United States Court of Appeals for the Federal Circuit

IN RE: STEVEN C. CHUDIK,
Appellant

2016-1817

Appeal from the United States Patent and Trademark Office, Patent Trial and Appeal Board in No. 11/525,631.

Decided: March 27, 2017

GREGORY B. BEGGS, Law Offices of Gregory B. Beggs, Downers Grove, IL, argued for appellant.

MARY L. KELLY, Office of the Solicitor, United States Patent and Trademark Office, Alexandria, VA, argued for appellee Michelle K. Lee. Also represented by NATHAN K. KELLEY, MEREDITH HOPE SCHOENFELD, THOMAS W. KRAUSE.

Before DYK, REYNA, and STOLL, *Circuit Judges*.

REYNA, *Circuit Judge*.

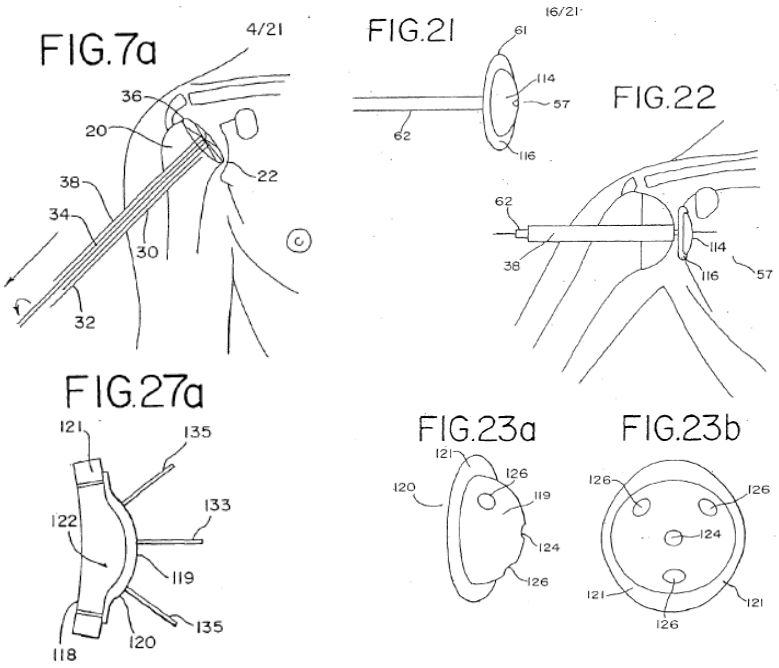
Steven Chudik appeals from the Patent Trial and Appeal Board's ("Board") determination that claims 1, 15, 18, and 33–40 of U.S. Patent Application 11/525,631 ("'631 application") are anticipated by two prior art references.

Because substantial evidence does not support the Board's determination, we *reverse*.

BACKGROUND

1. The '631 Application

The '631 application, entitled "Glenoid Implant for Minimally Invasive Shoulder Replacement Surgery," describes an invention related to "rotator cuff sparing procedures and associated devices for shoulder replacement surgery." J.A. 24, ¶ 2. The '631 application improves on the prior art by offering "simple and less invasive perpendicular access to the humeral and glenoid joint surfaces," which "spares the rotator cuff tendons and allows for a quicker and more functional recovery." J.A. 29–30, ¶¶ 12–13. As relevant here, the surgery described in the '631 application involves two main steps. First, the surgeon removes "a minimal amount of bone from the peripheral surface of the glenoid"—a process called reaming. *See* J.A. 51, ¶ 124. Second, the surgeon places an implant in the reamed cavity. *See* J.A. 57, ¶ 142. The glenoid, reamer, and implant are pictured below:



J.A. 79, 91, 94. The scapula is the shoulder bone connecting the humerus (upper arm bone) to the clavicle (the collar bone). Figure 7a shows that the glenoid cavity 22 faces outward on the scapula. Figure 21 depicts a side view of the reamer, and Figure 22 shows how the reaming surface 114 faces toward the glenoid cavity. J.A. 30, ¶ 17; J.A. 37, ¶ 80.

Once the glenoid cavity has been reamed, the implant's protruding surface 119 "sits within the concavity of the reamed glenoid surface." J.A. 57, ¶ 142. Figures 23a and 27a show the protruding surface 119, which "protrudes into the glenoid 22 to a specified depth." *Id.* The '631 application describes the reaming surface 114 in similar terms to the protruding surface 119. *Compare* J.A. 51, ¶ 124, *with* J.A. 57, ¶ 142. Like the reaming surface 114, the protruding surface 119 faces toward the glenoid cavity. *See* Fig. 22.

Representative independent claims 1 and 40 are at issue in this appeal.[1] They recite:

> 1. A glenoid implant comprising:
>
> a shell having a protruding surface on a first side *arranged to engage* the surface of a cavity formed in a glenoid extending between peripheral glenoid surfaces, and
>
> a flat surface on the first side adjacent the protruding surface *arranged to engage* the peripheral glenoid surfaces adjacent the cavity, and
>
> a wear-resistant articulating surface on a second side opposite the flat surface and the protruding surface.

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[1] Rejected claims 15, 18, and 33–39 depend from claim 1. *See* J.A. 271–72.

40. A glenoid implant comprising:

a protruding surface on a first side *arranged to engage* the surface of a cavity formed in a glenoid extending between peripheral glenoid surfaces, and

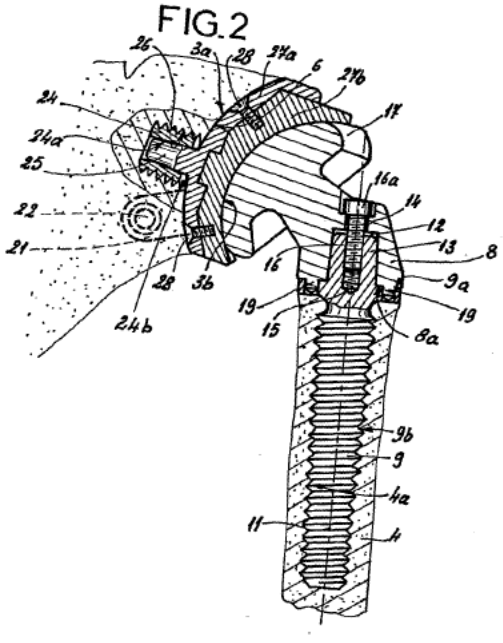
a substantially planar wear-resistant articulating surface on a second side opposite the protruding surface.

J.A. 3 (disputed term emphasized).

2. Prior Art

Rambert

FR 2 579 454 (Oct. 3, 1986) ("Rambert") discloses a glenoid implant with a shell element. J.A. 188.



Rambert Figure 2 shows element 27b in contact with anchoring element 27a, which in turn contacts the glenoid cavity. J.A. 198.

Bouttens

WO 01/47442 A1 (July 5, 2001) ("Bouttens") discloses a shoulder prosthesis assembly for implantation in the glenoid. J.A. 199.

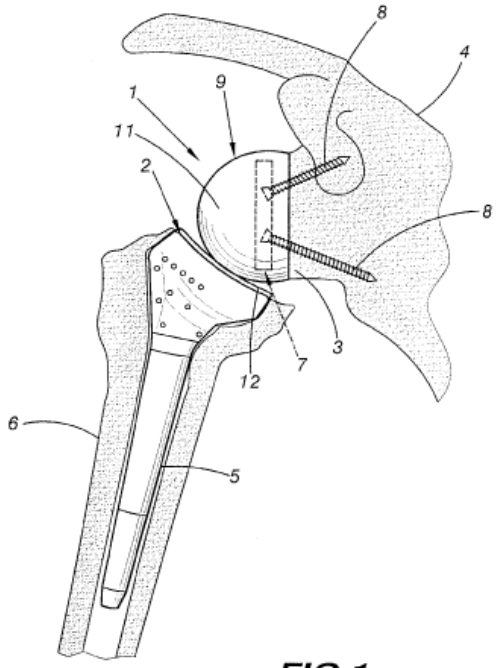


FIG. 1

Bouttens Figure 1 shows the protruding surface 11 facing away from the glenoid cavity and toward the humerus. J.A. 210. It also shows screws on the opposite side of the protruding surface attaching the implant to the glenoid region. *See id.*

3. Examination Proceedings

Mr. Chudik filed the '631 application on September 25, 2006. On June 5, 2012, the Examiner issued a Final

Action rejecting claims 1, 15, 18, and 33–40. The Examiner made four rejections:

- Claim 40 rejected under 35 U.S.C. § 112, first paragraph[2];
- Claims 1, 15, and 33–39 rejected under 35 U.S.C. § 102(b) as anticipated by Rambert;
- Claim 40 rejected under 35 U.S.C. § 102(b) as anticipated by Bouttens;
- Claim 18 rejected under 35 U.S.C. § 103(a) as obvious over Rambert and Church.

Mr. Chudik filed a Notice of Appeal of the Examiner's rejections on September 1, 2012.

4. Board Proceedings

The parties briefed Mr. Chudik's appeal in 2012 and 2013. The Board issued its Decision on Appeal on February 10, 2016. It did not sustain the Examiner's determination that claim 40 failed to comply with § 112, first paragraph. But it did sustain the Examiner's determinations that:

- Claims 1, 15, and 33–39 were anticipated by Rambert;
- Claim 40 was anticipated by Bouttens;
- Claim 18 would have been obvious over Rambert and Church.

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[2] 35 U.S.C. §§ 102, 103, and 112 were replaced with new versions in the America Invents Act. *See* Leahy Smith America Invents Act, Pub. L. No. 112-29, §§ 3(b), 3(c), and 4(c), 125 Stat. 284, 285–87, 296 (2011) ("AIA"). The new versions of §§ 102, 103, and 112 do not apply in this case, given that the '631 patent application predates those revisions. *See* AIA, §§ 3(n)(1), 4(e), 125 Stat. 293, 297. Thus, we refer to the pre-AIA version of Title 35.

In support of its findings, the Board stated that "independent claim 1 is an apparatus claim and does not require the recited surfaces to 'engage' the specified glenoid regions; rather, independent claim 1 requires only that the recited surfaces be 'arranged' for such engagement." J.A. 6. Therefore, according to the Board, "the fact that Rambert's protruding and flat surfaces are not described or depicted as actually engaging the specified glenoid regions is not dispositive, as they can still be arranged to do so." *Id.* The Board thus sustained the Examiner's rejection of claims 1, 15, and 33–39 based on Rambert.

As for claim 40, another apparatus claim, the Board stated that Mr. Chudik "does not adequately address why Bouttens's surface 11 is structurally incapable of engaging a glenoid cavity that matches its protruding profile." J.A. 8. The Board noted that "the claim language does not specify shape characteristics of the cavity, and the Specification conveys that the cavity can have 'any' shape that matches that of the protruding surface." *Id.* It also found that the Examiner's construction of the term "articulating surface" to mean "where elements unite as a joint" was "broad but reasonable" and "consistent with the Specification." J.A. 9. Therefore, the Board sustained the rejection of claim 40 based on Bouttens.

Finally, the Board affirmed the rejection of claim 18 as obvious over Rambert and Church. J.A. 10. The Board's reasoning rested only on Rambert; it did not discuss Church. *See id.* On appeal, Mr. Chudik states that "the Church patent is of no consequence in this case." Opening Br. 16. Similarly, the Government makes no separate argument regarding Church. We therefore do not address whether claim 18 would have been obvious over Rambert and Church.

Chudik timely appeals, arguing that neither Rambert nor Bouttens anticipates the '631 application without

improper modification and that the Examiner wrongly construed "articulating surface." We have jurisdiction under 28 U.S.C. § 1295(a)(4)(A).

STANDARD OF REVIEW

Anticipation is a question of fact we review for substantial evidence. *Blue Calypso, LLC v. Groupon, Inc.*, 815 F.3d 1331, 1341 (Fed. Cir. 2016). Substantial evidence is "such relevant evidence as a reasonable mind might accept as adequate to support a conclusion." *Universal Camera Corp. v. NLRB*, 340 U.S. 474, 477 (1951). "Where two different conclusions may be warranted based on the evidence of record, the Board's decision to favor one conclusion over the other is the type of decision that must be sustained by this court as supported by substantial evidence." *In re Bayer Aktiengesellschaft*, 488 F.3d 960, 970 (Fed. Cir. 2007). Though our review of an anticipation finding is deferential, we have not hesitated to reverse the Board when substantial evidence does not support its findings. *See Nidec Motor Corp. v. Zhongshan Broad Ocean Motor Co.*, __ F.3d __, 2017 WL 977034 (Fed Cir. Mar. 14, 2017); *In re Skvorecz*, 580 F.3d 1262, 1267–68 (Fed. Cir. 2009).

DISCUSSION

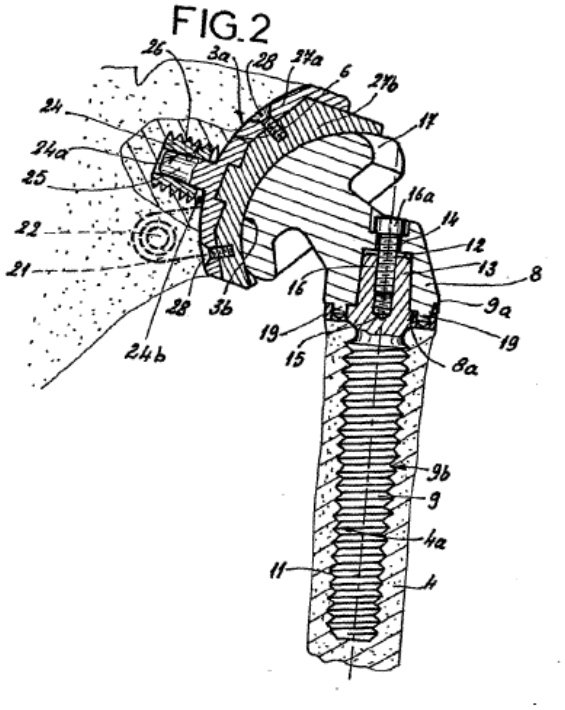
1. Legal Standard

A patent claim is invalid for anticipation under 35 U.S.C. § 102 when a prior art reference describes "each and every claim limitation and enable[s] one of skill in the art to practice an embodiment of the claimed invention without undue experimentation." *ClearValue, Inc. v. Pearl River Polymers, Inc.*, 668 F.3d 1340, 1344 (Fed. Cir. 2012) (quotation marks and citation omitted). Simply put, an anticipated invention "is not new." *Skvorecz*, 580 F.3d at 1266. By contrast, a prior art reference that "'must be distorted from its obvious design'" does not anticipate a patent claim. *In re Wells*, 53 F.2d 537, 539

(C.C.P.A. 1931) (quoting *Block v. Nathan Anklet Support Co.*, 9 F.2d 311, 312 (2d Cir. 1925)); *accord Topliff v. Topliff*, 145 U.S. 156, 161 (1892) ("It is not sufficient to constitute an anticipation that the device relied upon might, *by modification*, be made to accomplish the function performed by the patent in question, if it were not designed by its maker, nor adapted, nor actually used, for the performance of such functions.") (emphasis added). In other words, a prior art reference anticipates a claim only if it discloses all the elements "in the same form and order as in the claim." *Abbott Labs. v. Sandoz, Inc.*, 544 F.3d 1341, 1345 (Fed. Cir. 2008); *NetMoneyIN, Inc. v. VeriSign, Inc.*, 545 F.3d 1359, 1369 (Fed. Cir. 2008) (same).

2. Rambert

Claim 1 of the '631 application requires the "shell having a protruding surface on a first side arranged to engage the surface of a cavity formed in a glenoid extending between peripheral glenoid surfaces." J.A. 3. As an initial matter, neither the parties nor the Board construed the term "engage." However, the Board seems to interpret it to mean "contact," which we find to be reasonable. *See* J.A. 6 (admitting that because element 27b does not "directly contact[] bone regions of the scapula 5," it does not actually engage). Indeed, Rambert Figure 2 shows element 27b engaging element 27a, which in turn engages the glenoid cavity.



J.A. 198. The Examiner recognized that element 27b—not element 27a—contains the "protruding surface on a first side" that claim 1 requires. *See* J.A. 6 ("The surfaces identified by the Examiner as the 'protruding surface' and the 'flat surface' reside on Rambert's second portion 27b . . . , and thus are not described or depicted as directly contacting bone regions of the scapula 5."). The Board found this fact not to be dispositive, however, because as an apparatus claim, claim 1 "does not require the recited surfaces to 'engage' the specified glenoid regions." *Id.* The Board found that because the surfaces of element 27b "can still be arranged to" engage the glenoid regions, Rambert anticipates claims 1 and its dependent claims 15 and 33–39. We disagree.

Claim 1 is indeed an apparatus claim, and the "arranged to engage" language could imply that the protruding surface on the flat side need not always actually

engage the glenoid cavity surface. However, it must be at least capable of doing so.[3] Here, element 27b's protruding surface cannot be "arranged to engage" the glenoid cavity surface without removing element 27a. Prior art that "must be distorted from its obvious design" does not anticipate a new invention. *Wells*, 53 F.2d at 539; *see also Topliff*, 145 U.S. at 161 (prior art that must be modified "to accomplish the function performed by the patent in question" does not anticipate).[4] Neither the Examiner nor the Board described how the protruding surface of Rambert's element 27b is capable of engaging the surface of the glenoid cavity without removing element 27a, *i.e.*, tearing the invention apart. Therefore, substantial evidence does not support the Board's anticipation finding based on Rambert.

3. Bouttens

Claim 40 of the '631 application requires "a protruding surface on a first side arranged to engage the surface of a cavity formed in a glenoid extending between peripheral glenoid surfaces." J.A. 3. The Board concluded that

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[3] Neither the parties nor the Board construed the term "arranged to." We assume for purposes of this opinion that "arranged to" is analogous to "adapted to," which means "made to," "designed to," or "configured to." *In re Man Mach. Interface Techs. LLC*, 822 F.3d 1282, 1286 (Fed. Cir. 2016). "Adapted to" occasionally has a broader meaning of "capable of" or "suitable for." *Id.* Even under this broader definition, element 27b is not capable of engaging with the glenoid cavity surface.

[4] The government relies heavily on *In re Schreiber*, 128 F.3d 1473 (Fed. Cir. 1997), which involved an old structure from the prior art being put to a new use. But that is not the situation here, because Rambert teaches a different structure than the '631 application with an identical use.

Bouttens anticipates claim 40 because its surface 11 is not "structurally incapable of engaging a glenoid cavity that matches its protruding profile," and because "the Specification conveys that the cavity can have 'any' shape that matches that of the protruding surface." J.A. 8. We disagree.

Mr. Chudik's brief asks two relevant questions: "If the Bouttens implant's 'protruding surface' is faced about, turned 180 degrees, where does the Examiner or the Board propose to fasten it in a person's shoulder? What is going to happen to the humerus?" Appellant's Op. Br. 15. The Board does not address either question. The Board's reasoning only makes sense if the user rotates Bouttens 180 degrees, thereby rendering the protruding surface 11 capable of engaging the glenoid cavity instead of the humerus.

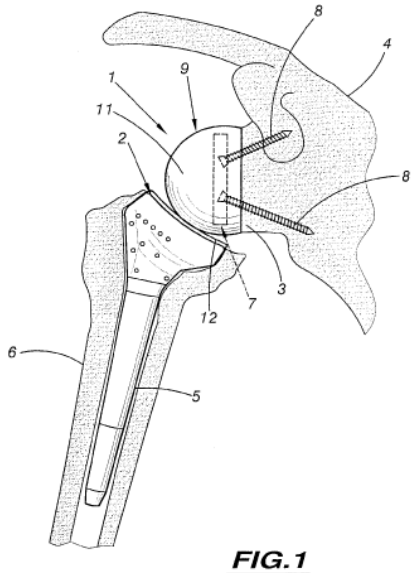

FIG.1

Figure 1 demonstrates that rotating Bouttens so that the protruding surface faces the glenoid cavity would require relocating the screws for Bouttens to remain operable. This endeavor would constitute a significant

and impermissible modification. *Wells*, 53 F.2d at 539; *Topliff*, 145 U.S. at 161.

The Board's determination of anticipation was erroneous because the Board failed to describe how a user could rotate Bouttens without modification while continuing "to accomplish the function performed by" the '631 application. *Topliff*, 145 U.S. at 161. We therefore reverse the Board's anticipation finding as not supported by substantial evidence. We need not resolve Mr. Chudik's second argument about whether the Examiner correctly construed "articulating surface."

CONCLUSION

Substantial evidence does not support the Board's determination that Rambert or Bouttens anticipate claims 1, 15, 18, or 33–40 of the '631 application. We *reverse* the Board's rejection of those claims.

REVERSED

COSTS

Costs to Mr. Chudik.