

Filed: December 2, 2024

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

COMMSCOPE TECHNOLOGIES LLC,
Petitioner
v.

BELDEN CANADA ULC,
Patent Owner

Case IPR2024-01218
Patent No. 10,795,107

PATENT OWNER'S PRELIMINARY RESPONSE

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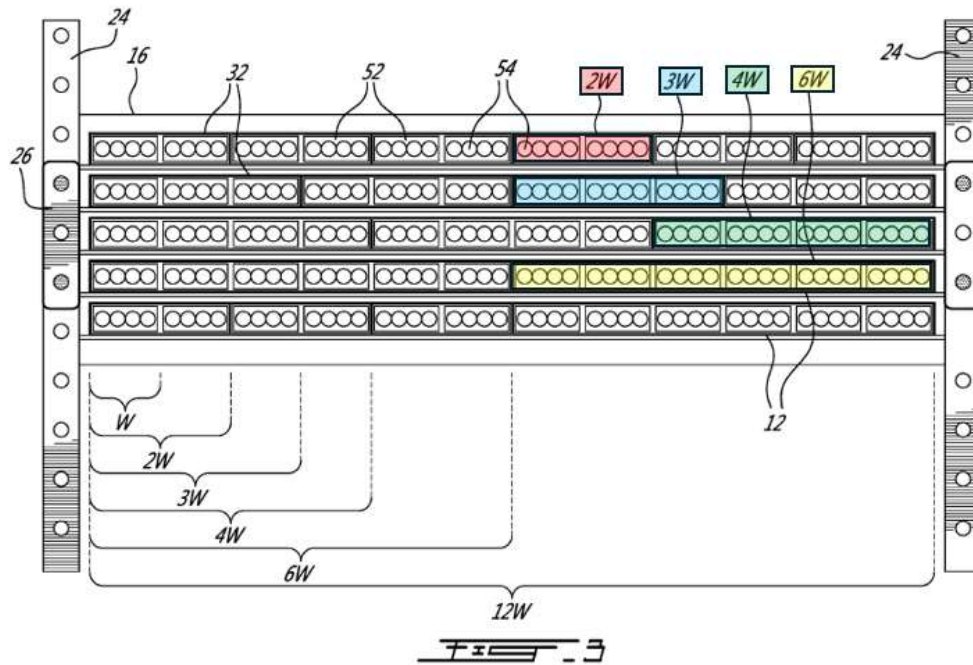
I. Introduction

Patent Owner Belden Canada ULC respectfully requests that the Board deny institution of Petitioner CommScope Technologies LLC's Petition challenging claims 1-5 and 8-13 of U.S. Patent No. 10,795,107 ("the '107 patent") (Ex. 1001).¹

The '107 patent is one of a family of patents directed to a novel modular fiber optic cassette system. Prior art cassette and tray systems suffered from a number of drawbacks, including "that cassettes which are used to terminate fiber optic cables comprising different numbers of optic fibers are generally incompatible with one another and additionally require trays with different spacing, securing mechanisms and the like." '107 patent at 1:29-34. To address these issues, the '107 patent teaches the use of "different cassette sizes . . . based on an integer multiple of a standardised pitch or width unit W" (*id.* at 3:42-45) and "a fastener assembly for removeably securing each of the cassettes" (*id.* at Abstract). These cassettes are referred to as the "2W cassette," "3W cassette," "4W cassette," and "6W cassette." *Id.* at 3:46-54. The

¹ Patent Owner is also concurrently submitting preliminary patent owner responses in IPR2024-01227 and IPR2024-01228. Those proceedings challenge patents related to the '107 patent. Although the arguments in those proceedings are similar, the arguments (and claims) are not the same as in this proceeding.

simplicity of this elegant system is illustrated below, where each cassette of a standardized width fits “snuggly” next to neighboring cassettes (*id.* at 3:54-59):



Id. at Fig. 3 (annotated). Cassettes of the same size can be used together (e.g., four $3W$ cassettes together) or, alternatively, “cassettes 32 of different widths could be used together” (e.g., three $2W$ cassettes and one $6W$ cassette). *Id.* at 3:54-59.

Petitioner argued that the '107 patent claims would have been obvious, but the Petition relied upon a host of legal and factual errors that preclude institution. In particular, the Petition included six (6) grounds. Grounds 1-3 rely on Fukui (Ex. 1004) as a primary reference and Grounds 4-6 rely on Sauter (Ex. 1006) as a primary reference. Petitioner, however, failed to establish a reasonable likelihood of

success regarding any challenged claims for either the Fukui grounds or Sauter grounds.

Fukui only discloses a cassette of a single width—not “a first of said set of cassettes comprising a first cassette width of one of one, two, three, four and six standard width units and a second of said cassettes comprising a second cassette width different from said first cassette width and one of one, two, three, four and six standard width units.” Fukui’s disclosure that a user can utilize an “open hole” in the single-width cassette to extend optical fibers into a second single-width cassette cannot transform two coupled cassettes into a cassette of a second width.

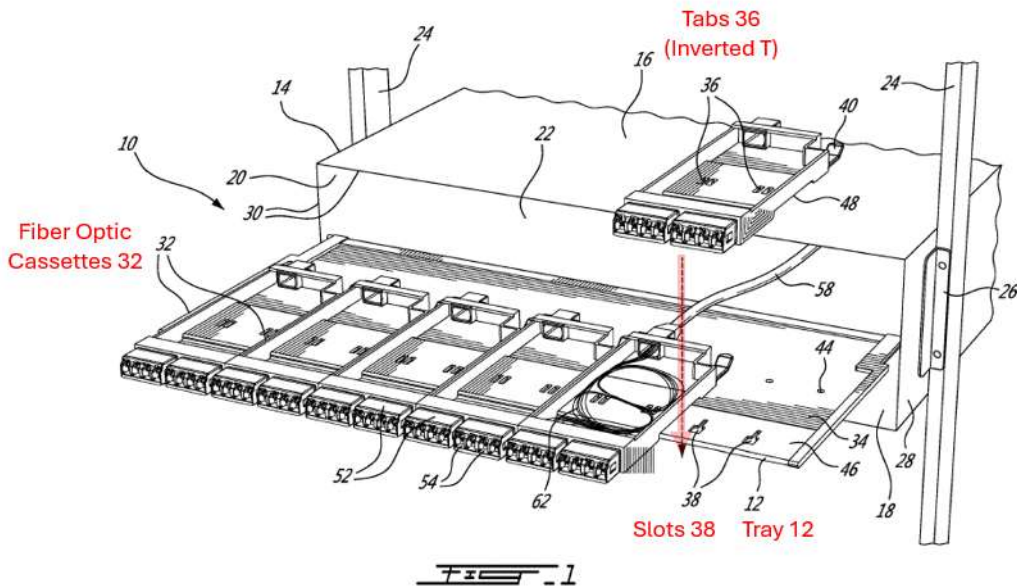
Petitioner’s Sauter-based arguments include three independent deficiencies. First, like Fukui, Sauter does not disclose or suggest “a first cassette width” and “a second cassette width,” wherein each width is a “standard width unit[],” as required by the claim. Second, Petitioner’s argument improperly mixed and matched separate and distinct features from various embodiments of Sauter, leaving the ultimate combination wholly deficient, especially regarding fundamental flaws in the proposed mappings of various claim elements. And third, the Board should exercise its discretion to deny institution because Petitioner’s proposed mapping of Sauter is cumulative of the arguments and prior art already considered by the Office during prosecution and Petitioner failed to demonstrate any error by the Office.

II. Overview of the '107 Patent

The '107 patent is directed to “a modular fiber optic cassette.” '107 patent at 1:14-15. Of the challenged claims, claims 1 and 8 are the only independent claims.

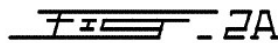
As the '107 patent explains, the prior art discloses fiber optic cassettes “for use in terminating fiber optic trunk cables and splitting them out to patch cables.” *Id.* at 1:23-26. These cassettes “are removeably arranged on tray systems within a rack mounted case.” *Id.* According to the '107 patent, “[o]ne drawback of these cassettes and tray systems is that they are typically preconfigured to terminate fiber optic cables comprising a single predetermined number of optic fibers.” *Id.* at 1:26-29. “Another drawback is that cassettes which are used to terminate fiber optic cables comprising different numbers of optic fibers are generally incompatible with one another and additionally require trays with different spacing, securing mechanisms and the like.” *Id.* at 1:29-34.

In response to these problems with prior art systems, the '107 patent discloses “a fiber optic cassette comprising a width of one or more standard width units and such that fiber optic cassettes of different widths can be arranged on the same tray while optimizing the use of tray space.” *Id.* at 1:15-19. As the annotated figure below illustrates, “tray 12 receives a plurality of removable fiber optic module or cassettes 32 arranged side by side on an upper surface 34.” *Id.* at 2:66-3:2.



Id. at Fig. 1 (annotated). In one embodiment, “each fiber optic cassette 32 is secured to the tray 12 using a fastener comprising tabs 36 of inverted ‘T’ cross section which engage with respective slots 38 machined or otherwise formed in the tray 12.” *Id.* at 3:2-5. In this way, cassettes 32 are secured to the tray using a fastening mechanism on their underside.

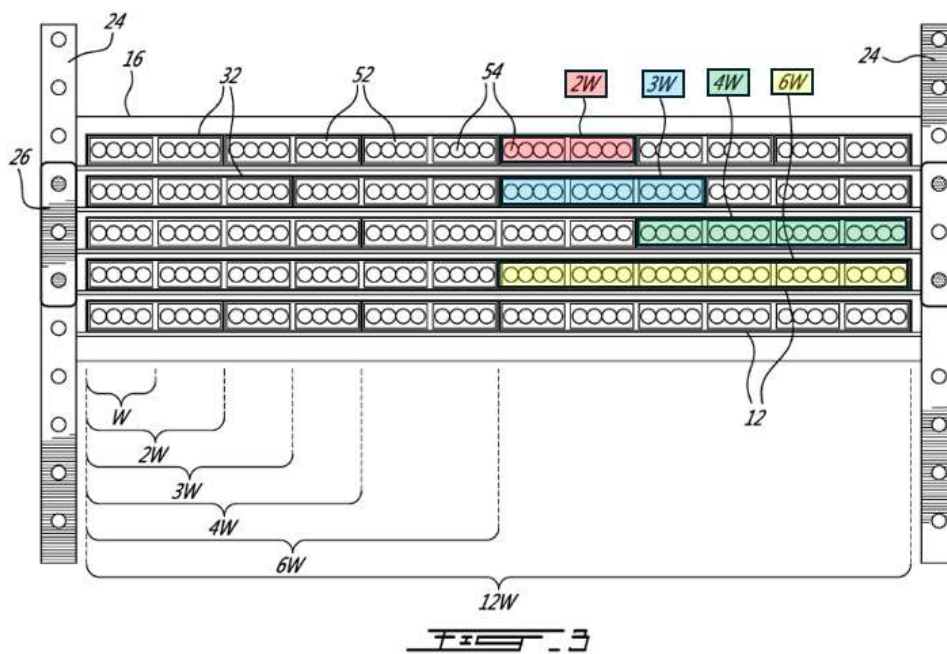
Each cassette 32 includes “a plurality of receptacle modules 52 each comprising a plurality of receptacles 54 . . . arranged in a row and exposed along a forward edge 56 of the cassette 32.” *Id.* at 3:16-20.



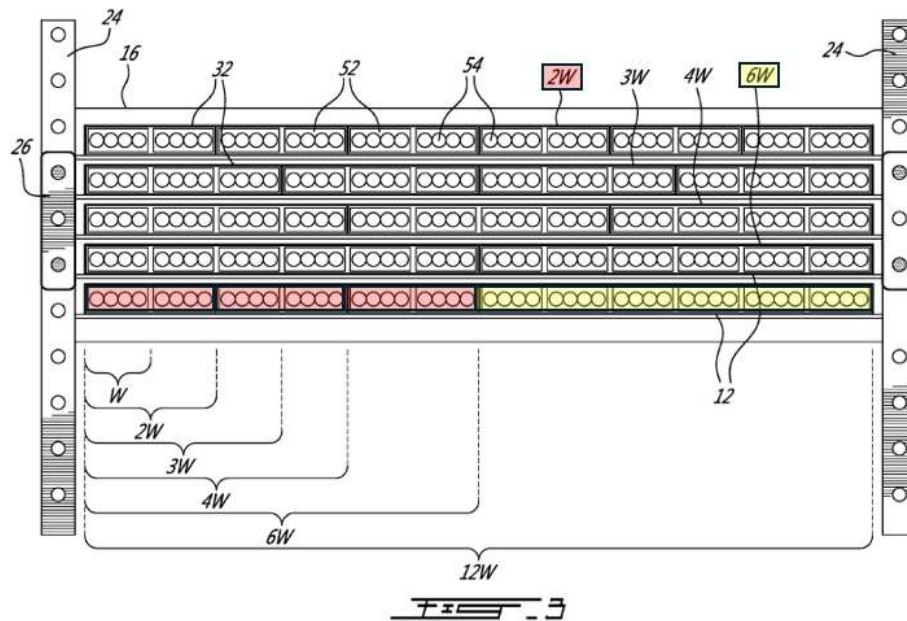
Id. at Fig. 2A (annotated). Cassette 32 “terminates a fiber optic cable 58, such as a trunk cable or the like, comprising a plurality of optic fibers at a multi-fiber connector receiving receptacle 60 on a rearward edge.” *Id.* at 3:20-24. “Each optic fiber of the fiber optic cable 58 is interconnected with a respective one of the receptacles 54 using an optic fiber segment 62 comprising a receptacle end which is terminated by a plug 64.” *Id.* at 3:24-27.

Figure 3, annotated below, illustrates how “a fiber optic cassette comprising a width of one or more standard width units and such that fiber optic cassettes of different widths can be arranged on the same tray while optimizing the use of tray space.” *Id.* at 1:15-19. The ’107 patent discloses “a set of four (4) different cassette

sizes to accommodate terminating fiber optic cables comprising [a] different number of optic fibers.” *Id.* at 3:39-41. “Each of the different cassette sizes of the set is based on an integer multiple of a standardised pitch or width unit W ” *Id.* at 3:41-45. These cassettes are referred as the “2W cassette,” “3W cassette,” “4W cassette,” and “6W cassette.” *Id.* at 3:46-54. These are each shown in the figure below:



Id. at Fig. 3 (annotated). In some embodiments, such as the one below, “cassettes 32 of different widths could be used together.” *Id.* at 3:54-59.



Id. at Fig. 3 (annotated). In either case, the “six (6), four (4), three (3) and two (2) cassettes fit snugly side by side on the 12W tray.” *Id.* at 3:54-59.

III. Grounds 1-3: Petitioner Failed to Establish a Reasonable Likelihood that Petitioner Would Prevail on Any Claim Challenged in View of Fukui (Alone or in Combination with Other References).

A. Fukui Cannot Render Obvious Claim 1’s Recitation of “a First of Said Set of Cassettes Comprising a First Cassette Width” and “a Second of Said Cassettes Comprising a Second Cassette Width.”

Fukui (alone or in combination with Sedor (Ex. 1005) or Laarveld (Ex. 1026)) fails to render obvious claim 1 because it does not disclose or teach “a set of fiber optic cassettes,” as claimed. Claim 1 recites “a first of said set of cassettes comprising a first cassette width of one of one, two, three, four and six standard width units and a second of said cassettes comprising a second cassette width different from said first cassette width and one of one, two, three, four and six

standard width units.” And Fukui’s disclosure and other prior art of record (including Petitioner’s characterization of this other prior art) also make clear that Fukui does not disclose or teach anything other than one type of cassette: a single “standard width unit[.]”²

According to Petitioner, “Fukui’s modules (e.g., 10, 20) are a set of fiber optic cassettes.” Petition at 41. Module 10 is shown on the left, and module 20 is shown on the right:

Fig.4

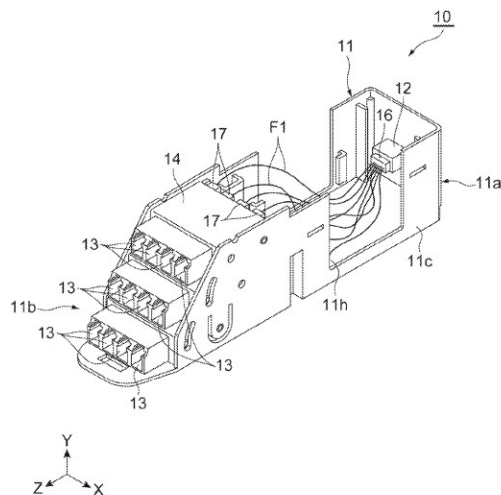
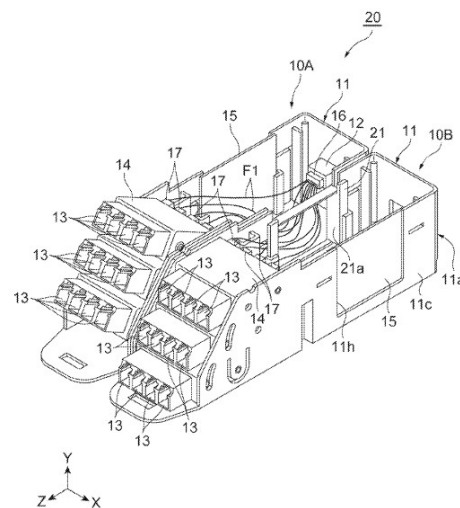


Fig.5

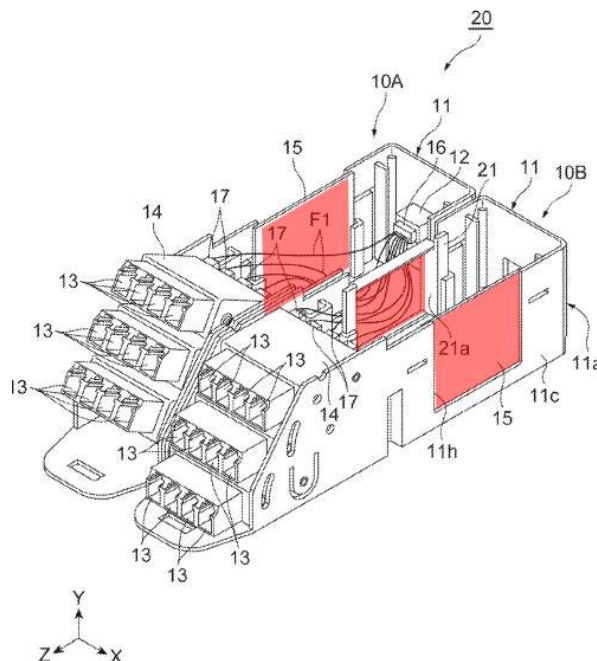


² The parties have a pending claim construction dispute in the parallel district court litigation regarding the “width” language. *See* Petition at 21-23. In any event, Petitioner’s deficiency regarding claim 1 applies irrespective of any claim construction dispute in the parallel litigation.

Fukui at Fig. 4 (left), Fig. 5 (right). Petitioner argued that “Fukui’s module 10 is an example of the recited ‘*first cassette*’ with a width of ‘*one*’ standard width unit, and Fukui’s module 20 is an example of the recited ‘*second cassette*’ with a width of ‘*two*’ standard width units.” Petition at 50.

Fukui, however, makes clear that module 20 is nothing more than two modules 10 coupled together—not a second module of a different width. According to Fukui, to expand the capacity of this single-core conversion module 10, two single-core conversion modules 10 may be “coupled” together. Fukui at 7:23-8:6. Fukui teaches that modules 10 are connected using “coupling member 21,” which spans the opening 11h of each individual module. *Id.* at 7:34-41. This coupling member has an “open hole” (*id.* at 7:42-43), shown in red below:

Fig.5

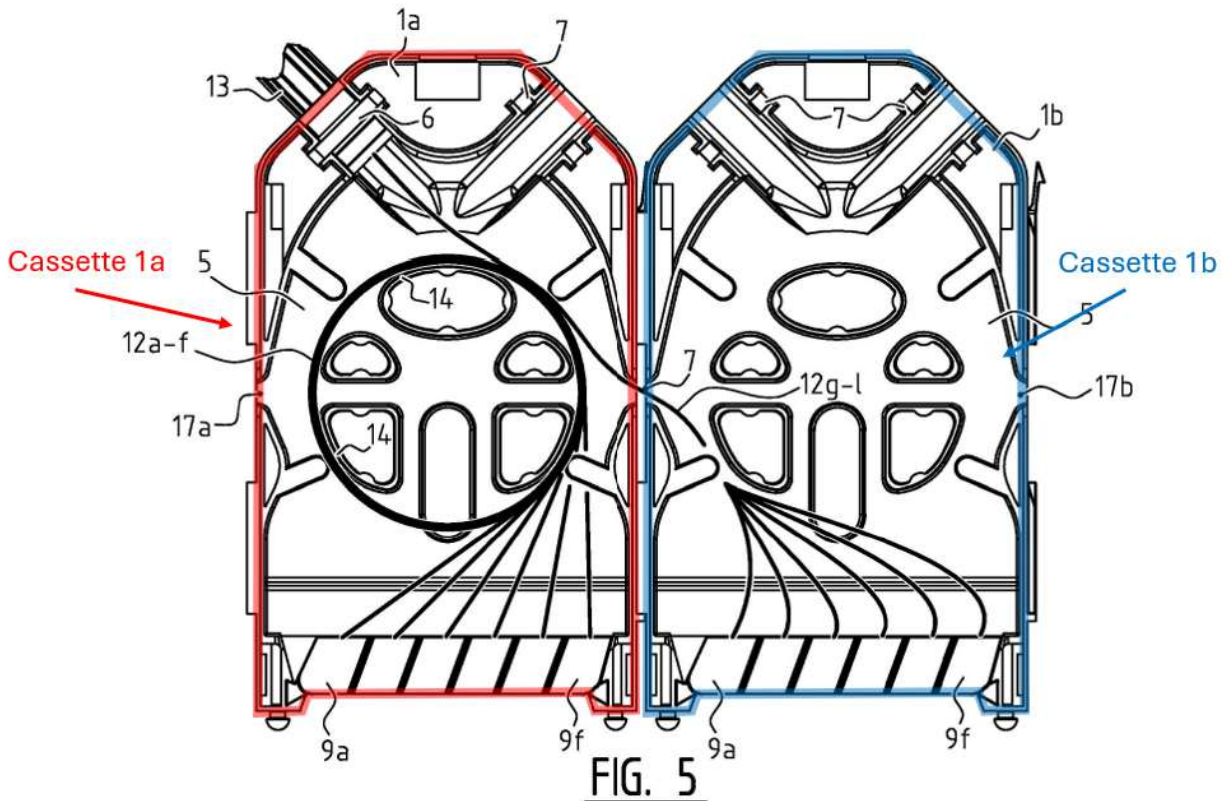


Id. at Fig. 5 (annotated). The open hole enables “optical fibers F1 extending from the multi-core optical connector 16 of the first unit module 10A [to] pass through the respective openings 11h . . . to be led to the second unit module 10B.” *Id.* at 7:42-56. But this does not meet the requirements of the “second cassette,” as claimed.

Claim 1 requires one cassette of a certain width (“a first of said set of cassettes comprising a first cassette width”) and a second cassette of a different width (“a second of said cassettes comprising a second cassette width”). Fukui only discloses one type of cassette: a single “standard width unit[.]” Even if that unit can be connected to a neighboring unit through an “open hole,” the cassette size (i.e., that of module 10) remains the same (even if, collectively, the modules are labeled differently). Fukui cannot anticipate or render obvious claim 1 merely by including an opening to connect two (or more) modules 10.

Indeed, other prior art cited by Petitioner and Petitioner’s characterization of that art make clear that merely coupling two cassettes together—as taught by Fukui—does not turn two cassettes into a single cassette. According to Petitioner, “Laarveld [(Ex. 1026)] discloses . . . creat[ing] larger cassettes by coupling cassettes together.” Petition at 87-88 (citing Laarveld’s Figure 5). But according to Laarveld, Figure 5 discloses “**two cassettes** 1a and 1b”—not a single cassette—“that are arranged side by side.” Laarveld at 14:23-24 (emphasis added); *see also id.* at 14:26-

15:8 (further characterizing two connected cassettes in terms of a “first cassette” and “second cassette”).



Id. at Fig. 5 (annotated). Petitioner further adopted Laarveld’s characterization of the two cassettes, explaining that, “[l]ike Fukui, Laarveld teaches [that] the fibers from the cable in the rear (13) can be distributed to **both coupled cassettes** by routing the fibers through a passage in the middle.” Petition at 88 (emphasis added) (citing Laarveld at 14:27-15:1). Thus, under Petitioner’s own language, Fukui’s two cassettes, when coupled together, are “coupled cassettes”—not a single cassette with a different width than the uncoupled cassettes. Coupling two cassettes does not result in a single cassette—it results in two coupled cassettes.

B. Fukui Similarly Cannot Anticipate or Render Obvious the Cassette Width Requirements of Independent Claim 8.

Claim 8 recites “selecting a plurality of cassettes for installation on the tray from a set of cassettes having a plurality of different widths, wherein each of said different widths is evenly divisible by said standard width unit.” Petitioner’s argument for claim 8 mirrors the argument for claim 1, and Petitioner likewise contends that “Fukui’s modules 10 and 20 have different widths.” *Id.* at 75-76 (citations omitted). But as discussed for claim 1, Fukui only discloses one type of cassette: a single “standard width unit.” Even if that unit can be connected to a neighboring unit, the cassette size remains the same. Fukui thus neither anticipates nor renders obvious claim 8’s recitation of “a set of cassettes having a plurality of different widths.”

IV. Grounds 4-6: Petitioner Failed to Establish a Reasonable Likelihood that Petitioner Would Prevail on Any Claim Challenged in View of Sauter (Alone or in Combination with Other References).

Petitioner’s analysis of independent claim 1 under Ground 4 fails for two separate reasons. First, Petitioner’s analysis of claim 1’s “width” limitation is deficient because Sauter’s single-gang and double-gang cassettes do not disclose or render obvious the recited “width” limitation of the claim. Second, Petitioner’s mapping of claim 1 to the prior art is intentionally obscure, mapping individual claim limitations to multiple alternative embodiments in Sauter, as well as disclosures in

other references. Each deficiency provides an independent basis to deny institution. Petitioner's additional Sauter-related arguments under Ground 5 and Ground 6 fail to make up for the deficiencies in Ground 4.

A. Under Ground 4, Petitioner Failed to Establish that Sauter Renders Obvious Claim 1.

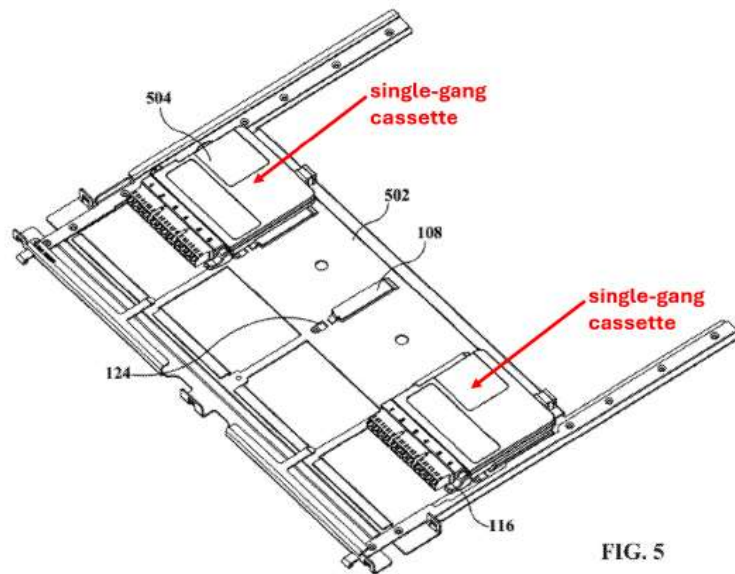
1. Sauter Cannot Render Obvious Claim 1's Recitation of "a First of Said Set of Cassettes Comprising a First Cassette Width" and "a Second of Said Cassettes Comprising a Second Cassette Width."

Sauter (alone or in combination with Laarveld or Fukui) fails to render obvious claim 1 because Sauter does not disclose or suggest both (1) "a first of said set of cassettes comprising a first cassette width of one of one, two, three, four and six standard width units"; and (2) "a second of said cassettes comprising a second cassette width different from said first cassette width and one of one, two, three, four and six standard width units."

For Element 1C,³ Petitioner argued that "Sauter discloses a set of fiber optic cassettes," including "single-gang cassettes 112, 504 and double-gang

³ Petitioner identified "Element 1C" as "a set of fiber optic cassettes, a selected plurality of the cassettes arrangeable side by side along said tray front end wherein each of said cassettes comprises a plurality of optic plug receiving receptacles

cassettes 110.” Petition at 99-100 (citations omitted). The “single-gang cassettes” are shown below:

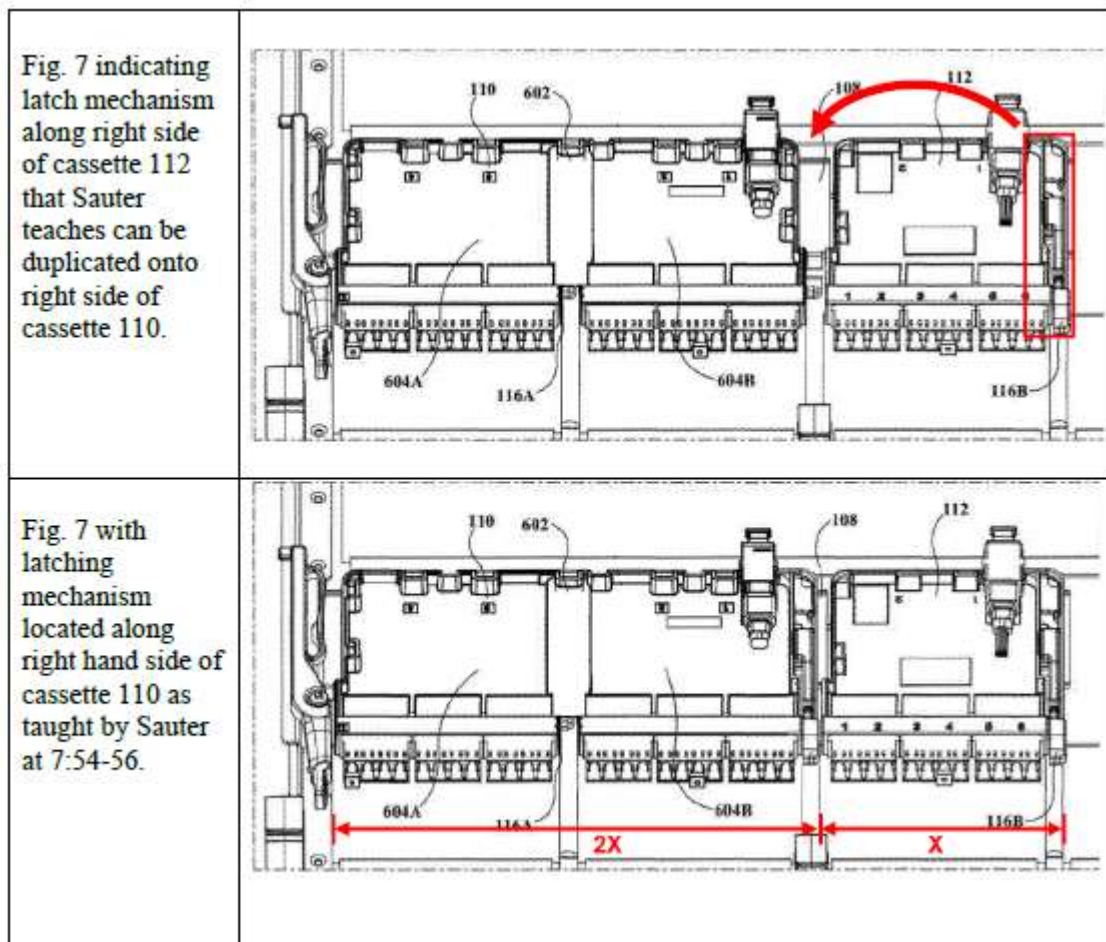


Id. (citations omitted) (annotating Sauter at Fig. 5).

Petitioner also argued that “Sauter’s sets of single/double/triple/multi-gang cassettes” disclose or render obvious “a first [second] of said set of cassettes comprising a first [second] cassette width of one of one, two, three, four and six

arranged side by side in a row along a front thereof, a first of said set of cassettes comprising a first cassette width of one of one, two, three, four and six standard width units and a second of said cassettes comprising a second cassette width different from said first cassette width and one of one, two, three, four and six standard width units.” Petition at 144.

standard width units.” *Id.* at 107-110 (alterations in original). Under Petitioner’s argument, Sauter’s “single-gang cassette” is a first cassette and a “double-gang cassette” is a second cassette. *Id.* at 107-108. Petitioner argued that “[w]hen the latching mechanism 120 of the double-gang cassette is positioned along the right-hand side of the cassette (as taught by Sauter . . .), the width of the double-gang cassette mathematically equals twice the width of the single-gang cassette.” *Id.* at 108 (citations omitted); *see also id.* at 110. According to Petitioner, this is shown below:



Id. at 110 (annotating and modifying Sauter at Fig. 7). This placement of latching mechanism 120 along the right-hand side of the double-gang cassette is key to Petitioner’s argument. It is, however, insufficient to meet the claim language for multiple reasons.

As an initial matter, Petitioner recognized that Sauter’s arrangement does not result in “exact multiples in width of the smallest gang cassette,” as Petitioner’s own construction requires. *Id.* at 136. Elsewhere in the Petition, Petitioner argued that “when Fukui’s mounting features [i.e., “hooks and holes” beneath the cassette] are used instead of Sauter’s [side] rails/rail guides/latch, the resulting cassettes[] would be exact multiples in width of the smallest gang cassette.” *Id.* (citation omitted). Petitioner thus conceded that modifying Sauter to include latching mechanism 120 along the right-hand side of the double-gang cassette does not result in “exact multiples in width of the smallest gang cassette.” *Id.* Sauter thus fails to meet the claim language as construed by Petitioner requiring “the cassette width must be evenly divisible by the standard width unit.” *Id.* at 21.

Petitioner’s argument is also incorrect because it requires integrating a structural feature onto the outside of a cassette’s housing to achieve the claimed cassette width. Indeed, Sauter’s Figure 6, which Petitioner labels the “double-gang cassette,” illustrates the double-gang cassette housing, without an integrated latching mechanism on the right-hand side:

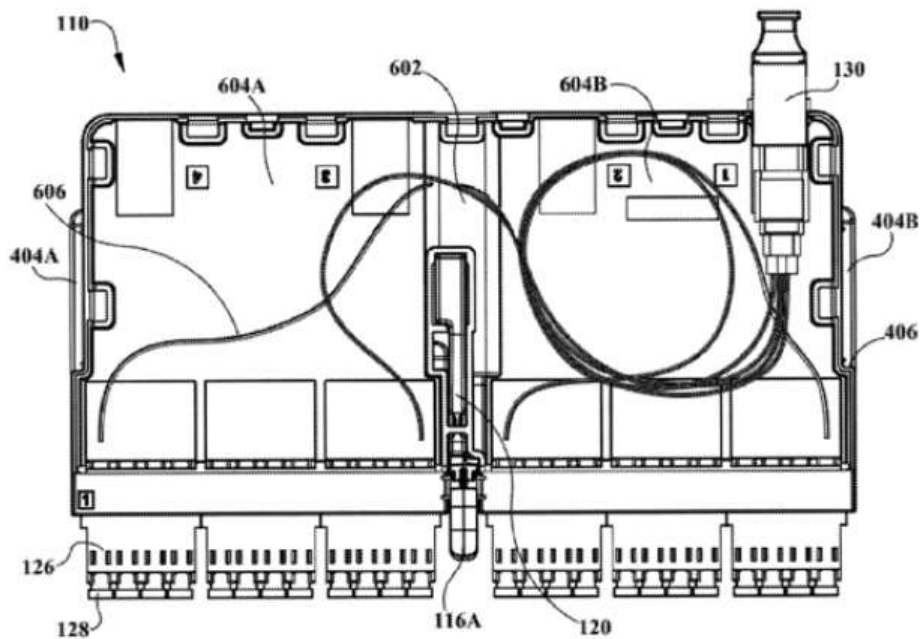


FIG. 6

double-gang cassette

Id. at 20 (annotating Sauter at Fig. 6); *see also* Sauter at 6:57-7:2. This is likewise illustrated in Figure 9, again without the latching mechanism:

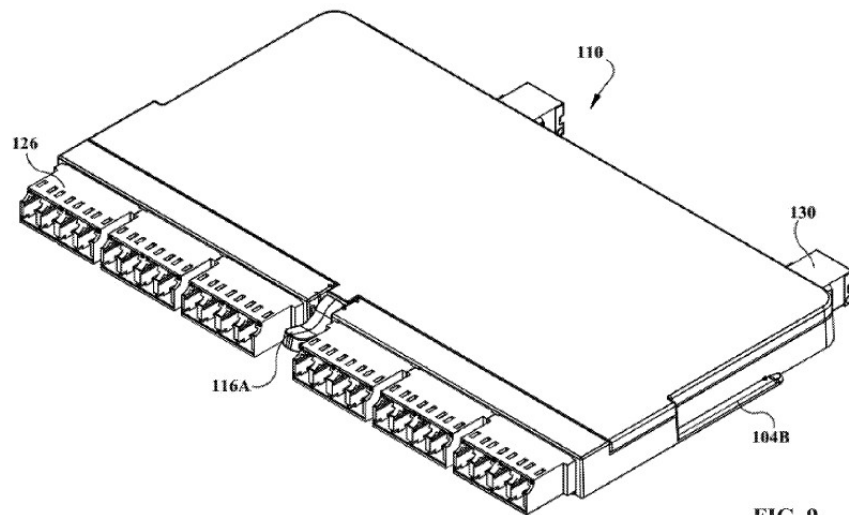


FIG. 9

Sauter at Fig. 9. And it is again illustrated in Figure 7, as annotated by Petitioner to call out the “double-gang cassette”:

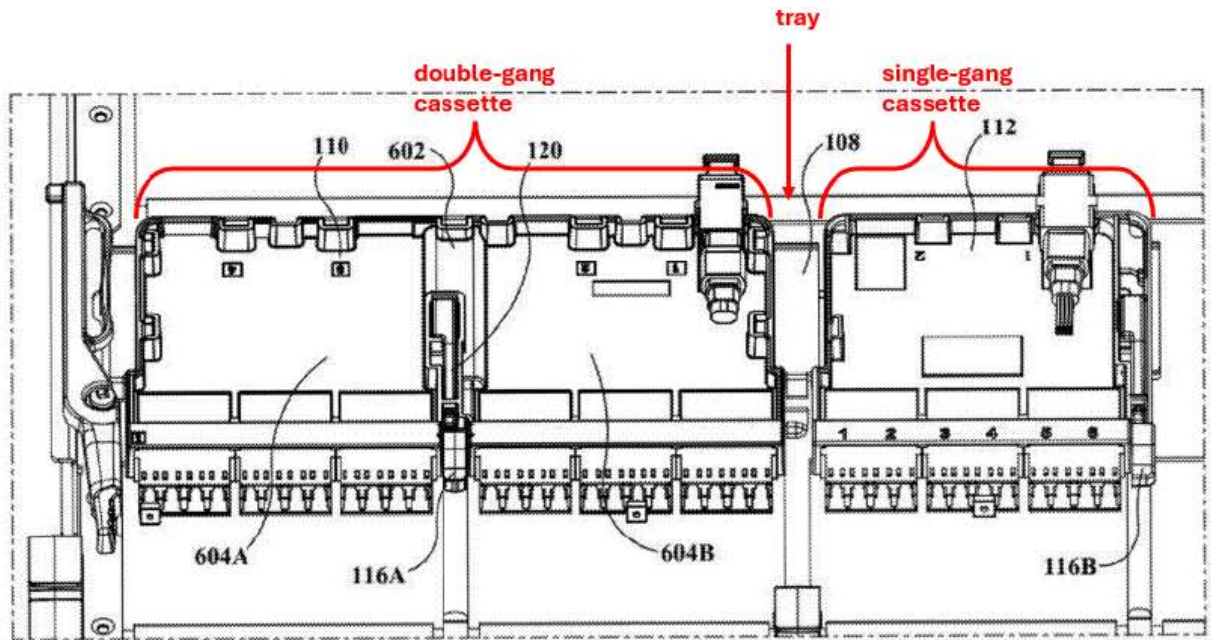


FIG. 7

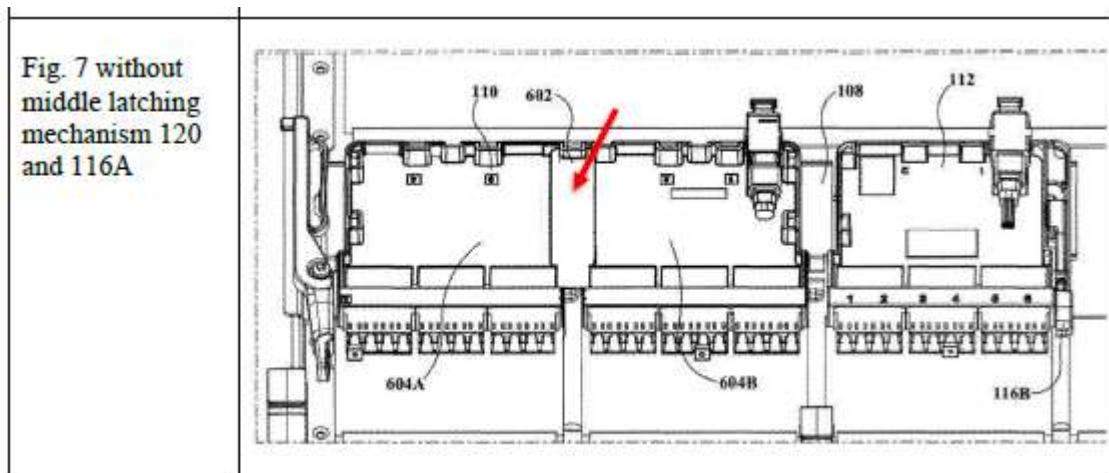
Petition at 20 (annotating Sauter at Fig. 7). These figures illustrate the span of Sauter’s double-gang cassette.

Moreover, Petitioner’s incorporation of features outside of the cassette itself is contrary to the plain language of the claim. The claim language refers to the “cassette width”: “a first of said set of cassettes comprising *a first cassette width* of one of one, two, three, four and six standard width units and a second of said cassettes comprising *a second cassette width* different from said first cassette width and one of one, two, three, four and six standard width units.” (Emphases added.) Petitioner, however, proposed stretching the claim term “cassette width” to cover both the cassette and a separately attached latching mechanism 120. *Id.* at 108. But

the claimed “cassette width” does not extend to features outside of the cassette case, including the attached latching mechanism 120 as Petitioner proposed.

Indeed, the ’107 patent discloses that “[e]ach of the different cassette sizes of the set is based on *an integer multiple of a standardised pitch or width unit W* wherein one standardized width unit accommodates a single receptacle module 52 comprising four (4) receptacles 54.” ’107 patent at 3:42-45 (emphasis added). Arbitrarily integrating latching mechanism 120 on the side of a cassette—as Petitioner does in the annotated and modified figure above—does not alter the width of the underlying cassette.

A technical expert is not required to see that Sauter’s double-gang cassette is *more than twice the width* of a single-gang cassette (when correctly considered without the features outside the cassette casing). As Sauter explains, the double-gang cassette requires a width sufficient to cover six receptacles *and* space for an intervening rail guide (i.e., “a clearance area 602”) between those receptacles. Sauter at 7:22-37. This is because the double-gang cassette requires latching mechanism 116A to be positioned in a clearance area in the middle of the double-gang cassette. *Id.* at 6:21-26, 7:3-37, 7:48-53. This clearance area was identified by Petitioner in the figure below:



Petition at 109 (annotating Sauter at Fig. 7). Sauter even recognizes that double-gang cassette 110 is only “approximately twice the width of [the] single-gang cassette (which is designed to fit between two adjacent rail guides)” because, unlike the single-gang cassette, “the dual-gang cassette 110 also spans an intermediate rail guide 108D.” Sauter at 7:15-19. The result is that Sauter’s double-gang cassette is more than twice the width of a single-gang cassette.

According to Petitioner, Sauter also allegedly meets the claim language under a construction proposed by Patent Owner during the parallel litigation. Petition at 107-108. In the parallel litigation, Patent Owner argued that the phrase “cassette width of one of one, two, three, four and six standard width units” should be construed as a “cassette width that accommodates one of one, two, three, four, or six receptacle modules.” *Id.* at 21. Petitioner theorized that, because Sauter’s single-gang cassette accommodates three quad modules and a double-gang cassette accommodates six quad modules, the double-gang cassette is twice the width of a

single-gang cassette under Patent Owner’s litigation construction of the claim. *Id.* at 107-108. But Petitioner does not adopt this construction and even alleged that it is incorrect. *See id.* at 21-23. The Board, however, need not fully resolve this claim construction dispute here. Irrespective of the proposed constructions, a cassette width is not construed *solely* by its ability to accommodate a certain number of receptacle modules or construed to include structures that are additionally attached (e.g., a latching mechanism). But this is how Petitioner incorrectly proposed to apply Patent Owner’s construction.

As a result, under either construction, Sauter fails to disclose or suggest “a first of said set of cassettes comprising a first cassette width of one of one, two, three, four and six standard width units and a second of said cassettes comprising a second cassette width different from said first cassette width and one of one, two, three, four and six standard width units.”

2. Petitioner Improperly Proposed to Mix and Match Various Separate and Distinct Prior Art Embodiments, Without Explanation, and Without a Motivation for Doing So.

Petitioner improperly proposed to not only treat Sauter’s separate and distinct embodiments as interchangeable, but also obfuscated which combinations of separate and distinct embodiments Petitioner actually proposed to modify to somehow render obvious the claims. This is basis alone to deny institution. *See, e.g., Abiomed, Inc. v. Maquet Cardiovascular, LLC*, IPR2017-01204, -01205, Paper 9 at

8-12 (PTAB Oct. 23, 2017); *see also Net MoneyIN, Inc. v. VeriSign, Inc.*, 545 F.3d 1359, 1371 (Fed. Cir. 2008) (explaining, in the context of anticipation, that “it is not enough that the prior art reference discloses part of the claimed invention, which an ordinary artisan might supplement to make the whole, or that it includes multiple, distinct teachings that the artisan might somehow combine to achieve the claimed invention”).

Petitioner identified “Element 1D” of the ’107 patent as “a fastener for removeably securing each of said cassettes to said tray.” Petition at 144. To satisfy Element 1D, Petitioner argued that “Sauter’s cassettes include a fastener which is latching mechanism 120 and rails 404 that cooperate with apertures 124 and rail guides 108 on the tray to removably secure Sauter’s cassettes to the tray.” *Id.* at 111 (citations omitted). This is shown below:

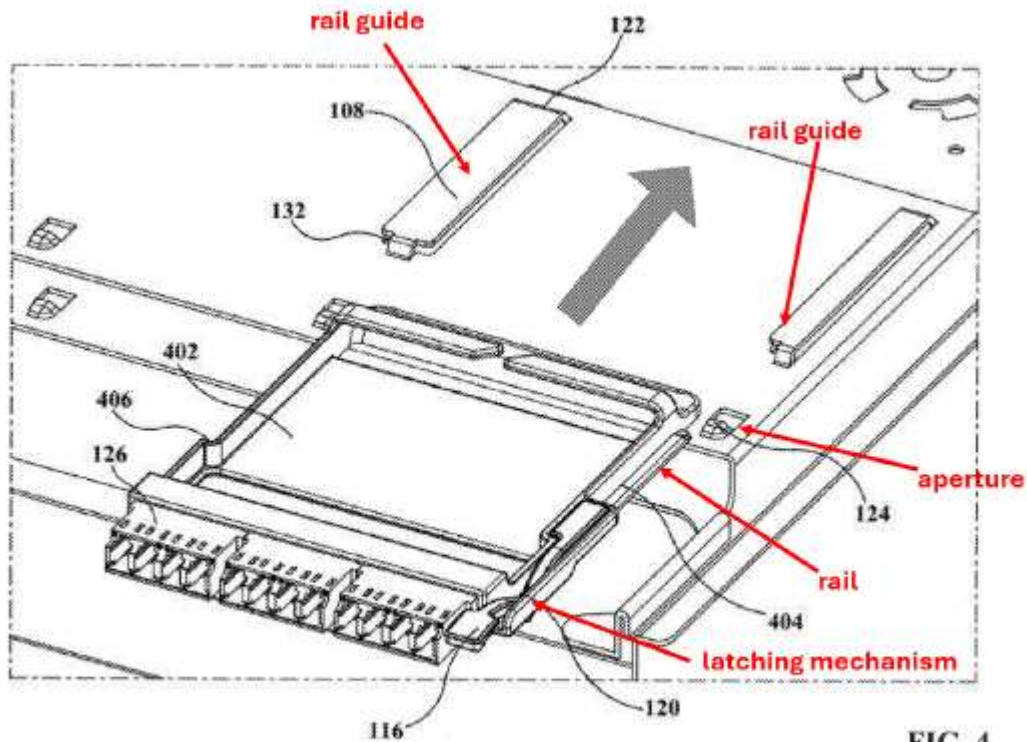


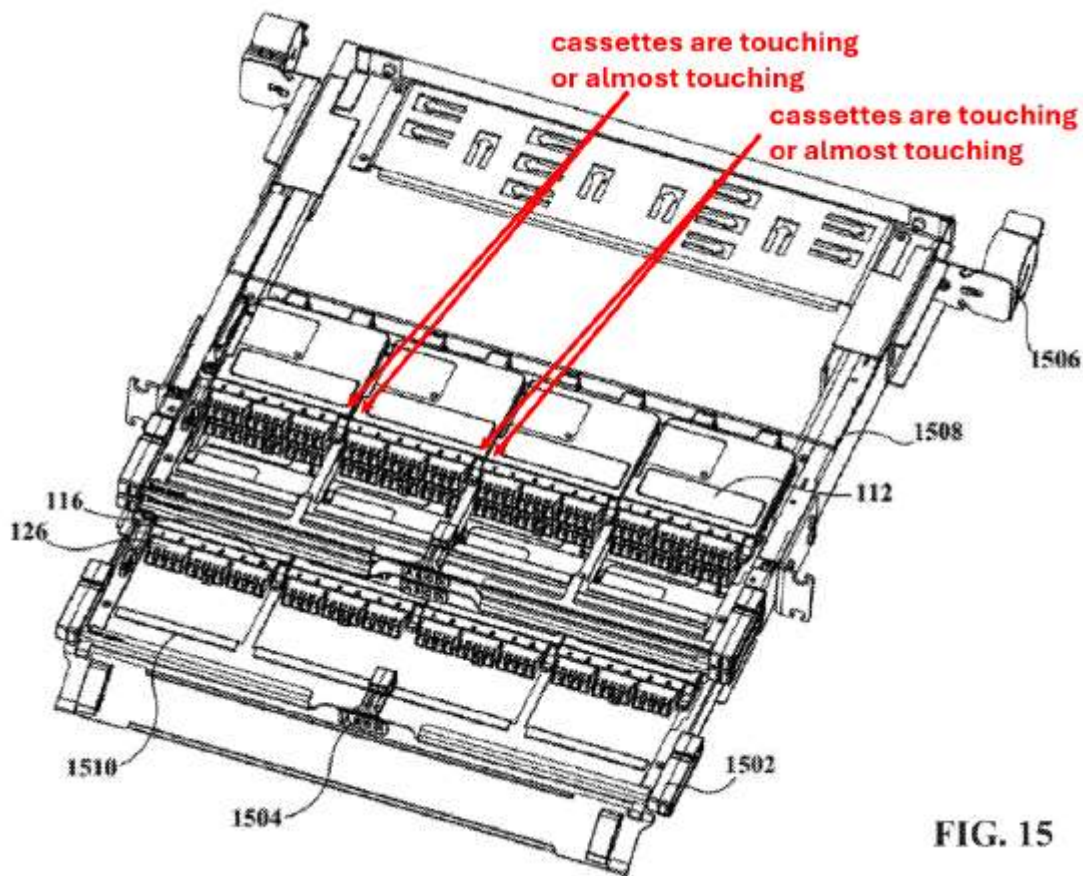
FIG. 4

Latching mechanism 120 and rails 404 on cassette are an example of a fastener that fit into rail guides 108 and aperture 124 on tray to releasably secure cassettes to tray.

Id. (annotating Sauter at Fig. 4). This is Petitioner’s only proposed mapping for Element 1D under Ground 4. Indeed, as discussed above regarding Element 1C, Petitioner argued that, under its construction of the claimed “width” term, “[w]hen the latching mechanism 120 of the double-gang cassette is positioned along the right-hand side of the cassette . . . , the width of the double-gang cassette mathematically equals twice the width of the single-gang cassette.” *Id.* at 108 (citations omitted). Thus, the latching mechanism is essential for Petitioner’s analysis of other claim elements.

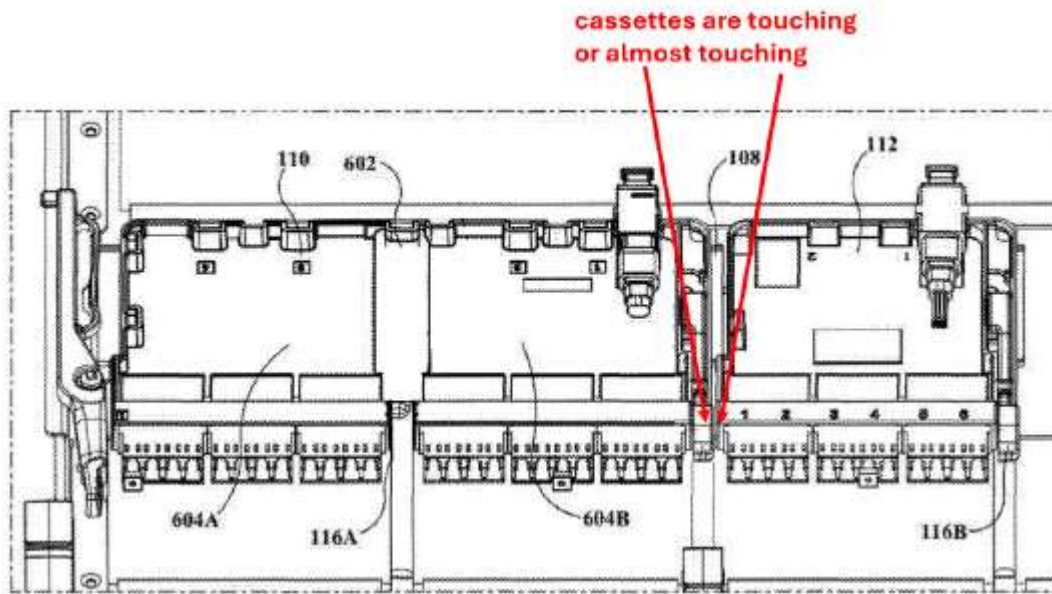
Nevertheless, according to Petitioner, “Element 1E” recites “wherein[,] when arranged on said at least one tray[,] each of said fiber optic cassettes touches at least one other fiber optic cassette.” *Id.* at 144. Citing Sauter’s Figure 15, Petitioner argued that “when the cassettes are arranged on the tray side-by-side, the cassettes are either touching or almost touching.” *Id.* at 112. But to make this argument, Petitioner had to resort to mixing and matching Sauter’s separate and distinct embodiments, as well as altering the same features of Sauter’s disclosure that Petitioner relied upon elsewhere.

Figure 15 illustrates “fiber optic cassette trays 1510 [that] include ***rail guides on their upper surface.***” Sauter at 9:46-49 (emphasis added). In other words, Figure 15’s alternative embodiment does not include rail guides (and latching mechanisms) on the sides of the cassettes. And, according to Sauter, “the example illustrated in FIG. 15 depicts ***only single-gang cassettes*** 112 installed on trays 1510.” *Id.* at 9:49-56 (emphasis added). Figure 15 does not include the double-gang cassettes, which are likewise essential to Petitioner’s argument.



Petition at 112 (citations omitted) (annotating Sauter at Fig. 15). Petitioner can only argue that the “cassettes” are “touching” (“or almost touching”) by pointing to Figure 15’s alternative embodiment that does not include a latching mechanism on the right-hand side of the cassette or double-gang cassettes. But both features—now disregarded—were key to Petitioner’s arguments for Elements 1C and 1D.

Alternatively, Petitioner argued that, when the latching mechanism is placed on the right-hand side of the double-gang cassette, “the double-gang cassette is touching or almost touching the single-gang cassette.” *Id.* at 112-113.



Id. at 113 (annotating Sauter at Fig. 7) (citation omitted). Petitioner, however, failed to explain how “touching or almost touching” can apply in both instances. Petitioner also failed to explain how Sauter meets the claim’s requirement that “each of said fiber optic cassettes touches at least one other fiber optic cassette.” Under Petitioner’s alternative argument, one cassette touches a latching mechanism integrated outside a cassette housing—not a second cassette—and Petitioner failed to explain how this meets the claim language.

Indeed, Petitioner appears to concede elsewhere in the Petition that Sauter fails to render obvious “each of said fiber optic cassettes touches at least one other fiber optic cassette.” According to Petitioner (with respect to a different ground), “[i]t would have been obvious to use the cassette fastening features from Fukui on Sauter’s cassettes to eliminate the need for any rail guides on Sauter’s tray and allow

for Sauter’s cassettes to touch when arranged on the tray.” *Id.* at 131 (citation omitted). The result is that, under Petitioner’s understanding of the claims and prior art, Sauter’s (unmodified) cassettes do not actually “touch” when using Sauter’s rail guides (and accompany latches).

Petitioner raised yet an additional argument in contending that it would alternatively “been obvious based on Sauter alone or in light of Laarveld (EX1026) to modify Sauter’s cassettes so that they touch.” *Id.* at 113 (citation omitted). But this argument again ignored how Petitioner relied on not only (1) the alleged existence of a latching mechanism on the right-hand side of the double-gang cassette to meet Element 1C, but also on (2) how that same cassette somehow meets alternative arguments under Element 1D. Those proposed mappings are not only incredulous, but they also cannot be sustained under Petitioner’s alternative argument that eliminates the right-hand latch. Petitioner also failed to explain how its combination meets all elements of the claim.

B. Petitioner’s Analysis of Independent Claim 8 in Ground 4 Failed for the Same Reasons as Independent Claim 1.

Claim 8 recites “selecting a plurality of cassettes for installation on the tray from a set of cassettes having a plurality of different widths, wherein each of said different widths is evenly divisible by said standard width unit.” Petitioner’s argument for claim 8 mirrored the argument for claim 1, and Petitioner likewise

argued that “Sauter’s single-gang cassette, double-gang cassette, triple-gang cassette and other multi-gang cassettes are all cassettes having different widths.” *Id.* at 126-127 (citations omitted). But this argument failed to show that Sauter’s disclosure meets the claim language for the same reason discussed for claim 1.

Claim 8 likewise recites “wherein[,] when arranged on the tray[,] each of said selected cassettes touches at least one other selected cassette.” Petitioner’s argument for claim 8 again mirrored the argument for claim 1. *Id.* at 128; *see also id.* at 112-116. The result is that Petitioner’s deficient arguments for claim 1 (i.e., inconsistently moving the latching mechanism where necessary to satisfy a given limitation) also undermine Petitioner’s argument for claim 8.

C. Petitioner’s Additional Reliance on Fukui in Ground 5 Failed to Remedy the Noted Deficiencies in the Sauter Grounds.

Petitioner alternatively raised additional grounds for Elements 1C (i.e., the “[s]ize limitations”) and 8B (“selecting a plurality of cassettes for installation on the tray from a set of cassettes having a plurality of different widths, wherein each of said different widths is evenly divisible by said standard width unit”). *Id.* at 135-136.

According to Petitioner, “it would have been obvious to incorporate . . . mounting features from Fukui into Sauter’s cassettes and tray, and when Fukui’s mounting features are used instead of Sauter’s rails/rail guides/latch, the resulting cassettes[] would be exact multiples in width of the smallest gang cassette.” *Id.* at

136 (citation omitted). Again, despite arguing for Ground 4 that a latching mechanism/rail on the right-hand side of the double-gang cassette is necessary to render claims 1 and 8 obvious, Petitioner proposed removing the latching mechanism/rail for Ground 5. But as discussed above and shown in Petitioner’s annotated image below, even if one of ordinary skill in the art at the time of the invention were to compare the single-gang cassette and the double-gang cassette without a latch on the right-hand side, Sauter still cannot meet the “width” claim limitations:

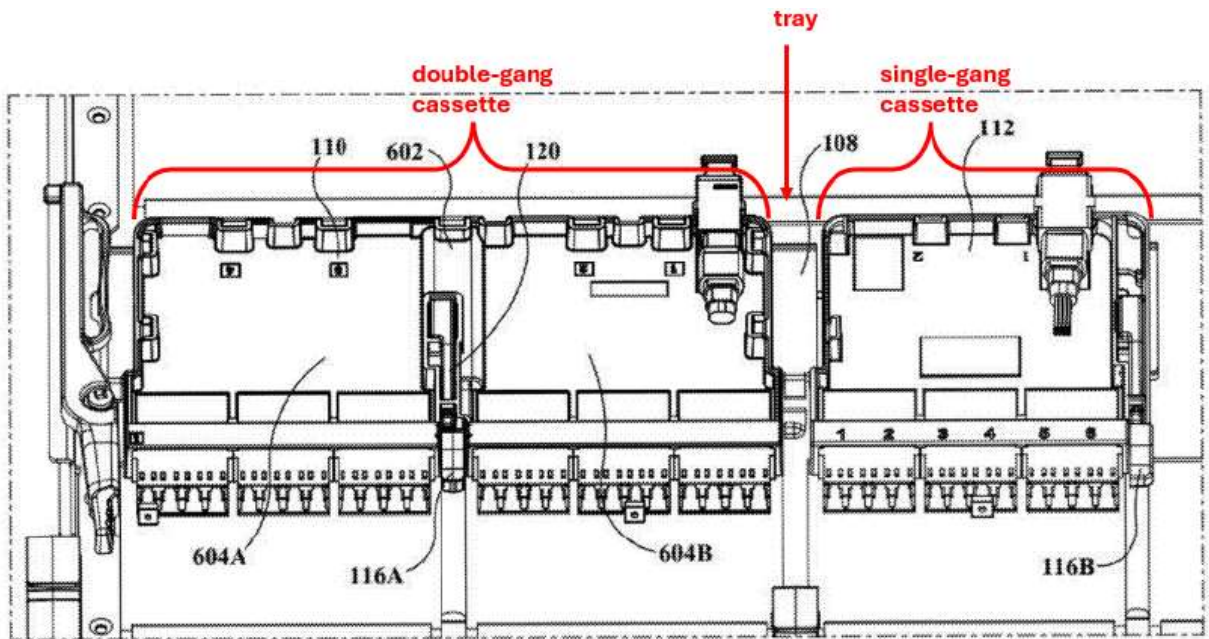


FIG. 7

Id. at 20 (annotating Sauter at Fig. 7).

D. Petitioner’s Additional Arguments in Ground 6 Failed to Remedy the Noted Deficiencies in the Sauter Grounds.

In Ground 6, Petitioner further argued that Sauter modified in view of Sedor renders obvious the challenged claims. *Id.* at 138-142. But these additional arguments include “[a]dding a top and/or bottom wall” or “[p]ositioning cassettes on the tray front end/edge” in view of Sedor. *Id.* Neither argument remedies any of the deficiencies described above with respect to claims 1 and 8.

V. The Board Should Decline to Institute Under 35 U.S.C. § 325(d) Because the Petition Relied on Substantially the Same Art and Arguments that Were Previously Considered.

The Board should exercise its discretion to deny under § 325(d) because the Petition presents “the same or substantially the same prior art or arguments previously . . . presented to the Office” and because Petitioner failed to meet its burden to show material error with respect to such art or arguments.⁴ 35 U.S.C. § 325(d); *see also Advanced Bionics, LLC v. MED-EL Elektromedizinische Geräte GmbH*, IPR2019-01469, Paper 6 at 7-9 (PTAB Feb. 13, 2020) (precedential) (“*Advanced Bionics*”); *Becton, Dickinson & Co. v. B. Braun Melsungen AG*,

⁴ Patent Owner recognizes that this argument only reaches Sauter-based grounds, not Fukui-based grounds. This argument thus only needs to be addressed after the Board confirms the fundamental deficiencies in Petitioner’s Fukui-based grounds.

IPR2017-01586, Paper 8 at 17-18 (PTAB Dec. 15, 2017) (precedential as to Section III.C.5, first paragraph) (“*Becton*”).

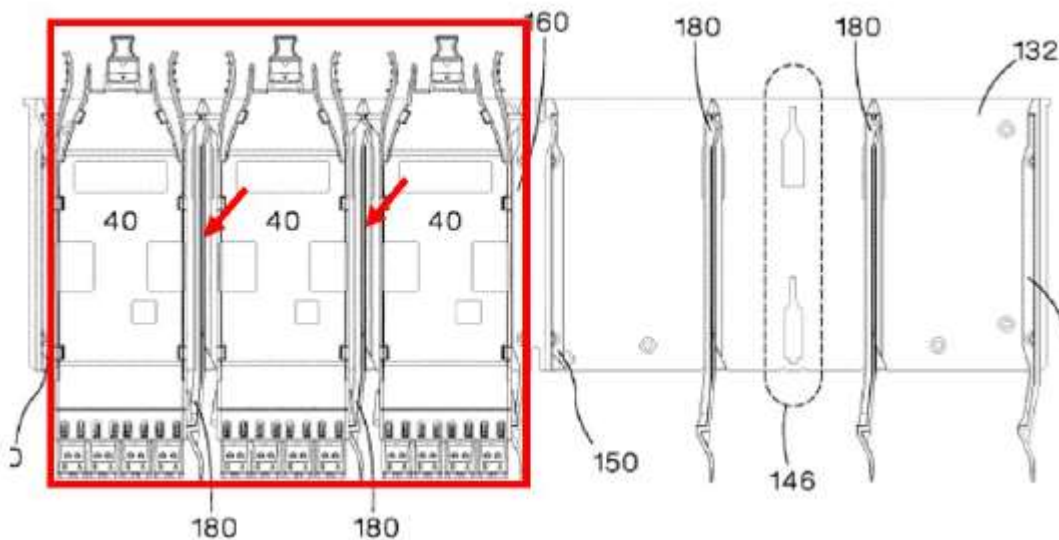
Petitioner devoted two sentences to this issue in the Petition under a heading titled “Discretionary Issues,” contending that (1) its “grounds are not the same or substantially the same as any combination previously presented to the Patent Office,” and (2) “Fukui is a new reference that discloses the elements the examiner believed all the other art failed to disclose.” Petition at 24. But, as discussed above, Fukui fails to disclose the missing claim elements. And the remaining grounds (i.e., Grounds 4-6) rely on Sauter, a reference that is substantially similar to the references applied (and overcome) during prosecution. Indeed, Sauter is deficient for the same reason as the reference (i.e., Sedor) applied during prosecution.

A. Part One of the *Advanced Bionics* Test: “Whether the Same or Substantially the Same Art Previously Was Presented to the Office.”

Under part one of the *Advanced Bionics* framework, the Board considers whether the same art or arguments were previously presented to the Office. *Advanced Bionics* at 8-10 (addressing *Becton* factors (a), (b), and (d) under part 1 of § 325(d) framework). Petitioner recognizes that Sedor—a reference used in the Petition as a secondary reference in at least two different grounds—was substantively considered during prosecution and applied as a primary reference. Petition at 8-12 (citations omitted). Rather than use Sedor as a primary reference,

Petitioner uses Sauter—a reference Petitioner acknowledged was “art of record” during prosecution—as a primary reference. *Id.* at 18. Petitioner, however, applied Sauter in the same way that the Examiner applied Sedor.

In prosecution of the ’107 patent and related patents, the Examiner eventually found that the challenged claims were patentable over Sedor due to Sedor’s disclosure of rails that were connected to the outside of a cassette housing. *Id.* at 8-12 (citations omitted). Petitioner identified these rails in its Petition:



Id. at 11 (annotating Sedor at Fig. 9). According to the Examiner, “Sedor et al. discloses modular trays comprising different sized fiber optic modules, where removable rails are provided which may be removeably secured to a tray body in one of a number of positions so as to accommodate the different sizes of modules. Each of these essential rails [is] positioned between adjacent ones of the modules, and therefore Sedor et al[.] fails to disclose the *highlighted* portion of the claims.”

Ex. 1007 at 184. The Examiner found that, because of the necessity of these rails, Sedor fails to disclose “wherein[,] when arranged on said at least one tray[,] each of said fiber optic cassettes touches at least one other fiber optic cassette.” *Id.* at 184-185.

Like Sedor’s rails, Sauter discloses a latching mechanism and related rails between cassette edges (at least for the double-gang cassette). Petition at 111 (citations omitted) (arguing same). Repeating arguments already rejected by the Examiner, Petitioner argued that, despite the presence of this latching mechanism and rails, “when the cassettes are arranged on the tray side-by-side, the cassettes are either touching or almost touching.” *Id.* at 112.

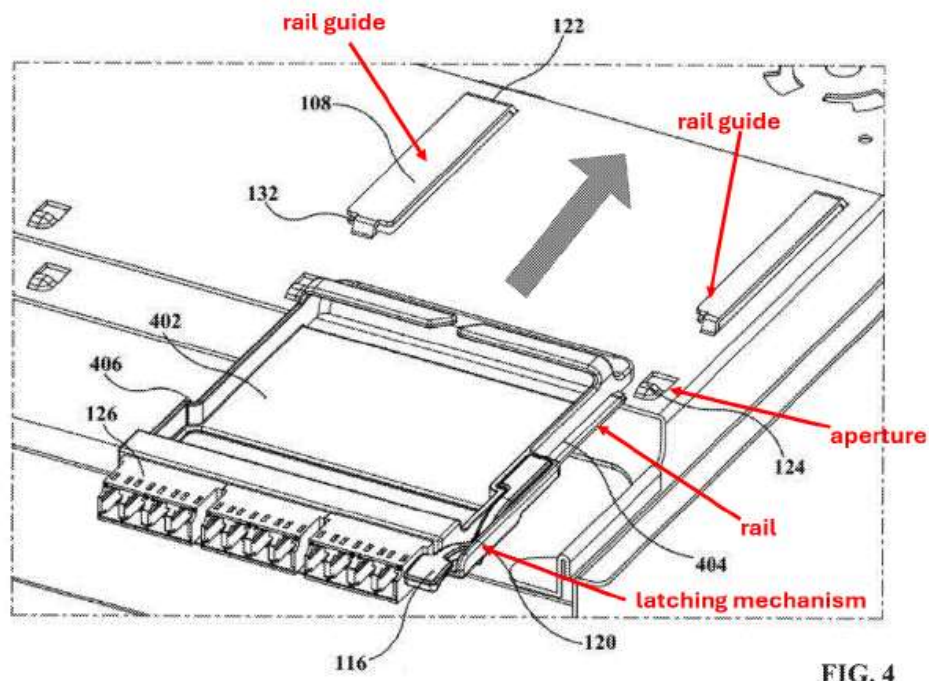


FIG. 4

Latching mechanism 120 and rails 404 on cassette are an example of a fastener that fit into rail guides 108 and aperture 124 on tray to releasably secure cassettes to tray.

Id. at 111 (annotating Sauter at Fig. 4). But this is the same argument the Examiner rejected during prosecution.

Indeed, in later child applications, the Examiner also applied Sedor as a primary reference. In each instance, the Examiner allowed the claims because Sedor's rails mean that Sedor does not disclose or suggest the claimed "width" or "touching" limitations. For one application, the Examiner explained that "[w]hen widths are measured from the outer side edges of the cassettes, Sedor et al. fails to disclose cassettes having the sizes required by the claim." Ex. 1002 at 222. Similarly, for another application, the Examiner likewise found that "[w]hen measuring widths from the outer side edges of the cassettes, Sedor et al. fails to disclose or reasonably suggest cassettes having the sizes require[d] by the claim." Ex. 1033 at 79. Petitioner should not be permitted to bring forth these same arguments yet again.

For at least the reasons above, the "same or substantially the same prior art or arguments previously were presented to the Office." *Advanced Bionics* at 10; *see also Becton* at 17-18.

B. Part Two of the *Advanced Bionics* Test: "Whether the Petitioner Has Demonstrated that the Office Erred in a Manner Material to the Patentability of Challenged Claims."

Under part two of the *Advanced Bionics* framework, *Becton* factors (c), (e), and (f) are considered in the evaluation of whether the Examiner materially erred during prosecution. *Advanced Bionics* at 8, 10-11. *Becton* identifies these factors as

“(c) the extent to which the asserted art was evaluated during examination, including whether the prior art was the basis for rejection”; “(e) whether Petitioner has pointed out sufficiently how the Examiner erred in its evaluation of the asserted prior art; and (f) the extent to which additional evidence and facts presented in the Petition warrant reconsideration of the prior art or arguments.” *Becton* at 17-18. All three factors weigh in favor of denial here.

Advanced Bionics explains that “[i]f the ‘same or substantially the same prior art or arguments previously were presented to the Office,’ then the Board’s decisions generally have required a showing that the Office erred in evaluating the art.” *Advanced Bionics* at 8 (citing *Becton* at 24). “At bottom, this framework reflects a commitment to defer to previous Office evaluations of the evidence of record unless material error is shown.” *Id.* at 9.

Yet here, with regard to various instances noted above where the Patent Owner overcame rejections based on Sedor and its rails/latching mechanism during prosecution, Petitioner did not even attempt to meet its burden to show material error regarding the above arguments considered during prosecution.

That is, the Petition is entirely silent regarding why its Sauter-based arguments are meaningfully different from highly similar grounds that were previously overcome during prosecution of the application that became the ’107 patent and related applications. Indeed, the Petition failed to identify any

specific error or oversight made by the Office. Under the circumstances, *Becton* factors (c), (e), and (f) further support the conclusion that Petitioners have failed to “demonstrate[] a material error by the Office,” and, as a consequence, the Board should exercise its discretion to deny institution under § 325(d). *Advanced Bionics* at 10; *see also Becton* at 17-18.

VI. Conclusion

For at least the reasons provided above, the Petition should be denied.

Respectfully submitted,

Dated: December 2, 2024

By: /Cory C. Bell/
Cory C. Bell, Reg. No. 75,096
Back-up Counsel

CERTIFICATE OF COMPLIANCE

The undersigned hereby certifies that the foregoing **PATENT OWNER'S PRELIMINARY RESPONSE** contains 6,144 words, excluding those portions identified in 37 C.F.R. § 42.24(a), as measured by the word-processing system used to prepare this paper.

Dated: December 2, 2024

By: /Cory C. Bell/
Cory C. Bell, Reg. No. 75,096
Back-up Counsel

CERTIFICATE OF SERVICE

The undersigned hereby certifies that a copy of the foregoing **PATENT OWNER'S PRELIMINARY RESPONSE** was served on December 2, 2024, via e-mail directed to counsel of record for the Petitioner at the following:

Philip P. Caspers
pcaspers@carlsoncaspers.com

Samuel A. Hamer
shamer@carlsoncaspers.com

Dated: December 2, 2024

By: /Lisa C. Hines/
Lisa C. Hines
Case Manager
FINNEGAN, HENDERSON, FARABOW,
GARRETT & DUNNER, LLP