

**IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF PENNSYLVANIA**

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RAILWARE, INC.,	:	
Plaintiff,	:	Case No.: 2:24-cv-02963 (JMY)
-against-	:	
SOUTHEASTERN PENNSYLVANIA	:	
TRANSPORTATION AUTHORITY,	:	
Defendant.	:	
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RAILWARE’S OPENING CLAIM CONSTRUCTION BRIEF

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I. INTRODUCTION

Plaintiff Railware, Inc. (“Railware”) proposes the following three groups of claim terms for construction: (1) “release code,” “removal code,” “secret code,” and “secret release code,” as used in the Asserted Patents¹ (collectively the “Code Terms”), (2) “user terminal” as used in the ’782 patent, and (3) “user terminal” and “remote user terminal” as used in the ’835 and ’115 patents. *See* Vogel Decl., Ex. 4. Railware’s proposed constructions for these groups of terms remain faithful to the claim language and specifications of the Asserted Patents, as well as the extrinsic evidence in the form of expert testimony and relevant dictionary definitions. *See Nature Simulation Sys. Inc. v. Autodesk, Inc.*, 50 F.4th 1358, 1363 (Fed. Cir. 2022); *Phillips v. AWH Corp.*, 415 F.3d 1303, 1314 (Fed. Cir. 2005).

In contrast, Defendant Southeastern Pennsylvania Transportation Authority (“SEPTA”) advances premature and unsupported arguments regarding indefiniteness and seeks to add improper and confusing words to the claims that are not supported by the intrinsic or extrinsic evidence. *See* Vogel Decl., Ex. 5. Specifically, with respect to the Code Terms, not only does SEPTA fail to propose alternative constructions to Railware’s proposed constructions, SEPTA also prematurely asserts that the Code Terms are indefinite. *Id.* However, “the weight of the jurisprudence disfavors indefiniteness determinations at the *Markman* stage of patent litigation,” and, as such, SEPTA’s indefiniteness arguments should be ignored.² *CSB-Sys. Int’l v. SAP Am., Inc.*, No. 10-2156, 2011 WL 3240838, at *16–18, 20 n.16 (E.D. Pa. July 28, 2011) (collecting

¹ Asserted Patents refers collectively to the three (3) patents at issue in this case, namely U.S. Patent Nos. 9,517,782 (the “’782 patent”), RE47,835 (the “’835 patent”), and RE49,115 (the “’115 patent”). Copies of these patents are attached as Exhibits 1-3 to the Declaration of Bryan J. Vogel in Support of Railware’s Opening Claim Construction Brief (“Vogel Decl.”), filed contemporaneously herewith.

² SEPTA failed to meet the deadline for service of its invalidity positions under this Court’s Scheduling Order. Indeed, SEPTA did not serve its substantive positions on invalidity, including indefiniteness, until February 7, 2025, 11 days after the Court-ordered deadline of January 27, 2025. For this additional reason, SEPTA’s indefiniteness arguments should be ignored.

cases). Nevertheless, even if the Court is inclined to consider SEPTA’s premature indefiniteness arguments—which are based on attorney argument alone, with no supporting expert testimony—SEPTA cannot satisfy its heavy burden of showing by clear and convincing evidence that the Code Terms are indefinite. With respect to “user terminal” and “remote user terminal,” SEPTA proposes constructions that improperly add words to the claims that are contrary to the intrinsic and extrinsic evidence, and lead to confusing and inconsistent readings of the claims. Rather than staying true to the intrinsic and extrinsic evidence of the Asserted Patents—as Railware’s proposed constructions do—SEPTA’s proposed constructions appear motivated instead by a desire to manufacture potential noninfringement and/or invalidity arguments. SEPTA’s improper gambit to try to manufacture such arguments through its proposed claim constructions should be rejected.

II. BACKGROUND

A. Technology Background: Railway Control and Railway Safety Systems

Modern railroads control the movement of trains through a railway network using a centralized system known as a centralized traffic control (“CTC”) system. Ahmadian Decl.³ ¶ 14; *see also id.* ¶¶ 15-18, 204. CTC systems are used for many things, including monitoring, tracking, and operating trains traversing tracks throughout the railway network. *Id.*; *see also* Vogel Decl., Ex. 14. CTC systems are controlled by individuals known as “dispatchers”⁴ and typically include one or more control consoles. *Id.* The control console can take many forms, and provides an interface to facilitate control of, or interactions with and/or between, a variety of

³ Declaration of Mehdi Ahmadian, Ph.D. in Support of Railware Inc.’s Claim Construction Submissions, dated March 14, 2025 and exhibits (“Ahmadian Decl.”), filed under seal at ECF 35. A redacted copy of the Ahmadian Declaration is filed contemporaneously herewith.

⁴ The Asserted Patents sometimes refer to the dispatcher as a “railway traffic controller.” *See, e.g.*, ’782 patent at 6:5, 7:35-36, 7:56, 8:22, 9:21, 9:40, 9:44-45, 9:48, 9:50, 9:52-53, 10:4, 10:7, 10:35; *see also, e.g.*, ’835 patent at 3:7-9; 6:17-20; 8:6-8; ’115 patent at 3:14-16; 6:20-21; 8:9-14.

back-end and front-end components to facilitate control of train traffic throughout the railway network. *Id.* The control console is configured to display various categories of information, such as track conditions, train traffic, and scheduling. *Id.* Through the control console, the dispatcher can view and facilitate control of the movement of trains throughout the railway network. *Id.* Movement of trains within a sector of track is typically governed by interlocking signals, which are indirectly controlled by the dispatcher via interactions with the control console. *Id.*

Railway tracks periodically require maintenance. *Id.* ¶ 15. When that happens, railway field workers⁵ must physically enter the track area to perform the necessary maintenance. *Id.* This can be a very dangerous task for those workers. *Id.* ¶ 16. Through human error or otherwise, trains have been erroneously diverted to active work zones and have resulted in the death and/or injury of those railway field workers working on the track, as well as damage to equipment and/or property. *Id.* ¶¶ 16, 18, 51. As such, over the years, a variety of safety systems were developed to attempt to mitigate that extensive danger. *Id.* ¶¶ 16-18. For example, some such systems included basic alarm systems that were designed to warn railway field workers of trains entering into work zones. *Id.* ¶ 16. The hope was that these alarms would give the workers sufficient time to move out of the way of incoming train traffic. *Id.* These systems still led to death and/or injury of railway field workers, as well as damage to equipment and/or property. *Id.*

As another example, using the CTC system, the dispatcher could remotely control the tracks used by trains. *Id.* ¶ 17; *see also* '782 patent at 1:48-62; '835 patent at 1:55-2:2; '115 patent at 1:62-2:9. This remote-control approach enabled the remote dispatcher to “block” sections of track and to temporarily reroute trains away from blocked track sections that were

⁵ The Asserted Patents sometimes refer to the railway field worker as a “maintenance worker.” *See, e.g.*, '782 patent at 5:26, 5:28, 5:48, 8:13, 8:27; *see also, e.g.*, '835 patent at 5:35-41; 7:62-65; 8:3-6; 9:7-12; '115 patent at 5:38-44; 7:65-67; 8:6-9; 9:9-14.

being worked on by railway field workers. Ahmadian Decl. ¶ 17; *see also* '782 patent at 5:50-54; '835 patent at 5:62-66; '115 patent at 5:65-6:2. But these systems were flawed because blocking/unblocking of track sections was ultimately controlled entirely by the remote dispatcher. Ahmadian Decl. ¶ 17. As such, a mistake, error, or misunderstanding by the dispatcher could (and did) lead to blocks that were removed prematurely, errantly, or mistakenly by the dispatcher, such as when a dispatcher falsely believed that the work was complete, or because the dispatcher intended to remove a different block and mistakenly removed a block on a track section where railway field workers were still working. *Id.*; *see also id.* ¶ 18 (discussing “Form D” control systems); '782 patent at 2:27-37; '835 patent at 2:33-43; '115 patent at 2:40-50; Vogel Decl., Exs. 6, 8. Despite these protections, human errors and accidents continued to occur, resulting in railway field worker injuries and fatalities and other damages. *Id.* ¶¶ 17-18.

B. Events Giving Rise to the Inventions of the Asserted Patents

Consistent with the infirmities of prior systems discussed above, unfortunately, a tragic event occurred that gave rise to the inventions described and claimed in the Asserted Patents. In 2013, a Metro-North Railroad passenger train struck and killed several railway field workers in West Haven, Connecticut. *Id.* ¶ 51. This happened because a remote dispatcher mistakenly removed the block protection on the wrong railroad track (that appeared in close proximity on the control console to the block protection that should have been removed). *Id.*

Immediately after the accident occurred, Metro-North Railroad (Railware’s long-time customer) asked Railware’s President, Ross Pirtle (the inventor on the Asserted Patents), to determine and assess the cause of this tragic accident. *Id.* Mr. Pirtle conducted an investigation, and determined that the accident was caused due to the dispatcher—believing the track to be clear—routing a train on the track where the workers were still working, which resulted in the train striking the railway field workers on the track and tragically killing them. *Id.* Mr. Pirtle

developed his inventions that are described and claimed in the Asserted Patents to prevent this from happening again. *Id.* ¶ 52. Specifically, as discussed further below, Mr. Pirtle invented an unconventional network architecture for generating, transmitting, receiving and using a code that is associated with a block placed on a track by a dispatcher and that is transmitted to the railway field worker(s) that is working on the track, but otherwise is not readily available to the dispatcher. *See* discussion, *infra*, Section II.C; *see also* Ahmadian Decl. ¶¶ 25, 88, 113, 115, 117. In order to remove the block on a track, the code must be returned to the CTC system, such as by the dispatcher receiving the code from the railway field worker, for example, through a radio transmission. *See* Ahmadian Decl. ¶ 47. By putting the power to lift a block in the hands of the railway field worker(s) working under its protection, Mr. Pirtle's patented inventions prevent errant unblocking of track(s) within the railway network and ultimately save lives, prevent injury, and prevent damage to equipment and/or property. *See id.* at ¶ 49. Mr. Pirtle's inventions are implemented at some of the busiest railroads in the U.S., as well as implemented in Railware's train control software (Dispatch X), which would ultimately become a commercial embodiment of the Asserted Patents called EEPS (Enhanced Employee Protection System). *Id.*

Railware's patented technology has received praise in the industry. For example, the Federal Railroad Administration ("FRA") issued Safety Advisory 2014-02 "to reemphasize the importance of clear communication and compliance with applicable rules and procedures regarding roadway worker authority limits on controlled track." Vogel Decl., Ex. 7. Therein, the FRA specifically stated "FRA recommends that railroads adopt one or more electronic technologies that may serve to fill the technology gap. Examples of such technology already in use include the following systems: Enhanced Employee Protection System [EEPS] . . . ,” referring to Railware's commercial embodiment of its patented technology. *Id.* at 70269.

C. The Asserted Patents

In general, the Asserted Patents cover systems, apparatuses, and methods that, *inter alia*, protect railway field workers (and equipment and property) who go out onto train tracks to perform necessary maintenance from the life-threatening danger of unexpected train traffic. Ahmadian Decl. ¶¶ 21, 25; '782 patent at 1:14-17, 11:12-14; '835 patent at 1:21-24, 11:40-42; '115 patent at 1:29-32, 11:37-39. The Asserted Patents accomplish this goal by permitting a train dispatcher to place “blocks” on specified segments of track that prevent trains from being routed into the blocked area, where the power to remove the block is placed in the hands of the railway field worker(s) out on the tracks in the form of a code. Ahmadian Decl. ¶¶ 25-33; '782 patent at 7:39-47, 7:50-55; '835 patent at 7:57-65, 8:1-6; '115 patent at 7:60-8:1, 8:4-9. To remove the block, the code must be returned to the CTC system, such as, for example, by the dispatcher receiving the code through a radio transmission. Ahmadian Decl. ¶¶ 34-48; *see* '782 patent at 7:55-59, 11:5-7; '835 patent at 8:6-10, 11:33-39; '115 patent at 8:9-14, 11:30-36.

1. U.S. Patent No. 9,517,782

The '782 patent, entitled “Tools for Railway Traffic Control,” is directed “to railway traffic control, and more specifically, a system, apparatus, and method for railway traffic control to address concerns for safety of railway workers working on or near railroad tracks.” '782 patent at 1:14-17; Ahmadian Decl. ¶¶ 19-21; *see also id.* ¶¶ 22-52. The '782 patent identifies as a fundamental goal of the inventions, the provision of systems, tools and methods that assure “the railway worker has more control over the traffic through the rail block in which the worker is working, and fatal on-track accidents can be reduced.” '782 patent at 11:12-14; Ahmadian Decl. ¶ 25. To accomplish this goal, the '782 patent requires “generating a removal code and transmitting the removal code to the electronic contact address of the railway field worker, and

permitting the block to the track sections to be removed only upon entry of the removal code in the centralized railway control system.” ’782 patent at 2:47-57; Ahmadian Decl. ¶ 25.

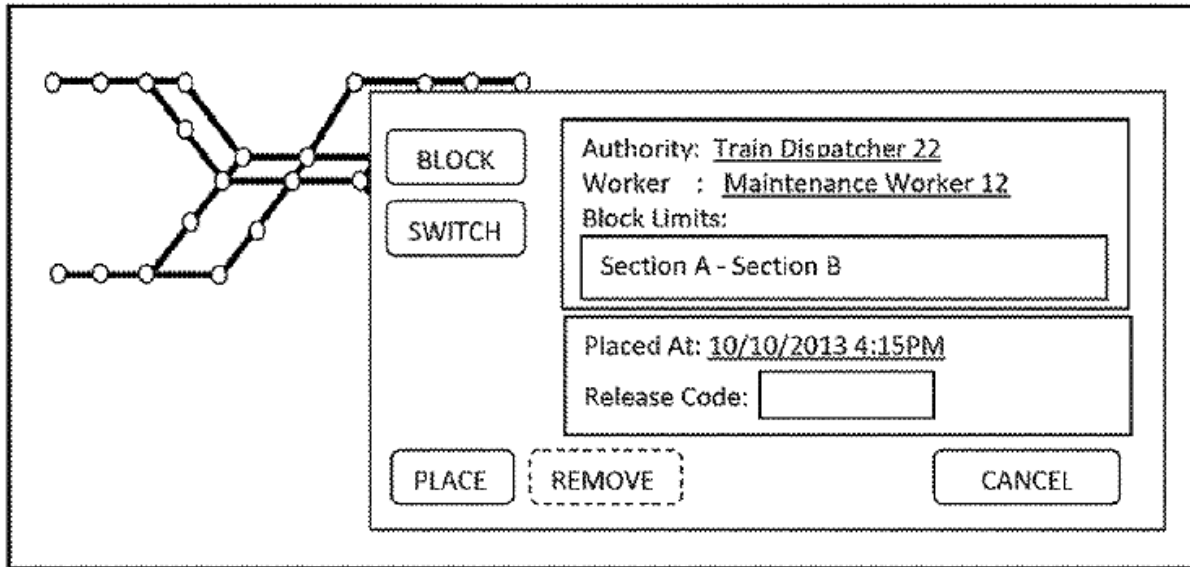
The ’782 patent describes the inventions in further detail, explaining that, first, the dispatcher places a block on a specified rail section by inputting corresponding information into the control console via a user interface. ’782 patent at 7:39-47; Ahmadian Decl. ¶ 26. “Once the block is put into place,” the railway traffic control terminal automatically generates a “random secret code,” saves this code to an “internal storage,” and “sends the code to the maintenance worker designated for track work.” *Id.* at 7:50-55; *see also id.* at 7:1-3; Ahmadian Decl. ¶ 29. The ’782 patent repeatedly emphasizes that the release or removal code is “secret” from the dispatcher. *Id.* at 5:58-60 (“the code generator 101B is configured to produce [a] removal code . . . , such as a cipher which is . . . secret.”); *see also id.* at 9:33-34, 9:65-10:1, 10:10-13, 10:15-22; Ahmadian Decl. ¶ 81-131. Indeed, the release or removal code remains “secret” from the dispatcher until it is time to remove the block. ’782 patent at 10:10-13; Ahmadian Decl. ¶¶ 34, 46-47, 99, 349-350.

Once the block is placed, information corresponding to the now-blocked railway section is displayed to the dispatcher on the user interface, but this displayed information does not include the computer-generated removal or release code, which remains “secret” from the dispatcher. *See, e.g.,* ’782 patent, Figure 7 (shown below); *see also id.* at 5:58-64, 7:4-10, 7:59-61, 10:23-36; Ahmadian Decl. ¶ 30.



#	Type	Placed On	Issued To	Limits	Placed By	Removed	Removed By
1	Maint.	10/10/2013 4:15PM	Maintenance Worker 12	Sec. A- Sec. B	Train Dispatcher 22	10/10/2013 10:00PM	Train Dispatcher 22
2	Maint.	10/11/2013 12:00PM	Maintenance Worker 35; Maintenance Worker 36	Sec. C- Sec. D- Sec. F	Train Dispatcher 44	N/A	N/A

The dispatcher “may not remove” the block on the specified track section “without the input of the release code.” ’782 patent at 7:55-59; *see also id.* at 11:1-5 (“Once a block has been placed, the interlock remains in a blocked s[t]ate, until the maintenance worker supplies the release code” to the dispatcher or railway control apparatus); Ahmadian Decl. ¶ 34. Thus, “[s]o long as the block is in place, [the] maintenance worker can perform on-track work, without interference of oncoming train traffic.” ’782 patent at 11:5-7; Ahmadian Decl. ¶ 34. Along these lines, the specification of the ’782 patent explains that the “remove” button through which the dispatcher can remove a block “is disabled without the input of the secret code.” ’782 patent at 10:10-13; Ahmadian Decl. ¶¶ 84, 150. This is illustrated in, for example, Figure 6 (shown below), where the dispatcher has not yet received the code from the railway field worker, and the “remove” button is disabled or “dashed out.” ’782 patent at 7:5-61; Ahmadian Decl. ¶¶ 149-151.



“After the maintenance worker finishes the assigned work and is clear of the train tracks, he/she may then supply the interlock control system with the release code, and the interlock control system in turn can release the interlock over the block.” ’782 patent at 7:7-11; Ahmadian Decl. ¶ 35.

The ’782 patent discloses a number of different embodiments that describe how the railway field worker can return the removal or release code to the dispatcher/railway control apparatus to release a block on a track. ’782 patent at 3:11-12; Ahmadian Decl. ¶ 36. This includes, for example, the railway field worker (1) returning the removal or release code “manually” via calling the dispatcher and providing the removal or release code to the dispatcher to enter the removal or release code into the dispatcher’s terminal to release the block or (2) returning it “automatically” through the railway field worker’s user terminal or mobile device to provide the removal or release code to the CTC system without dispatcher intervention. ’782 patent at 3:11-29, 8:21-24, 8:40-45, 6:4-8, 10:23-36; Ahmadian Decl. ¶¶ 36-47.

The ’782 patent specification provides exemplar embodiments illustrating the “manual” return of the removal or release code to release a block on a track. For example, the ’782 patent

specification makes clear that the railway field worker may simply call the dispatcher and provide the removal or release code to the dispatcher, who then enters the code into the dispatcher's terminal to remove the block on a track. *See* '782 patent at 8:21-24; Ahmadian Decl.

¶ 42. For example, as discussed above with respect to Figure 6, the remove button in the dispatcher's user interface is disabled until the dispatcher receives the code from the railway field worker. '782 patent at 7:5-61; Ahmadian Decl. ¶¶ 149-151. As another example, "FIG. 8 [annotated below] shows the user interface of the railway traffic control terminal 105 as the railway traffic controller inputs the release code to remove the block on certain track sections." '782 patent at 8:21-24; Ahmadian Decl. ¶ 42.

The screenshot displays a user interface for a railway traffic control terminal. On the left, there is a track diagram with several segments. To the right of the diagram is a form with the following elements:

- Two buttons labeled "BLOCK" and "SWITCH" are positioned to the left of a text input field.
- The text input field contains "Section A - Section B".
- Below this field is a label "Placed At: 10/10/2013 4:15PM".
- Below the "Placed At" label is a "Release Code:" label followed by a text input field containing "912478". This entire "Release Code" section is highlighted with a red rectangular border.
- At the bottom of the form are three buttons: "PLACE" (which is dashed), "REMOVE", and "CANCEL".

As another exemplar embodiment of the "manual" return of the removal or release code to release a block, the specification states:

Once the secret code is received, the secret code may be input to the designated field (S1308) . . . [T]he railway traffic control terminal 105 checks that all information input into all fields is correct and that all fields are filled in. *After* this check is performed by the railway traffic control terminal 105, the remove button is enabled on the form (01312) and the railway traffic controller may remove the block on the corresponding track section.

'782 patent at 10:23-36 (emphasis added); Ahmadian Decl. ¶ 46. By using words like “once” and “after,” the specification of the '782 patent makes clear that, in embodiments where the dispatcher is involved in the removal of a block, the dispatcher cannot remove the block until the dispatcher receives the code from the railway field worker. Ahmadian Decl. ¶ 46. Similarly, the specification states that “[i]f the code is incorrect, the railway traffic control terminal 105 will prompt the user [the dispatcher] to input the code again.” '782 patent at 10:26-28. Thus, the railway field worker may “manually” return the removal or release code to the railway control apparatus by first providing the code to the dispatcher, who then enters the removal or release code into the railway control apparatus via interactions with the dispatcher’s terminal to release the block on the track. *Id.* In each of the above exemplary embodiments where the dispatcher is involved in the removal of the block (*e.g.*, the “manual” embodiments), it is not until the railway field worker seeks to remove the block that the dispatcher receives the code for the first time. Ahmadian Decl. ¶ 46. In sum, for the “manual” embodiments, the '782 patent specification makes clear that the dispatcher does not have ready access to the removal or release code to remove the block until that code is provided by a railway field worker. *Id.* ¶ 47.

In contrast with the above exemplar embodiments regarding “manual” return of the code, in exemplary embodiments illustrating the “automatic” return of the release or removal code, the railway field worker can interact directly with their own user terminal or mobile device to release a block on a track. *Id.* ¶ 37. For example, the railway field worker may be able to directly release the block through a block removal user interface “provided within a mobile application or webpage through which the railway field worker can enter the removal code manually or orally.” '782 patent at 12-16; Ahmadian Decl. ¶ 37. As another example, the release or removal code may be “embedded in a link in a message transmitted by email or messaging to the electronic

contact address of the railway field worker, and the railway field worker can simply cause the removal code to be entered by activating the link in the message received by the railway field worker.” ’782 patent at 3:16-23; Ahmadian Decl. ¶ 38. Such an exemplar embodiment is shown, for example, in Figure 10 of the ’782 patent, which shows “an example of a user interface display that may be provided on the field worker side or triggering block removal.” ’782 patent at 4:20-22; Ahmadian Decl. ¶ 39. Accordingly, in addition to “manual” return of the code, the ’782 patent also describes “automatic” return of the code, where the railway field worker returns the code via interaction with the railway field worker’s user terminal or mobile device to provide the removal or release code to the CTC system without dispatcher intervention. Ahmadian Decl. ¶¶ 37-41. In sum, for the “automatic” embodiments, the ’782 patent specification makes clear that the dispatcher does not have ready access to the removal or release code. *Id.* ¶ 47.

In addition to the above, the ’782 patent also describes a “back-door” or “failsafe” that can be used in limited instances to “retrieve” the removal or release code from the “internal storage” of the railway traffic control apparatus rather than from the railway field worker. ’782 patent at 10:6-22; Ahmadian Decl. ¶ 48. For example, the ’782 patent explains that “[i]f there is no maintenance worker available to transmit the random secret code, the code can be retrieved from the train traffic control terminal . . . by the train traffic controller.” ’782 patent at 10:6-22; Ahmadian Decl. ¶ 48. A person of ordinary skill in the art (“POSITA”) would understand that by using the words “retrieved from the railway control apparatus,” the otherwise “secret” nature of the “release code” creates a hurdle or an impediment for the dispatcher to obtain the code and such a mechanism for retrieving the code is employed only in limited circumstances. Ahmadian Decl. ¶ 48. For example, Figure 13 of the ’782 patent states that the code would have to be retrieved by the “Chief Traffic Controller,” and not by just a dispatcher. *See* ’782 patent at Figure

13, step S1306. By forcing the “release code” to be “retrieved from the train traffic control apparatus” “via the Chief Traffic Controller” (as opposed to simply displaying the “release code” in full view of the dispatcher), the ’782 patent makes clear that the claimed “release code” is not “readily available” to the dispatcher. *Id.* Thus, even in the absence of an available railway field worker to provide the release or removal code, the operation of the methods, tools and systems described and claimed in the ’782 patent is consistent with the goal of the inventions to ensure that “the railway worker has more control over the traffic through the rail block in which the worker is working, and fatal on-track accidents can be reduced.” ’782 patent at 11:12-14; Ahmadian Decl. ¶ 48.

2. U.S. Patent No. RE47,835

The ’835 patent is related to the ’782 patent and is also entitled “Tools for Railway Traffic Control.” As with the ’782 patent, the ’835 patent generally relates to methods, tools and systems to control traffic over a railway track section when a railway field worker is working on or near the track section. *See, e.g.*, ’835 patent, Abstract; Ahmadian Decl. ¶ 54; *see also id.* ¶¶ 53, 55. Like the ’782 patent, the ’835 patent describes and claims an unconventional network architecture for generating, transmitting, receiving and using a code that is associated with a block placed on a track by a dispatcher and that is transmitted to the railway field worker(s) that is working on the track, but otherwise is not readily available to the dispatcher. *See, e.g.*, ’835 patent at 6:3-5, 10:22-25, 10:35-38, 10:41-48; Ahmadian Decl. ¶¶ 53-55. The ’835 patent differs from the ’782 patent in some of the terminology it uses. Ahmadian Decl. ¶ 55. For example, the ’835 patent consistently uses the terms “terminal” and “user terminal” to refer to the railway field worker’s terminal. *See, e.g.*, ’835 patent at 6:31-32; Ahmadian Decl. ¶ 55. In contrast, in the ’782 patent, the terms “terminal” and “user terminal” are used in both the claims and the

specification to refer to either the railway field worker's terminal or the dispatcher's terminal, depending on the context in which the terms are used. Ahmadian Decl. ¶ 55.

3. U.S. Patent No. RE49,115

The '115 patent is related to the '782 patent and is also entitled "Tools for Railway Traffic Control." As with the '782 and '835 patents discussed above, the '115 patent generally relates to methods, tools and systems provided to control traffic over a railway track section when a railway worker is working on or near the track section. *See, e.g.*, '115 patent, Abstract; Ahmadian Decl. ¶ 57; *see also id.* ¶¶ 56, 58-59. Like the '782 and '835 patents, the '115 patent describes and claims an unconventional network architecture for generating, transmitting, receiving and using a code that is associated with a block placed on a track by a dispatcher and that is transmitted to the railway field worker(s) that is working on the track, but otherwise is not readily available to the dispatcher. *See, e.g.*, '115 patent at 6:6-9, 10:22-25, 10:34-37, 10:39-46; Ahmadian Decl. ¶¶ 56-59, 113. Like the '835 patent, the '115 patent differs from the '782 patent in some of the terminology it uses. Ahmadian Decl. ¶ 59. For example, as with the '835 patent, the '115 patent consistently uses the terms "terminal" and "user terminal" to refer to the railway field worker's terminal. *See, e.g.*, '115 patent at 6:34-35; Ahmadian Decl. ¶ 59.

III. LEGAL STANDARDS

A. Claim Construction

Claim terms must be given their ordinary and customary meaning to one of ordinary skill in the art ("POSITA") at the time of the invention unless there is clear and unambiguous evidence in the patent's specification or prosecution history that the patentee intended a different meaning. *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312-13 (Fed. Cir. 2005) (*en banc*). Claim construction is informed by intrinsic evidence, which includes the claims themselves, the patent's specification, and the prosecution history. *Id.* at 1314-17. The patent's specification is of

particular importance in the claim construction process. *Id.* at 1315. It is the language of the patent claim itself, guided by the patent’s specification, that is the most pertinent in determining the meaning of a given claim term. *Id.* However, when consulting the specification, courts should “avoid the danger of reading limitations from the specification into the claim,” *id.* at 1323, unless the patentee was “his own lexicographer and imbued the claim terms with a particular meaning or disavowed or disclaimed scope of coverage, by using words or expressions of manifest exclusion or restriction.” *E-Pass Techs., Inc. v. 3Com Corp.*, 343 F.3d 1364, 1369 (Fed. Cir. 2003) (internal quotations omitted). “When construing claim terms and phrases, the court cannot add or subtract words from the claims or appeal to ‘abstract policy considerations’ to broaden or narrow their scope.” *Biedermann Techs. GmbH & Co. KG v. K2M, Inc.*, No. 2:18CV585, 2020 WL 1933918, at *2 (E.D. Va. Apr. 22, 2020).

Extrinsic evidence can also be considered, but is “less significant than the intrinsic record.” *Phillips*, 415 F.3d at 1317-18. Moreover, “extrinsic evidence in the form of expert testimony can be useful to a court for a variety of purposes,” including to “provide background on the technology at issue, to explain how an invention works, to ensure that the court’s understanding of the technical aspects of the patent is consistent with that of a person of skill in the art, or to establish that a particular term in the patent or the prior art has a particular meaning in the pertinent field.” *Id.* at 1318.

It is also important to recognize that claim construction is “not an obligatory exercise in redundancy.” *U.S. Surgical Corp. v. Ethicon, Inc.*, 103 F.3d 1554, 1568 (Fed. Cir. 1997). “[C]ourts are not (and should not be) required to construe every limitation present in a patent’s asserted claims.” *O2 Micro Int’l Ltd. v. Beyond Innovation Tech. Co.*, 521 F.3d 1351, 1362 (Fed. Cir. 2008). In particular, a court may simply reject improper, unnecessary, or unhelpful proposed

constructions. *ActiveVideo Networks, Inc. v. Verizon Commc'ns, Inc.*, 694 F.3d 1312, 1325-26 (Fed. Cir. 2012); *Finjan, Inc. v. Secure Computing Corp.*, 626 F.3d 1197, 1207 (Fed. Cir. 2010).

B. Indefiniteness

The law in this Court is clear that addressing indefiniteness at the claim construction stage is improper. *CSB-Sys. Int'l Inc. v. SAP Am., Inc.*, No. CIV.A. 10-2156, 2011 WL 3240838, at *16-18, 20 n.16 (E.D. Pa. July 28, 2011) (refusing to address indefiniteness arguments of a party at Markman as “issues of indefiniteness are premature at such an early stage of the litigation”). “‘Several well-settled principles . . . tend to discourage rulings on indefiniteness at the Markman stage,’ including the high burden of proof a defendant must satisfy—clear and convincing evidence—as well as an indefiniteness ruling’s dispositive effect.” *Britax Child Safety, Inc. v. Nuna Int'l B.V.*, No. 17-CV-2724, 2019 WL 7161687, at *15 (E.D. Pa. Dec. 23, 2019) (quoting *CSB-Sys. Int'l*, 2011 WL 3240838, at *17); *see also Waddington N. Am., Inc. v. Sabert Corp.*, No. 09-4883 (GEB), 2010 WL 4363137, at *3 (D.N.J. Oct. 27, 2010); *Takeda Pharm. Co. v. Handa Pharm., LLC*, No. C-11-00840 JCS, 2012 WL 1243109, at *16 (N.D. Cal. Apr. 11, 2012); *Butamax Advanced Biofuels LLC v. Gevo, Inc.*, Nos. 12-1036-SLR, 12-1200-SLR, 12-1300-SLR, slip op. at 2 (D. Del. Feb. 3, 2015). As such, SEPTA’s indefiniteness arguments should be ignored.

IV. ARGUMENT

- A. The Code Terms: “release code” [’782 patent and ’835 patent], “removal code” [’835 patent], “secret code” [’835 patent and ’115 patent], and “secret release code” [’835 patent] – Should Be Construed to Mean: “a code that is not readily available to” the Dispatcher (as that Individual Is Referred to in each Respective Claim)**

'782 Patent

<u>Term(s)</u>	<u>Railware's Proposed Construction</u>	<u>SEPTA's Proposed Construction</u>
"release code"	A code that is not readily available to the terminal user (<i>i.e.</i> , the dispatcher).	No construction offered. ⁶

'835 Patent

<u>Term(s)</u>	<u>Railware's Proposed Construction</u>	<u>SEPTA's Proposed Construction</u>
"removal code" "release code" "secret release code"	A code that is not readily available to the user of the railway [traffic] control apparatus (<i>i.e.</i> , the dispatcher).	No construction offered. ⁶
"secret code"	A code that is not readily available to the user of the railway control apparatus (<i>i.e.</i> , the dispatcher).	No construction offered. ⁶

'115 Patent

<u>Term(s)</u>	<u>Railware's Proposed Construction</u>	<u>SEPTA's Proposed Construction</u>
"secret code"	A code that is not readily available to the user of the railway control apparatus (<i>i.e.</i> , the dispatcher).	No construction offered. ⁶

The intrinsic and extrinsic evidence support Railware's proposed constructions, which conform to how a POSITA would have understood the Code Terms at the time the Asserted

⁶ As part of the parties' claim construction exchanges under the Court's Scheduling Order, on February 10, 2025, SEPTA asserted that the Code Terms are indefinite, but did not provide any expert declaration and did not provide any alternative proposed constructions to Railware's proposed constructions. Vogel Decl., Ex. 5. Just last week on April 29, 2025, however, SEPTA informed Railware that SEPTA is withdrawing its request that this Court rule during claim construction on SEPTA's arguments that the Code Terms are indefinite. Vogel Decl., Ex. 9. Yet, confusingly, at the same time, SEPTA also informed Railware that SEPTA still intends to present arguments that the Code Terms are indefinite. *Id.* SEPTA's assertions are illogical and are not supported by the law of this Court. *See CSB-Sys. Int'l Inc.*, 2011 WL 3240838, at *16-18, 20 n.16. Nevertheless, Railware addresses SEPTA's premature and unsupported indefiniteness arguments herein.

Patents were filed. Specifically, a POSITA would understand the Code Terms to mean “a code that is not readily available” to the dispatcher (as that individual is referred to in each respective claim).⁷ *See* Ahmadian Decl. ¶¶ 80-137. SEPTA offers no alternative constructions or expert testimony⁸ to rebut Railware’s proposed constructions, and instead relies solely on unsupported attorney argument that these terms are indefinite—an argument that cannot be considered during claim construction.

1. Railware’s Proposed Claim Constructions are the Proper Constructions.

a. The specifications of the Asserted Patents support Railware’s proposed constructions.

The specifications of the Asserted Patents support Railware’s proposed constructions for at least three reasons: the specifications consistently and repeatedly describe the Code Terms as (1) “secret,” (2) “automatically” generated and transmitted, and (3) saved to “internal storage.” Taken together, a POSITA would understand the Code Terms to mean “a code that is not readily available to” the dispatcher (as that individual is referred to in each respective claim). *See* Ahmadian Decl. ¶¶ 82-122.

First, the Asserted Patents repeatedly and consistently refer to the Code Terms as “secret” from the dispatcher. Ahmadian Decl. ¶ 83. For example, the specifications state that the “code generator 101B” is configured to produce a removal code “which is . . . secret.” ’782 patent at 5:58-60; *see also* ’835 patent at 6:3-5; ’115 patent at 6:6-9; Ahmadian Decl. ¶ 84.

⁷ As illustrated in the summary tables above, the asserted claims of the Asserted Patents use differing language to refer to the dispatcher. For example, the asserted claims of the ’782 patent use the words “terminal user” to refer to the dispatcher. The asserted claims of the ’835 patent use the words “user of the railway control apparatus” or “user of the railway traffic control apparatus” to refer to the dispatcher. Similarly, the asserted claims of the ’115 patent use the words “user of the railway control apparatus” to refer to the dispatcher.

⁸ The Court-ordered deadline to serve an expert declaration in support of claim construction positions was March 14, 2025. ECF 23 at 35; ECF 25. SEPTA did not serve an expert declaration in support of its positions on or before that date and did not cite any expert testimony to support its arguments (*see* Vogel Decl., Ex. 5), and therefore waived any reliance on or support of expert testimony. As discussed herein, this failure is fatal to SEPTA’s arguments.

The specifications also state “the railway traffic control terminal 105 generates and saves a random secret code.” ’782 patent at 9:33-34; *see also* ’835 patent at 9:55-56; ’115 patent at 9:56-57; Ahmadian Decl. ¶ 84. Once a block is placed and the code is generated and sent to the railway field worker, the dispatcher can view certain information about the placed block, but not the code, as illustrated in Figure 7 (discussed above in the summary of the Asserted Patents). Notably absent from Figure 7 is any code that is associated with the blocks on the tracks. Ahmadian Decl. ¶ 94. It is not until the railway field worker seeks to remove a block that the dispatcher receives the code for the first time from the railway field worker. ’782 patent at 7:14-20; ’835 patent at 7:31-37; ’115 patent at 7:35-41; Ahmadian Decl. ¶ 99. Specifically, the specifications of the Asserted Patents explain that “[i]n order for a block on a certain track to be lifted, the release code has to be input into the railway traffic control apparatus.” *Id.* The railway field worker “sends the release code” to the dispatcher/railway traffic control apparatus, and “the release code is then input into the block remover 101C. After which, the block is removed and traffic to that section of rail is then allowed.” ’782 patent at 7:17-20; ’835 patent at 7:33-37; ’115 patent at 7:37-41; Ahmadian Decl. ¶ 99.

As yet another example of the Code Terms being “secret” from the dispatcher, the specifications of the Asserted Patents describe situations where the railway traffic control terminal “enables safety measures so that the block cannot be removed without the input of the secret code generated.” ’782 patent at 9:65-10:1; *see also* ’835 patent at 10:22-25; ’115 patent at 10:22-25; Ahmadian Decl. ¶¶ 84, 149-151. Along these lines, the specifications explain that the “remove” button through which the dispatcher releases a block “is disabled without the input of the secret code.” ’782 patent at 10:10-13; *see also* ’835 patent at 10:35-38; ’115 patent at 10:34-37; Ahmadian Decl. ¶¶ 84, 149-151. This is illustrated in Figure 6 (discussed above in the

summary of the Asserted Patents), where the dispatcher has not yet received the code from the railway field worker, and therefore the “remove” button is disabled. ’782 patent at 7:55-61; *see also* ’835 patent at 8:6-12; ’115 patent at 8:9-16.

The specifications also describe situations where the railway field worker, who knows the code, “transmits the random secret code to the railway traffic control center” in order to release the block on a track. ’782 patent at 10:15-22; *see also* ’835 patent at 10:41-48; ’115 patent at 10:39-46; Ahmadian Decl. ¶¶ 84, 149-151. Thus, the specifications consistently and repeatedly explain that the code is “secret” from the dispatcher. *See* ’782 patent at 5:58-60, 9:65-10:1, 10:10-13, 10:15-22; ’835 patent at 6:3-5, 10:22-25, 10:35-38, 10:41-48; ’115 patent at 6:6-9, 10:22-25, 10:34-37, 10:39-46; *see also* Ahmadian Decl. ¶¶ 83-85. Indeed, a POSITA would understand from the specifications that the code is not readily available to the dispatcher because the code is “secret” from the dispatcher. Ahmadian Decl. ¶ 85.

Second, the Asserted Patents describe the generation and transmission of the code as “largely automated” by the railway control apparatus to maintain the secrecy of the code from the dispatcher. ’782 patent at 2:58-62; ’835 patent at 2:64-3:2; ’115 patent at 3:4-9; Ahmadian Decl. ¶¶ 88-89. According to the specifications, after the dispatcher initiates a block, “the railway traffic control terminal 105 generates a release code . . . and sends the code to the maintenance worker designated for track work, i.e. maintenance worker 12.” ’782 patent at 7:52-55; *see also* ’835 patent at 8:3-6; ’115 patent at 8:6-9. The code is “automatically transmitted” by the railway control apparatus to the railway field worker after the dispatcher places a block. ’782 patent at 2:58-62; ’835 patent at 2:64-3:2; ’115 patent at 3:4-9. Indeed, each of these specific operations (generating and transmitting the secret code) is performed automatically by the railway control apparatus after the dispatcher places the block. *See* ’782 patent at 2:53-55, 5:58-

64, 7:1-10, 7:32-55, 8:54-59, 10:1-5; '835 patent at 2:59-61, 6:3-10, 7:15-27, 7:49-8:6, 9:7-12, 10:26-30; '115 patent at 2:66-3:1, 6:6-13, 7:20-30, 7:53-8:9, 9:9-14, 10:25-29; *see also* Ahmadian Decl. ¶ 88. No further involvement by the dispatcher is required. *See id.* By “automatically” generating and transmitting (*e.g.*, without the intervention of the dispatcher) the code to the railway field worker(s) when a block is placed by the dispatcher, the code is not displayed to the dispatcher. *See id.* Indeed, a POSITA would understand from the specifications of the Asserted Patents that the code is not readily available to the dispatcher because the described operations explicitly do not involve displaying the code to the dispatcher. *Id.* ¶ 89.

Third, the Asserted Patents describe that the code is saved to “internal storage” of the railway control apparatus, further maintaining the secrecy of the code from the dispatcher. *See* '782 patent at 7:2-3; 8:29-31; '835 patent at 7:16-19, 8:47-50; '115 patent at 7:20-22, 8:50-53; *see also* Ahmadian Decl. ¶ 86. The fact that the code is saved in “internal” storage indicates to a POSITA that the code is not displayed or readily available to the dispatcher. Ahmadian Decl. ¶¶ 86-87, 89. As discussed above with respect to Figure 7, once a block is placed, the dispatcher can view certain information about a block, such as the type of block, when it was placed, who it was issued to, the geographic limits of the block, and who placed it. *See* '782 patent at Figure 7. The dispatcher cannot view, however, the code itself, which is, again, secret and confined to “internal storage” and therefore not readily available to the dispatcher. *Id.*

Further, as discussed above, the specifications’ description of what happens when the railway field worker cannot provide the code to the dispatcher supports Railware’s proposed constructions. Specifically, the specifications disclose a “back door” or “failsafe” in which the code may be “retrieved” from the internal storage, for example, by the Chief Traffic Controller. '782 patent at 10:19-22; *id.* at Figure 13, step S1306; '835 patent at 10:44-48; '115 patent at

10:42-46; *see also* Ahmadian Decl. ¶ 117. The combination of saving the code to “internal storage” and forcing the code to be “retrieved from the train traffic control apparatus” (as opposed to simply displaying the code in full view of the dispatcher), makes clear to a POSITA that the claimed code is not “readily” available to the dispatcher. Ahmadian Decl. ¶ 115.

Taken together, the specifications’ description of the Code Terms as “secret,” being “automatically” generated and transmitted, and being stored in “internal storage”—in addition to providing a “back door” or “failsafe” to retrieve the code from internal storage—convey to a POSITA that the Code Terms mean “a code that is not readily available to” the dispatcher (as that individual is referred to in each respective claim). Ahmadian Decl. ¶¶ 82, 120. Accordingly, the specifications of the Asserted Patents support Railware’s proposed constructions.

b. The claim language of the Asserted Patents supports Railware’s proposed constructions.

The claim language of the Asserted Patents also supports Railware’s proposed constructions. *See* Ahmadian Decl. ¶¶ 123-131. *First*, consistent with the specifications of the Asserted Patents discussed above, the claims of the Asserted Patents consistently recite that a railway control apparatus automatically generates and transmits the code to a railway field worker after a block is placed on a track. For example, claim 5 of the ’782 patent recites “generating by the railway control apparatus a release code and transmitting the release code to an electronic contact address accessible by the railway field worker.” Similarly, claim 1 of the ’835 patent recites “a code generation part [of a railway traffic control apparatus] to generate a removal code . . . and transmit the removal code to the electronic contact address of the railway field worker.” Claim 20 of the ’115 patent similarly recites executing “computer-executable instructions by the processor causes the railway control apparatus to . . . generate a secret code associated with the at least one selected track section; and transmit the secret code to a remote

user terminal.” None of the claims of the Asserted Patents recite any limitations indicating that the code is displayed to the dispatcher prior to receiving the code from the railway field work to release a block on a track. Ahmadian Decl. ¶¶ 124-130. A POSITA would understand this claim language to indicate that the code is not readily available to the dispatcher. *Id.*

Second, numerous claims of the ’835 patent and all claims of the ’115 patent expressly state that the code is “secret.” For example, independent claims 20, 30, and 40 (and all of the claims that depend therefrom) of the ’835 patent expressly require that the claims “secret release code”/“secret code” are “secret.” The same is true of independent claims 20, 30, and 31 (and all of the claims that depend therefrom) of the ’115 patent. Consistent with the specifications discussed above, a POSITA would understand this claim language to indicate that the code is not readily available to the dispatcher. Ahmadian Decl. ¶ 131; *see also id.* ¶¶ 126-130.

Accordingly, the claim language of the Asserted Patents support Railware’s proposed constructions of “a code that is not readily available to” the dispatcher (as that individual is referred to in each respective claim).

c. The express goals of the Asserted Patents support Railware’s proposed constructions.

The Asserted Patents state that one goal of the described and claimed inventions is to give “the railway worker [] more control over the traffic through the rail block in which the worker is working, and fatal on-track accidents can be reduced.” ’782 patent at 11:12-14; ’835 patent at 11:40-43; ’115 patent at 11:37-39; *see also* Ahmadian Decl. ¶¶ 105-114. A POSITA would understand that, by providing the railway field worker(s) with a code that is not readily available to the dispatcher, and requiring the railway field worker to provide that code before lifting a block, the Asserted Patents prevent the mistakes that led to the death and injury of

railway field workers. Ahmadian Decl. ¶ 114. Accordingly, the goals of the Asserted Patents support Railware’s proposed constructions.

d. The Patent Trial and Appeal Board’s decisions support Railware’s proposed constructions.

Finally, prior decisions by the Patent Trial and Appeal Board (“Board”) analyzing the Asserted Patents further support Railware’s proposed constructions. *See* Ahmadian Decl. ¶¶ 132-137. By way of background, in July 2023, National Railroad Passenger Corporation d/b/a Amtrak (“Amtrak”) filed three petitions for *inter partes* review, one against each of the Asserted Patents.⁹ All three petitions were denied by the Board. Ahmadian Decl. ¶ 132; Vogel Decl., Exs. 16-18. While the Board concluded that it need not adopt a construction for the Code Terms in order to deny institution, it also concluded that Amtrak failed to show that the prior art disclosed the claimed inventions, particularly finding that the Code Terms “encompass[] a non-public code that is received by [] railway personnel that may be used to release a track block.” Vogel Decl., Exs. 16 at 19, 17 at 22, 18 at 20; Ahmadian Decl. ¶ 132. More, the Board found that the Code Terms require “limitations on the accessibility to the code by, for example, the dispatcher prior to a release of a track block.” *Id.* Stated differently, the Board reviewed the Asserted Patents and concluded that the Code Terms must, by their nature and as described in the specifications and claims, mean that the code is not readily available to the dispatcher prior to the release of a block on a track. Accordingly, the Board’s decisions support Railware’s proposed constructions.

⁹ *National Railroad Passenger Corporation d/b/a Amtrak v. Railware, Inc.*, IPR2023-01179 (challenging ’782 patent); *National Railroad Passenger Corporation d/b/a Amtrak v. Railware, Inc.*, IPR2023-01180 (challenging ’835 patent); and *National Railroad Passenger Corporation d/b/a Amtrak v. Railware, Inc.*, IPR2023-01181 (challenging ’115 patent).

2. SEPTA's Arguments Regarding Indefiniteness Should Be Ignored.

SEPTA does not propose alternative constructions for the Code Terms and instead attempts to advance improper and unsupported arguments that these terms are indefinite. SEPTA's arguments should be ignored for a number of reasons.

a. Indefiniteness arguments should not be considered during claim construction.

As discussed above, it is well-settled in this Court that indefiniteness arguments should not be considered during claim construction. *CSB-Sys. Int'l Inc.*, 2011 WL 3240838, at *16-18; *Britax Child Safety, Inc.*, No. 17-CV-2724, 2019 WL 7161687, at *15; *see also Waddington*, 2010 WL 4363137, at *3; *Takeda*, 2012 WL 1243109, at *16; *Butamax*, Nos. 12-1036-SLR, 12-1200-SLR, 12-1300-SLR, slip op. at 2. In addition, SEPTA's indefiniteness arguments were not timely provided under the Court's Scheduling Order. *See supra*, n.2 Accordingly, SEPTA's indefiniteness arguments should be ignored on these bases alone.

b. Even if the Court considers SEPTA's indefiniteness arguments, SEPTA cannot satisfy its heavy burden of proving indefiniteness by clear and convincing evidence because it has provided no expert testimony.

Nevertheless, even if the Court is inclined to consider SEPTA's indefiniteness arguments during claim construction—it should not—SEPTA's arguments fail because SEPTA cannot satisfy its heavy burden of proving indefiniteness by clear and convincing evidence because SEPTA failed to provide any expert testimony to support its arguments.

Claims are presumed valid. *See* 35 U.S.C. § 282. To overcome that presumption, SEPTA must show by clear and convincing evidence that the Code Terms are indefinite. *Microsoft Corp. v. i4i Ltd. P'ship*, 564 U.S. 91, 111 (2011). “[D]efiniteness is to be evaluated from the perspective of a person skilled in the relevant art [POSITA].” *Nautilus, Inc. v. Biosig Instruments, Inc.*, 572 U.S. 898, 899 (2014). As such, failure to provide testimony from a

POSITA (*i.e.*, expert testimony) in support of a parties’ indefiniteness arguments is fatal. *Hand Held Prods., Inc. v. Amazon.com, Inc.*, No. CV 12-768-RGA-MPT, 2014 WL 2873902, at *16 (D. Del. June 24, 2014), *report and recommendation adopted sub nom. Hand Held Prods., Inc. v. Amazon.com*, No. CV 12-768-RGA-MPT, 2014 WL 5779416 (D. Del. Nov. 5, 2014) (“Amazon provides no expert testimony in support of its indefiniteness argument, relying instead on attorney argument. The court determines Amazon’s arguments fail to establish by clear and convincing evidence these terms are indefinite.”). Here, SEPTA provided no expert testimony, which is fatal to SEPTA’s indefiniteness arguments.

Indeed, in this case, it stands un rebutted that “a person of ordinary skill in the art [POSITA] of the Asserted Patents would have (i) at least a bachelor’s degree in electrical, mechanical, industrial or related engineering, and (ii) would have had at least two (2) years of experience in railway safety, railway operations, and/or railway control systems.” Ahmadian Decl. ¶ 63. SEPTA has offered no evidence from a POSITA so qualified. Accordingly, SEPTA cannot satisfy its heavy burden of proving indefiniteness by clear and convincing evidence, and its arguments should be ignored.

c. Even if the Court considers SEPTA’s indefiniteness arguments, SEPTA’s unsupported attorney argument regarding indefiniteness are without merit.

Further, even if the Court is inclined to consider SEPTA’s indefiniteness arguments during claim construction—it should not—SEPTA’s unsupported attorney argument regarding the Code Terms are without merit. *See* Ahmadian Decl. ¶¶ 138-168. A claim term meets the definiteness requirement when “a patent’s claims, viewed in light of the specification and prosecution history, inform those skilled in the art about the scope of the invention with reasonable certainty.” *Nautilus, Inc.*, 572 U.S. at 910. In establishing this standard, the Supreme Court made clear that determining whether the patent informs a POSITA about the meaning of a

given term with “reasonable certainty” is not an exercise in pinpoint precision. *Id.* “[T]he definiteness requirement must take into account the inherent limitations of language.” *Id.* at 909. Rather, for “reasonable certainty” to exist, “all that is required is that the patent apprise [a POSITA] of the scope of the invention.” *Biosig Instruments, Inc. v. Nautilus, Inc.*, 783 F.3d 1374, 1381 (Fed. Cir. 2015) (citation omitted)). Further, so long as the patent provides some “objective baseline through which to interpret” the claims such that the claim terms are not “purely subjective,” then the claims satisfy the definiteness requirement. *Niazi Licensing Corp. v. St. Jude Med. S.C., Inc.*, 30 F.4th 1339, 1347 (Fed. Cir. 2022) (citation omitted). SEPTA has not provided any evidence—let alone clear and convincing evidence—that the Code Terms are indefinite under this standard.

First, SEPTA argues that the Asserted Patents allegedly fail to inform, with reasonable certainty, those skilled in the art about whether the Code Terms are “secret.” SEPTA is incorrect. Railware has presented un rebutted evidence from its expert, Dr. Ahmadian, that the Asserted Patents do inform a POSITA, with reasonable certainty, that the Code Terms are “secret.” Ahmadian Decl. ¶¶ 146-155. Indeed, Dr. Ahmadian conducted a thorough, un rebutted examination of all three of the Asserted Patents, and concluded that a POSITA would understand the Code Terms are “secret” from the dispatcher, considering, for example, the many instances where the specifications of the Asserted Patents refer to the code being “secret,” a “cipher,” and otherwise generally not available to the dispatcher (prior to the dispatcher receiving the code back from the railway field worker or the railway control apparatus). *Id.* Dr. Ahmadian’s un rebutted testimony concludes that “a POSITA would understand with reasonable certainty whether a code qualifies as not readily available to the dispatcher based on whether the dispatcher can see or easily access the code before it is time for removal the block.” *Id.* ¶ 154.

Dr. Ahmadian further concludes that the scope of the claims that utilize the Code Terms is clear. *See, e.g.*, Ahmadian Decl. ¶¶ 81-137 (analyzing the “Code Terms”); *id.* ¶ 81 (concluding that “a POSITA would have understood the . . . “Code Terms” . . . as a code that is not readily available to the dispatcher (as that individual is referred to in each respective claim, noted in the above charts), consistent with Railware’s proposed construction.”).

Second, SEPTA argues that the Asserted Patents allegedly fail to inform, with reasonable certainty, those skilled in the art about the contents of the Code Terms or how they are created. SEPTA is incorrect. Again, Dr. Ahmadian concluded after careful, unrebutted examination of the Asserted Patents that a POSITA would readily understand the contents of the Code Terms and how they are created through, for example, the specifications of the Asserted Patents consistent description of the code as a “cipher which is random, pseudo-random, secret, etc.,” as well as the many illustrations throughout the Asserted Patents of a code depicted as a string of symbols (such as a six-digit numerical string). Ahmadian Decl. ¶¶ 156-165. Dr. Ahmadian concludes that the scope of the claims that utilize the Code Terms is clear. *See, e.g.*, Ahmadian Decl. ¶¶ 81-137.

Finally, SEPTA argues that certain footnotes in the Board’s IPR decisions discussed above support its arguments that the “Code Terms” are indefinite. SEPTA’s reliance on these footnotes is misplaced and without merit. Indeed, the Board merely stated that the specifications “do[] not appear to expressly address how a person of ordinary skill in the art would have distinguished a code that is ‘readily available’ to the dispatcher from a code that was not ‘readily available.’” *See* Vogel Decl., Ex. 16 at n.11. But this statement is *dicta*. It does not relate to anything pertinent to the issues before the Board. Indeed, the question of indefiniteness under 35 U.S.C. § 112 was not before the Board, and therefore the Board did not need to and did not specifically analyze whether the claims provided a POSITA with reasonable certainty as to the

scope of the claims. *See* 35 U.S.C. § 311(b) (limiting the scope of inter partes review to “ground(s) that could be raised under section 102 or 103 and only on the basis of prior art consisting of patents and printed publications.”). Nevertheless, as discussed above, the unrebutted testimony of Dr. Ahmadian establishes that a POSITA would understand, based on the claim language and specifications, including the stated goals of the Asserted Patents and the repeated emphasis on secrecy and the like, when the code would be considered readily available to the dispatcher and when it would not. Ahmadian Decl. ¶¶ 132-137.

In sum, Dr. Ahmadian’s testimony regarding the reasonable certainty of the “Code Terms” stands unrebutted. SEPTA’s unsupported attorney argument to the contrary cannot satisfy SEPTA’s heavy burden of proving indefiniteness and, in any event, is without merit. *See Hand Held Prods., Inc.*, 2014 WL 2873902, at *16. The meaning of the Code Terms is definite and understandable to a POSITA with reasonable certainty.

B. “user terminal” [’782 patent, claim 5] Means “user terminal of a terminal user (*i.e.*, the dispatcher)”

<u>Railware’s Proposed Construction</u>	<u>SEPTA’s Proposed Construction</u>
user terminal of a terminal user (<i>i.e.</i> , the dispatcher)	railway field worker’s mobile user device

It is clear from the language of claim 5 and the specification of the ’782 patent that “terminal” as used in claim 5 refers to the “terminal” of the dispatcher, not of the railway field worker. Ahmadian Decl. ¶¶ 248; *see also id.* ¶¶ 247, 249-275. Consistent with this, Railware’s proposed construction for the term “user terminal” is “user terminal of a terminal user (*i.e.*, the dispatcher).” SEPTA’s proposed construction, on the other hand, ignores the plain language of the claims and specification of the ’782 patent.

1. The Language of Claim 5 of the '782 Patent Supports Railware's Proposed Construction.

The language of claim 5 is clear that “user terminal” is the terminal of the terminal user¹⁰ (*i.e.*, the dispatcher). Ahmadian Decl. ¶¶ 259-261. *First*, as an initial matter, a POSITA would understand from the language of claim 5 that the terms “user terminal” and “terminal” are used synonymously¹¹ throughout claim 5 of the '782 patent, and therefore there is only one “terminal” described in claim 5. *Id.* ¶ 259. Indeed, as shown in the annotation of claim 5 below, claim 5 identifies “a terminal user interface on ***a terminal*** to permit a terminal user of the ***terminal*** [to] request the railway control apparatus to place a block” *See* '782 patent claim 5 (emphasis added, annotated in green below); *see also* Ahmadian Decl. ¶¶ 259-261.

¹⁰ “Terminal user” is the term used throughout claim 5 of the '782 patent to identify the operator of the “terminal” or “user terminal” described therein. As such, Railware proposes “terminal user” in its proposed construction—as opposed to only a term like “dispatcher”—in order to mirror the terminology used in claim 5 of the '782 patent.

¹¹ Giving different words in a claim the same construction is proper when those words are used interchangeably, as they are here. *See, e.g., In re PersonalWeb Techs. LLC*, No. 2020-1566, 2021 WL 3557196, at *4 (Fed. Cir. Aug. 12, 2021) (upholding the same construction for the terms “licenses” and “authorized” as “[t]he patents’ written description proceeds to describe the invention, interchangeably using the terms ‘licensed’ and ‘authorized’ to refer to the same concept.”).

5. A method to enhance railway control, to protect safety of railway workers on or near railway tracks, said method comprising:

configuring a mobile user device of a railway field worker to provide a device user interface to display information received via a network from a railway control apparatus and to permit the railway field worker to respond to prompts displayed thereon;

providing a terminal user interface on a terminal to permit a terminal user of the terminal request the railway control apparatus to place a block on one or more specified track sections to permit a railway field worker to enter the track sections while blocking railway traffic to said track sections;

generating by the railway control apparatus a release code and transmitting the release code to an electronic contact address accessible by the railway field worker via operation of the user interface of the user terminal; and

permitting the block to said one or more track sections to be removed by the railway control apparatus only upon receiving the release code from the user terminal in return.

Ahmadian Decl. ¶ 265. The use of “terminal” follows-through into the next claim element, where instead of “terminal,” the similar phrase “user terminal” is used, namely “via operation of the user interface of the *user terminal*.” (Emphasis added, annotated in green above.) *Id.* ¶ 259.

Similarly, the last claim element again uses “user terminal,” as “receiving the release code from the *user terminal* in return.” (Emphasis added, annotated in green above.) *Id.* Thus, a POSITA would understand from the claim language of claim 5 that “terminal” and “user terminal” refer to the same “terminal.” *Id.* ¶ 259.

Second, a POSITA would understand from the language of claim 5 that the “terminal”/“user terminal” is associated with the dispatcher, not with the railway field worker. This is mainly because claim 5 separately claims a “mobile user device of a railway field worker,” as annotated in blue above. ’782 patent at claim 5; Ahmadian Decl. ¶ 263. As such, a

POSITA would understand that the “mobile user device of a railway field worker” (highlighted in blue above) is associated with the railway field worker, and the “terminal”/“user terminal” (highlighted in green above) is associated with the dispatcher, and therefore these terms have different meanings. These associations and meanings are consistent with a well-settled legal principle of claim construction that “[d]ifferent claim terms are presumed to have different meanings.” *Apple Inc. v. Omni MedSci, Inc.*, No. 2023-1034, 2024 WL 3084509, at *3 (Fed. Cir. June 21, 2024). Stated differently, here, claim 5 separately introduces a “mobile user device” as well as a “terminal”/“user terminal” in order to refer to different aspects of the claimed invention. And claim 5 specifically associates “mobile user device” with the “railway field worker” (as noted by the language itself in claim 5) and specifically associates “terminal”/“user terminal” with the dispatcher—consistent with Railware’s proposed claim construction. ’782 patent at claim 5; *see also* Ahmadian Decl. ¶¶ 266-268.

Finally, a POSITA would understand from the language of claim 5 that the “terminal”/“user terminal” refers to the user terminal of a “terminal user” (*i.e.*, the dispatcher) because claim 5 repeatedly describes the “terminal”/“user terminal” performing operations and entering instructions associated with the dispatcher/railway control apparatus: “plac[ing] a block on one or more specified track sections,” “generating . . . a release code,” “transmitting the release code to an electronic contact address accessible by the railway field worker,” and “permitting the block . . . to be removed.” ’782 patent at claim 5; *see also* Ahmadian Decl. ¶ 260. These operations and instructions are associated with the dispatcher’s terminal and the railway control apparatus, not the railway field worker’s device. *Id.*; *see also, infra*, Section IV.B.2.

Accordingly, the claim language of claim 5 of the ’782 patent supports Railware’s proposed construction of “user terminal of a terminal user (*i.e.*, the dispatcher).”

2. The Specification of the '782 Patent Supports Railware's Proposed Construction.

Consistent with the language of claim 5 discussed above, a POSITA would understand from the specification of the '782 patent that the “terminal”/“user terminal” of claim 5 of the '782 patent is the terminal of the terminal user (*i.e.*, the dispatcher) because the specification of the '782 patent consistently and repeatedly associates the operations performed by the claimed “terminal”/“user terminal” with the operations performed by the railway control apparatus and/or the dispatcher. Ahmadian Decl. ¶ 257. Generally, the specification of the '782 patent states that “[t]he CTC is controlled by a single person known as a train dispatcher.” '782 patent at 1:46-47. Against this backdrop, the specification of the '782 patent repeatedly references operations performed by the railway control apparatus and/or the dispatcher that match the operations performed by the “terminal”/“user terminal” in claim 5. *See* Ahmadian Decl. ¶¶ 262-275.

First, claim 5 states that the “terminal”/“user terminal” has a “terminal user interface.” Consistent with this, the specification of the '782 patent states that the railway control apparatus has a “user interface 101D,” and “[t]he user interface 101D is configured preferably for the ease of use for the railway traffic controller.” '782 patent at 6:4-5. “The user interface 101D displays information and tools needed to enable/disable blocks on rail sections.” *Id.* at 6:6-8. A POSITA would understand that the reference to the “terminal user interface” in claim 5 is, for example, the “user interface 101D” as discussed in the specification of the '782 patent, which is specifically “configured . . . for the ease of use” of the dispatcher. Ahmadian Decl. ¶ 254.

Second, claim 5 of the '782 patent states that the “terminal”/“user terminal” is used by the “terminal user” (*i.e.*, the dispatcher) to request the railway control apparatus to “place a block on one or more specified track sections.” Consistent with this, the specification of the '782 patent makes clear that the placement of blocks through the railway control apparatus is an operation

performed by the dispatcher/railway control apparatus. '782 patent at 3:1-5, 7:40-42, 9:25-27; Ahmadian Decl. ¶¶ 253-257. For example, the specification of the '782 patent states “the adaptation may include a RTC user interface to permit a user (e.g., train dispatcher) to specify a track section(s) to be blocked, specify an instruction to the centralized railway control system to block the railway traffic to the specified track section(s).” '782 patent at 3:1-5; Ahmadian Decl. ¶ 254. Similarly, the specification of the '782 patent states “[t]he railway traffic controller may place blocks on any section of traffic using this user interface.” '782 patent at 7:40-42. Further, the specification of the '782 patent states “[i]n S1201, the rail traffic controller selects the sections to be blocked using the railway traffic control terminal 105.” *Id.* at 9:25-27. Accordingly, the specification of the '782 patent makes clear to a POSITA that “plac[ing] a block on one or more specified track sections” as used in claim 5 is an operation performed by the dispatcher/railway control apparatus through the dispatcher’s terminal.

Third, claim 5 of the '782 patent states that “operation of the user interface of the user terminal” causes the railway control apparatus to “generat[e] . . . a release code” and “transmit[] the release code to an electronic contact address accessible by the railway field worker.” As with the operation of placing a block discussed above, the generation and transmission of the release code to the railway field worker are described in the specification of the '782 patent as being performed by the railway control apparatus based on instructions by the dispatcher through the dispatcher’s terminal. For example, the specification of the '782 patent states that once a block is put into place by the dispatcher, “the railway traffic control terminal 105 generates a release code, stores the release code, and sends the code to the maintenance worker designated for track work.” *Id.* at 7:52-55. Thus, the specification of the '782 patent makes clear to a POSITA that

generating and transmitting a code to the railway field worker as used in claim 5 is performed by the railway control apparatus based on instructions through the dispatcher's terminal.

Finally, claim 5 of the '782 patent recites "permitting the block . . . to be removed only upon receiving the release code from the user terminal in return." The specification of the '782 patent makes clear that removal of blocks may be performed by the railway control apparatus through interaction with the dispatcher's terminal. For example and as discussed above, in describing the "manual" embodiments of the inventions, the specification of the '782 patent states "the railway traffic controller . . . may not remove the track blocks without the input of the release code in the allotted area labeled release code." *Id.* at 7:57-59. The specification of the '782 patent goes on to explain that "FIG. 8 shows the user interface of the railway traffic control terminal 105 as the railway traffic controller inputs the release code to remove the block on certain track sections." *Id.* at 8:21-24. Further, the specification of the '782 patent explains that "once the code is received" by the dispatcher and is entered into the dispatcher's terminal and confirmed that it is correct, "the remove button is enabled on the form (S1312) and the railway traffic controller may remove the block on the corresponding track section." *Id.* at 10:23-36. More, the specification of the '782 patent explains that "[i]f the code is incorrect, the railway traffic control terminal 105 will prompt the user [the dispatcher] to input the code again." *Id.* at 10:26-28. Thus, the specification of the '782 patent makes clear to a POSITA that removal of the block as used in claim 5 may be performed by the railway control apparatus based on entrance of the code into the dispatcher's terminal.

In sum, the specification of the '782 patent makes clear to a POSITA that each of the above operations as recited in claim 5 are associated with the railway control apparatus and/or the dispatcher's terminal, not the railway field worker's device. Accordingly, the specification of

the '782 patent supports Railware's proposed construction for "terminal"/"user terminal" of "user terminal of a terminal user (*i.e.*, the dispatcher)."

3. SEPTA's Proposed Construction Is Improper and Not Supported by the Intrinsic or Extrinsic Evidence.

In contrast to Railware's proposed construction, SEPTA's proposed construction is improper and not supported by the intrinsic or extrinsic evidence for at least two reasons: (1) it would improperly construe separately claimed terms in claim 5 to mean the same thing, and (2) it would exclude preferred (if not all) embodiments described in the '782 patent.

First, as discussed above, claim 5 of the '782 patent separately claims the "mobile user device of the railway field worker," on the one hand, and the "terminal"/"user terminal," on the other hand. Thus, these terms are presumed to have—and indeed do have—different meanings. *Omni MedSci*, No. 2023-1034, 2024 WL 3084509, at *3. But under SEPTA's proposed construction, both the "mobile user device" and the "terminal"/"user terminal" would refer to the same device—*i.e.*, the railway field worker's device. This is improper for the same reasons discussed above—namely, "mobile user device" and "terminal"/"user terminal" have different meanings in claim 5. The issues created by SEPTA's proposed construction, however, do not end there. Under SEPTA's proposed construction, additional terms that are separately claimed would also necessarily have the same meaning. Indeed, the claimed "device user interface" associated with the "mobile user device" (on the one hand) and the "terminal user interface" of the "terminal"/"user terminal" (on the other hand) would also mean the same thing, despite being separately claimed. This, again, is improper. *Id.* Indeed, claim 5 is clear that the "mobile user device" has its own "device user interface," and the "terminal"/"user terminal" also has its own "terminal user interface." Ahmadian Decl. ¶ 269. SEPTA's proposed construction improperly conflates all of these terms, rendering aspects of claim 5 meaningless and nonsensical and

creating considerable inconsistencies and confusion. *Omni MedSci*, 2024 WL 3084509, at *3; *Intel Corp. v. Qualcomm Inc.*, 21 F.4th 801, 810 (Fed. Cir. 2021); *Becton, Dickinson & Co. v. Tyco Healthcare Grp.*, 616 F.3d 1249, 1254-55 (Fed. Cir. 2010).

Second, under SEPTA’s proposed construction, claim 5 of the ’782 patent would result in a nonsensical claim that reads out the entire dispatcher-side and “manual” embodiments of the inventions, which are consistently described in the specification of the ’782 patent. This is improper. *Sequoia Tech., LLC v. Dell, Inc.*, 66 F.4th 1317, 1327 (Fed. Cir. 2023) (“[a] claim construction exclud[ing] a preferred embodiment is rarely, if ever correct” (citation omitted)). Indeed, under SEPTA’s proposed construction, claim 5 would not include any term that refers to the dispatcher’s terminal for controlling the railway network by placing and removing blocks. This is not only inconsistent with the plain language of claim 5, but is also inconsistent with the specification of the ’782 patent, which consistently describes the inventions in terms of providing for the interactions between the railway field worker’s device, on the one hand, and the railway control apparatus/dispatcher’s terminal, on the other, in order to ensure the goals of the ’782 patent are achieved by preventing errant unblocking of track within the railway network and ultimately saving lives, preventing injury, and preventing damage to equipment and/or property. ’782 patent at 4:60-5:3, 5:32-39. Thus, SEPTA’s reading-out of claim 5 any term that refers to the dispatcher’s terminal should be rejected. *Sequoia Techs.*, 66 F.4th at 1327; *SSI Techs., LLC v. Dongguan Zhengyang Elec. Mechanical Ltd.*, 59 F.4th 1328, 1338-39 (Fed. Cir. 2023); *Intel Corp.*, 21 F.4th at 810; *Becton, Dickinson & Co.*, 616 F.3d at 1255.

Third, SEPTA argues that the ’782 patent’s use of “user terminal” in unasserted claim 1 of the ’782 patent supports SEPTA’s proposed construction. SEPTA’s reliance on claim 1 is without merit. The “same terms appearing in different claims of the same patent” are not

presumed to have the same meaning if “it is clear from the specification and prosecution history that the terms have different meanings at different portions of the claims.” *Masimo Corp. v. Sotera Wireless, Inc.*, No. 2022-1415, 2023 WL 6307959, at *4 (Fed. Cir. Sept. 28, 2023) (citation omitted); *Fin Control Sys. Pty., Ltd. v. OAM, Inc.*, 265 F.3d 1311, 1318 (Fed. Cir. 2001). Here, the claim language of unasserted claim 1 of the ’782 patent, and asserted claim 5 of the ’782 patent, presents precisely this scenario. Indeed, claim 1 recites, in relevant part, “a user terminal ***provided to a railway field worker***” ’782 patent claim 1 (emphasis added). In contrast and as discussed above, asserted claim 5 recites “a mobile user device of a railway field worker,” thereby explicitly associating a “mobile user device” with the “railway field worker,” not a “user terminal.” Accordingly, this differing use of terminology across these claims fails to support SEPTA’s proposed construction.

Fourth, SEPTA’s proposed construction, seeking to replace “user terminal” with “mobile user device,” conflicts with contemporaneous dictionaries that defined “terminal” consistently with the ’782 patent, further demonstrating that “user terminal” requires no further construction beyond identifying that it is the “user terminal of the terminal user (*i.e.* the dispatcher).” For example, contemporaneous dictionaries have defined “terminal” as follows: (i) “combination of a keyboard and output device (as a video display unit) by which data can be entered into or output from a computer or electronic communications system,” (Vogel Decl., Ex. 13 at 1289), (ii) “of or relating to an end, extremity, boundary, or terminus,” *id.*, (iii) “a part that forms the end,” *id.*, (iv) “a device having input/output links with a computer but situated at a distance from the computer,” (Vogel Decl., Ex. 10 at 1663), (v) “[a] device at which a user enters data or commands for a computer and which displays the received output,” (Vogel Decl., Ex. 11 at 1487), (vi) “[a] functional unit in a system or communication network at which data may enter or

leave,” (Vogel Decl., Ex. 12 at 686), (vii) “[a] point in a system or communication network at which data can either enter or leave,” (*id.*), and (viii) “[a] device, usually equipped with a keyboard and display device, capable of sending and receiving information. . . .,” (*id.*).

Ahmadian Decl. ¶ 258. Accordingly, SEPTA’s attempts to redefine “user terminal” as a “mobile user device” is improper, unnecessary and unhelpful. *ActiveVideo*, 694 F.3d at 1325-26.

Fifth, SEPTA argues that an isolated statement made by Railware in IPR proceedings¹² brought by Amtrak against the ’782 patent support SEPTA’s proposed construction. It does not. While the Federal Circuit has indicated that statements made during IPR proceedings *may* be relevant in the claim construction process, *see Maquet Cardiovascular LLC v. Abiomed Inc.*, 131 F.4th 1330, 1342-43 (Fed. Cir. 2025), such evidence is of limited value, particularly when weighed against the plain language of the claims and the specification. *See Phillips v. AWH Corp.*, 415 F.3d 1303, 1317, (Fed. Cir. 2005), *cert. denied*, 546 U.S. 1170 (2006); *see also. Arbmetrics, LLC v. Dexcom Inc.*, 838 F. App’x 529, 533 (Fed. Cir. 2020) (“[r]epresentations [made] during prosecution cannot enlarge the content of the specification.”). For this reason alone, SEPTA’s reliance on any such statement should be ignored.

Nevertheless, the isolated statement relied upon by SEPTA does not support SEPTA’s proposed construction, nor does it stand for the proposition SEPTA cites it for. Indeed, in Railware’s Patent Owner Preliminary Response (“POPR”; Vogel Decl., Ex. 15) submitted in response to Amtrak’s IPR Petition challenging claims 1-8 of the ’782 patent, Railware stated that “claims 1 and 5 each require that a track block be removed ‘only upon receiving the release code from the user terminal in return.’” POPR at 20. Railware also separately stated that “[b]y using the word ‘only,’ the claims require that the ‘release code’ is not readily available to the

¹² *National Railroad Passenger Corporation d/b/a Amtrak (“Amtrak”) v. Railware, Inc.*, IPR2023-01179.

dispatcher until the ‘release code’ is received from the user terminal, which is in the field with the railway worker.” *Id.* Contrary to SEPTA’s arguments, the statement by Railware is consistent with the overall technical framework of the inventions described throughout the specification of the ’782 patent and Railware’s POPR, namely that the inventions described and claimed provide an unconventional network architecture for generating, transmitting, receiving and using a code that is associated with a block placed on a track by a dispatcher and that is transmitted to the railway field worker(s) working on the track, but otherwise is not readily available to the dispatcher. *Id.* at 6, 10, 18; Ahmadian Decl. ¶ 113. In order to remove the block on a track, the code must be returned to the CTC system, such as by the dispatcher receiving the code from the railway field worker, for example, through a radio transmission. POPR at 6-8; Ahmadian Decl. ¶ 34. By putting the power to lift a block in the hands of the railway field worker(s) working under its protection, the inventions prevent errant unblocking of track and ultimately save lives, prevent injury, and prevent damage to equipment and/or property. POPR at 6-8; Ahmadian Decl. ¶ 49.

Consistent with this and as Railware explains in its POPR (and which SEPTA ignores), the word “terminal” could refer to the dispatcher’s terminal or the railway field worker’s terminal, depending on the context of its use. For example, Railware explains that “the railway control *terminal* 105 . . . enables safety measures so that the block cannot be removed without the input of the secret code generated.” POPR at 11 (quoting ’782 patent at 9:65-10:1) (emphasis added and removed). Further, Railware argued in its POPR that “the Petition fails to establish that the block is removed ‘only upon receiving the release code from the user terminal,’ *as that term is used in the context of the ’782 patent*,” thereby making clear that the term “user terminal” is a contextual term whose meaning can change depending on the context. *Id.* at 28.

More, Railware explains that one of Amtrak's cited references fails to show "what information, if any, is actually 'received in return' at the *dispatcher's terminal*." *Id.* at 30 (emphasis added). Accordingly, Railware's POPR, consistent with the '782 patent itself, uses the phrase "user terminal" contextually to refer to the "user terminal" of the dispatcher (*e.g.*, in the context of claim 5) and to refer to the "user terminal" of the railway field worker (*e.g.*, in the context of claim 1).

Taking the isolated statement out of context, SEPTA seeks to advance a "gotcha" argument. Specifically, SEPTA argues that by including the phrase "user terminal, which is in the field with the railway worker," Railware somehow allegedly disclaimed the plain meanings of the term "user terminal" as used in the context of claim 5. In order to find that a patentee disclaimed claim scope, however, such disclaimer must be "clear and unmistakable." *Maquet Cardiovascular*, 131 F.4th at 1343. Courts "must not divorce the analysis from the claim language at issue by looking more broadly to the claims' subject matter." *Id.* at 1340. Railware made no "clear and unmistakable" disclaimer of claim scope with respect to "user terminal." *Id.* at 1343. Again, SEPTA takes the statement out of context, and, in the process, ignores Railware's POPR where it consistently explains that the word "terminal" could refer to the dispatcher's terminal or the railway field worker's terminal, depending on the context of its use.¹³ More, the construction of "user terminal" was not at issue in the IPR. The statement SEPTA takes out of context concerned Railware's proposed construction of a different claim term (*i.e.*, "release code") and concerned a different aspect of the claimed inventions. As such,

¹³ While perhaps Railware could have been more precise in its language to state that "[b]y using the word 'only,' the claims require that the 'release code' is not readily available to the dispatcher until the 'release code' is received from the user terminal, [as that term is used in each respective claim]," this is of no moment here because when read in light of the rest of Railware's POPR and the specification and claims of the '782 patent, the meaning of these terms is clear, as used on the context of claims 1 and 5 as discussed herein. And, again, there was no clear and unmistakable disclaimer of claim scope. *Maquet Cardiovascular*, 131 F.4th at 1343.

the isolated statement is of no value to construing “user terminal” as used in claim 5. *Id.* Overall, SEPTA’s arguments regarding Railware’s POPR are nothing more than an attempt to sow confusion and manufacture potential noninfringement and/or invalidity arguments. A POSITA would not be so easily fooled, as Dr. Ahmadian’s unrebutted testimony establishes. Ahmadian Decl. ¶¶ 247-275.

Finally, in view of SEPTA’s failings above, SEPTA’s proposed construction appears motivated by a desire to manufacture potential noninfringement and/or invalidity arguments than staying true to the intrinsic and extrinsic evidence of the ’782 patent. For example, according to SEPTA, SEPTA’s accused systems allegedly place and remove blocks and generate and send codes using a dispatcher’s terminal. Ahmadian Decl. ¶¶ 28, 44. Under SEPTA’s proposed construction, however, claim 5 would be rewritten to require that the placement and removal of blocks, as well as the generation and transmission of codes, all occur on the railway field worker’s terminal. Ahmadian Decl. ¶¶ 267-268. As discussed above, SEPTA’s rewriting of claim 5 in this way is improper and not supported by the intrinsic or extrinsic evidence. And SEPTA’s attempt to propose a construction designed to manufacture a potential noninfringement argument should be rejected. *Diversey, Inc. v. POPS Techs. LLC*, No. 1:18-CV-4210-AT, 2021 WL 3396803, at *21 (N.D. Ga. June 14, 2021), *report and recommendation adopted*, No. 1:18-CV-4210-AT, 2022 WL 886220 (N.D. Ga. Jan. 12, 2022) (“‘Manufactured’ disputes over the meaning of claim language through litigation inspired ‘proposed constructions’ does not equate to true disagreements among persons having ordinary skill in the art.”).

In sum, Railware’s proposed construction of “user terminal of a terminal user (*i.e.*, the dispatcher)” should be adopted because it is supported by the intrinsic and extrinsic evidence of the ’782 patent. In contrast, SEPTA’s proposed construction is inconsistent with the intrinsic and

extrinsic evidence and would render aspects of claim 5 meaningless and nonsensical and create considerable inconsistencies and confusion.

C. “user terminal” [’835 patent] and “remote user terminal” [’115 patent] Mean “user terminal of a railway field worker”

<u>Railware’s Proposed Construction</u>	<u>SEPTA’s Proposed Construction</u>
user terminal of a railway field worker	railway field worker’s mobile user device

Both Railware and SEPTA are aligned in that these terms should be construed to refer to the user terminal of the railway field worker.¹⁴ The dispute, to the extent there is one, appears to lie in whether the claim term “user terminal” should be rewritten as a “mobile user device” (*i.e.*, SEPTA’s position) or whether it need not be further construed (*i.e.*, Railware’s position). SEPTA’s proposed construction should be rejected because it improperly adds words to potentially narrow the claims and is not supported by the intrinsic or extrinsic evidence. *See* Ahmadian Decl. ¶¶ 237-245. In contrast, Railware’s proposed construction is supported by the intrinsic and extrinsic evidence. *See id.* ¶¶ 226-236.

1. The Claim Language of the ’835 and ’115 Patents Supports Railware’s Proposed Construction.

Railware’s construction conforms to the claim language of the ’835 and ’115 patents. *See* Ahmadian Decl. ¶¶ 229-232. The claims at issue in both patents use the term “user terminal,” ’835 patent claims 1, 20, 23, 30, 33, 40, 41, or “remote user terminal,” ’115 patent claims 20, 24-27, 29, 30, 31, 35, 36. They do not use the term “mobile user device.” In fact, the term “mobile user device” does not appear at all in either patent—not in the claims or the specifications of the ’835 and ’115 patents. Ahmadian Decl. ¶ 238. There is therefore no reason to stray from the

¹⁴ Railware acknowledges that its proposed construction for “user terminal” differs between the ’782 patent and the ’835 and ’115 patents. Although claim terms are generally construed consistently across related patents, this is not an absolute rule, particularly here, where the differing constructions remain faithful to the claim language and the specifications of the respective patents. *See Vascular Sols. LLC v. Medtronic, Inc.*, 117 F.4th 1361, 1370 (Fed. Cir. 2024).

plain language of claims, which “define the invention to which the patentee is entitled the right to exclude.” *Phillips v. AWH Corp.*, 415 F.3d at 1312; *see also SmithKline Beecham Corp. v. Apotex Corp.*, 403 F.3d 1331, 1338-39 (Fed. Cir. 2005).

Accordingly, the claim language of the ’835 and ’115 patents support Railware’s proposed construction of “user terminal of a railway field worker.”

2. The Specifications of the ’835 and ’115 Patents Support Railware’s Proposed Construction.

The specifications of the ’835 and ’115 patents provide further support that the “user terminal” and “remote user terminal” refer to the “user terminal of a railway field worker.” *See Ahmadian Decl.* ¶¶ 233-236. Indeed, the specification of the ’835 patent consistently refers to the railway field work’s terminal as a “terminal.” *See, e.g.*, ’835 patent at 7:20-27 (“The release code is then sent to *the terminal* [102] 103. *This terminal* [102] 103 is the *contact associated with the designated worker . . .*”) (emphasis added); *see also id.* at 5:4-7, 6:65-7:2, 7:28-30, 7:33-34. The specification of the ’115 patent is the same. ’115 patent at 7:23-30 (“The release code is then sent to *the terminal* [102] 103. This terminal [102] 103 is the contact associated with the designated worker . . .”); *see also id.* at 5:7-10, 7:1-5, 7:31-33, 7:37-38. This is consistent with the claim language, as discussed above.

The specifications of the ’835 and ’115 patents also provide numerous examples of “user terminals,” as well as a description of the relevant components of the user terminal such that no further construction is necessary or helpful for these terms. For example, the ’835 and ’115 patents state “[t]he terminal 103 could be any communication device such as, but not limited to, mobile phone or smartphone, tablet, [WIC (or another)] pager, PDA, etc.” ’835 patent at 9:23-25; ’115 patent at 9:25-27. Further, the specifications state that “a user terminal (e.g., the terminal 103” can include “a controller (or processor) 202 that communicates with a number of

other components, including storage 203, display 204, input/output (such as mouse, touchpad, stylus, microphone and/or speaker with voice/speech interface and/or recognition software, etc.) 205 and a network interface 206, by way of an internal bus 201.” ’835 patent at 6:31-39; ’115 patent at 6:34-42. Notably absent from any of this discussion is any limitation of the “terminal”/“user terminal” to a “mobile user device” (whatever these words mean to SEPTA). Indeed, as stated above, the phrase “mobile user device” does not appear in the specifications (or claims) of the ’835 or ’115 patents at all.

Accordingly, based on the descriptions and examples of “terminal” and “user terminal” in the specifications of the ’835 and ’115 patents, a POSITA would understand that the claimed “user terminal” in the ’835 patent and the claimed “remote user terminal” in the ’115 patent is the “user terminal of a railway field worker,” without further construction, as proposed by Railware. Ahmadian Decl. ¶ 236.

3. SEPTA’s Proposed Construction is Improper and Is Not Supported by the Intrinsic or Extrinsic Evidence.

SEPTA improperly proposes rewriting the claims so that “user terminal” and “remote user terminal” mean a “mobile user device.” SEPTA’s proposed rewriting of the claims is not supported by the intrinsic or extrinsic evidence and should be rejected for at least two reasons: (1) SEPTA’s proposed construction runs counter to the law of claim construction because it improperly adds words to the claims to potentially narrow their scope; and (2) SEPTA’s proposed construction is contrary to the claims and specifications of the ’835 and ’115 patents. *See* Ahmadian Decl. ¶¶ 237-245.

First, SEPTA’s proposed construction ignores the core principle that the Court “cannot add or subtract words from the claims . . . to broaden or narrow their scope.” *Biedermann*, 2020 WL 1933918, at *2. For example, SEPTA’s proposed construction adds the words “mobile user

device” into the claims. While the phrases “user terminal” and “remote user terminal” certainly encompass the concept of (or may be synonymous with) a “mobile user device,” nothing in the claims or specifications indicate that the “user terminal” must be a “mobile user device” (whatever these words apparently mean to SEPTA). Ahmadian Decl. ¶¶ 239, 245. In contrast with SEPTA’s proposed construction, the specifications of the ’835 and ’115 patents state “it should be understood that the subject matter of this disclosure can be utilized by any computing device including but not limited to PDAs (personal digital assistants), cell phones, personal, notebook and workstation computers, kiosks, other information terminals, [WIC (or another)] pager, etc.” ’835 patent at 4:56-61; ’115 patent at 4:59-64; Ahmadian Decl. ¶ 239. Stated differently, nothing in the specifications necessarily limit the scope of the claims to a “mobile user device,” as SEPTA proposes. By improperly adding words to the claims by rewriting the “user terminal” to be a “mobile user device,” SEPTA’s proposed construction runs afoul of the law.

Second, SEPTA’s proposed construction lacks support in the claims and specifications of the ’835 and ’115 patents. As discussed above, the term “mobile user device” is not used in the claims or specifications of the ’835 or ’115 patents. Ahmadian Decl. ¶ 238. Adding the term “mobile user device” and substituting it for “user terminal” and “remote user terminal” in the ’835 and ’115 patents would, therefore, be potentially confusing to a POSITA. *Id.* This confusion is apparent because SEPTA’s proposed construction is contrary to the specifications of the ’835 and ’115 patents. For example, in addition to the above, the specifications of the ’835 and ’115 patents are also clear that the inventions described were intended to capture various configurations of technology, ’835 patent at 4:56-61; ’115 patent at 4:60-64, as well as “services in a modular fashion by other devices connected by a communication network,” ’835 patent at

4:61-64; '115 patent at 4:64-67. Moreover, both the '835 and '115 patents state that “the terminal 103 could be *any communication device*” and not necessarily a “mobile user device” (whatever these words mean to SEPTA). '835 patent at 9:23-25 (emphasis added); '115 patent at 9:25-27; Ahmadian Decl. ¶ 239. By limiting or changing the claims to a “mobile user device,” SEPTA’s proposed construction may exclude numerous embodiments in which the “user terminal” or “remote user terminal” may not be a “mobile user device,” however SEPTA interprets those words. Ahmadian Decl. ¶¶ 244-245.

Further, as discussed above, the specifications of the '835 and '115 patents also identify the components of the “terminal” of the railway field worker, including “a controller (or processor) 202 that communicates with a number of other components, including storage 203, display 204, input/output (such as mouse, touchpad, stylus, microphone and/or speaker with voice/speech interface and/or recognition software, etc.) 205 and a network interface 206, by way of an internal bus 201.” '835 patent at 6:31-39; '115 patent at 6:34-42. A POSITA would understand this recitation of components to apply broadly to any device that contains such components. Ahmadian Decl. ¶¶ 239-240. SEPTA’s proposed construction that “user terminal” must be a “mobile user device” (whatever these words apparently mean to SEPTA) is potentially contrary to the expansive description for the “terminal” provided in the specifications of the '835 and '115 patents, and would be potentially confusing to a POSITA. *Id.* ¶¶ 272-273.

More, as discussed above with respect to “user terminal” as used in the '782 patent, contemporaneous dictionaries have defined “terminal” consistently with the '835 and '115 patents, further demonstrating that SEPTA’s attempts to redefine “user terminal” as “mobile user device” (whatever these words apparently mean to SEPTA) is unnecessary, confusing and unhelpful. *See supra*, Section IV.B.3.

Given the lack of support in the claims and specifications for SEPTA's proposed construction, SEPTA's proposed construction appears to be motivated by a desire to manufacture potential noninfringement and/or invalidity arguments rather than stay true to the intrinsic or extrinsic evidence. For example, according to SEPTA, SEPTA's accused systems allegedly use a "mobile phone configured to operate as a one-way text pager" to receive the code and a "radio" to return the code to the dispatcher. Ahmadian Decl. ¶¶ 352-355. Under SEPTA's proposed construction, however, certain claims of the '835 and '115 patents would be rewritten to require a "mobile user device" (whatever these words apparently mean to SEPTA) rather than a "user terminal" and thereby potentially literally read-out SEPTA's accused systems. As discussed above, SEPTA's rewriting of the claims of the '835 and '115 patents in this way is improper and not supported by the intrinsic or extrinsic evidence. And SEPTA's attempt to propose a construction designed to manufacture a potential noninfringement argument should be rejected. *Diversey, Inc.*, 2021 WL 3396803, at *21.

In contrast to SEPTA's proposed construction, Railware's proposed construction remains faithful to the intrinsic and extrinsic evidence. Indeed, Railware's proposed construction adds no new words to the claims, avoids potential confusion, and aligns with the descriptions of "user terminal" in the specifications and claims of the '835 and '115 patents. Accordingly, Railware's proposed construction of "user terminal of a railway field worker" should be adopted.

V. CONCLUSION

For all the foregoing reasons, Railware respectfully requests that this Court adopt Railware's proposed constructions and arguments and reject SEPTA's proposed constructions and arguments.

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Respectfully submitted,

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