

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

PROVISUR TECHNOLOGIES, INC.,
Petitioner,

v.

TEXTOR MASCHINENBAU GMBH,
Patent Owner.

IPR2024-00224
Patent 9,457,487 B2

Before JEREMY M. PLENZLER, CARL M. DeFRANCO, and
JASON W. MELVIN, *Administrative Patent Judges*.

DeFRANCO, *Administrative Patent Judge*.

JUDGMENT
Final Written Decision
Determining All Challenged Claims Unpatentable
Granting-in-Part Patent Owner's Motion to Amend
35 U.S.C. § 318(a)

I. INTRODUCTION

Textor Maschinenbau GMBH (“Textor”)¹ is the owner of U.S. Patent 9,457,487 B2 (Ex. 1001, “the ’487 patent). Provisur Technologies, Inc. (“Provisur”) filed a petition for *inter partes* review of claims 1–4, 6, 9, 10, 14–16, and 22 of the ’487 patent. Paper 2 (“Pet.”). After considering the petition, we instituted *inter partes* review of all the claims as challenged in the petition. Paper 8 (“Inst. Dec.”). Textor, in due course, filed a patent owner response. Paper 16 (“PO Resp.”). Provisur followed with a reply. Paper 33 (“Pet. Reply”). And Textor followed with a sur-reply. Paper 51 (“PO Sur-Reply”).

Also, in response to the petition and our Institution Decision, Textor filed a motion to amend, which:

- (1) *non-contingently* canceled claims 1–4, 6, 9, 10, and 14–16, and proposed replacing them with new substitute claims 25–33; and
- (2) only *contingently* canceled claim 22, and proposed replacing it with new substitute claim 34.

Paper 13 (“PO MTA”); *see also id.* Appx. A. Provisur filed an opposition to the motion to amend, maintaining its original grounds *and* presenting new grounds of unpatentability. Paper 35 (“Pet. MTA Opp.”). After receiving Preliminary Guidance (Paper 41) from us regarding its motion to amend, Textor filed a reply to Provisur’s opposition, changing its cancellation of original claim 22 from contingent to *non-contingent*. Paper 42 (“PO MTA Reply”). With that change, none of the originally challenged claims remains

¹ Textor identifies Weber Textor Maschinenbau GmbH, Weber, Inc., Textor, Inc., Weber Maschinenbau GmbH Breidenbach, and Weber Maschinenbau GmbH Neubrandenburg (“Weber”) as real parties-in-interest. Paper 5, 2. Thus, any reference to Textor encompasses Weber as well.

in the proceeding, and we are left to consider only substitute claims 25–34 as proposed by Textor in its motion to amend. Textor’s reply also seeks a so-called “clerical change” to its motion to amend, which we address later in this decision. *Id.* at 1.

In due course, Provisur filed a sur-reply to Textor’s motion to amend. Paper 48 (“Pet. MTA Sur-Reply”). There, Provisur addresses substitute claims 25–34 as proposed by Textor in its motion to amend. Provisur also notes that Textor’s “clerical change” to the motion to amend is procedurally improper “without a revised motion to amend under 37 C.F.R. § 42.121(f).” *Id.* at 4, n.1.

We have jurisdiction over this *inter partes* review under 35 U.S.C. § 6. We held an oral hearing on January 15, 2025, a transcript of which is in the record. Paper 56 (“Hrg. Tr.”). This Final Written Decision is entered pursuant to 35 U.S.C. § 318(a). We grant Textor’s motion to cancel original claims 1–4, 6, 9, 10, 14–16, and 22 of the ’487 patent. Also, for the reasons below, we determine that Provisur has shown, by a preponderance of the evidence, that proposed substitute claims 25–34 are unpatentable. As such, we deny Textor’s motion to amend.

II. BACKGROUND

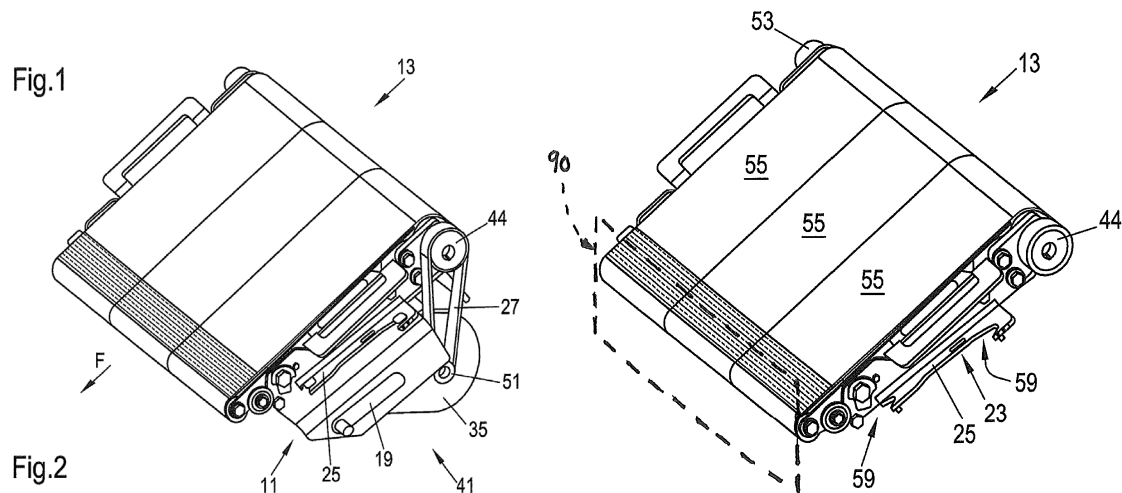
A. Related Matters

The ’487 patent is the subject of a parallel infringement action—*Provisur Technologies, Inc. v. Weber, Inc.*, No. 5-21-cv-06113 (W.D. Mo.) (“the Missouri action”). *See* Paper 5, 2. In that case, Textor asserted the ’487 patent against Provisur via a counterclaim. *See* Ex. 3001, Dkt. #204. A jury trial was conducted but not completed in that case. *See* Ex. 3003, Dkt.

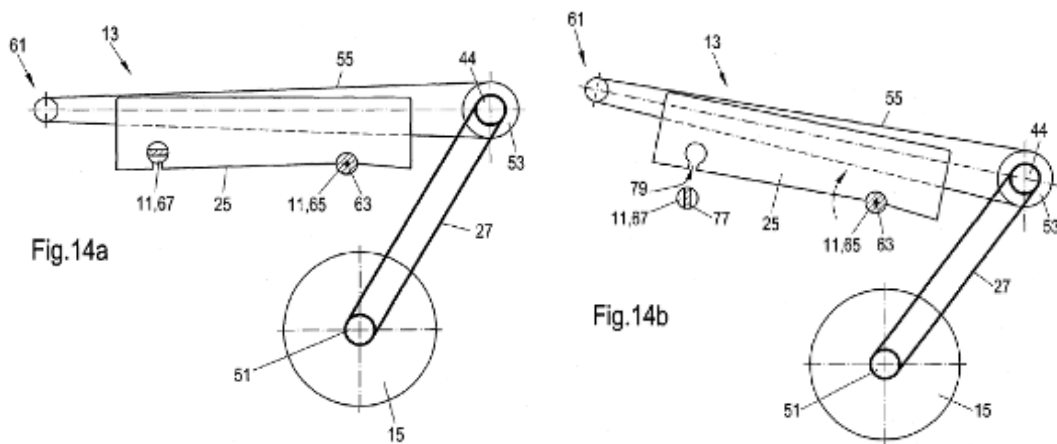
#625–629, 634. On February 4, 2025, after the sixth day of trial, the district court *sua sponte* ordered a mistrial. *See id.*, Dkt. #635.

B. The '487 Patent

The '487 patent describes a “slicing apparatus for food products” that includes a “removable conveyor belt unit.” Ex. 1001, Abstract, 1:15–18, 2:25–26. The conveyor belt unit must be removable because it is “customarily greatly contaminated during the operation of a slicing apparatus,” thereby requiring daily cleaning, “frequently even several times daily.” *Id.* at 1:50–57. To that end, the '487 patent describes a removable conveyor belt unit that facilitates such cleaning. *Id.* at 2:20–27. As shown below in Figures 1 and 2 of the '487 patent, removable conveyor belt unit 13 includes base 25 coupled to substructure 41 via mount 11. *Id.* at 7:30–34.



As shown above, substructure 41 is provided with drive shaft 51 and drive belt 27, which is coupled to drive wheel 44 on conveyor belt unit 13. *Id.* at 8:20–29. Importantly, and as shown below in Figures 14a and 14b, conveyor belt unit 13 may be removed from substructure 41 by means of “relative movement” between drive shaft 15 on the substructure and drive wheel 44 on the conveyor belt unit. *Id.* at 3:52–4:18.



As shown above, conveyor belt unit 13 can be pivoted, which reduces the space between drive wheel 44 on the conveyor belt unit and stationary drive shaft 51 on drive motor 51, thereby allowing drive belt 27 to be “relaxed” or “tautened” for removing and re-installing the base on mounts 11 of the substructure. *Id.* at 4:1–26, 12:30–40, 13:7–36.

C. The Challenged Claims

In its petition, Provisur challenges claims 1–4, 6, 9, 10, 14–16, and 22 of the ’487 patent. As discussed above, Textor’s motion to amend *non-contingently* cancels claims 1–4, 6, 9, 10, 14–16, and 22, which leaves only proposed substitute claims 25–34. Substitute claim 25 is reproduced below:

25. A slicing apparatus for food products, the slicing apparatus comprising:
- a removable conveyor belt unit (13) having at least one track and a base (25);
 - a substructure (41) having a mount (11) coupled to the base (25); and
 - a drive (15) coupled to the conveyor belt unit (13) by a drive belt (27), the conveyor belt unit (13) is configured to be cancelled by relaxing the drive belt (27) and is configured to be established by tautening the drive belt (27), with the relaxing and tautening of the drive belt (27) each being provided by a relative

movement between the drive (15) and the conveyor belt unit (13);

wherein the conveyor belt unit (13) is configured to be removed and/or installed without tools.

PO MTA, Appx. A (claim 25) (emphasis added for limitation in dispute).

D. The Asserted Grounds

The table below reflects both the original grounds asserted in Provisur’s petition (Grounds 1–4), as well as the new grounds asserted in Provisur’s opposition to Textor’s motion to amend (Grounds 5 and 6).

Claims Challenged	35 U.S.C. §	Basis
Original: 1, 6, 9, 15, 16 Proposed Substitute: 25, 29, 30, 33	102	Konishi, ²
Original: 1–4, 6, 9, 10, 14–16, 22 Proposed Substitute: 25–34	103(a)	Konishi, Linde ³
Original: 1–4, 6, 9, 10, 14–16, 22 Proposed Substitute: 25–34	103(a)	McLaughlin ⁴
Original: 1–4, 6, 9, 10, 14–16, 22 Proposed Substitute: 25–34	103(a)	McLaughlin, Konishi
Proposed Substitute: 25–34	103(a)	McLaughlin, Herman ⁵
Proposed Substitute: 25–34	103(a)	Konishi, Mathues ⁶

² Japanese Patent Publication 06-117905, published Apr. 28, 1994 (Ex. 1004, “Konishi”).

³ WO 03/065786 A2, published Aug. 14, 2003 (Ex. 1005, “Linde”).

⁴ US 9,296,120 B2, issued Mar. 29, 2016 (Ex. 1006, “McLaughlin”).

⁵ US 6,755,149 B2, issued June 29, 2004 (Ex. 1041, “Herman”).

⁶ US 2008/0016999 A1, published Jan. 24, 2008 (Ex. 1037, “Mathues”).

III. ANALYSIS

A. Level of Ordinary Skill in the Art

Provisur proposes that one skilled in the art would have had:

(1) a bachelor's degree (or equivalent) in mechanical engineering (or a similar field) and at least two years of experience working as an engineer (or similar role) on food processing and/or packaging systems (or in a similar field); or (2) at least seven years of experience working as an engineer (or similar role) on food processing and/or packaging systems (or in a similar field).

Pet. 8–9. Textor does not dispute Provisur's definition of the level of skill in the art. *See generally* PO Resp. There being no dispute, we adopt Provisur's definition of the level of skill in the art.

B. Claim Construction

Provisur construes the claim terms “according to their plain and ordinary meanings” while asserting that “[n]o terms require an explicit construction to resolve the unpatentability controversy between the parties here.” Pet. 9. Textron appears to agree, stating in the related parallel district court action that “most of [its] patent claims are plain and ordinary . . . [t]hey're not difficult or complex claims or claim terms.” Ex. 1020, 5. That being the case, we do not perceive the need to expressly construe any claim terms. *See Nidec Motor Corp. v. Zhongshan Broad Ocean Motor Co.*, 868 F.3d 1013, 1017 (Fed. Cir. 2017) (confirming that the Board need not construe claim terms where their construction is not material to the dispute).

C. The Originally Challenged Claims

As indicate above (Section II.D), Provisur challenges claims 1–4, 6, 9, 10, 14–16, and 22 on various grounds that include anticipation by Konishi and obviousness over an assortment of references that include Konishi,

McLaughlin, and Lindee. Those claims, however, are no longer at issue because Textor’s motion to amend effectively cancels them all. More specifically, per its motion to amend, Textor *non-contingently* cancels claims 1–4, 6, 9, 10, and 14–16, while only contingently canceling claim 22. *See* PO MTA 1, Appx. A. Later, however, Textor changes the contingent cancellation of claim 22 to be *non-contingent*. *See* PO MTA Reply 1 (“[Textor] asks that the Board make replacement of claim 22 non-contingent.”); *see also* PO Sur-Reply 1 n.1 (“[Textor’s] proposed Claim 22 amendment is no longer contingent.”). As such, per its motion to amend, Textor non-contingently cancels all the claims as originally challenged in the petition. And, because we grant Textor’s motion to amend to the extent of that cancellation, none of originally challenged claims 1–4, 6, 9, 10, 14–16, and 22 remain in the proceeding, and we are left to consider only substitute claims 25–34 as proposed in the motion to amend.

There is one twist, however, that we must address before considering Textor’s proposed substitute claims. Textor seeks a so-called “clerical change” to its motion to amend that actually consists of three changes, namely, (1) “preserving” original claim 16 rather than non-contingently canceling it, (2) withdrawing its proposed substitute claim 25, and (3) re-numbering proposed substitute claims 26–33 to now depend from claim 16 rather than claim 25. *See* PO MTA Reply 1. Apparently, Textor believes this “clerical change” is needed to fend off a motion filed by Provisur in the parallel district court action, which sought to have original claim 16 dismissed from Textor’s infringement claim there due to Textor’s cancellation of original claim 16 here. *See id.* Although the district court

ended up denying Provisur’s motion, Textor nonetheless asks us, under the guise of a “clerical change,” to allow original claim 16 back into the case.⁷

Allowing Textor to retract the non-contingent cancellation of claim 16 presents a problem, however. By the time Textor sought its clerical change, Provisur had already opposed the motion to amend and presented new grounds of unpatentability against Textor’s substitute claims 25–34. So, while Textor’s motion to amend and Provisur’s opposition thereto focus on substitute claims 25–34, Textor’s belated attempt (via its MTA Reply) to reinstate original claim 16 while withdrawing substitute claim 25 would basically make Provisur’s opposition difficult to follow and in some ways non-sensical. Indeed, per the scheduling order in this case, Textor had the option to file a “revised motion to amend,” which would have set a new briefing schedule and allowed Provisur an opportunity to file a new opposition. *See* Paper 10, at 5 (“If Patent Owner files a revised motion to amend, the Board shall enter a revised scheduling order setting the briefing schedule for that revised motion and adjusting other due dates as needed.”). But, inexplicably and frankly troubling, Textor chose not to elect that option or follow that explicit procedure.⁸ Thus, to avoid any confusion in the briefing and/or prejudice to Provisur, we reject Textor’s attempt to reinstate original claim 16 via a “clerical change.”

⁷ Provisur reports that Textor continues to assert original claim 16 in the district court infringement action despite non-contingently cancelling that claim here. *See* Pet. Reply 3.

⁸ Indeed, during the hearing, Textor’s counsel confirmed that its “clerical change” should not be viewed as a revised motion to amend because that procedure “triggers a new schedule for new briefing.” *See* Hrg. Tr. 37:16–20, 39:1–20.

In any event, this may be a distinction without a difference. Substitute claim 25, as proposed in Textor’s motion to amend, is merely original claim 16 re-written in independent form to incorporate the limitations of original claim 1. In fact, as Textor admits, original claim 16 and substitute claim 25 are identical in scope. *See* PO MTA 1 (“Because amended claim 1 (substitute claim 25) is identical in scope to claim 16, to avoid duplication, Patent Owner cancels claim 16.”). And because the parties’ treat them essentially the same, we will too. So, despite our rejection of Textor’s attempt to reinstate original claim 16, our analysis of substitute claim 25 (set forth below) applies equally to original claim 16. As such, original claim 16 stands or falls with substitute claim 25. We now turn to the merits of Textor’s motion to amend and the patentability of the newly proposed substitute claims.

D. Textor’s Motion to Amend—Proposed Substitute Claims 25–34

At the outset, we note that Provisur does not dispute Textor’s compliance with the threshold requirements for filing a motion to amend. *See* 35 U.S.C. § 316(d)(1), (3); 37 C.F.R. § 42.121(a)(2), (a)(3), (b)(1), (b)(2), (d)(1). There being no dispute, and having reviewed Textor’s motion to amend, we find that it complies with those threshold requirements.⁹ As such, we consider the substitute claims as proposed in Textor’s motion to amend.

We begin with substitute claim 25, as that appears to be the sole focus of the parties’ arguments. As discussed above, substitute claim 25 combines

⁹ Indeed, our preliminary guidance found that Textor met its burden of showing that its motion to amend met those threshold requirements. *See* Prelim. Guid. 3–5.

the limitations of original claims 1 and 16. *See* PO MTA, Appx. A (claim 25). Provisur challenges substitute claim 25 on six different grounds. *See supra* Section II.D. We need only consider two of those grounds, as they are dispositive—*first*, anticipation by Konishi, and, *second*, obviousness over Konishi and Mathues.

1. Anticipation by Konishi

In challenging substitute claim 25 as anticipated by Konishi, Provisur relies on its showing for original claims 1 and 16, as together they are no different than substitute claim 25. *See* Pet. MTA Opp. 6–7 (citing Pet. 19–29). Substitute claim 25 begins by reciting the basic components of the claimed slicing apparatus, namely,

- a removable conveyor unit having a track and a base;
- a substructure having a mount coupled to the base; and
- a drive motor coupled to the conveyor belt unit by a drive belt.

See PO MTA, Appx. A. Substitute claim 25 then recites two limitations directed to the configuration of the removable conveyor unit, *first*, that the conveyor belt unit “is configured to be cancelled by relaxing the drive belt and is configured to be established by tautening the drive belt, with the relaxing and tautening of the drive belt each being provided by a relative movement between the drive and the conveyor belt unit” (hereinafter, “the relaxing/tautening limitation”), and, *second*, that the conveyor belt unit “is configured to be removed and/or installed without tools” (hereinafter, “the toolless limitation”). *Id.*

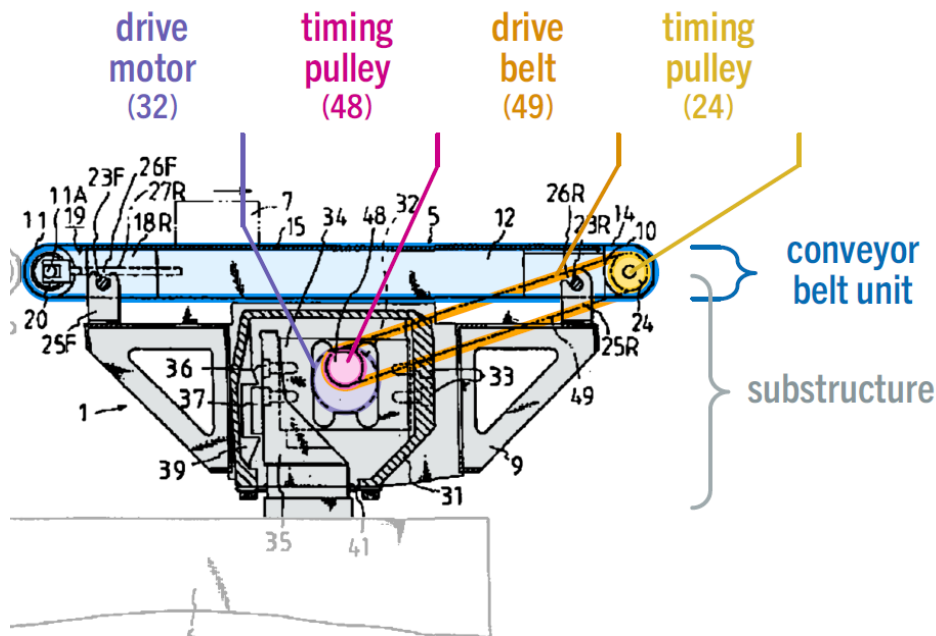
Notably, Textor does not contest that Konishi discloses each of the basic components as recited in claim 25, nor does Textor contest that Konishi discloses the claim limitation reciting the relaxing/tautening

limitation. As such, only the toolless limitation of substitute claim 25 is in dispute. Nonetheless, we give a brief overview of Provisur’s showing for the uncontested limitations of substitute claim 25 before addressing the contested toolless limitation.

To show how Konishi discloses each of the basic components of substitute claim 25, Provisur submits a chart, reproduced below, mapping each of the recited components to corresponding elements in Konishi. *See id.* at 6; *see also* Pet. 19 (same).

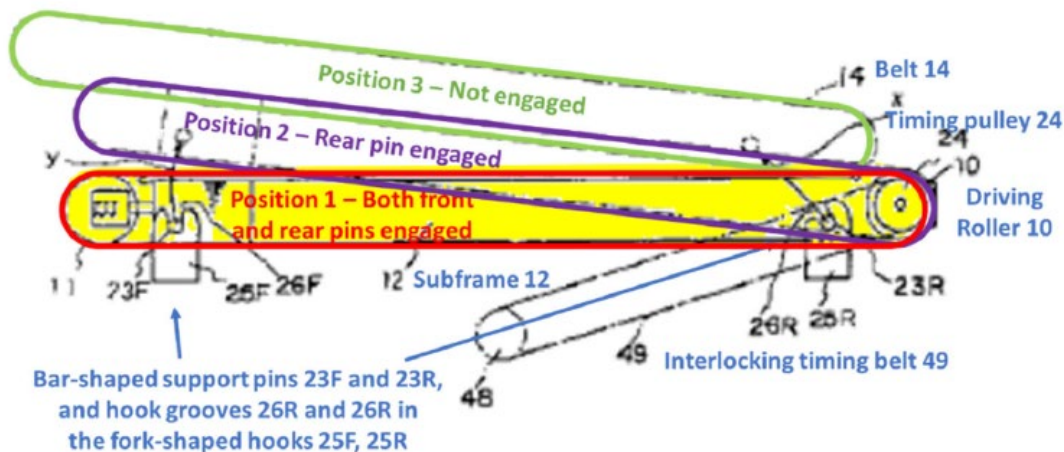
Claim Element	Konishi Exemplary Disclosures
removable conveyor belt unit	conveyor belt 14, subframe 12, and rollers 10-11, timing pulley 24
base	subframe 12
substructure	frame 9
mount	hooks 25R, 25F
drive	drive motor 32
drive belt	timing belt 49, timing pulley 48, conveyor belt 14, timing pulley 24
relaxing/tautening/relative movement	[0033]–[0041]; Figs. 8-9

Provisur also provides two annotated figures from Konishi to illustrate how Konishi discloses claim 25’s basic components, as well as claim 25’s relaxing/tautening limitation. First, Provisur submits annotated Figure 1 from Konishi, reproduced below, to show exactly where Konishi discloses the claimed components of: (1) a removable conveyor belt unit (blue) having a base (light blue) and a track (dark blue); (2) a substructure (grey) having mounts (25F, 25R) coupled to the conveyor belt unit’s base; and (3) a drive motor (pink) coupled to the conveyor belt unit by a drive belt (orange). *See* Pet. 19–23, 25 (citing Ex. 1004, Summary, ¶¶ 1, 4, 18, 20, 21, 25, 26, 32, 34, Figs. 1, 10).



Next, Provisur submits annotated Figure 8 from Konishi, reproduced below, to illustrate how Konishi discloses the relaxing/tautening limitation of claim 25. *See id.* at 23–24 (citing Ex. 1004 ¶¶ 33–34); *see also* Pet. MTA Opp. 6 (citing Ex. 1003 ¶¶ 72–116; Ex. 1040 ¶¶ 44–57).

Figure 8



As shown above, the conveyor belt unit is configured to be removed from the mounts 25F, 25R by pivoting the conveyor belt unit 14 from an installed position (red) where the drive belt is “stretched” (i.e., *tautened*) to a

removed position (green) where the drive belt “becomes loose” (i.e., *relaxed*). Ex. 1004 ¶¶ 33–34. Provisur also provides credible testimony from its expert to show what one skilled in the art would have understood from reading Konishi’s description in conjunction with reviewing Konishi’s figures. *See* Pet. 23–24 (citing Ex. 1003 ¶¶ 87–92); Pet. MTA Opp. 6 (citing Ex. 1040 ¶¶ 44–45).

Regarding those uncontested claim limitations, we find that the record fully supports Provisur’s showing that Konishi discloses each of them. That being the case, we turn to the only limitation of substitute claim 25 in dispute—the toolless limitation.

At the outset, we note that the toolless limitation recited by substitute claim 25 is a negative limitation—“the conveyor belt unit is configured to be removed and/or installed *without tools*.” That being the case, we are mindful that Konishi need not state the absence of tools in order to disclose the negative toolless limitation. *See AC Techs., S.A. v. Amazon.com, Inc.*, 912 F.3d 1358, 1367 (Fed. Cir. 2019) (“[A] reference need not state a feature’s absence in order to disclose a negative limitation.”). But, at the same time, we recognize that “[s]ilence is generally not disclosure.”

Novartis Pharms. Corp. v. Accord Healthcare, Inc., 38 F.4th 1013, 1017 (Fed. Cir. 2022), *cert. denied sub nom. Novartis Pharms. Corp. v. HEC Pharm Co.*, 143 S. Ct. 1748 (2023). Rather, in determining what Konishi discloses, we look to what one skilled in the art would have understood from reading Konishi as a whole, including its internal context. *See Almirall, LLC v. Amneal Pharms. LLC*, 28 F.4th 265, 273 (Fed. Cir. 2022) (“[I]t was reasonable for the Board to find that, in the context of [a prior art reference], a skilled artisan would recognize that the reference discloses a complete

formulation—excluding the possibility of an additional active ingredient.”). Thus, so long as one skilled in the art would have understood from reading Konishi that its conveyor belt unit has a configuration that would permit toolless removal and/or installation, then that is enough to satisfy the negative limitation of substitute claim 25.

Here, to meet the toolless limitation, Provisur relies on Konishi’s context, as well as the testimony of both its expert and Textor’s expert on what one skilled in the art would have understood from Konishi in light of that context. Notably, Provisur points to Konishi’s express purpose—“[t]o simplify the structure of the subframe containing the conveyor belt *to make it easier to remove from the [main] frame.*” Pet. 29 (citing Ex. 1004, [Purpose]); *see also* Pet. Reply 4 (citing Pet. 29). As Provisur explains, Konishi achieves that purpose by describing a removal process involving three simple movements:

First, after stopping the operation of motor 32 . . . , the front part of the subframe 12 is *lightly lifted upward* in the direction of arrow y, as shown by the dashed line in Figure 8, and the front support [p]in 23F is removed from the hook groove 26F of the hook 25F.

At this time, since the timing prefix 24 fixed to the shaft 10A of the drive roller 10 *moves diagonally downward*, the interlocking timing belt 49 stretched between the timing pulley 24 and the timing pulley 48 fixed to the rotating shaft 62 on the sub-housing 42 side becomes loose, and the timing belt 49 can be easily removed from the timing pulley 24 of the drive roller 10.

Next, as shown by the two-dot chain line in Figure 8, when the rear part of the subframe 12 is *pulled diagonally upward* in the direction of arrow X, the rear support bin 23R comes off from the diagonal hook groove 26R of the hook 25R.

Ex. 1004 ¶¶ 33–34 (emphases added).

With those three movements—lifting the front part of the conveyor belt unit lightly upward, moving the rear part of the conveyor belt unit diagonally downward, and pulling the rear part of the conveyor belt unit diagonally upward—“[Konishi’s] sub-frame 12 still equipped with the conveyor belt 14 . . . can be separated from the frame 9 side and can be processed with predetermined cleaning or the like.” *Id.* ¶ 34. Indeed, when describing the removal process, Konishi references only mounting hooks 25F and 25R as holding the conveyor belt unit in place on main frame 9—

in the process of removing the conveyor belt 14 as described above, since the subframe 12 has already been removed from the hooks 25F and 25R, the conveyor belt 14 does not interfere with the hooks 25F and 25R, and can be removed smoothly to the side and immediately subjected to predetermined cleaning by showering, etc.

Id. ¶ 36 (emphasis added). Elsewhere, Konishi emphasizes how the “configuration” of fork-shaped hooks 25F and 25R on frame 9 make subframe 12 of the conveyor belt unit such that “it can be easily installed” and “it can be easily removed.” *Id.* ¶¶ 21–22. Those disclosures, Provisur contends, would have been understood by one skilled in the art as describing an entirely toolless removal and installation process for Konishi’s conveyor belt unit. *See* Pet. MTA Opp. 6–7 (referencing Pet. 28–29, which cites Ex. 1003 ¶¶ 114–116, Ex. 1004, Purpose, ¶¶ 22, 33–34, 39, 47); *see also id.* at 7 (citing Ex. 1040 ¶¶ 44–57); Pet. MTA Sur-Reply 1 (citing Ex. 1004 ¶ 45).

In response to Provisur’s showing, Textor contends that the toolless limitation of substitute claims 25–34 “is not present in Konishi (Ex. 1004).” PO MTA 3. Referencing its Patent Owner Response, Textor argues that the removal and installation of Konishi’s conveyor belt unit cannot be toolless because one skilled in the art would not have considered it “heavy” enough

to be “secured by gravity alone” on mounting hooks 25R and 25F, and, instead, would have known it “should be *lightweight*” to allow for easy removal and re-installation. *Id.* at 4 (citing PO Resp. 26, 36–38). With that in mind, Textor surmises that “[Konishi’s] conveyor belt units must be secured by physical mechanisms to ensure they do not pop out of place during operation.” PO Resp. 27–28. According to Textor, Konishi’s conveyor belt unit “must be secured against popping out of their vertically open contact points during operation” in order to avoid “damaged . . . food product” and reduce “safety risk to nearby workers.” *Id.* at 30 (citing Ex. 2006 ¶¶ 58–60).

We see one glaring problem with Textor’s contention. Textor simply contends that Konishi must be secured “by physical mechanisms” or “physical fastening” to prevent inadvertent pop outs. PO Resp. 27, 31, 32. But nowhere does Textor contend that physically securing Konishi’s conveyor belt unit against such pop outs would necessarily involve *tools*. Instead, the record shows that one skilled in the art would have known that preventing pop outs requires nothing more than a simple latch. Indeed, Textor and its expert admit that one skilled in the art necessarily would have understood that Konishi’s conveyor unit uses “a latching mechanism” or is “required to be latched in place” for effective operation—

Q. [by Provisur’s counsel] Do you recall how the conveyer belt is removed in Konishi?

A. [by Textor’s expert] Well, the full removal is not described in Konishi, only lifting the conveyer off once it’s been unlatched. *I think there has to be a latching mechanism in Konishi, and a person of skill in the art would understand that.*

...

Q. So you would agree that a person of ordinary skill in the art reviewing Konishi would understand that there was a latching mechanism in Konishi? Is that your opinion?

A. *I believe a person of skill in the art would understand that in implementing the invention of Konishi, it would – the conveyor assembly would be required to be latched in place due to the forces that are at play and the vibrations. It just wouldn't function as a weigh conveyor without being latched.*

Ex. 1045, 28:18–29:21 (emphasis added).

So, even assuming Textor's scenario that Konishi's conveyor belt unit must be secured by a physical mechanism, which Textor's expert identifies as most likely being a latch, it nonetheless still falls within the scope of the claims because, indisputably, a latch is a toolless mechanism. As Textor admits, the '487 patent's use of a "latch" mechanism "allows the user to remove the conveyor for cleaning from a fully secured state (i.e., the state in which the conveyor operates) *without any tools*." PO Resp. 5–8 (emphasis added); *see also* Ex. 1001, 12:41–46 (describing latch 21 in Fig. 12a), 13:13–30 (describing latch 77 in Figs. 14a, b)). Thus, the term "without tools," as described in the '487 patent and recited in the claims, clearly encompasses a "latch." Textor's expert likewise admits that a latch is generally understood to be toolless. Ex. 1045, 143:20–144:4 ("Q. Does a latch require tools to latch or unlatch? . . . A. In general, no, there are latches that do not require tools."). So, to the extent Konishi does not mention a latch, but Textor's expert admits it nonetheless would have included a latch, we find that such a latch would have been toolless as generally understood. And, because "without tools" in the '487 patent encompasses a latch, Konishi therefore anticipates.

But, even absent a latch, Konishi would have been understood as satisfying the toolless limitation. In particular, one skilled in the art reasonably would have understood that the friction and weight of Konishi's conveyor unit on the mounting hooks would have kept the conveyor unit in place within mounting hooks 45R and 45F. For instance, Provisur's expert testifies one skilled in the art "would have understood that the weight and frictional forces at play would have kept [Konishi's] removable conveyor belt unit in place" because "Konishi teaches that its purpose was to 'simplify the structure of the subframe containing the conveyor belt to make it easier to remove the frame,'" and one skilled in the art "would have understood that Konishi's simple mounting configuration would have not involved tools to install and/or remove the conveyor." Ex. 1040 ¶ 47 (citing Ex. 1004, [Purpose]).

We find that testimony credible and persuasive. Consistent with that testimony, Konishi teaches that "the structure of the subframe side is made simple and lightweight, making it easy to attach and detach from the frame both structurally *and from a work perspective*." Ex. 1004 ¶ 45 (emphasis added).

To the extent that Textor argues that Konishi's conveyor unit "might" pop out of place during operation due to vibrational and other dynamic forces (PO Resp. 29–31), we note that Konishi accounts for such forces by recognizing the desirability of "maintaining the functionality of the equipment in *stable* and good condition" while "making it easy to attach and detach from the frame both structurally and *from a work perspective*." Ex. 1004 ¶¶ 4, 45, respectively (emphases added). Indeed, as shown in Figure 8, Konishi expressly contemplates a "*diagonal* hook groove 26R" for mounting

the conveyor belt unit, which requires that the conveyor belt unit be rotated, then “pulled diagonally upward” in the x and y directions, and then “removed smoothly to the side.” Ex. 1004 ¶¶ 33–34, 36 (emphasis added); *see also id.* ¶¶ 21–22. In our view, those explicit disclosures, as buttressed by the testimony of Provisur’s expert regarding the weight and frictional forces of Konishi’s mounting configuration, would have informed one skilled in the art that Konishi’s method of mounting its conveyor unit (i.e., on vertical hook 25F and diagonally oriented hook 25R) necessarily would withstand the vibrational and dynamic impact of forces typically encountered in the art of food processing and packaging.

Moreover, even assuming that Konishi’s conveyor unit may not work ideally, it nonetheless anticipates insofar as it is able to do what the claims require, which, quite simply, is that the conveyor unit be “configured to be removed and/or installed without tools.” Nowhere do the claims require more of the claimed conveyor belt unit, let alone that it be able to withstand unclaimed vibrational and dynamic forces that might possibly be encountered in the course of a production run. Indeed, in response to being asked “[w]ould a conveyor belt unit that is held in place by gravity and friction alone meet the claim requirements of claim 16,” which is identical to claim 25, Textor’s admits that “there’s nothing in claim 16 that specifically prohibits a conveyor belt unit being held in place by friction and gravity.” Ex. 1053, 58:7–16. As such, we reject the notion that the simplicity of Konishi’s mounting configuration does not satisfy the toolless limitation of substitute claim 25 (and by its identity thereto, claim 16).

For all the above reasons, we find that Provisur presents compelling proof that Konishi discloses a conveyor belt unit that “is configured to be

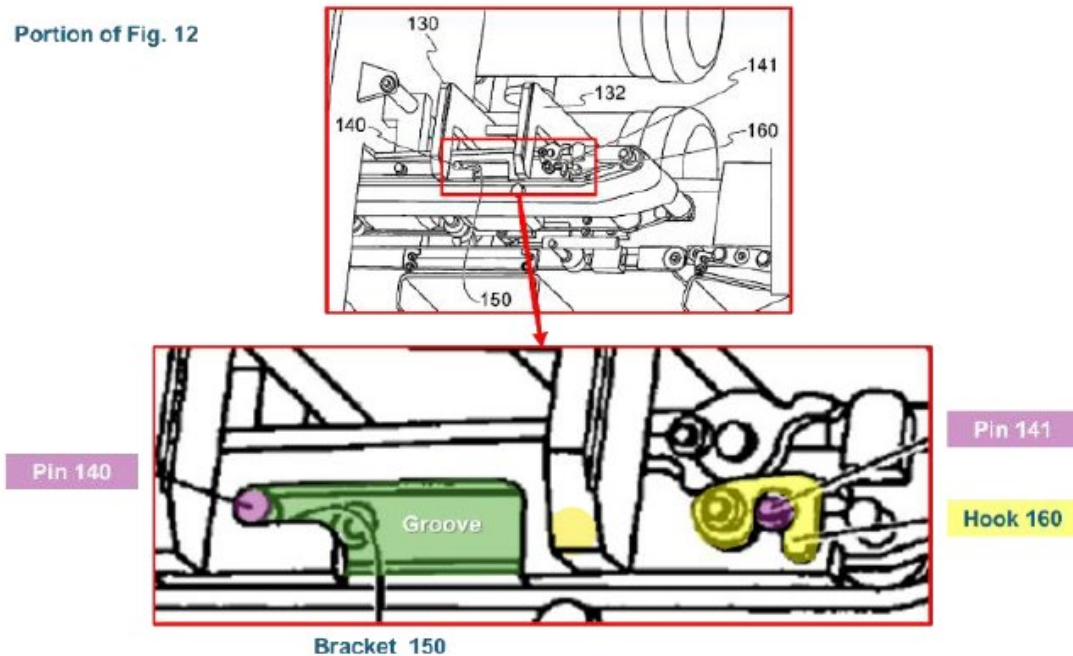
removed and/or installed without tools,” which is the only disputed limitation of substitute claim 25. As discussed above, Textor does not contest Konishi’s disclosure of the remaining limitations of substitute claim 25. Nor does Textor contest Konishi’s disclosure of the limitations recited by substitute claims 29, 30, and 33, which Provisur also challenges as being anticipated by Konishi. From our review of the record, Provisur persuades us that Konishi discloses these uncontested limitations, so we need not further address them. *See In re NuVasive, Inc.*, 841 F.3d 966, 974 (Fed. Cir. 2016) (“The Board, having found the only disputed limitations together in one reference, was not required to address undisputed matters.”); *see also* Paper 10 at 9 (“Patent Owner is cautioned that any arguments not raised in the response may be deemed waived”). Thus, we determine that Provisur demonstrates, by a preponderance of the evidence, that substitute claims 25, 29, 30, and 33, as proposed in Textor’s motion to amend, are unpatentable as anticipated by Konishi.

2. Obviousness Over Konishi and Mathues

a. Provisur’s Evidence of Obviousness

In the event Konishi alone does not teach the toolless limitation, Provisur relies on the combined teachings of Konishi and Mathues as rendering obvious the subject matter of proposed substitute claim 25. *See* Pet. MTA Opp. 17–21 (citing Ex. 1003 ¶¶ 213–225, 231, 232, 234, 235). For meeting the toolless limitation, Provisur points to Mathues’ teaching of a removably mounted conveyor belt unit for a food slicing machine that includes a latching mechanism for preventing unintentional removal of the conveyor belt unit from the machine. *Id.* at 17–18 (citing Ex. 1037, Abstract, ¶¶ 14, 49). In particular, Provisur submits an annotated portion of

Mathues's Figure 12, reproduced below, to illustrate how Mathues's latching mechanism allows for easy removal and installation of the conveyor belt unit on the food slicing machine.



As shown above, annotated Figure 12 depicts pins 140 and 141 (purple) extending laterally outward from one side of the conveyor belt unit's frame. Ex. 1037 ¶ 48. The conveyor belt unit is installed on the food slicing machine by inserting pin 140 into bracket 150 (green) on the machine and, once the conveyor unit's pin 140 is fully within a slot on bracket 150, then rotating hook 160 (yellow) over pin 141, "thereby preventing unintentional removal from the brackets." *Id.* ¶¶ 48–49. Importantly, Mathues discloses that removal of the conveyor belt unit from the machine "is accomplished by simply unhooking the hooks, sliding the conveyor in the upstream direction and dropping it downwardly for removal." *Id.* ¶ 49.

Relying on the testimony of its expert, Provisur contends it would have been obvious for one skilled in the art "to implement the concept of Mathues' toolless hooks or similar on Konishi's removable conveyor belt

unit to provide the benefit of locking Konishi's conveyor in place." Pet. MTA Opp. 18 (citing Ex. 1040 ¶¶ 220–223). This reasoning, Provisur explains, addresses the "pop out" concern of Textor and its expert. *See* Ex. 2006 ¶¶ 57–61. We find that reasoning persuasive, as it is consistent with the explicit benefit provided by Mathues's latching mechanism—"preventing unintentional removal" of the conveyor belt unit from a food slicing machine like Konishi's.

Textor responds that "[t]he entire conveyor unit in Mathues is bolted in place, resisting movement in any direction and relieving Mathues's latches from any responsibility to resist movement." PO MTA Reply 10 (citing Ex. 2015 ¶¶ 25–27). According to Textor, "[Provisur's expert] appears to have misunderstood the mechanics of Mathues" by overlooking Mathues's Figure 13, which purportedly shows "Mathues's removable conveyor is bolted in place for operation." *Id.* at 11 (citing Ex. 1040 ¶ 219, Ex. 2015 ¶ 27).

Rather than Provisur, we think it is Textor who misunderstands and overlooks the reason for Provisur's reliance on Mathues. As Provisur's expert makes clear, Konishi's removable conveyor belt unit already includes pins 23F and 23R, which are akin to Mathues's pins 140 and 141 on its removable conveyor unit. *See* Ex. 1040 ¶¶ 217, 219 (citing Ex. 1004 ¶ 33, Fig. 1; Ex. 1037 ¶ 49, Fig. 12). Also, like Mathues, Konishi includes hook grooves 26F and 26R on the mounting arms 25F and 25R of Konishi's machine, which are akin to the groove and hook configuration on the mounting arms 130 and 132 of Mathues's machine. *Compare* Ex. 1004 ¶¶ 33, 36, Fig. 1 (Konishi), *with* Ex. 1037, Fig. 12 (Mathues).

With those similarities in mind, Provisur’s expert credibly explains that one skilled in the art would have modified “the attachment points of Konishi such that it used a groove system like that illustrated in Figure 12 of Mathues” and “would have installed Mathues’ hook on the permanent structure of [Konishi] and used it to lock the removable conveyor belt unit after it was installed.” Ex. 1040 ¶ 231. Moreover, as Provisur’s expert also explains, one skilled in the art “would have recognized that applying Mathues’ groove and hook system to Konishi’s removable conveyor belt unit is a combination of conventional parts using known methods that results in predictable changes” and “[t]hese simple design considerations and attachment points would have been well within the skill [in the art] to design.” *Id.*

In our view, that testimony by Provisur’s expert outweighs, and is more persuasive, than the speculative testimony of Textor’s expert, who focuses exclusively on what he perceives is shown in Mathues’s Figure 13 while ignoring what is explicitly described in Mathues’s Figure 12, that is, elongated “slots” to accommodate the pins on a removable conveyor belt unit and “rotatable hooks . . . to hook around the pins . . . when the conveyor is in its installed position, thereby preventing unintentional removal from the brackets [on the machine]” wherein “[r]emoval is accomplished by simply unhooking the hooks, sliding the conveyor in the upstream direction and dropping it downwardly for removal.” Ex. 1037 ¶ 49 (emphasis added). Nowhere does Mathues’s description mention or otherwise suggest that the conveyor belt unit is “bolted in place” on the machine via a “nut and bolt assembly,” as Textor and its expert speculate based solely on a fuzzy and vague depiction in Figure 13. PO MTA Reply 10–11 (citing Ex. 2015 ¶ 27).

Aside from that speculative argument, which we reject, Textor’s only other argument against the asserted combination of Konishi and Mathues is that Konishi lacks the toolless limitation of substitute claim 25. As discussed above (Section II.D.1), we find that Konishi discloses that limitation, so we need not address it further. Aside from those two arguments, Textor does not otherwise contest Provisur’s showing that the combination of Konishi and Mathues discloses remaining limitations of substitute claim 25 and that one skilled in the art would have had sufficient reason with rational underpinning to combine their respective teachings to arrive at the claimed invention. *See* Pet MTA Opp. 17–21 (Provisur’s showing as to substitute claim 25); PO MTA Reply 3–8, 10–12 (Textor’s response). And, aside from presumably relying on its arguments with respect to substitute claim 25, Textor does not otherwise contest Provisur’s showing for substitute claims 26–34, which Provisur also challenges as being unpatentable over the combined teachings of Konishi and Mathues. *See* Pet MTA Opp. 21–24 (Provisur’s showing as to substitute claims 26–34). From our review of the record, Provisur persuades us that the asserted combination discloses these uncontested limitations, so we need not address them further. *See In re NuVasive, Inc.*, 841 F.3d 966, 974 (Fed. Cir. 2016) (“The Board, having found the only disputed limitations together in one reference, was not required to address undisputed matters.”).

b. Textor’s Evidence of Non-Obviousness

At the outset, we note that Textor’s motion to amend does not argue secondary considerations of non-obviousness in support of its proposed substitute claims 25–34. *See generally* PO MTA 1–24. Nor does Textor’s reply in support of its motion to amend include such an argument. *See*

generally PO MTA Reply 1–12. However, Textor’s patent owner response (which is typically reserved for arguing the original claims of a challenged patent) does raise secondary considerations in the context of both original claim 16 and substitute claim 25. *See* PO Rep. 51. So, while this may constitute an improper incorporation by reference (37 C.F.R. § 42.6(a)(3)), we nonetheless consider Textor’s evidence of secondary considerations from its patent owner response as also applying to its motion to amend, in particular, proposed substitute claim 25.

After reviewing the parties’ arguments and evidence, we find that Provisur’s evidence of obviousness strongly outweighs Textor’s evidence of secondary considerations. That is because, as Provisur correctly explains, Textor fails to demonstrate the requisite nexus of such evidence to the merits of the claimed invention. *See* Pet. MTA Opp. 25 (referencing Pet. Reply 18–23); Pet. MTA Sur-Reply 7 (same). More specifically, Textor fails to show that its evidence of secondary considerations is the direct result of the allegedly unique feature of the claimed invention—a removable conveyor unit that is configured to be removed “without tools.” In other words, Textor must tie its evidence of secondary consideration to the *toolless* feature and not just the removable aspect of the claimed “removable conveyor belt unit.”

Here, in arguing secondary considerations, Textor presents evidence of alleged commercial success and long-felt need.¹⁰ *See* PO Resp. 50–57. And, to show that such success and need is attributable to the toolless feature

¹⁰ Textor also presented evidence of alleged “copying” (PO Resp. 56–57), but later concedes that such allegation “has not been fully developed” and is “no longer being advanced” and “therefore moot” (PO Sur-Reply 19–20).

of the claimed removable conveyor belt unit, Textor offers the testimony of three fact witnesses, the inventor of the '487 patent (Mr. Josef Mayer), a Textor sales manager (Mr. Kevin Duesterhaus), and Textor's CEO (Mr. Jarrod McCarroll).¹¹ See PO Resp. 52–54 (citing Exs. 2012, 2013); PO Sur-Reply 21–23 (citing Ex. 1054). But, from our review, those witnesses do not make clear whether the success of Textor's new TS700 slicer (which Textor says embodies the claimed invention) is attributable in any meaningful way to the *toolless* capability added during the TS700's development as opposed to the addition of the TS700's *other new technology*.

For instance, Mr. Mayer, the only listed inventor on the face of the '487 patent, identifies the [REDACTED] benefits of the TS700 slicer relative to past slicing technology as being [REDACTED] well as [REDACTED] [REDACTED] Ex. 2012, 167:19–168:15. He also highlights the additional benefits of Textor's new TS700 slicer—

[REDACTED]

Id. at 168:19–169:6 (emphases added).

¹¹ Textor initially identifies these witnesses as “Weber” witnesses (see PO Resp. 54), but later refers to them as “Textor” witnesses (see PO MTA Sur-Reply 19–20). For consistency, we use the latter, as Textor and Weber appear to be affiliated.

And, while Mr. Mayer says he additionally had [REDACTED]

[REDACTED] neither Mr. Mayer nor Textor’s other witnesses tie that *toolless* feature of the removable conveyor unit to the commercial success of the TS700 slicer. Indeed, it is undisputed that removable conveyor units in food slicing machines were well-known at the time, as even the ’487 patent admits. *See* Ex. 1001, 2:1–13 (“Conveyors are furthermore known which can be removed simply including the respective conveying means.”). Konishi is also proof of the well-known nature of removable conveyor units. As a result, Textor must tie the *toolless* removal of the conveyor unit—the only feature missing from the prior art—to the success and need of the TS700 slicer, rather than simply the removability of the conveyor unit from the slicer.

But, in our view, Textor fails to make that connection. Under cross-examination by Provisur’s counsel, Textor’s own witnesses confirm that the toolless feature was not a significant contributor to the overall success and need of the TS700 slicer. To begin, we note that Weber’s chief business development officer, Mr. Jörg Schmeiser, downplays the importance of the removable conveyor cassette in Textor’s TS700 slicer—

Q [by Provisur’s counsel] So do you think the Weber removable conveyor cassette patents are core technologies?

A [by Mr. Schmeiser] I think this is -- from my personal opinion, . . . I would not perceive it as a core technology. *It’s a conveyor. You know, it’s – it’s not a core technology.*

Ex. 1060, 250:9–17 (emphasis added).

And, although Weber’s sales manager, Mr. Duesterhaus, identifies the “overall design” of the TS700 slicer, including the “removable cassettes,” as

driving customer interest, he still fails to tie that interest to the *toolless* capability of the removable cassettes—

Q. [by Provisur’s counsel] You’re not aware of any Weber customer that’s bought an entire slicing line because of a removable conveyor cassette, are you? . . .

A. [by Mr. Duesterhaus] I don’t -- in the end I don’t know what decisions made them purchase that machine.

Q. You don’t know why your customers buy your machines? . . .

A. I give them a lot of reasons to buy our machines, but the overwhelming reason, I’m not sure.

Q. Okay. So in the end it’s just hard for you to say why a customer buys a slicing line? . . .

A. Could be maybe they like me. I don’t know, but I think it’s pretty safe to say that *the overall design of the machine, including the removable cassettes, is probably a good reason to purchase that machine.*

Ex. 1057, 255:17–256:16 (emphasis added).

And the inventor of the ’487 patent, Mr. Mayer, makes the same point—that it is the “complete” aspect of the TS700 slicer that drives customer purchases—

Q. [by Provisur’s counsel] And so no one buys an entire slicing line just to get a removable conveyor belt unit in it, right? . . .

A. [by Mr. Mayer] -- that -- that removable conveyor is important for the TS700. But . . . I think it’s more or less [sp] *related to the complete budget of a production line*, and not only of that feature of the removable conveyor which is implemented in the TS700.

Ex. 1063, 285:2–20 (emphasis added).

And Textor’s CEO, Mr. McCarroll, explains even further that the toolless feature was only one of many reasons for why customers purchase the TS700 slicer, with those additional reasons including “performance of the machine,” “slice quality,” and “footprint”—

Q. [by Provisur's counsel] In your experience, why do you think customers buy the TS700, the TS750, and the TS500?

A. [by Mr. McCarroll] Well, I think it's -- it's -- a lot of it is application based. You know, I'd have to say that there's -- you know, it's obviously the sanitation, the hyg[i]enic design, the simplicity of the machine, the performance of the machine, the tool-less design of the machine, all come into play when customers are looking at this compared to other solutions out there.

* * *

Q. What do you think drives the success of the TS700?

A. I think the hyg[i]enic design. I think the tool-free design of the machine for taking parts off, such as the removable cassette. I think the slice quality. I think the footprint. I think those are all features that customers appreciate about the solution.

Ex. 1054, 38:9–19, 43:10–17.

In assessing the impact of this testimony, we recognize that the toolless feature need not be “solely responsible” for the success in order for it to be given favorable weight. *Continental Can Co. v. Monsanto Co.*, 948 F.2d 1264, 1273 (Fed. Cir. 1991). Nonetheless, it must play some meaningful role in driving the success. Here, weighing the collective testimony of Textor's witnesses as to the many reasons for the success of the TS700 slicer against the few instances where the inventor of the '487 patent, Mr. Mayer, and Textor's CEO, Mr. McCarroll, mention the toolless feature of the removable cassette, we are not persuaded that the toolless feature was an *important* contributor to the success of the TS700 slicer. Rather, more than anything else, the testimony shows it was the removability of the conveyor cassette from TS700's base (which is in the prior art) as well as the TS700's small footprint, slicing quality, and cabinet-free accessibility that contributed to the TS700's success. Moreover, the lack of any *objective* evidence from Textor, i.e., aside from interested witnesses, does not help

their case. Thus, we do not give much weight to Textor’s evidence of secondary considerations.

c. Conclusion

In the end, we find that Textor’s evidence of non-obviousness is insufficient to outweigh the strong evidence of obviousness shown by the asserted combination of Konishi and Mathues. As such, we determine that Provisur demonstrates, by a preponderance of the evidence, that substitute claims 25–34 are unpatentable as obvious over the combined teachings of Konishi and Mathues.

3. Additional Challenges

As mentioned above, Provisur additionally challenges substitute claims 25–34 on four other grounds—as obvious over Konishi and Lindee, or as obvious over McLaughlin alone or combined with either Konishi or Herman. *See* Pet. 29–79. Having already determined that substitute claims 25–34 are unpatentable as anticipated by Konishi and/or as obvious Konishi and Mathues, we need not reach these alternative challenges. *See Bos. Sci. Scimed, Inc. v. Cook Grp. Inc.*, 809 F. App’x 984, 990 (Fed. Cir. 2020) (non-precedential) (recognizing that the “Board need not address issues that are not necessary to the resolution of the proceeding” and has “discretion to decline to decide additional instituted grounds once the petitioner has prevailed on all its challenged claims”).

IV. CONCLUSION

We grant Textor’s motion to amend canceling originally challenged claims 1–4, 6, 9, 10, 14–16, and 22. We otherwise deny Textor’s motion to amend proposing substitute claims 25–34, given that Provisur proves, by a preponderance of the evidence, that such claims are unpatentable. In sum, we resolve Textor’s motion to amend as follows:

Motion to Amend Outcome	Claims
Original Claims Canceled by Amendment	1–4, 6, 9, 10, 14–16, 22
Substitute Claims Proposed in the Amendment	25–34
Substitute Claims: Motion to Amend Granted	
Substitute Claims: Motion to Amend Denied	25–34
Substitute Claims: Not Reached	

V. ORDER

Accordingly, it is:

ORDERED that Textor’s motion to amend canceling claims 1–4, 6, 9, 10, 14–16, and 22 of the ’487 patent is *granted*;

FURTHER ORDERED that Textor’s motion to amend proposing substitute claims 25–34 is *denied*;

FURTHER ORDERED that claims 1–4, 6, 9, 10, 14–16, and 22 of the ’487 patent are *cancelled*; and

FURTHER ORDERED that, because this is a Final Written Decision, the parties to the proceeding seeking judicial review of the decision must comply with the notice and service requirements of 37 C.F.R. § 90.2.

IPR2024-00224
Patent 9,457,487 B2

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