specific prior applications, they do not relax the longstanding requirement of detailed particularity, nor do they establish that generic boilerplate or omnibus “in their entireties” statements in procedural cross-reference sections satisfy § 112(a). To the contrary, both reaffirm the settled rule that incorporation by reference is effective only when the incorporating document clearly identifies, with specificity, the precise material being imported and where it may be found. *Advanced Display*, 212 F.3d at 1282–83. In *Paice*, the Federal Circuit expressly quoted and applied the *Advanced Display* standard—confirming that it remains good law and has not been displaced. 881 F.3d 894, 906–07 (Fed. Cir. 2018) (quoting *Advanced Display*, 212 F.3d at 1282). Likewise, *Harari* did not endorse blanket or omnibus incorporation language; instead, it cited *Zenon*, and reaffirmed that incorporation is valid only where “one reasonably skilled in the art would understand the application as describing with sufficient particularity the material to be incorporated.” *Id.* at 1378 (quoting *Zenon*, 506 F.3d 1370 (Fed. Cir. 2007)). It would be an abuse of the patent laws to permit applicants to satisfy § 112(a) through vague, catch-all incorporation clauses that lack the clarity, specificity, and particularity.

Accordingly, the '412 Application cannot, through vague and nonspecific incorporation language, supply the missing written description support for the three-

pane with subsidiary thread feature required by each independent claim of the '731 Patent. Because the incorporation by reference language in the '412 Application cannot cure the break in the asserted **green** chain, this renders PO's priority argument defective and limits the '731 Patent's effective filing date to no earlier than **July 16, 2020** (the filing date of the '283 Application). Therefore, Cohen qualifies as prior art under § 102(a)(1).

D. PO Improperly Attempts to Shift the Burden onto Petitioners

PO's assertion that Petitioners are precluded from addressing the sufficiency of intervening applications in the priority chain misstates both the law and the Petition's framework. It is PO's burden—not Petitioners'—to establish entitlement to the earlier effective filing date it asserts. *See PowerOasis*, 522 F.3d at 1305–06. The Petition properly challenged the priority date of the '731 Patent and satisfied its burden of persuasion with respect to patentability. Cohen qualifies as prior art unless PO can demonstrate uninterrupted written description support through each link in the asserted priority chain. *See generally* Paper 1. That challenge squarely placed priority at issue, shifting the burden of production to PO to prove that each application in its asserted chain satisfies § 112(a). *See Dynamic Drinkware*, 800 F.3d at 1380. PO failed to meet its burden.

PO's reliance on *Yita LLC v. MacNeil IP LLC*, 69 F.4th 1356 (Fed. Cir. 2023), and *Corephotonics, Ltd. v. Apple Inc.*, 84 F.4th 990 (Fed. Cir. 2023), is also

misplaced. Those cases bar new invalidity theories or new prior art arguments raised for the first time in reply. Petitioners' Reply here does neither. Rather, it rebuts PO's defective showing of priority by explaining why specific applications in the asserted "**green** chain"—such as the '412 Application—fail to provide the necessary written description support for the claimed three-pane, subsidiary-thread functionality. That is a direct response to PO's argument that the chain is "unbroken," not a new ground of unpatentability. The ground is still premised Cohen invalidating Claims 1–30 under §102. *See* Paper 1, 19–99. The Petition explicitly put the issue of effective filing date at the center of this proceeding, and the Board routinely considers reply arguments that clarify or reinforce a petitioner's original challenge to § 112 priority entitlement. *See Arthrex*, 35 F.4th at 1345 (noting that petitioner complied with § 311(b) by asserting invalidity grounds under § 102, which "merely dictates the grounds on which an IPR petition may be based, not the issues that the Board may consider to resolve those grounds.").

Hence, because PO has not met its burden to demonstrate uninterrupted § 112 support across the asserted priority chain, and because Petitioners' discussion of the missing written description in the '412 Application merely rebuts that deficiency, the Board should reject PO's attempt to bar Petitioners' reply arguments and reaffirm that Cohen remains a valid § 102(a)(1) prior art reference.

IV. CONCLUSION

For the foregoing reasons, Claims 1–30 of the '731 Patent should be found invalid.

Dated: November 5, 2025

Respectfully submitted,

/Robert C.F. Pérez/

Robert C.F. Pérez (Reg. No. 39,328)

**PILLSBURY WINTHROP SHAW
PITTMAN LLP**

7900 Tysons One Place, Suite 500

Tysons, VA 22102

Telephone: 703.770.7759

Facsimile: 703.770.7901

Email: robert.perez@pillsburylaw.com

Christopher Kao (*pro hac vice*)

Brock S. Weber (*pro hac vice*)

**PILLSBURY WINTHROP SHAW
PITTMAN LLP**

Four Embarcadero Center, 22nd Floor

San Francisco, CA 94111

Telephone: 415.983.1000

christopher.kao@pillsburylaw.com

brock.weber@pillsburylaw.com.

Counsel for Petitioners

Slack Technologies, LLC and

Salesforce, Inc.

CERTIFICATE OF COMPLIANCE

1. The undersigned certifies that this brief complies with the type volume limitations of 37 CFR § 42.24(a)(1)(i). This brief contains 3841 words (excluding the table of contents, the table of authorities, mandatory notices under 37 CFR § 42.8, the certificate of service, certificate of compliance, and appendix of exhibits), as calculated by the “Word Count” feature of Microsoft Word 360, the word processing program used to create it.

2. The undersigned further certifies that this brief complies with the typeface requirements of 37 CFR § 42.6(a)(2)(ii) and typestyle requirements of 37 CFR § 42.6(a)(2)(iii). This brief has been prepared in a proportionally spaced typeface using Microsoft Word in Times New Roman 14-point font

Dated: November 5, 2025

Respectfully submitted,

/Robert C.F. Pérez/

Robert C.F. Pérez (Reg. No. 39,328)

Christopher Kao (*Pro hac vice*)

Brock S. Weber (*Pro hac vice*)

Counsel for Petitioners

Slack Technologies, LLC and

Salesforce, Inc.

CERTIFICATE OF SERVICE

The undersigned hereby certifies that a true copy of the foregoing
PETITIONERS' REPLY TO PO RESPONSE FOR *INTER PARTES* REVIEW
OF U.S. PATENT NO. 11,973,731 and supporting materials are being served by
electronic mail on the following attorneys of record:

LEAD COUNSEL

Steven R. Katz (Reg. No. 43706)
FISH & RICHARSON
60 South Sixth Street, Suite 3200
Minneapolis, MN 55402
Telephone: 617-542-5070
Facsimile: 877-769-7945
Email: katz@fr.com

BACK-UP COUNSEL

Lawrence K. Kolodney (Reg. No.
43,807)
FISH & RICHARSON
60 South Sixth Street, Suite 3200
Minneapolis, MN 55402
Telephone: 617-542-5070
Facsimile: 877-769-7945
Email: kolodney@fr.com

/Robert C.F. Pérez/
Robert C.F. Pérez