

# United States Court of Appeals for the Federal Circuit

2008-1003, -1072

CORDIS CORPORATION,

Plaintiff-Appellant,

v.

BOSTON SCIENTIFIC CORPORATION  
and SCIMED LIFE SYSTEMS, INC.,

Defendants-Cross Appellants.

Gregory L. Diskant, Patterson, Belknap Webb & Tyler LLP, of New York, New York, argued for plaintiff-appellant. With him on the brief were Eugene M. Gelernter, Thomas W. Pippert, Kathleen M. Crotty, Scott W. Parker and Scott B. Howard. Of counsel was Michael J. Timmons. Of counsel on the brief was Constantine L. Trela, Jr., Sidley Austin LLP, of Chicago, Illinois.

John M. Desmarais, Kirkland & Ellis LLP, of New York, New York, argued for defendants-cross appellants. With him on the brief were Peter J. Armenio, Young J. Park and Timothy K. Gilman.

Appealed from: United States District Court for the District of Delaware

Judge Sue L. Robinson

# United States Court of Appeals for the Federal Circuit

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CORDIS CORPORATION,

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BOSTON SCIENTIFIC CORPORATION  
and SCIMED LIFE SYSTEMS, INC.,

Defendants-Cross Appellants.

Appeals from the United States District Court for the District of Delaware  
in case no. 03-CV-027, Judge Sue L. Robinson.

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DECIDED: March 31, 2009

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Before MAYER and DYK, Circuit Judges, and HUFF, District Judge.\*

DYK, Circuit Judge.

Cordis Corporation (“Cordis”) appeals, and Boston Scientific Corporation and Scimed Life Systems, Inc. (“Boston Scientific”) cross-appeal, from a final judgment of the United States District Court for the District of Delaware. The judgment was based on two separate jury verdicts of infringement: (1) infringement by Boston Scientific of claims 1 and 23 of U.S. Patent No. 4,739,762 (“the ’762 patent”) and claim 2 of U.S. Patent No. 5,895,406 (“the ’406 patent”), and (2) infringement by Cordis of claim 36 of U.S. Patent No. 5,922,021 (“the ’021 patent”). The judgment also determined that those

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\* Honorable Marilyn L. Huff, District Judge, United States District Court for the Southern District of California, sitting by designation.

claims were not invalid. Cordis Corp. v. Boston Scientific Corp., Civ. No. 03-027-SLR (D. Del. Sept. 24, 2007) (judgment). With one minor exception, we affirm.

## BACKGROUND

Cordis and Boston Scientific own patents relating to intravascular stents, which are cylindrical lattice-like scaffolds inserted into a blood vessel and then expanded, often by using a balloon catheter, in order to hold the vessel open. Cordis owns the '762 patent and the '406 patent, and Boston Scientific owns the '021 patent.

In January 2003, Cordis filed suit against Boston Scientific, alleging that several of Boston Scientific's stents infringe various claims of the '762 patent and the '406 patent. Boston Scientific counterclaimed, alleging that several of Cordis's stents infringe various claims of the '021 patent. The district court denied Cordis's motion for a preliminary injunction against sales of one of Boston Scientific's stents, and we affirmed. Cordis Corp. v. Boston Scientific Corp., 99 F. App'x 928 (Fed. Cir. 2004).

We treat the Cordis claims and the Boston Scientific claims separately. Since Cordis is the appellant, we first discuss Boston Scientific's claims against Cordis that are the subject of the Cordis appeal.

The Boston Scientific claims: The jury returned a verdict in July 2005 that (a) Cordis's Cypher, BX Velocity, BX Sonic, and Genesis stents do not literally infringe claim 36 of the '021 patent; (b) "the Cypher, BX Velocity, BX Sonic and Genesis stents infringe the 'corners' limitation of claim 36 of the '021 patent under the doctrine of equivalents"; and (c) claim 36 of the '021 patent is not invalid for obviousness. Cordis Corp. v. Boston Scientific Corp., Civ. No. 03-027-SLR, 2006 WL 1305227, at \*1 (D. Del.

May 11, 2006) (“Memorandum Opinion”). The district court denied Cordis’s motion for judgment as a matter of law or, in the alternative, a new trial.

The Cordis claims: On summary judgment, the district court determined that claims 1 and 23 of the ’762 patent were not invalid. A separate jury returned a verdict in favor of Cordis in June 2005 that (a) Boston Scientific’s Express, Taxus Express, Express Biliary, and Liberté stents literally infringe claim 23 of the ’762 patent; (b) Boston Scientific induced literal infringement of claim 1 of the ’762 patent with respect to these stents; (c) the Liberté stent literally infringes claim 2 of the ’406 patent; and (d) claim 2 of the ’406 patent is neither anticipated nor rendered obvious by the prior art. The district court denied Boston Scientific’s motion for judgment as a matter of law or, in the alternative, a new trial.

After the district court entered judgment, Cordis and Boston Scientific both timely appealed. We have jurisdiction under 28 U.S.C. §§ 1291, 1292(c)(2), and 1295(a)(1).

#### DISCUSSION

We review the denial of a motion for judgment as a matter of law without deference, and we review the denial of a motion for a new trial for abuse of discretion. Hewlett-Packard Co. v. Mustek Sys., Inc., 340 F.3d 1314, 1318 (Fed. Cir. 2003). Each party raises issues that have little merit. We dispose of those arguments summarily, reserving more extended discussion for the few issues that merit attention.

We first address Cordis's appeal.

A. "Wherein" clause construction

Cordis challenges the judgment that its BX Velocity stent infringes claim 36 of the '021 patent. Claim 36 depends from claim 24, which in turn depends from claim 23. '021 patent col.22 l.42, col.21 l.16.

The procedural posture of this issue is unclear. The jury found that the accused Cordis stents do not literally infringe claim 36 of the '021 patent. Instead of addressing whether Cordis's stents infringed claim 36 under the doctrine of equivalents, the jury was asked only to determine whether Cordis's stents "infringe the 'corners' limitation of claim 36 of the '021 patent under the doctrine of equivalents." J.A. at 11,238. The jury found that the "corners" limitation was infringed under the doctrine of equivalents. Apparently the parties agreed that the BX Velocity stent infringes all limitations of claim 36 (if properly construed by the district court) except the "corners" limitation, but the parties provided no reference in the record reflecting this agreement. However, the district court entered judgment of infringement of claim 36, and we assume that the judgment rests upon such an agreement.

Cordis first argues that the district court erred in construing the "wherein" clause of claim 23, and that under a proper construction of this clause Cordis's BX Velocity stent does not infringe claim 36.<sup>1</sup> The "wherein" clause of claim 23 describes how the

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<sup>1</sup> This argument does not apply to Cordis's Cypher, BX Sonic, and Genesis stents.

struts within one expansion column or ring of a stent are connected to the struts of another column or ring,

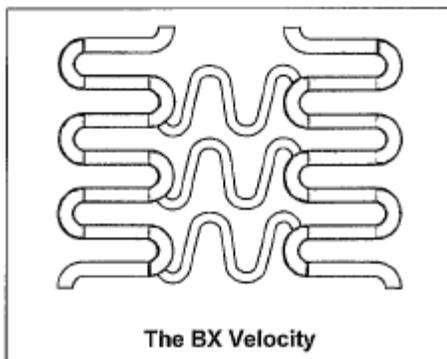
wherein the first expansion strut of the first expansion strut pair in the first expansion column has a longitudinal axis offset from a longitudinal axis of the first expansion strut of the second expansion strut pair in the second expansion column.

'021 patent col.21 ll.11-15 (emphasis added). The district court construed this “wherein” clause in claim 23 to mean “the first expansion strut in the first column does not share a longitudinal axis with the second expansion strut in the second column.” Cordis Corp. v. Boston Scientific Corp., Civ. No. 03-027-SLR, 2005 WL 1322966, at \*2 (D. Del. June 3, 2005) (“Claim Construction”). The district court refused to construe the “wherein” clause in claim 23 to exclude so-called “180 degrees out of phase” stent designs.

Claim construction is an issue of law, Markman v. Westview Instruments, Inc., 52 F.3d 967, 970-71 (Fed. Cir. 1995) (en banc), aff'd, 517 U.S. 370 (1996), that we review without deference, Cybor Corp. v. FAS Technologies Inc., 138 F.3d 1448, 1456 (Fed. Cir. 1998) (en banc).

Cordis urges that the district court’s construction improperly failed to exclude stents whose strut pairs are arranged “180 degrees out of phase,” a phrase that both parties agree is in common usage in stent design. In such a 180-degree out-of-phase arrangement, the struts within each expansion column or ring are connected to form pairs, and the connected ends of the pairs in one ring face the connected ends of the pairs in the next ring, forming a mirror-image pattern. Cordis argues that if claim 23 excludes such 180-degree out-of-phase designs, then Cordis’s BX Velocity stent (which

uses a 180-degree out-of-phase design) would not infringe claim 36. Cordis illustrated the 180-degree out-of-phase design with a diagram:



Br. for Pl.-Appellant Cordis Corp. 3.

Cordis argues that the same “wherein” clause appears in both claim 1 and claim 23; that the clauses must have the same meaning; and that the prosecution history shows that the “wherein” clause excludes 180-degree out-of-phase designs. Cordis’s argument is a bit confusing. The issue is not the meaning of the “wherein” clause. Rather, the problem stems from the fact that claim 23 and claim 1 use different numbering systems, so that, for example, the “first expansion strut of the second expansion strut pair in the second expansion column” is not the same strut in claim 23 as in claim 1.

Under the numbering system of claim 1, each strut in a column or ring is either the “first” or “second” strut of a pair, each pair in the first ring is a “first . . . pair,” and each pair in the second ring is a “second . . . pair.”<sup>2</sup> Thus in claim 1, the “wherein”

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<sup>2</sup> Claim 1 of the '021 patent states:

1. A stent in a non-expanded state, comprising:  
a first expansion strut pair including a first expansion strut positioned adjacent to a second expansion strut and a joining strut of the first expansion strut pair that couples the first and

clause requires the first strut of every strut pair in the first ring to be offset from the first strut of every strut pair in the second ring, which would not be possible in a 180-degree out-of-phase design. However, under the numbering system of claim 23, each strut in a ring is individually numbered “first . . . second . . . third . . . fourth . . .,” each pair in the first ring is individually numbered “first . . . second . . . third . . . fourth . . .,” and each pair in the second ring is individually numbered “first . . . second . . . third . . . fourth

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second expansion struts at a distal end of the first expansion strut pair, a plurality of the first expansion strut pair forming a first expansion column;

- a second expansion strut pair including a first expansion strut positioned adjacent to a second expansion strut and a joining strut of the second expansion strut pair that couples the first and second expansion struts of the second expansion strut pair at a proximal end of the second expansion strut pair, a plurality of the second expansion strut pair forming a second expansion column;
- a first connecting strut including a first connecting strut proximal section, a first connecting strut distal section and a first connecting strut intermediate section, the first connecting strut proximal section being coupled to the distal end of the first expansion strut pair in the first expansion column and the first connecting strut distal section being coupled to the proximal end of the second expansion strut pair of the second expansion column, a plurality of the first connecting strut forming a first connecting strut column that couples the first expansion column to the second expansion column, the first connecting strut intermediate section being non-parallel to the first connecting strut proximal and distal sections, wherein the first expansion strut of the first expansion strut pair in the first expansion column has a longitudinal axis offset from a longitudinal axis of the first expansion strut of the second expansion strut pair in the second expansion column.

'021 patent col.18 ll.9-41 (emphases added).

...”<sup>3</sup> Thus in claim 23, the “wherein” clause requires only one specific strut (the first

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<sup>3</sup> Claim 23 of the '021 patent states:

23. A stent in a non-expanded state, comprising:

a first expansion column formed of a plurality of first expansion column strut pairs, a first expansion strut pair including a first expansion strut adjacent to a second expansion strut and a first joining strut that couples the first and second expansion struts at a proximal end of the first expansion strut pair, a second expansion strut pair including a third expansion strut adjacent to the second expansion strut and a second joining strut that couples the second and third expansion struts at a distal end of the second expansion strut pair, a third expansion strut pair including a fourth expansion strut adjacent to the third expansion strut and a third joining strut that couples the third and fourth expansion struts at a proximal end of the third expansion strut pair, a fourth expansion strut pair including a fifth expansion strut adjacent to the fourth expansion strut and a fourth joining strut that couples the fourth and fifth expansion struts at a distal end of the fourth expansion strut pair, a first expansion strut pair first corner formed where the first joining strut is coupled to the first expansion strut, and a first expansion strut pair second corner formed where the first joining strut is coupled to the second expansion strut, and a second expansion strut pair first corner formed where the second joining strut is coupled to the second expansion strut, and a second expansion strut pair second corner formed where the second joining strut is coupled to the third expansion strut, and a third expansion strut pair first corner formed where the third joining strut is coupled to the third expansion strut, and a third expansion strut pair second corner formed where the third joining strut is coupled to the fourth expansion strut, and a fourth expansion strut pair first corner formed where the fourth joining strut is coupled to the fourth expansion strut, and a fourth expansion strut pair second corner formed where the fourth joining strut is coupled to the fifth expansion strut;

a second expansion column formed of a plurality of second expansion column strut pairs, a first expansion strut pair including a first expansion strut adjacent to a second expansion strut and a first joining strut that couples the first and second expansion struts at a proximal end of the first expansion strut pair, a second expansion strut pair including a third expansion strut adjacent to the second expansion strut and a second joining strut that couples the second and third expansion struts

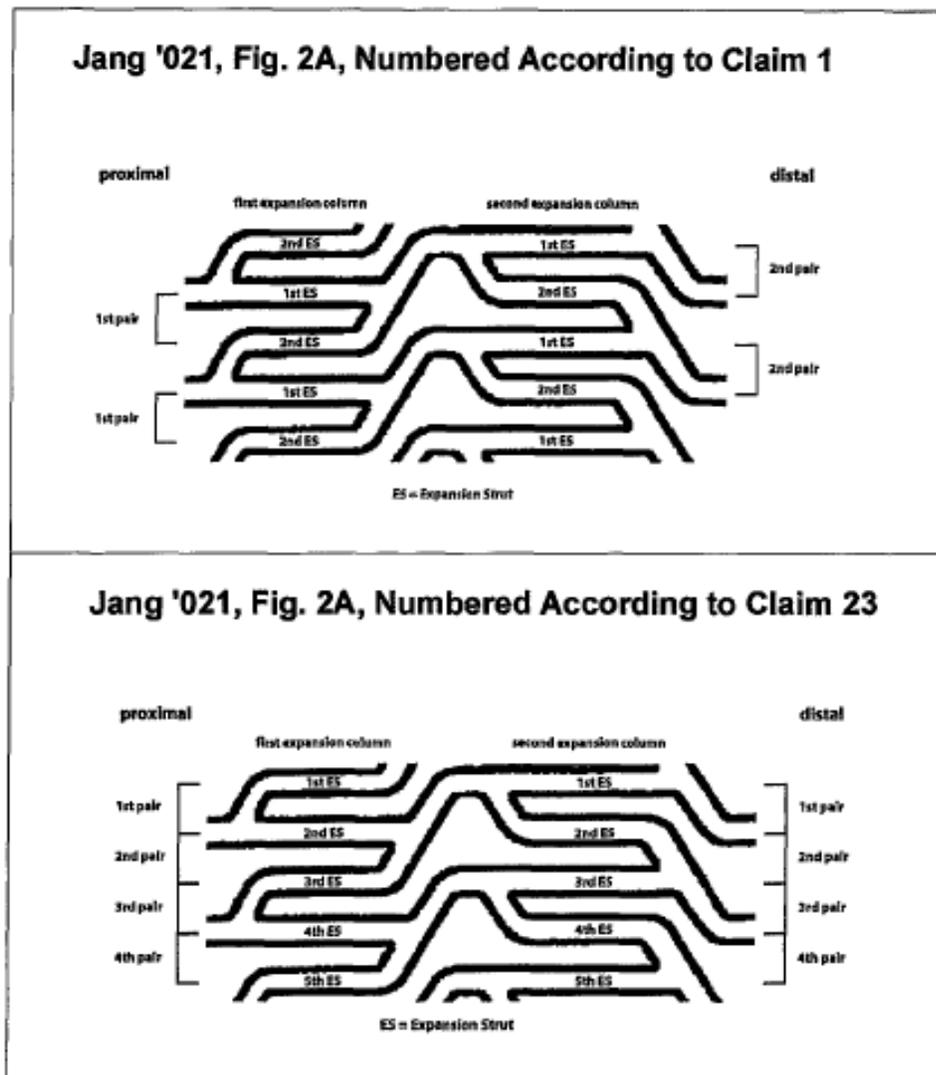
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at a distal end of the second expansion strut pair, a third expansion strut pair including a fourth expansion strut adjacent to the third expansion strut and a third joining strut that couples the third and fourth expansion struts at a proximal end of the third expansion strut pair, a fourth expansion strut pair including a fifth expansion strut adjacent to the fourth expansion strut and a fourth joining strut that couples the fourth and fifth expansion struts at a distal end of the fourth expansion strut pair, a first expansion strut pair first corner formed where the first joining strut is coupled to the first expansion strut, and a first expansion strut pair second corner formed where the first joining strut is coupled to the second expansion strut, and a second expansion strut pair first corner formed where the second joining strut is coupled to the second expansion strut, and a second expansion strut pair second corner formed where the second joining strut is coupled to the third expansion strut, and a third expansion strut pair first corner formed where the third joining strut is coupled to the third expansion strut, and a third expansion strut pair second corner formed where the third joining strut is coupled to the fourth expansion strut, and a fourth expansion strut pair first corner formed where the fourth joining strut is coupled to the fourth expansion strut, and a fourth expansion strut pair second corner formed where the fourth joining strut is coupled to the fifth expansion strut; and

- a first connecting strut column formed of a plurality of first connecting struts, each connecting strut of the first connecting strut column including a connecting strut proximal section, a connecting strut distal section and a connecting strut intermediate section, a first connecting strut proximal section is coupled to the joining strut of the second expansion strut pair of the first expansion strut column, and a first connecting strut distal section is coupled to the joining strut of the first expansion strut pair of the second expansion strut column, and a second connecting strut proximal section is coupled to the joining strut of the fourth expansion strut pair of the first expansion strut column, and a second connecting strut distal section is coupled to the joining strut of the third expansion strut pair of the second expansion strut column, the first connecting strut intermediate section being non-parallel to the first connecting strut proximal and distal sections wherein the first expansion strut of the first expansion strut pair in the first expansion column has a longitudinal axis offset from a longitudinal axis of the first expansion strut of the second expansion strut pair in the second expansion column.

'021 patent col.19 l.53 – col.21 l.15 (emphases added).

strut of the first pair in the first ring) to be offset from one other specific strut (the “first expansion strut of the second expansion strut pair” in the second ring). Cordis numbered a figure from the '021 patent (also known as the Jang patent) to illustrate these different numbering systems:



Br. for Pl.-Appellant Cordis Corp. 40. Because these two specific struts could be offset from each other but yet aligned with other struts to form a 180-degree out-of-phase pattern, the language of claim 23 includes 180-degree out-of-phase designs. Indeed, the parties appear to agree that on their face claim 1 and claim 23 each use a different

numbering system to describe the relative arrangement of a stent's struts, with the result that the claim 23 "wherein" clause does not exclude 180-degree out-of-phase designs. The question is whether the prosecution history requires that, despite its plain language, the "wherein" clause of claim 23 be construed to use the same numbering system as claim 1. Cordis argues that the prosecution history reflects such a "clear and unmistakable" disclaimer. Free Motion Fitness, Inc. v. Cybex Int'l, Inc., 423 F.3d 1343, 1353 (Fed. Cir. 2005); see also Omega Eng'g, Inc., v. Raytek Corp., 334 F.3d 1314, 1325-26 (Fed. Cir. 2003). We cannot agree.

The "wherein" clause was added to claims 1 and 23 during the prosecution of the '021 patent after the examiner rejected both claims as anticipated by European Patent Application No. 95307687.4, Pub. No. 0 709 067 A2 ("Pinchasik"). Pinchasik discloses a stent whose struts are arranged in a 180-degree out-of-phase design but whose struts are not numbered. During the first office action, the examiner rejected claims 1 and 23 as anticipated by Pinchasik, coloring one of Pinchasik's stent design figures and numbering parts of the figure (labeled "Figure 2") according to the numbering system of claim 1 of the '021 patent.<sup>4</sup> The examiner's numbering system is, however, different than claim 23's numbering system. The examiner's rejection in light of Pinchasik made no reference to 180-degree out-of-phase designs, but simply stated that claim 1, claim 23, and other claims "are rejected under 35 U.S.C. § 102(b) as being anticipated by Pinchasik" and that "[w]ith respect to [these claims] . . . refer to the modified Figure 2

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<sup>4</sup> The exhibit included at page 7994 of the Joint Appendix shows that the examiner colored in and labeled the figure from Pinchasik, but does not disclose numbering of the figure by the examiner. The parties appear not to dispute that the examiner did number the figure according to the numbering system of claim 1 of the '021 patent.

attached to this office action.” J.A. at 1705. After the “wherein” clause was added to claims 1 and 23, the examiner allowed both claims. Cordis argues that the examiner used only the numbering system of claim 1 when allowing both claim 1 and claim 23, and that the examiner necessarily assumed that claim 23 used the same numbering system as claim 1. However, the examiner did not say so, and we cannot simply suppose that the claims were allowed based on an assumed identity of numbering systems. We note that Cordis does not argue that Pinchasik anticipates claim 23 of the ’021 patent under the district court’s claim construction, which suggests that the examiner could have allowed the claim on other grounds. Cordis also argues that both the applicant and the examiner referred to stent pairs as “longitudinally offset,” but these references simply repeat the “wherein” clause and say nothing about different numbering systems. Finally, on the disclaimer issue, Cordis argues that the ’021 patent’s provisional application described the invention as consisting of stents whose flexibility depended on connections between “split level” (and thus offset) strut pairs, but again this language in the provisional application did not discuss the system for numbering these connected strut pairs. A disclaimer must be “clear and unmistakable,” and unclear prosecution history cannot be used to limit claims. Free Motion Fitness, 423 F.3d at 1352-53; see also Inverness Med. Switz. GmbH v. Warner Lambert Co., 309 F.3d 1373, 1381-82 (Fed. Cir. 2002). The plain language of claim 23 cannot be overcome by such unclear prosecution history. Although Cordis urges that no figure in the ’021 patent uses a 180-degree out-of-phase design, a patent is not confined to its disclosed embodiments. See Phillips v. AWH Corp., 415 F.3d 1303, 1323 (Fed. Cir. 2005) (en banc).

We affirm the district court's construction of the "wherein" clause in claim 23 of the '021 patent.

B. Corners limitation

Alternatively, Cordis argues that the judgment of infringement of claim 36 of the '021 patent by the BX Velocity stent should be set aside, because the jury erred in concluding that the "corners" limitation of claim 36 was satisfied under the doctrine of equivalents, and because the district court erred in denying judgment as a matter of law on this ground. The "corners" limitation appears both in the language of claim 36 itself and in claim 23, on which claim 36 depends.<sup>5</sup> Cordis does not dispute the district court's construction of "corners" as "a place where two surfaces meet to form an angle." Claim Construction, 2005 WL 1322966, at \*1.

First, Cordis argues that the evidence did not support the jury's verdict of infringement of this limitation under the doctrine of equivalents. A jury's determination of infringement is a question of fact that we review to consider whether it is supported by substantial evidence. B. Braun Med., Inc. v. Abbott Labs., 124 F.3d 1419, 1423 (Fed. Cir. 1997).

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<sup>5</sup> Claim 36 of the '021 patent states:

36. The stent of claim 24, wherein the first connecting strut proximal section is coupled to the second corner of the second expansion strut pair of the first expansion strut column, and the first connecting strut distal section is coupled to the first corner of the first expansion strut pair of the second expansion strut column, and the second connecting strut proximal section is coupled to the second corner of the fourth expansion strut pair of the first expansion strut column, and the second connecting strut distal section is coupled to the first corner of the third expansion strut pair of the second expansion strut column.

'021 patent col.22 ll.42-52 (emphases added).

The district court properly found that Boston Scientific presented sufficient expert testimony that Cordis's BX Velocity stent meets the "corners" limitation of claim 36 under the doctrine of equivalents under the function-way-result test of Graver Tank & Manufacturing Co. v. Linde Air Products Co., 339 U.S. 605, 608 (1950), a test that is still useful under Warner-Jenkinson Co. v. Hilton-Davis Chemical Co., 520 U.S. 17, 39-40 (1997), particularly for mechanical inventions. Boston Scientific's expert Dr. Moore testified that the "corners" in claim 36 and the circular arcs or rounded corners of the BX Velocity stent both function as actual and potential reference points for joining adjacent stent rings, fulfill this function through their similar locations, and can or do result in offset connections between stent rings. Such testimony fulfills Boston Scientific's obligation to "provide particularized testimony and linking argument . . . with respect to the function, way, result test when such evidence is presented to support a finding of infringement under the doctrine of equivalents." Tex. Instruments Inc. v. Cypress Semiconductor Corp., 90 F.3d 1558, 1567 (Fed. Cir. 1996).

Cordis next argues that the doctrine of equivalents should not be applied in this case because the jury's finding of infringement vitiated the "corners" limitation.<sup>6</sup> Cordis asserts that the circular arcs of the BX Velocity stent cannot "form an angle" as required by the district court's claim construction. Whether the doctrine of equivalents vitiated a patent claim is a question of law we review de novo. Pfizer, Inc. v. Teva Pharms. USA, Inc., 429 F.3d 1364, 1379 (Fed. Cir. 2005).

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<sup>6</sup> Cordis also argues that circular arcs were disclaimed. We find no basis for this in the prosecution history of the '021 patent.

The district court properly found that vitiation did not bar a doctrine of equivalents analysis here. Although we have “refused to apply the doctrine [of equivalents] . . . where the accused device contained the antithesis of the claimed structure,” Planet Bingo, LLC v. GameTech International, Inc., 472 F.3d 1338, 1345 (Fed. Cir. 2006), the circular arcs of the BX Velocity are not antithetical to the “corners” limitation in claim 36 of the ’021 patent. Boston Scientific’s theory that the circular arcs of the BX Velocity stent are equivalent to the “corners” in claim 36 does not vitiate the “corners” limitation, because it does not “render[ ] the pertinent limitation meaningless,” Freedman Seating Co. v. Am. Seating Co., 420 F.3d 1350, 1359 (Fed. Cir. 2005), or “effectively eliminate that element in its entirety,” Warner-Jenkinson, 520 U.S. at 29. See Primos, Inc. v. Hunter’s Specialties, Inc., 451 F.3d 841, 850 (Fed. Cir. 2006).

We affirm the district court’s denial of Cordis’s motions for judgment as a matter of law or, in the alternative, a new trial on infringement of the ’021 patent.

### C. New claim construction arguments

Cordis argues that the district court improperly declined after trial to adopt a new construction of “expansion columns” and “connecting strut columns” in the claims of the ’021 patent. In a motion for judgment as a matter of law on infringement of the ’021 patent, Cordis raised for the first time the argument that the district court should adopt the construction of these terms that Boston Scientific had advocated in a different case relating to the ’021 patent.<sup>7</sup> The district court declined to do so. Cordis Corp. v. Boston

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<sup>7</sup> The claim construction Cordis urged the district court to adopt was appealed to this court and has since been vacated and remanded. Jang v. Boston Scientific Corp., 532 F.3d 1330, 1331 (Fed. Cir. 2008).

Scientific Corp., Civ. Nos. 03-027-SLR, 03-283-SLR, 2007 WL 2775087, at \*1 (D. Del. Sept. 24, 2007).

Raising this argument for the first time in a motion for judgment as a matter of law more than a year after the jury's infringement verdict was too late. "[L]itigants waive their right to present new claim construction disputes if they are raised for the first time after trial." Conoco, Inc. v. Energy & Env'tl. Int'l, L.C., 460 F.3d 1349, 1359 (Fed. Cir. 2006); see also Abbott Labs. v. Syntron Bioresearch, Inc. 334 F.3d 1343, 1357 (Fed. Cir. 2003). The district court properly declined to revise its claim construction in response to Cordis's argument.

#### D. Indefiniteness

Cordis asserts that the district court erred in finding that claim 23 of the '021 patent is not indefinite. Cordis argues that claim 36, and claim 23 on which it depends, are invalid unless claim 23's "wherein" clause is construed to exclude 180-degree out-of-phase designs. Indefiniteness under 35 U.S.C. § 112 ¶ 2 is an issue of claim construction and a question of law that we review de novo. Praxair, Inc. v. ATMI, Inc., 543 F.3d 1306, 1319 (Fed. Cir. 2008). We see no basis for Cordis's argument. Claim 23 as construed by the district court is not indefinite.

#### E. Obviousness

Cordis argues that the jury erred in finding that claim 36 of the '021 patent was not invalid for obviousness, and that the district court erred in denying Cordis's motion for judgment as a matter of law of obviousness.

The '021 patent claims priority to its provisional application. '021 patent col.1 ll.6-8. Cordis first argues that the district court should have ruled as a matter of law that the

'021 patent was not entitled to a priority date of April 26, 1996 (when the '021 patent's provisional application was filed), and that the correct priority date is April 25, 1997 (when the '021 patent's non-provisional application was filed). Cordis asserts that the priority date is important because after April 26, 1996, and before April 25, 1997, inventors had created stents that demonstrated that claim 36 of the '021 patent was invalid as obvious under 35 U.S.C. § 103. Cordis's basis for challenging the priority date is its theory that the '021 patent's April 1996 provisional application did not provide a sufficient written description of the patent's limitations, namely the limitation of claim 36 requiring connecting struts to be attached on one end at a "second" or bottom corner of a strut pair and on the other end at a "first" or top corner.

The written description requirement of 35 U.S.C. § 112 ¶ 1 is a question of fact, and we review a jury's findings of fact relating to the written description requirement for substantial evidence. PIN/NIP, Inc. v. Platte Chem. Co., 304 F.3d 1235, 1243 (Fed. Cir. 2002). To comply with the written description requirement, an applicant must "convey with reasonable clarity to those skilled in the art that, as of the filing date sought, he or she was in possession of the invention," New Railhead Mfg., L.L.C. v. Vermeer Mfg. Co., 298 F.3d 1290, 1295 (Fed. Cir. 2002) (quoting Vas-Cath Inc. v. Mahurkar, 935 F.2d 1555, 1563-64 (Fed. Cir. 1991) (emphasis omitted)), namely that he or she "had invented each feature that is included as a claim limitation," New Railhead, 298 F.3d at 1295. The district court cited uncontradicted testimony from Boston Scientific's expert Dr. Moore that the '021 patent's provisional application provided a sufficient written description of the limitations of claim 36. We conclude that the jury could properly find that the '021 patent was entitled to an April 1996 priority date.

Cordis alternatively argues that regardless of whether the '021 patent has a priority date of April 1996 or April 1997, several earlier patents<sup>8</sup> were prior art rendering claim 36 obvious. Cordis asserts that it would have been obvious to one of ordinary skill in the art to combine features of these patents to create stents with the bottom-corner-to-top-corner connecting struts disclosed in claim 36 of the '021 patent.

“We review ‘[the] jury’s conclusions on obviousness, a question of law, without deference, and the underlying findings of fact . . . for substantial evidence.’” Johns Hopkins Univ. v. Datascope Corp., 543 F.3d 1342, 1345 (Fed. Cir. 2008) (quoting LNP Eng'g Plastics, Inc. v. Miller Waste Mills, Inc., 275 F.3d 1347, 1353 (Fed. Cir. 2001)). The district court cited uncontradicted testimony from Boston Scientific’s expert Dr. Moore that the prior art patents cited by Cordis would be unlikely to be combined to create the connectors of claim 36 of the '021 patent, and that these prior art patents taught away from the bottom-to-top connectors described in claim 36 by describing features of such connectors as potentially harmful. The district court properly concluded there was substantial evidence that these prior art patents did not render claim 36 obvious.

We affirm the district court’s denial of Cordis’s motion for judgment as a matter of law or, in the alternative, a new trial on invalidity of the '021 patent.

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<sup>8</sup> U.S. Patent Nos. 5,102,417; 5,449,373; 5,643,312; 5,733,303; and 6,348,065.

## II

We next address Boston Scientific's cross-appeal.

### A. Monographs

Boston Scientific argues that the district court erred in holding that two monographs prepared by the inventor of the '762 patent are not prior art, and erred in granting Cordis's motion for summary judgment that the asserted claims of the '762 patent are not invalid "as to the asserted claims being invalidated by the Palmaz Monographs." Cordis Corp. v. Boston Scientific Corp., Civ. No. 03-027-SLR (D. Del. June 3, 2005) (summary judgment order).

If there are no facts in dispute, whether a reference is a prior art "printed publication" within the meaning of 35 U.S.C. § 102(b) is a question of law.<sup>9</sup> In re Klopfenstein, 380 F.3d 1345, 1347 (Fed. Cir. 2004). Because the facts of the distribution of Dr. Palmaz's monographs are not in dispute, we review de novo the issue of whether the monographs are prior art printed publications.

In 1980 the inventor of the '762 patent, Dr. Palmaz, prepared a ten-page paper describing his work on stents. This paper is the "1980 monograph." At that time he was a resident at a hospital in California. His name was not on the paper. He gave copies of the paper to approximately six of his teachers at an oral presentation of his work to these physicians and several other colleagues. Pursuant to agreements, Palmaz later gave copies of the monograph to two companies (Vascor, Inc., and Shiley, Inc.) while

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<sup>9</sup> Under 35 U.S.C. § 102, "[a] person shall be entitled to a patent unless . . . (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of the application for patent in the United States."

attempting to commercialize his stent technology.<sup>10</sup> Neither agreement required confidentiality, and the Shiley agreement specifically stated that Shiley “shall not be committed to keep secret any idea or material submitted.” J.A. at 19,473. In 1983 Dr. Palmaz revised the paper; the revised paper became the “1983 monograph.” In 1983 he also gave a copy of both monographs to Werner Schultz, a technician from whom Dr. Palmaz was seeking fabrication assistance. When Dr. Palmaz joined the faculty in 1983 at the University of Texas, San Antonio, he gave a copy of the 1983 monograph to a doctor there (who then gave it to the technician setting up Dr. Palmaz’s laboratory) and to the university as part of a research proposal. Dr. Palmaz applied for the patent that became the '762 patent in 1985.

A document is publicly accessible if it “has been disseminated or otherwise made available to the extent that persons interested and ordinarily skilled in the subject matter or art, exercising reasonable diligence, can locate it and recognize and comprehend therefrom the essentials of the claimed invention without need of further research or experimentation.” In re Wyer, 655 F.2d 221, 226 (CCPA 1981) (quoting I.C.E. Corp. v. Armco Steel Corp., 250 F. Supp. 738, 743 (S.D.N.Y.1966)). In general, “[a]ccessibility goes to the issue of whether interested members of the relevant public could obtain the information if they wanted to.” Constant v. Advanced Micro-Devices, Inc., 848 F.2d 1560, 1569 (Fed. Cir. 1988). Many of our cases in this area have concerned publications available in libraries, and the question has been whether the publication has been sufficiently indexed to be publicly accessible. See, e.g., In re Cronyn, 890

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<sup>10</sup> The parties here agree that there is no evidence that copies of the monographs were given to a third commercial entity, Cook Inc., before the critical date of the '021 patent.

F.2d 1158, 1161 (Fed. Cir. 1989); In re Hall, 781 F.2d 897, 899 (Fed. Cir. 1986); In re Wyer, 655 F.2d at 226. Other cases have involved widespread distribution so that the public could easily obtain copies of the publication. See, e.g., Kyocera Wireless Corp. v. Int'l Trade Comm'n, 545 F.3d 1340, 1350-51 (Fed. Cir. 2008).

Here we have a somewhat different question: whether the distribution to a limited number of entities without a legal obligation of confidentiality renders the monographs printed publications under § 102(b). We have held that where a distribution is made to a limited number of entities, a binding agreement of confidentiality may defeat a finding of public accessibility. But we have also held that such a binding legal obligation is not essential. Klopfenstein, 380 F.3d at 1351. We have noted that “[w]here professional and behavioral norms entitle a party to a reasonable expectation” that information will not be copied or further distributed, “we are more reluctant to find something a ‘printed publication.’”<sup>11</sup> Id. at 1350-51.

We first discuss Dr. Palmaz’s distribution of copies of his monographs to his university and hospital colleagues. We have recognized the importance of “preserv[ing] the incentive for inventors to participate in academic presentations or discussions” by noting that professional norms may support expectations of confidentiality. Id. at 1351.

The record here contains clear evidence that such academic norms gave rise to an

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<sup>11</sup> In the public use context of § 102(b), we have similarly noted that a lack of an express promise of confidentiality is not determinative of public use, but is instead “one factor to be considered in assessing all the evidence.” Bernhardt, L.L.C. v. Collezione Europa USA, Inc., 386 F.3d 1371, 1379 (Fed. Cir. 2004) (quoting Moleculon Research Corp. v. CBS, Inc., 793 F.2d 1261, 1266 (Fed. Cir. 1986)), abrogated on other grounds by Egyptian Goddess, Inc. v. Swisa, Inc., 543 F.3d 665 (Fed. Cir. 2008) (en banc); see also Invitrogen Corp. v. Biocrest Mfg., L.P., 424 F.3d 1374, 1382 (Fed. Cir. 2005).

expectation that disclosures will remain confidential.<sup>12</sup> Cordis's expert Dr. Buller testified that the "code of practice which occurs worldwide in academic circles, in departments, in medicine" includes treating a document describing scientific research in the "same confidential manner as you would if you had been given it directly by the author." J.A. at 8540-41. The district court properly concluded that Dr. Palmaz's distribution of the monographs to his academic and research colleagues did not render the monographs prior art printed publications.

However, Boston Scientific urges that, even if the academic and hospital distributions did not create public accessibility, the distribution of monographs to two commercial entities did so. These distributions occurred during attempts to interest the two companies in development of Dr. Palmaz's stent designs. There is no claim here that the two commercial entities provided any express agreement to keep the document confidential; indeed, one entity's disclosure agreement did not discuss the entity's confidentiality obligations, and the other entity's disclosure agreement specifically disclaimed such obligations (most likely to avoid a lawsuit resulting from inadvertent disclosure). Boston Scientific argues that under the decision of our predecessor court, the Court of Claims, in Garrett Corp. v. United States, "[w]hile distribution [of a government report] to government agencies and personnel alone may not constitute publication, distribution to commercial companies without restriction on use clearly does." 422 F.2d 874, 878 (Ct. Cl. 1970) (citation omitted).

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<sup>12</sup> The only potentially contrary testimony is a statement in a report by Boston Scientific's expert that a "colleague, faculty member or other recipient [of the monographs] . . . would be under no obligation to maintain the disclosure in confidence." J.A. at 19,386. As we have discussed, whether or not recipients have a legal obligation to maintain confidentiality is not determinative.

However, the evidence here was sufficient to support a conclusion that there was an expectation of confidentiality between Dr. Palmaz and each of the two commercial entities. While the Shiley legal agreement executed before development discussions disclaimed a confidentiality requirement, Dr. Palmaz testified that he requested confidentiality during subsequent discussions and was “surprise[d]” when he was shown the language of the Shiley agreement. J.A. at 8517; *id.* at 19,354. There is no suggestion that the request for confidentiality was not, in fact, honored. Dr. Palmaz confirmed that the entities kept their copies of the monograph confidential, whether or not they were legally obligated to do so. J.A. at 8502. The district court noted that “there is no evidence that [the commercial entities] would have distributed, or in fact did distribute, the 1980 Monograph outside of the company.” Cordis Corp. v. Boston Scientific Corp., Civ. No. 03-027-SLR, 2005 WL 1331172, at \*4 (D. Del. June 3, 2005). There was no showing that similar documents in the past became available to the public as a result of disclosure by these or similar commercial entities, that these or similar commercial entities typically would make the existence of such documents known and would honor requests for public access, or that these or similar commercial entities had an incentive to make the document available, etc. The mere fact that there was no legal obligation of confidentiality—all that was shown here—is not in and of itself sufficient to show that Dr. Palmaz’s expectation of confidentiality was not reasonable.<sup>13</sup>

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<sup>13</sup> Boston Scientific asserted that the district court improperly did not allow it to argue that the monographs were prior art in light of the result of a different litigation involving the '762 patent. We do not need to reach the question of whether the earlier determination that the '762 patent was “valid” precluded further litigation of the validity determination in this case.

We affirm the district court's holding that Dr. Palmaz's 1980 and 1983 monographs were not prior art printed publications under § 102(b), and we affirm the district court's grant of Cordis's summary judgment motion that the claims of the '762 patent are not invalidated by the Palmaz monographs.

### B. Anticipation

Boston Scientific argues that the jury erred in finding that claim 2 of the '406 patent is not invalid, and that the district court erred in not granting judgment as a matter of law on grounds of anticipation. Anticipation is a question of fact; we review the jury's verdict for substantial evidence. Voda v. Cordis Corp., 536 F.3d 1311, 1321 (Fed. Cir. 2008).

Boston Scientific's theory is that Cordis's '762 patent anticipates claim 2 of Cordis's '406 patent. The parties agree that the '762 patent includes all elements of claim 2 of the '406 patent, save for the functional language in claim 1 of the '406 patent (on which claim 2 of the '406 patent depends). This functional language states, "such that the links and bands define an expandable structure having axial flexibility in an unexpanded configuration." '406 patent col.5 ll.35-39 (emphases added).<sup>14</sup>

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<sup>14</sup> Claims 1 and 2 of the '406 patent state:

1. A stent having first and second ends with an intermediate section therebetween, and a longitudinal axis, comprising:
  - a plurality of longitudinally disposed bands, wherein each band defines a generally continuous wave having a spatial frequency along a line segment parallel to the longitudinal axis; and
  - a plurality of links for maintaining the bands in a tubular structure, wherein the links are so disposed that any single circumferential path formed by the links is discontinuous; such that the links and bands define an expandable structure having axial flexibility in an unexpanded configuration.

Boston Scientific argues that this “such that” claim language cannot operate as a claim limitation to distinguish the '406 patent over the prior art. Contrary to Boston Scientific’s argument, we have held that functional language can be a claim limitation. See Microprocessor Enhancement Corp. v. Tex. Instruments Inc., 520 F.3d 1367, 1375 (Fed. Cir. 2008). We conclude that the jury could properly find that the “such that” claim language is a limitation of claim 1 of the '406 patent that barred a finding of anticipation.

Boston Scientific alternatively argues that even if the “such that” functional language limits claim 2 to stents “having axial flexibility,” the evidence demonstrated that the '762 patent disclosed such axial flexibility. The district court, citing both the testimony of Boston Scientific’s expert Dr. Moore and the presumption of a patent’s validity, held that the evidence presented was sufficient for the jury to find that the '762 patent did not anticipate claim 2 of the '406 patent. The district court properly concluded that substantial evidence supported the jury’s verdict that claim 2 of Cordis’s '406 patent was not invalid.

We affirm the district court’s denial of Boston Scientific’s motion for judgment as a matter of law that claim 2 of the '406 patent is anticipated and invalid.

C. “Thin-walled”

Boston Scientific argues that the jury erred in finding that Boston Scientific’s Express and Taxus Express stents literally infringe claim 23 of the '762 patent, and in finding that Boston Scientific induced literal infringement of claim 1 of the '762 patent

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2. A stent according to claim 1, wherein each link is axially displaced from any circumferentially adjacent link.

'406 patent col.5 ll.26-41 (emphases added).

with respect to these stents.<sup>15</sup> Claim 23 of the '762 patent depends from claim 13. '762 patent col.12 ll.55-60. Boston Scientific also argues that the district court erred in

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<sup>15</sup> Claims 1, 13, and 23 of the '762 patent state:

1. A method for implanting a prosthesis within a body passageway comprising the steps of:
  - utilizing a thin-walled, tubular member as the prosthesis, the tubular member having a plurality of slots formed therein, the slots being disposed substantially parallel to the longitudinal axis of the tubular member;
  - disposing the prosthesis upon a catheter;
  - inserting the prosthesis and catheter within the body passageway by catheterization of said body passageway; and
  - expanding and deforming the prosthesis at a desired location within the body passageway by expanding a portion of the catheter associated with the prosthesis to force the prosthesis radially outwardly into contact with the body passageway, the prosthesis being deformed beyond its elastic limit.
  
13. An expandable intraluminal vascular graft, comprising:
  - a thin-walled tubular member having first and second ends and a wall surface disposed between the first and second ends, the wall surface having a substantially uniform thickness and a plurality of slots formed therein, the slots being disposed substantially parallel to the longitudinal axis of the tubular member;
  - the tubular member having a first diameter which permits intraluminal delivery of the tubular member into a body passageway having a lumen; and
  - the tubular member having a second, expanded and deformed diameter, upon the application from the interior of the tubular member of a radially, outwardly extending force, which second diameter is variable and dependent upon the amount of force applied to the tubular member, whereby the tubular member may be expanded and deformed to expand the lumen of the body passageway.

denying its motion for judgment as a matter of law of noninfringement under the “thin-walled” limitation of claim 1 and claim 13.

First, Boston Scientific argues that the district court construed the term “thin-walled” improperly. The district court construed “thin-walled” in claim 1 and claim 13 of the '762 patent as “the wall of the tubular member must have little extent from one surface to its opposite at both its first and second diameters.” Claim Construction, 2005 WL 1322966, at \*2. The district court’s claim construction was proper, and the district court was not obligated, as Boston Scientific urges, to construe “thin-walled” to exclude stent walls whose struts are thicker than they are wide.

Second, Boston Scientific complains that the district court refused to allow Boston Scientific to argue the prosecution history of the '762 patent to the jury, and that the district court’s exclusion of this argument prejudiced Boston Scientific’s noninfringement case. Boston Scientific had sought to use the prosecution history of the '762 patent to show that Cordis had admitted that stents whose thicknesses were within a particular numerical range were not “thin-walled.”<sup>16</sup> In effect, Boston Scientific sought to argue claim construction to the jury. We have held that it is improper to argue claim construction to the jury because the “risk of confusing the jury is high when

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23. The expandable intraluminal vascular graft of claim 13, wherein the outside of the wall surface of the tubular member is a smooth surface, when the tubular member has the first diameter.

'762 patent col.10 l.6–col.11 l.9; col.11 l.62–col.12 l.15; col.12 ll.55-60 (emphases added).

<sup>16</sup> When affirming the district court’s denial of Cordis’s preliminary injunction motion in this case, we found no error in the district court’s conclusion that the prosecution history did not limit “thin-walled” to “thicknesses no greater than 0.0045 inches.” Cordis Corp., 99 F. App’x at 933.

experts opine on claim construction.” CytoLogix Corp. v. Ventana Med. Sys., Inc., 424 F.3d 1168, 1172-73 (Fed. Cir. 2005); see Sundance, Inc. v. DeMonte Fabricating Ltd., 550 F.3d 1356, 1364 n.6 (Fed. Cir. 2008). The district court thus properly excluded Boston Scientific’s claim construction argument before the jury, and properly held that its exclusion of this argument did not entitle Boston Scientific to a new trial.

Third, Boston Scientific argues that even under the district court’s claim construction, Cordis did not present sufficient evidence that the Express and Taxus Express stents meet the “thin-walled” limitations of claim 1 and claim 13 (on which claim 23 depends). The district court cited testimony by Cordis’s expert Dr. Buller describing how the Express and Taxus Express stents meet the “thin-walled” limitation of claims 1 and 23 under the district court’s construction of this limitation. Memorandum Opinion, 2006 WL 1305227, at \*12. We conclude that the district court properly found that Cordis presented substantial evidence to support the jury’s infringement verdict.

We affirm the district court’s denial of Boston Scientific’s motion for judgment as a matter of law that the Express and Taxus Express stents do not infringe claims 1 and 23 of the ’762 patent under the “thin-walled” limitation of these claims.

D. “Substantially parallel”

Boston Scientific argues that the jury erred in finding that Boston Scientific’s Liberté stent infringes claims 1 and 23 of the ’762 patent, and that the district court erred in denying Boston Scientific’s motion for judgment as a matter of law of noninfringement under the “substantially parallel” limitations of claim 1 and claim 13 (on which claim 23 depends). Both claim 1 and claim 13 describe stents whose slots (spaces or openings within a stent’s lattice design) are “disposed substantially parallel to the longitudinal

axis” of the stent. ’762 patent col.10 l.61–col.11 l.9; col.11 l.62–col.12 l.15 (emphasis added).

Boston Scientific first contends that the district court erred by not construing the term “parallel” in claim 1 and claim 13 of the ’762 patent. This argument was not timely raised before the district court and has been waived. Conoco, 460 F.3d at 1359.

Next, Boston Scientific argues that Cordis did not present substantial evidence that the Liberté stent meets the “substantially parallel” limitation in claims 1 and 23. Boston Scientific asserts that the Liberté stent’s banana-shaped slots are not substantially parallel to the stent’s longitudinal axis. The district court cited testimony of both parties’ experts to support its finding that Cordis provided sufficient evidence to support the jury’s infringement verdict under the “substantially parallel” limitation. Memorandum Opinion, 2006 WL 1305227, at \*10. We conclude that substantial evidence supported the jury’s verdict.

Boston Scientific further asserts that the district court’s exclusion of the deposition testimony about the Liberté stent by Dr. Palmaz, the inventor of the ’762 patent, warrants a new trial. Dr. Palmaz testified during a deposition that the slots of the Liberté stent “deviate from the longitudinal axis” of the stent. J.A. at 11,520. The district court excluded this testimony, finding that Dr. Palmaz was not an expert on the Liberté stent and that his testimony did not provide relevant evidence of infringement and created a risk of prejudice. Memorandum Opinion, 2006 WL 1305227, at \*14. Boston Scientific argues that this testimony of Dr. Palmaz was important in defining the meaning of the claim term “substantially parallel” and in rebutting Cordis’s evidence that the Liberté stent infringed claims 1 and 23 of the ’762 patent. As noted earlier, claim

construction cannot be argued to the jury. CytoLogix Corp., 424 F.3d at 1172-73; see also Sundance, 550 F.3d at 1364 n.6. “[I]nventor testimony as to the inventor’s subjective intent is irrelevant to the issue of claim construction,” and as the inventor of the ’762 patent, Dr. Palmaz also had no special expertise regarding the alleged infringement of the patent by the Liberté stent. Howmedica Osteonics Corp. v. Wright Med. Tech., Inc., 540 F.3d 1337, 1346-47 (Fed. Cir. 2008); see also Air Turbine Tech., Inc. v. Atlas Copco AB, 410 F.3d 701, 714 (Fed. Cir. 2005). The district court’s exclusion of the Liberté stent portion of Dr. Palmaz’s deposition testimony was within its discretion.

We affirm the district court’s denial of Boston Scientific’s motion for judgment as a matter of law or a new trial that the Liberté stent does not infringe claims 1 and 23 of the ’762 patent under the “substantially parallel” limitation of these claims.

#### E. “Wave”

Boston Scientific contends that the jury erred in finding that the Liberté stent infringes claim 2 of the ’406 patent, and that the district court erred in denying Boston Scientific’s motion for judgment as a matter of law of noninfringement. Claim 2 of the ’406 patent depends from claim 1. ’406 patent col.5 ll.39-41. The parties agree that the Liberté stent infringes all limitations of claim 2, except the limitation in claim 1 (on which claim 2 depends) describing “a plurality of longitudinally disposed bands, wherein each band defines a generally continuous wave having a spatial frequency along a line segment parallel to the longitudinal axis.” ’406 patent col.5 ll.29-32 (emphasis added).

First, Boston Scientific argues that the district court improperly refused to construe the term “wave” in claim 1. In fact, the district court did construe the claim

language “longitudinally disposed bands, wherein each band defines a generally continuous wave having a spatial frequency along a line segment parallel to the longitudinal axis” as “the stent has multiple elongated surfaces that run parallel to the stent’s long axis, each of these surfaces having the undulating appearance of a continuous wave,” though it did not separately construe the term “wave.” Claim Construction, 2005 WL 1322966, at \*1.

As the district court pointed out, Boston Scientific did not suggest until after the close of the trial that the district court was required to construe the term “wave” in any other respect. Memorandum Opinion, 2006 WL 1305227, at \*6. Under Conoco, this argument thus was not timely raised before the district court and has been waived. 460 F.3d at 1359.

Alternatively, Boston Scientific argues that even under the district court’s claim construction, the evidence did not sufficiently support the jury’s infringement verdict. This contention is without merit. The district court cited testimony by Cordis’s expert Dr. Buller applying the court’s claim construction and describing how the Liberté stent meets the limitations of claim 2 of the ’406 patent. Memorandum Opinion, 2006 WL 1305227, at \*4. We conclude that Cordis presented substantial evidence to support the jury’s infringement verdict.

We affirm the district court’s denial of Boston Scientific’s motion for judgment as a matter of law that the Liberté stent does not infringe claim 2 of the ’406 patent.

#### F. Dismissal without prejudice

The district court granted Boston Scientific’s motion for judgment as a matter of law that its Taxus Liberté stent (not to be confused with its Liberté stent or its Taxus

Express stent) did not infringe the asserted claims of Cordis's '762 and '406 patents. The district court held that it did not have jurisdiction to consider infringement claims relating to the Taxus Liberté stent because that stent had "no nexus to the United States." Memorandum Opinion, 2006 WL 1305227, at \*24.

However, Boston Scientific argues that the district court erred in dismissing Cordis's infringement claims against the Taxus Liberté stent without prejudice, rather than with prejudice, and asserts that Cordis failed to prove that the Taxus Liberté stent infringed the asserted claims of the '762 and '406 patents. Cordis asserts that it did not present evidence at trial that the Taxus Liberté stent infringed the asserted claims of the '762 and '406 patents under 35 U.S.C. § 271(f) because it believed such evidence related only to damages rather than to infringement liability.<sup>17</sup>

"Congress has not clearly stated in 35 U.S.C. § 271 or in any other statute that § 271's requirement that the infringing act happen within the United States is a threshold jurisdictional requirement as opposed to an element of the claim." Litecubes, LLC v. N. Light Prods., Inc., 523 F.3d 1353, 1363 (Fed. Cir. 2008), cert. denied sub nom. GlowProducts.com v. Litecubes, LLC, 129 S. Ct. 578 (2008). Thus, the question of whether the Taxus Liberté stent had a nexus to the United States was an element of Cordis's liability claims, rather than a jurisdictional requirement. Because "a failure to prove the allegations alleged in a complaint requires a decision on the merits, not a dismissal for lack of subject matter jurisdiction," id. at 1361, the district court's dismissal

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<sup>17</sup> Cordis argues that the Taxus Liberté stent has the same structure as the Liberté stent. We see no error in the district court's determination that the Taxus Liberté stent and the Liberté stent are different products.

of Cordis's infringement claims regarding the Taxus Liberté stent should have been with prejudice.

We reverse the district court's dismissal without prejudice of Cordis's claims that the Taxus Liberté stent infringed the asserted claims of the '762 and '406 patents, and remand with instructions to dismiss the claims with prejudice.

### III

We affirm the district court's judgment in all respects save one. We reverse the district court's dismissal without prejudice of Cordis's claims that the Taxus Liberté stent infringed the asserted claims of the '762 and '406 patents, and remand with instructions to dismiss the claims with prejudice.

AFFIRMED-IN-PART, REVERSED-IN-PART, REMANDED

COSTS

No costs.