

NOTE: This disposition is nonprecedential.

**United States Court of Appeals
for the Federal Circuit**

ETHICON LLC,
Appellant

v.

INTUITIVE SURGICAL, INC.,
Appellee

2020-1600

Appeal from the United States Patent and Trademark Office, Patent Trial and Appeal Board in No. IPR2018-00936.

Decided: March 15, 2021

CHRISTOPHER PEPE, Weil, Gotshal & Manges LLP, Washington, DC, argued for appellant. Also represented by BRIAN E. FERGUSON, CHRISTOPHER MARANDO, PRIYATA PATEL; ANISH R. DESAI, ELIZABETH WEISWASSER, New York, NY.

NITIKA GUPTA FIORELLA, Fish & Richardson P.C., Wilmington, DE, argued for appellee. Also represented by STEVEN KATZ, Boston, MA; RYAN PATRICK O'CONNOR, JOHN C. PHILLIPS, San Diego, CA.

Before O'MALLEY, CLEVINGER, and STOLL, *Circuit Judges*.

STOLL, *Circuit Judge*.

Ethicon LLC appeals from a final written decision of the Patent Trial and Appeal Board holding claims 1–14 of U.S. Patent No. 9,585,658 unpatentable under 35 U.S.C. § 102 and denying Ethicon's contingent motion to amend to substitute proposed claims 20 and 21. Because we agree with the Board's claim construction of relevant terms, and because substantial evidence supports the Board's anticipation finding under that construction, we affirm the Board's determination that claims 1–14 are unpatentable. Because the Board's denial of Ethicon's contingent motion seeking to substitute proposed claims 20 and 21 was based on an anticipation finding unsupported by substantial evidence, we reverse that finding and remand for the Board to consider Intuitive Surgical, Inc.'s alternative grounds for invalidity of Ethicon's proposed substitute claims 20 and 21.

BACKGROUND

The '658 patent generally relates to surgical staplers having an end effector closing system and a firing system for deploying staples. The inventive stapling system of the '658 patent "comprises a housing comprising a rotary drive member, an elongate shaft extending from the housing," and "an end effector comprising a jaw configured to support a staple cartridge and an anvil rotatable to the jaw between an open position and a fully-closed position." '658 patent at Abstract. The end effector may comprise first and second jaw members, with staples typically deployed from the staple cartridge in the first jaw member. A driver in the first jaw member may traverse a channel in the staple cartridge and cause the staples to be deformed against the anvil located in the second jaw member. "In order to deploy

the staples, the surgical instrument can include . . . a firing drive for advancing the staple driver within the staple cartridge.” *Id.* at col. 11 ll. 29–32. The stapling system further comprises a closure cam operably coupled with the rotary drive member and configured to transmit a closing motion to the anvil, and an opening member configured to apply an opening force to the anvil.

Relevant to this appeal, Figures 3 and 4 of the ’658 patent provide exploded and partial side views, respectively, of the handle portion of the surgical stapler:

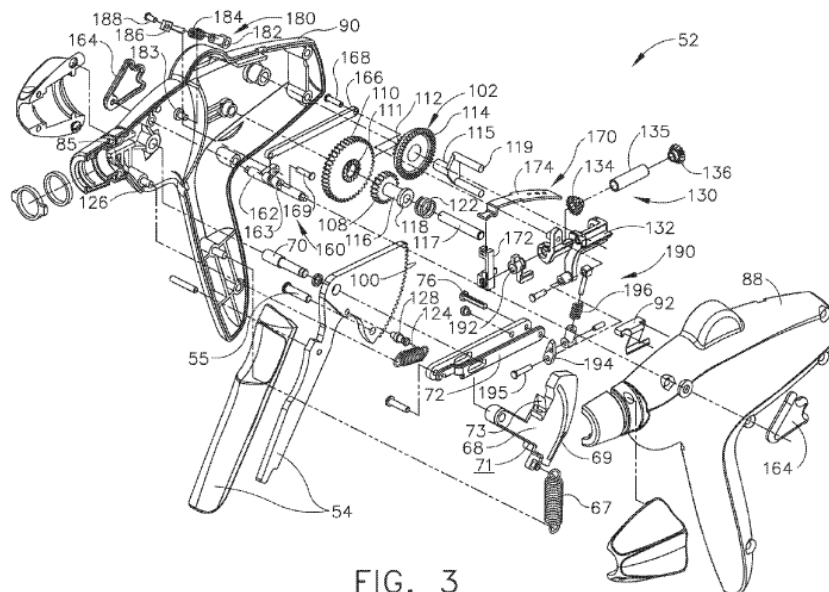


FIG. 3

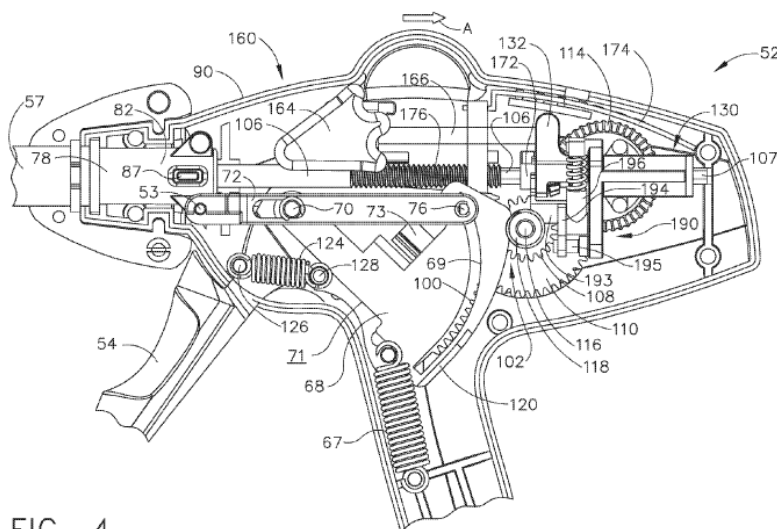


FIG. 4

Id. Figs. 3–4. The surgical instrument of the claimed invention can include handle portion 52, trigger 54, an elongate shaft assembly, and an end effector. In at least one embodiment, the anvil can be operably connected to trigger 54 such that, upon actuation of trigger 54, the anvil can be rotated into a closed position. More specifically, trigger 54 can be operably engaged with a closure drive system configured to translate both the anvil and the channel relative to the outer sheath of the elongate shaft of the surgical instrument. As can be seen in Figure 4, “the closure drive can include cam 68 operably engaged with trigger 54 such that a first actuation of trigger 54 can rotate cam 68 about pin 70 and drive closure links 72 in a substantially linear direction.” *Id.* at col. 11 l. 65–col. 12 l. 2. Once the anvil has been placed in its closed position, “trigger 54 can be actuated a second time to operate a firing drive which advances” the cutting member within the end effector. *Id.* at col. 13 ll. 3–6. More specifically, “the firing drive can include trigger gear portion 100 extending from trigger 54, gear train 102, gear carriage 130, and rotatable drive

shaft 106 which can be configured to advance” the cutting member within the end effector. *Id.* at col. 13 ll. 12–17.

Claim 1 is illustrative of the independent claims at issue on appeal. Though dependent claims 4, 9, and 12 each depends from a different independent claim, they are otherwise substantially the same. Independent claim 1 and dependent claim 4, which depends from claim 1, recite:

1. A stapling system, comprising:

a housing comprising a *rotary drive member*;

an elongate shaft extending from said housing, wherein said elongate shaft defines a longitudinal axis;

an end effector, comprising:

a jaw configured to support a staple cartridge; and

an anvil rotatable relative to said jaw between an open position and a fully-closed position, wherein said anvil comprises a cam surface;

a closure cam operably coupled with said *rotary drive member*, wherein said closure cam is configured to move longitudinally to engage said cam surface and transmit a closing motion to said anvil to move said anvil into said fully-closed position; and

an opening member configured to move longitudinally to apply an opening force to said anvil at a location other than said cam surface to move said anvil into said open position.

* * *

4. The stapling system of claim 1, further comprising a rotary motion generator configured to rotate said *rotary drive member*.

Id. at col. 92 l. 54–col. 93 l. 4, col. 93 ll. 9–11 (emphases added to disputed limitations).

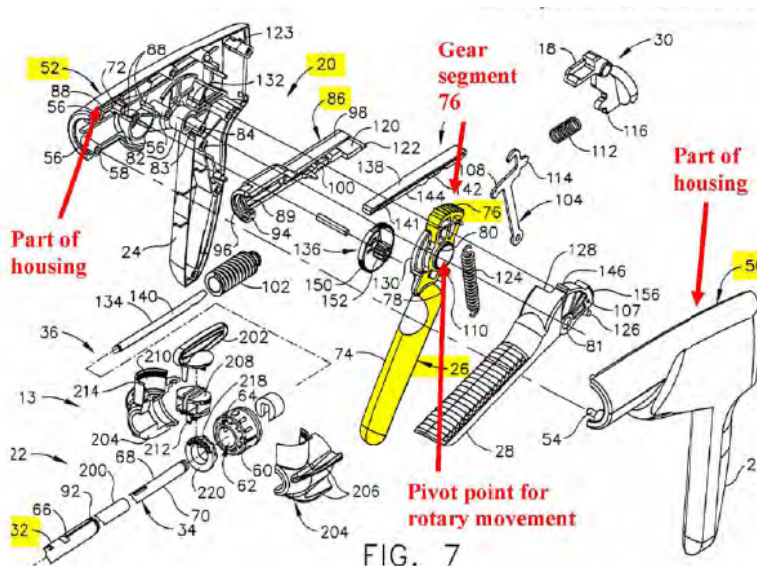
The parties agreed that the terms “rotary drive member,” “rotary member,” and “rotatable drive member” (collectively, “the rotary drive terms” or “rotary drive”) should receive the same construction. They also agreed that the claimed rotary drive is a component that rotates to drive another component. The primary claim construction dispute between the parties was whether a component of a trigger is excluded from the scope of the rotary drive terms. On appeal, Ethicon alternatively frames the dispute as whether “the component used to actuate the stapling system and the claimed rotary drive [can] be the same component.” Appellant’s Reply 6.

In its final written decision, the Board “d[id] not discern any substantive or meaningful difference in the construction of the ‘rotary drive member’ limitations proposed by the parties.” *Intuitive Surgical, Inc. v. Ethicon, LLC*, IPR2018-00936, slip op. at 10 (P.T.A.B. Jan. 13, 2020) (*Decision*). In its institution decision, however, the Board noted that, unlike Intuitive’s proposed construction, Ethicon’s proposed construction excluded “a ‘trigger’ or any components associated with a trigger” from the scope of the rotary drive terms. J.A. 484.

In the institution decision, the Board indicated that it was “not persuaded that the Specification of the ’658 patent somehow categorically excludes any component regarded as, or associated with, a ‘trigger’ from operating as a ‘rotary drive member.’” *Id.* The Board concluded that the specification’s failure to describe a “trigger” as a “rotary drive member” was not dispositive of whether a “rotary drive member” could include a “trigger.” *Id.* The Board also concluded that the specification’s disclosure of “embodiments in which both a ‘drive’ component and a ‘trigger’ component are present in a given device provides little, if any, meaningful insight into” whether a trigger should be excluded from the scope of the rotary drive terms. *Id.*

Accordingly, the Board construed the rotary drive terms to mean “a component that rotates to drive another component,” which “does not exclude a component regarded as a gear or a trigger.” *Decision*, slip op. at 10.

Applying this construction, the Board held claims 1–14 of the '685 patent anticipated by Wales.¹ Specifically, the Board found that gear segment 76 of Wales “is understood readily and reasonably as a ‘rotary drive member,’” because “gear segment 76, in pivoting/rotating to effect movement of yoke 86 to cause distal motion of closure sleeve 32, is viewed reasonably as a component that rotates to drive another component in response to actuation of the stapling system.” *Id.* at 19. These components can be seen in Intuitive’s annotation of Figure 7 of Wales (replicated below), which “depicts a perspective, exploded view of the handle portion of the proximal end of the surgical instrument,” Wales col. 3 ll. 61–63:



¹ Wales is U.S. Patent No. 6,981,628, filed on July 9, 2003, and titled “Surgical Instrument with a Lateral-Moving Articulation Control.”

J.A. 353.

Having found claims 1–14 anticipated by Wales, the Board then addressed Ethicon’s contingent motion to amend, which requested that the Board substitute proposed claims 15–28 should any of claims 1–14 be found unpatentable. Intuitive opposed Ethicon’s motion, arguing multiple grounds for invalidity of each of Ethicon’s proposed substitute claims, including that each claim is invalid as anticipated by Shelton I² under 35 U.S.C. § 102(e).³ The Board agreed with Intuitive and held Ethicon’s proposed substitute claims anticipated under § 102(e) by Shelton I. In view of this finding, the Board did not reach the merits of Intuitive’s alternative grounds for invalidity of Ethicon’s proposed substitute claims.

Ethicon appeals the Board’s anticipation finding and its denial of Ethicon’s contingent motion to amend. We have jurisdiction pursuant to 28 U.S.C. § 1295(a)(4)(A).

DISCUSSION

On appeal, Ethicon argues that claims 1–14 are not anticipated by Wales under the correct claim construction for the rotary drive terms, and that the Board erred in denying Ethicon’s contingent motion to amend with respect to proposed substitute claims 20 and 21. We address each argument in turn.

² U.S. Patent App. Pub. No. 2007/0175957.

³ Intuitive also asserted that all of Ethicon’s proposed substitute claims were invalid as: (1) anticipated under 35 U.S.C. § 102(e) by Shelton II (U.S. Patent App. Pub. No. 2007/0175961); (2) obvious under 35 U.S.C. § 103 over Wales; (3) obvious under § 103 over Wales and Chang (U.S. Patent No. 5,295,614); and (4) obvious under § 103 over Wales and Viola (U.S. Patent No. 5,954,259).

We review the Board's legal determinations de novo, *In re Elsner*, 381 F.3d 1125, 1127 (Fed. Cir. 2004), and its fact findings for substantial evidence, *In re Gartside*, 203 F.3d 1305, 1315 (Fed. Cir. 2000).

I

Ethicon asserts that the Board adopted an unreasonably broad construction for the rotary drive terms. We disagree.

Claim construction is ultimately a question of law that can involve underlying factual inquiries. *Teva Pharms. USA, Inc. v. Sandoz, Inc.*, 574 U.S. 318, 333 (2015). We review the Board's claim construction based solely on intrinsic evidence de novo, while we review subsidiary factual findings regarding extrinsic evidence, if any, for substantial evidence. *Personalized Media Commc'ns, LLC v. Apple Inc.*, 952 F.3d 1336, 1339 (Fed. Cir. 2020). The broadest reasonable interpretation standard applies to this inter partes review proceeding.⁴

On appeal, Ethicon agrees with the Board that the rotary drive is "a component that rotates to drive another component." Appellant's Br. 38. Ethicon argues, however, that the proper construction of the rotary drive terms should be further narrowed to exclude a trigger and a

⁴ Per recent regulation, the Board applies the claim construction standard articulated in *Phillips v. AWH Corp.*, 415 F.3d 1303 (Fed. Cir. 2005) (en banc), to IPR petitions filed on or after November 13, 2018. *See Changes to the Claim Construction Standard for Interpreting Claims in Trial Proceedings Before the Patent Trial and Appeal Board*, 83 Fed. Reg. 51,340 (Oct. 11, 2018) (codified at 37 C.F.R. § 42.100(b)). Because Intuitive filed its IPR petition before November 13, 2018, we apply the broadest reasonable interpretation standard.

component integral with a trigger. We see no basis in the intrinsic record for limiting the terms in this manner.

Starting with the claim language, the rather generic terms “rotary drive member,” “rotary member,” and “rotatable drive member” do not on their face exclude a trigger or a component integral with a trigger. For example, in describing the recited “rotary drive member,” claim 1 simply requires that the rotary drive member be in “a housing” and “operably coupled with” a closure cam. Nothing in this language of claim 1 would indicate to an ordinarily skilled artisan that a “rotary drive member” cannot be a trigger or part of a trigger. Likewise, though claim 4 requires a “rotary motion generator configured to rotate said rotary drive member,” nothing in this claim language excludes the rotary drive member from being integral with the rotary motion generator, or requires that the rotary drive member be separate from the rotary motion generator. The claim language simply requires that the rotary motion generator be operable to rotate the rotary drive member.

Turning to the specification, we similarly discern no intent by the inventors to exclude a trigger or component of a trigger from the scope of the claimed rotary drive terms. Ethicon asserts that “the specification contains ‘repeated and consistent descriptions’ of embodiments further describing the rotary drive as separate and distinct from the trigger.” Appellant’s Br. 40 (quoting *In re Smith Int’l, Inc.*, 871 F.3d 1375, 1383 (Fed. Cir. 2017)). Referring to Figures 1–20 of the ’658 patent, Ethicon also maintains that “the rotary drive is rotated by trigger 54, which is depicted and described as a separate component from the rotary drive.” *Id.* (citing ’658 patent col. 11 ll. 35–37). We do not disagree with Ethicon’s description of these figures. As we have repeatedly held, however, the fact that every embodiment in the specification depicts a particular arrangement or structure does not necessarily support reading that arrangement or structure into the claims absent express

claim language requiring as much. *See Aventis Pharma S.A. v. Hospira, Inc.*, 675 F.3d 1324, 1330 (Fed. Cir. 2012) (“[I]t is . . . not enough that the only embodiments, or all of the embodiments, contain a particular limitation’ to limit a claim term beyond its ordinary meaning.” (second alteration in original) (quoting *Teleflex, Inc. v. Ficosa N. Am. Corp.*, 299 F.3d 1313, 1325 (Fed. Cir. 2002))); *Innova/Pure Water, Inc. v. Safari Water Filtration Sys., Inc.*, 381 F.3d 1111, 1117 (Fed. Cir. 2004) (“[P]articlar embodiments appearing in the written description will not be used to limit claim language that has broader effect.” (first citing *Electro Sci. Indus., Inc. v. Dynamic Details, Inc.*, 307 F.3d 1343, 1349 (Fed. Cir. 2002); and then citing *Laitram Corp. v. NEC Corp.*, 163 F.3d 1342, 1347–48 (Fed. Cir. 1998))); *Liebel-Flarsheim Co. v. Medrad, Inc.*, 358 F.3d 898, 906 (Fed. Cir. 2004) (“[T]his court has expressly rejected the contention that if a patent describes only a single embodiment, the claims of the patent must be construed as being limited to that embodiment.” (collecting cases)). This is especially true here, where Ethicon’s proposed construction includes a negative limitation.

We have identified claim constructions that exclude a particular element as including a “negative limitation” and held that such exclusions must find support either in “the words of the claim” or through an “express disclaimer or independent lexicography in the written description that would justify adding that negative limitation.” *Omega Eng’g, Inc. v. Raytek Corp.*, 334 F.3d 1314, 1323 (Fed. Cir. 2003) (citing *CCS Fitness, Inc. v. Brunswick Corp.*, 288 F.3d 1359, 1366–67 (Fed. Cir. 2002)); *see also Vehicle IP, LLC v. AT & T Mobility, LLC*, 594 F. App’x 636, 642 (Fed. Cir. 2014) (“Neither the district court nor Appellees point to any express disclaimer or independent lexicography in the intrinsic record that justifies including the negative limitation ‘not remaining travel time’ in the proper construction of ‘expected time of arrival.’” (citing *Omega*,

334 F.3d at 1323)). None of these bases for importing a negative limitation into the claim language is present here.

Our review of the claim language and specification reveals no intent to confer on the claim language the meaning imparted by Ethicon's proffered negative limitation. Accordingly, we conclude that there is no basis in the intrinsic evidence for importing Ethicon's negative limitation and we adopt the Board's construction.

Ethicon's argument that the Board erred in finding claims 1–14 anticipated by Wales is contingent on our adoption of its proposed claim construction of the rotary drive terms. Because we adopt the Board's construction of the rotary drive terms, we affirm the Board's finding that Wales anticipates claims 1–14.

II

Ethicon also appeals the Board's denial of its contingent motion to amend to add proposed substitute claims 20 and 21, arguing that the Board erred in concluding that Shelton I is prior art to these claims under § 102(e). We agree.

Before the Board, Intuitive argued that Ethicon's contingent motion to amend should be denied because all of Ethicon's proposed substitute claims were invalid under § 102(e) over Shelton I. Shelton I is titled "Motor-Driven Surgical Cutting and Fastening Instrument with Adaptive User Feedback" and lists Frederick E Shelton IV, John N. Ouwerkerk, and Jerome R. Morgan as inventors. J.A. 2676. Frederick E. Shelton IV is the sole named inventor of the '658 patent. Ethicon asserted that Shelton I is not prior art to the proposed substitute claims because Mr. Shelton was the sole inventor responsible for conception of the portions of Shelton I that Intuitive relied on to anticipate Ethicon's proposed substitute claims. J.A. 818–19. Therefore, Ethicon maintained, Shelton I

was not prior art because it was not invented “by another” for purposes of 35 U.S.C. § 102(e).

The Board agreed with Intuitive and held Ethicon’s substitute claims anticipated under § 102(e) over Shelton I. *Decision*, slip op. at 37–38. In resolving whether Mr. Ouwerkerk and Mr. Morgan were joint inventors of the relevant portions of Shelton I, the Board considered declaration testimony from Mr. Shelton and Mr. Morgan in the framework set out by *Duncan Parking Technologies, Inc. v. IPS Group Inc.*, 914 F.3d 1347 (Fed. Cir. 2019). Under *Duncan*, to be a joint inventor, one must:

- (1) contribute in some significant manner to the conception or reduction to practice of the invention,
- (2) make a contribution to the claimed invention that is not insignificant in quality, when that contribution is measured against the dimension of the full invention, and
- (3) do more than merely explain to the real inventors well-known concepts and/or the current state of the art.

Id. at 1357–58 (quoting *In re VerHoef*, 888 F.3d 1362, 1366 (Fed. Cir. 2018)). *Duncan* further instructs that:

to decide whether a reference patent is “by another” for the purposes of 35 U.S.C. § 102(e), the Board must (1) determine what portions of the reference patent were relied on as prior art to anticipate the claim limitations at issue, (2) evaluate the degree to which those portions were conceived “by another,” and (3) decide whether that other person’s contribution is significant enough, when measured against the full anticipating disclosure, to render him a joint inventor of the applied portions of the reference patent.

Id. at 1358.

On appeal, Ethicon asserts that, with respect to proposed substitute claims 20 and 21, the Board erred in

applying the first element of the *Duncan* test—determining what portions of the reference patent Intuitive relied on as prior art to anticipate the claim limitations at issue. We agree. It is clear from the final written decision that the Board did not correctly identify the portions of Shelton I that Intuitive relied on to anticipate proposed substitute claims 20 and 21.

The Board found that Intuitive “relies directly and expressly on content appearing, for instance, at paragraphs 57–66 (Pet. Opp. 17, 20) of Shelton I in proposing anticipation of the substitute claims, which is the very content of Shelton I identified specifically by Mr. Shelton himself as exemplary content contributed by Morgan and Ouwerkerk.” *Decision*, slip op. at 34. This finding is neither correct nor supported by substantial evidence. Mr. Shelton’s declaration identifies paragraphs 59–65 of Shelton I as containing concepts conceived by Mr. Morgan and Mr. Ouwerkerk. J.A. 3975–76 (Shelton Dec. ¶ 15). Intuitive’s response to Ethicon’s contingent motion to amend did not rely on paragraphs 59–65 of Shelton I as providing an anticipating disclosure of proposed substitute claims 20 and 21. Rather, Intuitive’s claim chart mapped proposed substitute claim 20 to Figures 1–7 and paragraphs 46–47, 49, 52, 54, and 57 of Shelton I, and mapped proposed substitute claim 21 to Figure 3 and paragraphs 52 and 70–72 of Shelton I. J.A. 711–21, 724. Thus, contrary to the Board’s finding, Mr. Shelton’s declaration does not admit that Mr. Morgan and Mr. Ouwerkerk contributed to the disclosures in Shelton I that Intuitive relied on to anticipate proposed substitute claims 20 and 21.⁵ For at least

⁵ Because the Board’s discussion of corroboration relies on the same erroneous identification of the relevant portions of Shelton I, the Board’s corroboration analysis rises and falls with our analysis of the propriety of the Board’s application of *Duncan*.

this reason, we reverse the Board's finding that Shelton I constitutes § 102(e) prior art that anticipates proposed substitute claims 20 and 21.

We are not persuaded by Intuitive's post-hoc argument that the Board's identification of the relevant portions of Shelton I as paragraphs 57–66 and Figures 7–10 was correct. *See* Appellee's Br. 50–53. Essentially, Intuitive contends that by expressly identifying Figures 1–7 as anticipatory disclosures, it by implication identified each of the paragraphs of Shelton I that provides description of those figures. *Id.* at 50. As an example, Intuitive argues that its identification of Figure 6 also implicated paragraph 60, which was not expressly identified by Intuitive as an anticipating disclosure for proposed substitute claims 20 or 21. *Id.* But Intuitive's claim chart mapping the pertinent Shelton I disclosures to proposed substitute claims 20 and 21 identified particular paragraphs of Shelton I and, with the exception of paragraph 57 and Figure 7,⁶ did not overlap with the Board's identification of relevant material in Shelton I. We reject Intuitive's delayed attempt to bootstrap additional material into the anticipating disclosure Intuitive presented to the Board and reverse the Board's finding that Shelton I anticipates proposed substitute claims 20 and 21.

CONCLUSION

We have considered the parties' remaining arguments and do not find them persuasive. For the foregoing reasons, we affirm the Board's finding that Wales anticipates claims 1–14 under the proper construction, reverse the Board's finding that proposed substitute claims 20 and 21

⁶ Mr. Shelton's declaration did not identify either of these portions of Shelton I as portions to which Mr. Ouwerkerk or Mr. Morgan contributed. *See* J.A. 3975–76 (Shelton Dec. ¶ 15).

are anticipated by Shelton I, and vacate the Board's denial of Ethicon's contingent motion to amend with respect to proposed substitute claims 20 and 21. We remand for the Board to address whether proposed substitute claims 20 and 21 would be invalid based on any of Intuitive's alternative grounds for invalidity such that Ethicon's motion to add proposed substitute claims 20 and 21 should be denied.

**AFFIRMED-IN-PART, REVERSED-IN-PART, AND
REMANDED**

COSTS

No costs.