

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

BRYCER, LLC and BRYCER MANAGEMENT, INC.,
Petitioner,

v.

TEGRIS, INC.,
Patent Owner.

IPR2023-01196
Patent 11,126,966 B2

Petitioner Reply

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UPDATED LIST OF EXHIBITS

Exhibit No.	Description
1001	U.S. Patent No. 11,126,966
1002	File History of U.S. Patent No. 11,126,966
1003	Declaration of Richard MacInnes
1004	Curriculum Vitae of Richard MacInnes
1005	U.S. Patent App. Pub. No. 2002/0029222 to <i>Key</i>
1006	U.S. Patent App. Pub. No. 2005/0021449 to <i>Sweeney</i>
1007	U.S. Patent No. 7,649,450 to <i>Campion</i>
1008	U.S. Patent Prov. App. No. 60/849, 478 to <i>Campion</i>
1009	U.S. Patent Prov. App. No. 60/886,269
1010	U.S. Patent Prov. App. No. 60/977,870
1011	U.S. Patent Prov. App. No. 60/981,091
1012	U.S. Patent Prov. App. No. 60/981,784
1013	U.S. Patent Prov. App. No. 60/969,905
1014	U.S. Patent Prov. App. No. 60/981,782
1015	U.S. Patent No. 5,680,329 to <i>Lloyd</i>
1016	WO 2004/104891 to <i>Chauhan</i>
1017	U.S. Patent App. Pub. No. 2006/0152349 to <i>Ratnakar</i>
1018	U.S. Patent App. Pub. No. 2006/0197678 to <i>Silvers</i>
1019	U.S. Patent App. Pub. No. 2003/0126002 to <i>Jackson</i>
1020	U.S. Patent App. Pub. No. 2004/0230455 to <i>McKinney</i>
1021	U.S. Patent No. 5,950,150 to <i>Lloyd</i>
1022	<i>Shamsi, U.M., GIS Applications for Water, Wastewater, and Storm Water Systems</i> , CRC Press (2005)
1023	Complaint for Patent Infringement <i>with</i> Exhibits 1-3, Dkt. No. 1, in <i>Tegris, Inc. v. Brycer, LLC</i> , No. 22-cv-5741 (N.D. Ill.)
1024	Buildingreports.com from archive.org (Feb. 2005)
1025	U.S. Patent App. Pub. No. 2004/0267595 to <i>Woodings</i>
1026	<i>GIS Technology and Applications for Fire Service</i> , An ESRI White Paper (March 2006)
1027	Docket Sheet from <i>Tegris, Inc. v. Brycer, LLC</i> , No. 22-cv-5741 (N.D. Ill.), as of July 10, 2023

Exhibit No.	Description
1028	Federal Court Management Statistics—Profiles, Reporting Period March 31, 2023, <i>available at</i> https://www.uscourts.gov/sites/default/files/data_tables/fcms_na_distpr ofile0331.2023.pdf
1029	Comparison of specifications for U.S. Patent Prov. App. No. 60/886,269 and application leading to U.S. Patent No. 11,126,966
1030	Compilation of Motion to Dismiss briefing in <i>Tegris, Inc. v. Brycer, LLC</i> , No. 22-cv-5741 (N.D. Ill.)
1031	U.S. Patent App. Pub. No. 2005/0149544 to <i>Bishop</i>
1032	U.S. Patent App. Pub. No. 2005/0075968 to <i>Apostolides</i>
1033	U.S. Patent App. Pub. No. 2006/0200453 to <i>Santrosyan</i>
1034	“Who Are Your Competitors,” Tegris Website, Aug. 8, 2016, <i>available at</i> https://web.archive.org/web/20160802184933/http://tegrisinc.com/node/109
1035	“Why Choose Us,” Tegris Website, Mar. 21, 2016, <i>available at</i> https://web.archive.org/web/20160321235244/http://www.tegrisinc.com/whychooseus
1036	U.S. Patent No. 8,613,109 to <i>Janoulis, Williams, et al.</i>
1037	Deposition Transcript for Deposition of Leroy McNulty, June 6, 2024
1038	Deposition Transcript for Deposition of Michael A. Miller, June 12, 2024
1039	Deposition Transcript for Deposition of Andrew Moren, June 14, 2024
1040	Deposition Transcript for Deposition of David H. Williams, June 21, 2024

I. Introduction

PO attempts to make a simple idea complicated. Its arguments contradict the specification and state of the art, attempt to rewrite the claims, and are inconsistent with and contradicted by its own declarants. Further, PO's invalidity arguments (against obviousness) are, in several instances, opposite its embodied-products assertions (for secondary considerations). PO cannot have it both ways. Here, however, the claims are both obvious and not practiced by PO or Petitioner.

For these reasons, and the additional ones below, the claims are obvious.

II. PO's Declarants Should be Afforded Little to No Weight

PO offered four declarants (McNulty; Miller; Moren; Williams). Their testimonies are full of inconsistencies and improper legal analysis and should be given little to no weight.

McNulty testified he first reviewed the '966 patent during deposition preparation, EX1037, 38:20-39:1, contrary to his sworn declaration. EX2016 ¶¶4-5, 24-26. He testified that when he did review it, he "[didn't] recall paying any attention to the claims," EX1037, 39:7-10, and the first time he saw claim 8 was the day before his deposition, EX1037, 40:7-19—despite offering an opinion about PO's and Petitioner's systems practicing the claims in his declaration dated over seven weeks prior. EX2016 ¶¶26-47, p22.

Miller testified he never (i) used PO's or Petitioner's system, EX1038, 24:7-16, 18:15-19:14; (ii) reviewed any code, databases, or web-based registries for the systems, EX1038, 23:6-24:16; or (iii) spoke with anyone that had hands-on experience or discussed the systems' functionality relative to the patent claims, EX1038, 19:11-14, 24:17-25:19—despite providing a declaration concerning the systems practicing the claims. EX2017 ¶¶25-48. He also testified he (i) did not write his declaration, EX1038, 14:16-19; (ii) could not recall any corrections he made apart from not having hands-on experience with the systems, EX1038, 32:5-12; and (iii) was “surprised” certain portions were copied-and-pasted from other declarations. EX1038, 32:13-18.

Moren testified his attorneys prepared the draft of his declaration, EX1039, 93:21-94:14, and he did not know what “*Id.*” referred to throughout his declaration, which “was something... the legal team was referring to,” EX1039, 110:4-15. He is also an interested party, being Patent Owner's President and a named inventor. EX2015 ¶¶1-2, 4, 8.

Williams testified he destroyed notes. EX1040, 10:6-16. He does not meet his own POSA definition, lacking requisite experience in inspection, maintenance or testing of fire hydrants, fire alarms, or building sprinkler systems. *Compare* EX1040, 24:12-28:7, 31:2-7 *with* EX2020 ¶¶42-43. He relied upon the wrong POSA date (2007 provisional, not 2008 non-provisional), EX2020 ¶42, and provided no analysis

for the relevance of post-2008 documents to a POSA's knowledge in 2008. EX1040, 109:22-110:9.

Additional inconsistencies and improper analysis are discussed below (*e.g.*, considering only a subset of prior art contrary to Federal Circuit precedent).

III. PO's Claim Constructions are Contrary to the Intrinsic Record

PO seeks to narrow the claims by reading in non-existent limitations, despite not arguing disclaimer or lexicography. There is no specification support. And not only are these IPR-constructed-invalidity positions often inconsistent with PO's embodied-products constructions (for secondary considerations), *see* §VI.A, but certain constructions are inconsistent with PO's declarants.

A. The Claims Do Not Require “Simultaneously Sending Separate Notices... of an Upcoming Inspection”

PO argues “[8b], [8c], [8d], and [8e] collectively recite *simultaneously* sending separate notices to the approval authority and asset owner of an *upcoming inspection*.” POR, 25-26.¹ Claim 8 is a method reciting several steps; there is no requirement to “simultaneously” send or that both notices be tied to “an upcoming inspection.” PO points to Figure 5's block 510 and 8:15-19 in support. POR, 26. Neither describes anything “simultaneous” or mandates timing. The passage

¹ All emphasis added, unless noted.

discusses a *single* notice with a *single* piece of information that “preferably”—but not mandatorily—is generated based on an annual inspection (“owner/inspecting authority is notified that an inspection is needed on an owned asset,” where “notification is preferably generated based on an annual inspection.”). EX1001, 8:15-19. It does not discuss the claimed two *separate* notices to different users containing different information. EX1001, 15:33-48.

[8e] says nothing about an upcoming inspection. [8e] provides only that the notice is (i) “of the status of the assets assigned to the approval authority” (which, of course, could be that the assets were *already* inspected), and (ii) “based on the analysis” from [8c]. EX1001, 15:33-48. [8c]’s general “notification events” likewise say nothing about and are not limited to “upcoming inspections.” *See* §§III.C, V.A.3. Consistent with this idea, the specification discloses notifying the approval authority of asset status *after* an inspection if, *e.g.*, fees are not paid. EX1001, 4:49-67.

Regarding [8d], it separately specifies “*a* notification event... compris[ing] a designatable interval in advance of an impending deadline for the inspection,” EX1001, 15:33-42, which can be different from [8c]’s “notification events.” §§III.C, V.A.3.

Thus, it is improper in [8e] and redundant in [8d] to include “upcoming inspections.” Lastly, PO did not actually ask MacInnes about “simultaneous,” EX2021, 62:1-63:1.

B. PO Improperly Seeks to Limit [8d]’s “Notifying” and [8e]’s “Sending... a Notice”

PO asserts [8d]’s “notifying” and [8e]’s “sending... a notice” means “*automatically sending a message, as opposed to providing access to a web-registry or software where information may be found.*” POR, 26. PO does not suggest any intent to deviate from the plain meaning to add “automatically” or incorporate a negative limitation that eliminates web-based access. *Linear Tech. Corp. v. Int’l Trade Comm’n*, 566 F.3d 1049, 1059-60 (Fed. Cir. 2009).

PO’s only intrinsic support is the specification’s statement that “[a] year later, the property owner will receive notice (via email, physical mail, or *other*) that the fire sprinkler system is due for an annual inspection” and “use the registry to find qualified inspection companies and/or request bids....” POR, 27 (quoting EX1001, 4:24-36). The specification describes “other” unspecified means. It is describing notice to the owner ([8d]), not approval authority ([8e]), and the owner using the registry for other functions (*e.g.*, selecting a qualified inspector ([8f])). There is nothing in the specification or claims that limits the notification method (whether email or within the registry). It is also inconsistent with PO’s secondary-consideration theory (relying on web “dashboard” with “tasks” for notice). *See* §VI.A.

C. PO Improperly Attempts to Rewrite [8c]’s “Notification Events”

PO asserts [8c]’s “notification events” means “upcoming inspections for fire hydrants and related assets,” POR, 30, which PO earlier qualified as “related life

safety device[s] or system[s],” POR, 29. PO does not assert lexicography or disclaimer for general “notification events.” Nor does the claim limit [8c]’s “notification events” to a particular event or require particular details about such event. Further, PO’s construction improperly attempts to read into “notification event” limitations already—and only—in the claim as to [8d]’s separate “*a* notification event” (“a notification event... the notification event comprises a designatable interval in advance of an impending deadline for the inspection.”). EX1001, 15:33-38; §V.A.3 (explaining difference between [8c]’s “notification events” and [8d]’s “*a* notification event”).²

Even if PO was correct that [8c]’s “notification events” specified certain assets (PO is not), PO’s construction is still wrong. The claim scope is *expressly* limited to fire hydrants, not unspecified “related assets” (especially when PO’s declarants testified that basically anything can qualify as life safety). *See* §§III.D, IV.

² 8[c]’s “notification events” are not necessarily the same as [8d]’s “a notification event” (*e.g.*, because of antecedent basis and plurality). *See also* §§III.A, V.A.3.

D. PO's "Fire Hydrant Management Software" Construction is Inconsistent with the Record

PO repeats its construction the Board rejected on institution. *Compare* POR, 30-31 *with* Paper 9 ("ID"), 17-20. PO does not argue lexicography or disclaimer or otherwise make meaningfully different arguments now. Contrary to PO, the plain meaning of "fire hydrant management software" bears no relationship to "schedule maintenance," "reminders" or other such particulars.

Even PO's expert, Williams, disagrees with PO, asserting the patent's Background does not correspond to the claim. EX1040, 48:6-49:4; *see also* 41:18-48:5.

As the Board found, "fire hydrant" simply describes the content of the data processed by the "management software," ID, 20, which is also consistent with Williams' testimony that the claimed asset "scope" is limited to fire hydrants. EX2020 ¶54; EX1040, 92:17-93:1; *see also* EX1002, 614.

IV. Level of Ordinary Skill in the Art

PO disputes the level of skill, POR, 34-35, but does not actually explain how or why it impacts obviousness.

Not only does Williams not meet PO's definition, *see* §II, PO's proposal is inconsistent with the '966 patent, which admits that fire hydrants and other assets are interchangeable and does not ascribe any significance to the asset type being managed. EX1001, 1:19-38; Pet., 28; ID, 18-19. Regardless, PO's declarants

testified inconsistently about what qualifies as a “life safety system,” effectively rendering the proposal meaningless—it could include any asset in the ’966 patent’s Background. EX1037, 57:4-63:6; EX1038, 34:8-37:13. And Williams testified that banking-industry compliance (which neither focused on nor discussed assets or life safety) was relevant to his analysis. EX1040, 104:10-107:16. It also cannot reasonably be disputed that Petitioner’s expert, MacInnes, has asset management experience with various assets, and the requisite experience under Petitioner’s proffered level. EX1003 ¶¶8-15; EX1004. He also provided his opinions via his declaration. EX2021, 39:20-40:3, 40:23-41:25.

V. The Challenged Claims are Obvious

PO makes several (largely overlapping) arguments regarding allegedly missing claim limitations and motivation to combine. They fail.

A. The Prior Art Renders Obvious the Claims

PO argues Petitioner’s obviousness ground is missing several of claim 8’s limitations. PO (like Williams) ignores much of the record evidence (including most of the state of the art) and misconstrues the prior art’s teachings and Petitioner’s obviousness theory. They also conduct a legally improper analysis, focusing on individual references, rather than the entire record including the state of the art. *See Randall Mfg. v. Rea*, 733 F.3d 1355, 1362 (Fed. Cir. 2013). Indeed, Williams confirmed he did just that: he considered only a small subset of prior art. EX1040,

95:16-97:12 (confirming opinions limited to Key, Sweeney, Chauhan, McKinney). So too did Moren. EX1039, 71:14-72:5.

As explained below, under a proper obviousness analysis, the challenged claims are obvious.

1. Notices to Owner and Approval Authority ([8d]-[8e])

PO asserts the references do not teach sending notices to the asset owner and approval authority in advance of an upcoming inspection, focusing exclusively on Key. POR, 37-38. PO's arguments are wrong. They are premised on improper claim constructions, *see* §§III.A, III.C, V.A.3, and contradicted by PO's own practicing-the-claims arguments (*e.g.*, notice via “dashboard” with “tasks”), *see* §VI.A. Moreover, there is nothing in [8e] requiring notice in advance of an upcoming inspection. *See* §§III.A, V.A.3.

Notwithstanding, PO's theory seemingly rests on the idea there is something inventive and non-obvious about providing notifications to stakeholders at various times, *e.g.*, to keep them informed and allow them to take appropriate action. For example, PO asserts that Key only talks about sending payment invoices to an asset owner *after* an inspection is complete. POR, 38. PO is wrong—Key contemplates notices to asset owners at various times. But even so, PO hardly invented *pre-payment*, as if it was non-obvious to send an invoice to an asset owner and require

payment in *advance* of an inspection, before the inspector expended time and resources on the inspection. Nor did PO invent renewal notices.

PO also misinterprets and ignores Key's examples and the Petition's rationale explaining why it would have been obvious to send notices to system users with relevant information at various times. Pet., 42-53, 38-41.

Among other things, Key teaches sending notices in various forms, including via email, Pet., 42-43, and automatically notifying the owner in advance of a new (*i.e.*, upcoming) inspection, Pet., 41 (discussion of Key regarding [8c] including citing and discussing EX1005, [0077]), 42 (referring back to [8c]); *see also* EX1040, 99:11-102:20 (Williams testifying regarding Key's disclosure of owners (users) receiving notice including for repeat inspections). And Key expressly gives an example of how an owner is notified in *advance* of an inspection (*e.g.*, a rescheduled inspection). EX1005, [0077].

PO's argument is also seemingly premised on the incorrect proposition that inspections occur once, *not* in repeated cycles. In other words, it does not account for the fact the notice is at least in advance of the *next* inspection in Key. Indeed, both the '966 patent and prior art (Key, Lloyd'150, etc.) disclose that the inspection processes are repeated on a periodic basis (*e.g.*, as required by code) from object creation through decommission. EX1001, 1:19-41; EX1005, [0043], [0049], [0055], [0077], [0092], [0108] (Key disclosure of automatic notification before scheduling

new inspection; repeating inspection process; periodic inspections), FIGs. 2, 5; EX1021, 2:23-27, 6:5-21. *See also* Pet. 44 (explaining Key’s disclosure to provide relevant information throughout asset lifecycle).

Moreover, Key discloses its “processes and methods... may be arranged differently, or *steps taken in a different order*. In other words, some processes and methods may be deleted, *repeated, re-ordered*, combined, or blended....” EX1005, [0063]. This is consistent with the teachings in Key and the state of the art to provide notices to stakeholders (including owners, inspectors, and approval authorities) at various times, including in advance of deadlines (*e.g.*, for an upcoming inspection).

Petitioner also explained—and PO does not meaningfully address—that the state of the art demonstrates the necessity and importance of providing various stakeholders relevant information so they can make timely decisions, take timely actions, keep up-to-date for renewals/inspections, etc. Pet., 44-51 (citing and discussing, *e.g.*, Key, Chauhan, McKinney, Buildingreports, Apostolides, and Lloyd’150); *see also* Pet. 22-27 (explaining, *e.g.*, need to provide reporting and management throughout asset lifecycle to all relevant stakeholders), 10-21 (further discussing exemplary art).

In short, the Petition explained the prior art (including Key and others) is ripe with such notices throughout the compliance lifecycle for wide-ranging assets for various users (including owners, inspectors, and approval authorities) and the

rationale for doing so—exactly like the '966 patent. Indeed, beyond Key itself and the above, Lloyd'150 explains to provide automatic notices regarding fire/life safety asset compliance on a scheduled basis to keep stakeholders informed and allow them to take action. EX1021, Abstract, 1:9-2:22, 7:1-42, 21:23-23:14. Campion teaches to provide notices to building owners of inspections coming due and to approval authorities regarding compliance. EX1007, 8:24-29, 1:18-2:33. Ratnakar explains to provide an owner notice if the asset is due for registration such that the owner can take action. EX1017, [0029]. McKinney discloses sending renewal notices to the homeowner (such that they can stay informed and take appropriate action) and keeping regulatory authorities notified to better improve compliance. EX1020, [0056], [0080], [0045]. Chauhan discloses notifying customers by mail or phone to inform them of upcoming events. EX1016, [0166]. It is further confirmed by PO's own cited prior art. EX2008, [0071], [0094], [0504]-[0505].

2. Notifying the Owner Regarding Cost and Inspection Type ([8d])

PO argues the prior art fails to disclose “notifying an asset owner regarding the type and cost of the inspection” in [8d]. POR, 38-40. Initially, this argument is premised on PO's improper attempt to narrow the claim concerning “sending” a notice to the owner to exclude web-based notifications (§III.B), which is also irrelevant as the Petition explained Key discloses various user-notification methods including “in a known manner usually via email” as well as web-based. Pet., 42

(discussing email and referring back to [8c]), 38-41 (discussing various notices to users in Key).

PO's argument is further premised on the incorrect assertion that there is no advanced notice disclosed in Key (there is, *see* §V.A.1). It is also inconsistent with its secondary-considerations arguments, where PO asserts notices can be provided via a dashboard and they do not need to include the cost and inspection type within the notice (rather that can be found separately elsewhere), and further that "cost" can be non-monetary. *See* §VI.A; Pet., 46.

Notwithstanding, PO addresses Key and Sweeney, POR, 39-40, 57-58, not the other state of the art demonstrating the obviousness of the claims about the trivial claimed details (*e.g.*, standard format, notice timing, and inclusion of cost and inspection type), Pet., 42-48; *see also* §V.A.1.

PO also argues Key "does not disclose or suggest [8d]'s 'notification event compris[ing] a designatable interval in advance of an impending deadline for the inspection.'" POR, 41. This argument fails for the same reasons as above, including that (i) it misinterprets and ignores Key's teachings about the content and timing of the notice (including for repeated inspections) and (ii) both PO's and Williams' analysis concerned the prior art (Key and Sweeney) in isolation, not the record as a whole—including Key, Sweeney, McKinney, Buildingreports, Apostolides, and Lloyd'150—demonstrating the obviousness here. *See also* §V.A.1; Pet. 45-47.

3. Sending a Standard Format Notice to the Approval Authority ([8e])

PO asserts Key does not disclose sending a “standard” format notice to an approval authority of an upcoming inspection deadline in ([8e]). POR, 42. This argument initially fails because [8e] does not require the notice to be of an upcoming inspection—as PO asserts—only that asset status is provided. EX1001, 15:43-48; §§III.A, C. Notably, the “notification events” in [8c] are not the same “*a* notification event” in [8d] and no notification event is referenced in [8e]. EX1001, 15:31-48. Thus, [8c]’s notification events could be any number of events, and are not limited to the single [8d] event. *See also* §§III.A, C.

It further fails, for similar reasons as above, because it ignores Key’s teachings about the timing and methods for notifications, and considers Key in isolation, not the evidence as a whole. *See also* Pet. 49-52; §§III.A-C, V.A.1. Indeed, Key discloses both sending notices (*e.g.*, via email, web-based, etc.) to the approval authority about the asset status and using standard formats for the jurisdiction, EX1005, [0043]-[0047], [0067], [0070]-[0071], [0087], [0091], [0177]-[0182], and to repeat the process and perform steps in different orders, EX1005, [0043], [0049], [0055], [0063], [0077], [0092], [0108]—and the state of the art confirms the obviousness of doing so. Pet., 49-53.

It is also worth noting that a “standard” format notice can have no meaning aside from what already existed in the prior art. In other words, by definition,

“standard” has to refer to something that pre-dated the ’966 patent and (as confirmed by the prior art) was already known in the industry.

Lastly, PO’s teaching-away argument, POR, 42, fails, as both PO and Williams cite to Key’s [0044], which generally describes Figure 1 and the Internet.

4. Owner Selection of Inspector ([8f])

PO argues the references do not disclose the asset owner selecting an inspector. POR, 43-46. Initially, PO is incorrect Petitioner conflated “qualified” and “proximity,” POR, 43-44, at least based on PO’s (inconsistent) infringement theory. The Petition provided alternate explanations—based on PO’s incorrect infringement theory and on the claim’s plain meaning. Pet., 53-61.

Petitioner first explained that, under PO’s infringement theory, Key discloses the inspectors are qualified and such qualification occurs by jurisdiction (indicating asset proximity). Pet., 57-58. PO again ignores its district-court assertion (and, here, its practicing-the-claims assertion for secondary considerations). *See* §VI.A.

PO next takes issue with Petitioner’s obviousness analysis under the claim’s plain meaning. POR, 44-45 (discussing Pet., 58-59). PO cherry-picks portions of the record and argues certain references allegedly do not, individually, disclose the limitation. That is the wrong legal analysis. The Petition demonstrated the obviousness of this limitation, *i.e.*, the owner selecting a qualified inspector located in asset proximity. Pet., 58-61. Notably, PO does not address Petitioner’s actual

obviousness explanation of why a POSA would have found it beneficial and advantageous to find a *qualified* inspector who is in *proximity* to the asset (*e.g.*, not located on the other side of the country), including for improved efficiency, reduced labor costs, quality of work, and improved response times. Pet., 60-61 (citing Key, Sweeney, Lloyd’150, McKinney, Woodings, and Chauhan).³

5. Fire Hydrant Management Software ([8a])

PO asserts the references do not disclose the claimed fire hydrant management software. POR, 46-50. This argument is premised on PO’s improper claim construction, *see* §III.D; ignores the ’966 patent’s admissions about asset interchangeability; and mischaracterizes Petitioner’s obviousness theory. Petitioner explained—using the ’966 patent’s admissions and state of the art—why it would have been obvious to have management software for a particular asset such as a fire

³ PO also argues Petitioner mischaracterized Sweeney. POR, 45. Not so. Sweeney discloses contractors by location and providing the bids to “a plurality of contractors,” EX1006, [0043], indicating that bidding may include a subset of contractors. Sweeney confirms this elsewhere. EX1006, [0084] (discussing contractors within regional market). Regardless, this does not negate Petitioner’s showing based on the record evidence.

hydrant (and applied throughout the system). Pet., 21-28. Petitioner relied upon numerous references (*e.g.*, Key, Chauhan, McKinney, Ratnakar, Silvers, Jackson, Lloyd’150, Campion, Shamsi, and an ESRI whitepaper) as support, Pet., 21-28, which largely goes un rebutted by PO. Regardless, claim 8 says nothing about any particulars concerning fire hydrants, and beyond limiting the claim scope to “fire hydrants,” anything about how managing the claimed “fire hydrant” asset is any different than other assets. Claim 8 doesn’t even require management of a “fire hydrant”; it just requires an “asset.”

PO’s other arguments—about alleged complexity of databases and schema, POR, 47-49—are contradicted by the specification, claims, and PO’s declarants. Moren testified that a database in the context of the patent “is a collection of data.” EX1039, 77:12-20. Williams and McNulty testified similarly. EX1040, 32:1-8, 33:15-39:17; EX1036, 2:26-31; EX1037, 37:7-16.

B. Motivation to Combine

PO argues there is no motivation to combine and a teaching away. POR, 51-58. Not so.

These arguments are largely premised on the legally and factually improper assertion that “life safety” assets are not interchangeable with, and a POSA would not have looked to, non-life safety assets in its analysis.

Petitioner explained above the problems with this, including the '966 patent's admissions about asset interchangeability, and PO's declarants' inconsistent testimony about what qualifies as a "life safety asset." Nor does the fact that the claims were ultimately limited to "fire hydrants" impact the overall field of the invention (and the assets that are allegedly applicable to the same).

It further fails because PO does *not* address that the various references—including Key and others (discussed above and in the Petition)—explain the need and importance to manage various jurisdictionally regulated assets throughout their lifecycle (including "fire hydrants" and "life safety" assets). Critically, PO's argument is limited to Key, POR, 51-54, and fails to address the Petition's other art. Pet., 21-28; §V.A. As to PO's arguments about motivation for specific limitations, POR, 55-58, they ignore what Petitioner actually argued and the record evidence. They fail for the same reasons discussed above regarding the allegedly missing claim limitations (and obviousness of incorporating the same). They also fail because obviousness is considered as a whole, not based on individual limitations.

Lastly, PO's teaching-away argument, POR, 54-55, fails. PO asserts that Key teaches away from certain limitations. *Id.* PO does not cite to Key, apart from part of its Background. *Id.* (citing EX1005, [0003]-[0011]). Key's Background is discussing prior art problems for complying with jurisdictional codes due largely to reliance on "[t]he paper flow method." EX1005, [0003]-[0011]. That is not teaching

away—instead, Key (like the '966 patent) describes the “need... for an efficient, economical process for the transfer of information between jurisdictions and the entities that are mandated to perform required activities.” EX1005, [0014], [0015]-[0020]; *see also* Pet., 10-14 (Key overview). In reality, Key never criticizes, discredits or otherwise discourages investigation into the claimed invention—nor does PO point to any specific language in Key. *See DyStar Textilfarben GmbH v. C.H. Patrick Co.*, 464 F.3d 1356, 1363 (Fed. Cir. 2006).

VI. PO’s Secondary Considerations Fail

PO argues secondary considerations. POR, 59-67. Initially, secondary considerations here “cannot overcome a strong prima facie case of obviousness.” *Wyers v. Master Lock Co.*, 616 F.3d 1231, 1246 (Fed. Cir. 2010). But even if considered, they fail.

A. Neither PO’s Nor Petitioner’s System Practices Any Challenged Claim

PO has failed to show either PO’s or Petitioner’s system practices any claim. *See Muniauction, Inc. v. Thomson Corp.*, 532 F.3d 1318, 1328 (Fed. Cir. 2008); *Fox Factory, Inc. v. SRAM, LLC*, 944 F.3d 1366, 1372-73 (Fed. Cir. 2019). PO discusses only claim 8, POR, 61-63; there is nothing concerning claims 9-16.

PO’s claim charts (EX2018; EX2019) largely parrot the claim and rely upon screenshots. Its declarants follow suit, referring to the charts, without additional analysis. EX2015 ¶¶67-88; EX2016 ¶¶26-47; EX2017 ¶¶28-48; *see also* §II.

Petitioner first provides three examples (1-3) of how the charts affirmatively show the systems do *not* practice any claims. Petitioner then provides examples where PO failed to meet its burden (4-10).

I. PO does not assert the “notice” to the owner ([8d]) includes either a monetary item (*e.g.*, price), under the plain meaning of “cost,” or any cost associated with the type of inspection. EX2018, 4-6; EX2019, 12-16. *See K-2 Corp. v. Salomon S.A.*, 191 F.3d 1356, 1364 (Fed. Cir. 1999). Rather, PO asserts costs can include non-monetary items (*e.g.*, “time” and “effort”) and the notice itself does *not* need to include costs but instead can “include references to publications where additional costs may be listed.” EX2018, 4-5.

As to non-monetary items, PO cites to the patent at 8:26-37, which does not support PO. The citation discloses “general costs associated with the inspection,” which is consistent with “costs” being monetary throughout the specification. EX1001, 2:9-10, 3:3-4, 10:46; EX1039, 84:6-12 (Moren unable to identify anything in patent supporting “cost” being non-monetary). It is likewise consistent with (i) the action the owner takes in response (paying), EX1001, 4:51-52, 4:53-67, 9:3-20, 9:61-63; EX1030, 28-30, 74-76; and (ii) how PO used the term to describe its patent-pending system and in its documents. EX1035, 1; EX1039, 153:14-155:14, 129:8-130:3; EX2025, 3, 5, 21. It is also consistent with *Miller and McNulty* that the claimed “cost” means money. EX1038, 41:5-42:5; EX1037, 68:12-69:6. Regardless,

PO points to no monetary cost (or even any non-monetary items) within the alleged notices in either system.

As to the latter, the claim’s plain language requires the notice “include[] a cost associated with the type of inspection”—not some unexplained reference that may elsewhere have a cost (that itself is not associated with the inspection type). PO provides no intrinsic support for its assertion. And the prices PO points to for Petitioner’s system are both *outside* the notice, and *not* costs associated with the type of inspection due by the owner. EX2019, 12-14; EX1030, 29. The prices are for inspectors filing reports. EX2019, 12-14; EX1030, 29. PO’s system fails for effectively the same reasons. EX2018, 4.

Moreover, Williams declared the notices must “be self-contained/complete in content” and “all information the recipient needs to know about the situation associated with the notice is *contained in* the notice.” EX2020 ¶61; *see also* ¶62; EX1040, 69:8-16 (agreeing “notice itself *must* contain... [cost] associated with... type of inspection”). Thus, reference to additional information outside the notice, per Williams and the claim language (“includes... a cost...”), does not meet [8d]. *Mars, Inc. v. H.J. Heinz Co.*, 377 F.3d 1369, 1375-76 (Fed. Cir. 2004); *Genentech, Inc. v. Chiron Corp.*, 112 F.3d 495, 501 (Fed. Cir. 1997).

2. [8d] requires that “the *owner* of the asset, *upon remotely accessing* the... registry, may *update* and review the status of the assets,” but Petitioner’s

system affirmatively does *not* allow the owner to do so. EX2019, 6 (explaining Premises User, *i.e.*, “owner,” has “view only” access); EX1030, 27 (same). The same is true for PO’s system. EX2018, 6 (“All asset changes can be made by the AHJ. The owner can request changes be made to the asset *via the AHJ.*”). And PO’s declarants (Moren; Williams) confirmed the owner *itself* must be able to perform the specified functions, not some other entity (and likewise for the other claimed user classes). EX1039, 46:8-22, 47:18-21, 86:16-20, 88:17-20, 90:21-91:6; EX1040, 62:21-66:7.

3. PO does not show the owner in either system can select any inspector—let alone a qualified inspector based on asset proximity ([8f]). EX2019, 19-23; EX2018, 9-14. For Petitioner’s system, PO points only to “an inspector’s web-based template for inputting an inspection report” and actions taken by the inspector (not owner). EX2019, 19-23. That is because the owner cannot select the inspector. For PO’s system, PO includes a screenshot with “Search for Inspector,” EX2018, 11, which fails to show owner selection, inspector qualifications, or asset proximity. And, as with Example 2, the claims require the owner perform selection, not another party.

4. PO fails to show [8b]. For PO’s system, there is no evidence that real-time asset records are retrieved. PO points to a drop-down menu for “Role*” selection, EX2018, 3; EX1039, 101:5-14, which, at best, shows different users’

access. PO provides a narrative, EX2018, 3, which does not describe real-time records, where the records are retrieved from, or what does the retrieval. *See also* EX1039, 77:22-78:12. For Petitioner's system, PO parrots the claim and provides screenshots, but fails to show how the system and its components function to meet [8b]. EX2019, 10-11.

5. PO fails to show [8c]. For PO's system, PO shows only a screenshot where the approval authority can set inspection frequency. EX2018, 3-4. This provides no evidence of analyzing records, let alone to identify notification events. PO provides similarly conclusory support for Petitioner's system. EX2019, 12.

6. PO fails to show its system performs [8e]. EX2018, 6-9. It asserts accessing a passive "dashboard" with "tasks" meets the claimed sending a notice, EX2018, 6-9, while for invalidity, PO argued oppositely.

7. PO fails to show either system sends notices "simultaneously," despite (improperly) arguing for such construction. *See* §III.A.

8. PO fails to show [8h]. It points to website screenshots, EX2018, 16-17; EX2019, 25-29, which say nothing about inspection information being stored in a database or that it is stored "in association with the asset."

9. PO fails to show [8i]'s report transmission to the approval authority, or provide any evidence that "the noted deficiencies" are "stor[ed]... in association with the asset." EX2018, 18-23; EX2019, 30.

10. PO never explains what meets the claimed “fire hydrant management software,” “web-based registry,” or “database,” or that “the web-based registry is configured to run a fire hydrant management software.”

B. PO has Failed to Show a Nexus or That Any Alleged Secondary Consideration is Attributable to the Claimed Invention

There is no nexus because the systems do not practice the claims, *see* §VI.A, and because the systems are not coextensive with the claimed features. *Fox Factory*, 944 F.3d at 1373-74.

Here, there is no dispute both systems include numerous unclaimed features—managing, *e.g.*, **numerous** asset types other than fire hydrants. EX2019, 1, 14; EX2018, 10, 14, 24, 26, 32. Critically, PO amended the claims to limit them specifically to fire-hydrant management. *See* §III.D. PO has provided no evidence that any secondary consideration is attributable to management of fire hydrants, rather than other assets (and to the extent the evidence shows anything, it shows fire-hydrant management was not critical). Nor has PO provided any evidence that they are attributable to (unspecified) novel features. *Ormco Corp. v. Align Tech., Inc.*, 463 F.3d 1299, 1312-13 (Fed. Cir. 2006).

PO’s “unexpected results” argument rests on “two case studies”—which are actually PO’s own marketing materials—allegedly showing use of its system improved compliance. POR, 63-64. This fails. The “studies” describe many assets, EX2004, 8; EX2025, 13, but **never** fire hydrants, EX2004; EX2025; EX1039, 121:9-

122:16, 125:7-126:11. It is thus impossible to determine from the “studies” whether there was any relation to the claimed “fire hydrant management software.” They also discuss the importance of *non*-fire-hydrant asset management. EX2025, 10; EX1039, 133:1-135:15.

Further, any compliance increase was largely driven—not by the system itself—but by the fire marshal mandating its use. EX2004, 4; EX2025, 5-6; EX1039, 116:1-117:9, 118:7-119:4, 69:9-12. Moreover, PO does not provide underlying data from which the alleged increases can be calculated. EX1039, 119:6-121:1, 124:1-125:5. In short, PO has proffered vague, conclusory assertions that using an asset management system increased compliance; that is hardly unexpected.

PO’s “commercial success” argument, POR, 64-65, fails. For the same reasons as “unexpected results,” PO has not shown commercial success (if any) was a direct result of the unique characteristics of the claims. *SightSound Techs., LLC v. Apple Inc.*, 809 F.3d 1307, 1319 (Fed. Cir. 2015). Moreover, despite PO asserting its system was commercially successful, Moren was unable to provide *any* supporting data (*e.g.*, revenue, number of users, or number of reports). EX1039, 103:16-105:2. *See MRC Innovations, Inc. v. Hunter Mfg., LLP*, 747 F.3d 1326, 1336 (Fed. Cir. 2014). As to Petitioner’s alleged success, there is no evidence it is attributable to the claimed fire-hydrant-management system or its novel features, nor any evidence of the relative market or significance within. *Robert Bosch, LLC v.*

Iancu, 778 F. App'x 871, 881 (Fed. Cir. 2019). Regardless, it is based on Moren's assumptions that are not supported by any data, EX1039, 105:21-107:7, and fail to consider the market as a whole, EX1039, 139:15-141:16 (failing to consider other identified "third party ITM compliance providers"). Moren also made no attempt to differentiate revenue based on asset type. EX1039, 112:4-113:13; EX2040, 25.

PO asserts a long-felt need for compliance. POR, 65-66. The claims are not directed to compliance generally, but rather a specific fire-hydrant-management system. *Ethicon Endo-Surgery, Inc. v. Covidien LP*, 812 F.3d 1023, 1035 (Fed. Cir. 2016). PO is incorrect there were no prior art fire and life safety compliance systems; there were many. Pet., 10-28.

PO argues copying, POR, 66-67, but Petitioner and PO don't practice the claims and there is no probative evidence Petitioner copied anything. *Wyer*, 616 F.3d at 1246. Further, PO relies on the uncorroborated assertions of Moren, an interested party.

PO argues licensing, POR, 67, despite Moren admitting there are none. EX1039, 139:5-8.

VII. Conclusion

The challenged claims are unpatentable.

Respectfully submitted,

Dated: July 26, 2024

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CERTIFICATE OF COMPLIANCE

I hereby certify that this paper complies with the type-volume limitation of 37 C.F.R. §42.24 (as determined by the Microsoft Word word-processing system used to prepare this paper) because it contains 5,596 words, excluding the parts of the paper exempted by 37 C.F.R. §42.24(a).

Dated: July 26, 2024

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CERTIFICATE OF SERVICE

I hereby certify that the foregoing Petitioner Reply, Updated Exhibit List, and Exhibits 1034-1040 were served via email on July 26, 2024, upon the following counsel of record for Patent Owner:

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