

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

CORDIS CORPORATION,)
)
 Plaintiff,)
)
 v.) Civ. No. 03-027-SLR
)
 BOSTON SCIENTIFIC CORPORATION)
 and SCIMED LIFE SYSTEMS, INC.,)
)
 Defendants.)

MEMORANDUM ORDER

At Wilmington this *3d* day of June, 2005, having heard oral argument and having reviewed the papers submitted in connection with the parties' proposed claim construction;

IT IS ORDERED that the disputed claim language in U.S. Patent Nos. 5,895,406 ("the '406 patent"), 5,922,021 ("the '021 patent") and 4,739,762 ("the '762 patent"), as identified by the above referenced parties, shall be construed consistent with the tenets of claim construction set forth by the United States Court of Appeals for the Federal Circuit, as follows:

A. Claim 1 of the '406 patent.

1. "Stent."

Consistent with the claim language and its ordinary meaning¹ and the specification,² the court construes "stent" to mean "a tubular structure left inside a vessel to hold the vessel open."

2. "Comprising."

The court finds that "comprising" is a term of art that means "the named elements are essential, but other elements may be added and still form a [device] within the scope of the claim."³

3. "Longitudinally disposed bands, wherein each band defines a generally continuous wave having a spatial frequency along a line segment parallel to the longitudinal axis."

Consistent with the claim language and its ordinary meaning, the specification⁴ and the prosecution history,⁵ the court

¹See Stedman's Medical Dictionary 1336 (27th ed. 2002) (defining "stent" as a device "to assure patency of an intact but contracted lumen").

²'406 patent, col. 1, ll. 16-17; Id., col. 3, ll. 28-32.

³Stifung v. Renishaw PLC, 945 F.2d 1173 (Fed. Cir. 1991); see also Vehicular Technologies Corp. v. Titan Wheel Int'l, Inc., 212 F.3d 1377, 1382 (Fed. Cir. 2000). Elements that are otherwise excluded by the prosecution history or an explicit claim limitation are not claimed. See Kustom Signals, Inc. v. Applied Concepts, Inc., 264 F.3d 1326, 1332 (Fed. Cir. 2001); Spectrum Int'l, Inc. v. Sterilite Corp., 164 F.3d 1372, 1379-80 (Fed. Cir. 1998).

⁴Claim 1 requires that there be a plurality of links between bands. ('406 patent, col. 5, l. 32) The specification requires that the bands undulate through approximately two cycles before there is a circumferential link and that there be a plurality of periodic links. ('406 patent, col. 4, ll. 7-10, 15-17) Nowhere in the patent does it direct one of ordinary skill in the art how

construes this limitation to mean that "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."

5. "Links."

Consistent with the claim language and its ordinary meaning,⁶ the specification⁷ and the prosecution history,⁸ the court construes "links" to mean "short separate structures that run transverse to the long axis of the stent in order to connect adjacent longitudinal bands."

6. "Axial flexibility."

to construct a stent that meets these criteria without the bands running the length of the stent. Figures 3(a) and (b), showing a "portion of a stent with two bands between two circumferential links," cannot mean that a band is only what is shown, as what is depicted does not have a plurality of links. (See also '406 patent, col. 2, ll. 52-59 (describing Fig. 1(c) and (d) as an "axially flexible stent in accordance with present invention")) This construction does not read into the independent claim the limitations for its dependent claims, as none of the dependent claims cited by Cordis requires that the bands run the length of the stent. (See '406 patent, claim 10 and claim 17 (requiring that the bands be capped at the ends of the stent); Id., claim 3 (requiring that the band change in spatial frequency along its length))

⁵D.I. 230, Ex. 37 at 11637; Id., Ex. 34.

⁶D.I. 230, Ex. 39 (defining "link" as "a piece or part . . . that holds two or more important elements together . . .").

⁷'406 patent, col. 4, ll. 15-17.

⁸D.I. 230, Ex. 40 at 5, 6; D.I. 280, Ex. 42 at BSC11646.

Consistent with the claim language and its ordinary meaning⁹ and the specification,¹⁰ the court construes "axial flexibility" to mean "can bend or flex along its length."

B. Claim 12 of the '406 patent.

1. "Spatially aligned so as to be generally in phase with one another."

Consistent with the claim language and its ordinary meaning¹¹ and the specification,¹² the court construes this limitation to mean "the bands generally undulate at the same rate, so as to run parallel to each other."

C. Claim 23 of the '021 patent.

1. "Strut."

⁹D.I. 230, Ex. 41 (defining "axial" as "[l]ocated on, around, or in the direction of an axis" and "flexible" as "[c]apable of being bent or flexed").

¹⁰Claim 1 refers to both a longitudinal axis, parallel to which the bands run, and a circumferential axis on which the connecting links are placed. The specification, however, refers to the links as providing stability, not flexibility. ('406 patent, col. 4, ll. 58-61; col. 3, ll. 48-50) Therefore, a reference to axial flexibility must be referring to longitudinal flexibility.

¹¹D.I. 230, Ex. 41 (defining "align" as "[t]o arrange in a line or so as to be parallel"); D.I. 280, Ex. 10 (defining "in phase" as "in a synchronized or correlated manner).

¹²'406 patent, col. 4, ll. 10-15.

Consistent with the claim language and its ordinary meaning,¹³ this court construes "strut" to mean "a structural member designed to withstand force."

2. "Expansion strut pair corners" and "corners" of "expansion strut pairs."

Consistent with the claim language and its ordinary meaning¹⁴ and the specification,¹⁵ this court construes "corners" to mean "a place where two surfaces meet to form an angle."

3. "A first connecting strut column formed of a plurality of first connecting struts."

Consistent with the claim language and its ordinary meaning¹⁶ and the specification¹⁷ this court construes this

¹³D.I. 230, Ex. 4 (defining "strut" as "[a] structural member which is designed to take compression").

Cordis argues that the strut is designed to withstand pressure along its length. The specification, however, indicates that the stent is designed to withstand radial forces; limiting "strut" to structures that withstand pressure along their length is too narrow. ('021 patent, col. 3, ll. 24, 26, 46-47)

¹⁴D.I. 230, Ex. 5 at 452 (defining "corner" as "the place at which two converging lines or surfaces meet" and "the space between two converging lines or surfaces near their intersection; angle"); D.I. 233, Ex. 11 at 507 (defining "corner" as "the point or place where converging lines, edges or sides meet: ANGLE . . .").

¹⁵'021 patent, col. 11, ll. 66-67 - col. 12, ll. 11.

¹⁶BSC argues that this limitation should be construed simply as a "column . . . formed of connecting struts." This construction, however, is not consistent with the other claims. (See, e.g., '021 patent, col. 18, ll. 24-31; '021 patent, col. 22, ll. 42-52) (referring to "first connecting strut" as connecting the first expansion strut pair and second expansion

limitation to mean "a column formed of at least two first connecting struts."

4. "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."

Consistent with the claim language and its ordinary meaning and the specification¹⁸ and prosecution history,¹⁹ this court construes this limitation as meaning that "the first expansion strut in the first column does not share a longitudinal axis with the second expansion strut in the second column."

D. Claim 1 of the '762 patent.

1. "Comprising."

strut pair). Without a clear indication in the specification that "first connecting struts" should be given a different meaning in different claims, it should be construed consistently throughout. See also, Frank's Casing Crew & Rental Tools, Inc. v. Weatherford Inter'l, Inc., 389 F.3d 1370, 1377 (Fed. Cir. 2004) (citation omitted). Thus, this court declines to adopt BSC's asserted construction of this limitation.

¹⁷'021 patent, col. 6, ll. 46-52 (defining the "first connecting strut" as the first strut in the column and "second connecting strut" as the second strut in the column).

¹⁸'021 patent, col. 6, ll. 53-55 (defining "offset" as not collinear).

¹⁹D.I. 233, Ex. 25 at JFH 192, 196, 209, 217.

The court finds that "comprising" is a term of art that means "the named elements are essential, but other elements may be added and still form a [device] within the scope of the claim."²⁰

2. "Thin-walled."

Consistent with the court's previous construction,²¹ "thin-walled" is construed to mean "the wall of the tubular member must have little extent from one surface to its opposite at both its first and second diameters."

3. "The slots being disposed substantially parallel to the longitudinal axis of the tubular member."

Consistent with the claim language and its ordinary meaning²² and this court's previous construction,²³ this court

²⁰Stifung v. Renishaw PLC, 945 F.2d 1173 (Fed. Cir. 1991); see also Vehicular Technologies Corp. v. Titan Wheel Int'l, Inc., 212 F.3d 1377, 1382 (Fed. Cir. 2000). Elements that are otherwise excluded by the prosecution history or an explicit claim limitation are not claimed. See Kustom Signals, Inc. v. Applied Concepts, Inc., 264 F.3d 1326, 1332 (Fed. Cir. 2001); Spectrum Int'l, Inc. v. Sterilite Corp., 164 F.3d 1372, 1379-80 (Fed. Cir. 1998).

²¹Cordis Corp. v. Medtronic AVE, Inc., 194 F. Supp.2d 323, 332 (D. Del. 2002).

²²Cordis Corp., 339 F.3d at 1360 ("'substantially' as used in this context, denotes approximation.")

²³ In 97-550-SLR the court construed "plurality of slots" in such a way as to include the "substantially parallel" limitation. (97-550-SLR, D.I. 1127) The court includes this previous construction to make it clear what the limitation as a whole is construed to mean.

construes this limitation to mean that "a 'slot' is a long and narrow opening or groove, an opening whose length is substantially greater than its width. The claim requires slots in the tubular members that run largely or approximately parallel to the longitudinal axis."

E. Claim 9 of the '762 patent.

1. "Thin-walled."

Consistent with the construction of "thin-walled" for claim 1 of the '762 patent, the court construes "thin-walled" to mean "the wall of the tubular member must have little extent from one surface to its opposite at both its first and second diameters."

2. "Biologically inert coating."

Consistent with the claim language and its ordinary meaning²⁴ and the prosecution history,²⁵ this court construes "biologically inert coating" to mean "a coating that is not biologically active."

F. Claim 13 of the '762 patent.

1. "Comprising."

²⁴D.I. 233, Ex. 6 at col. 4, ll. 44-48 (referring to "inert and antithrombogenic outer surface."); Stedman's Medical Dictionary 706 (5th ed. 1982) (defining "inert" as "[i]nactive" or "[h]aving no pharmacologic or therapeutic action").

²⁵D.I. 233, Ex. 8 and PWRAP 3010 (indicating that at the time of the invention, it was known that something could be biologically inert and reduce thrombogenicity).

The court finds that "comprising" is a term of art that means "the named elements are essential, but other elements may be added and still form a [device] within the scope of the claim."²⁶

2. "Thin-walled."

Consistent with the construction of "thin-walled" for claim 1 of the '762 patent, the court construes "thin-walled" to mean "the wall of the tubular member must have little extent from one surface to its opposite at both its first and second diameters."

3. "Substantially uniform thickness."

Consistent with this court's previous construction²⁷ and the Federal Circuit's review of that construction,²⁸ "substantially uniform thickness" is construed to mean "the wall of the tubular member must be of largely or approximately uniform

²⁶Stifung v. Renishaw PLC, 945 F.2d 1173 (Fed. Cir. 1991); see also Vehicular Technologies Corp. v. Titan Wheel Int'l, Inc., 212 F.3d 1377, 1382 (Fed. Cir. 2000). Elements that are otherwise excluded by the prosecution history or an explicit claim limitation are not claimed. See Kustom Signals, Inc. v. Applied Concepts, Inc., 264 F.3d 1326, 1332 (Fed. Cir. 2001); Spectrum Int'l, Inc. v. Sterilite Corp., 164 F.3d 1372, 1379-80 (Fed. Cir. 1998).

²⁷Id.

²⁸This court does not view the Federal Circuit's 2003 opinion as reversing its original construction of "substantially uniform thickness," but instead clarifying the scope of that construction. Cordis Corp. v. Medtronic AVE, Inc., 339 F.3d 1352, 1360-62 (Fed. Cir. 2003). Thus, this court does not agree with BSC that the Federal Circuit's opinion added to the limitation that the stent must allow for "uniform expansion."

thickness. A wall that varies in thickness by as much as 100 percent cannot be said to be of substantially uniform thickness.

4. "The slots being disposed substantially parallel to the longitudinal axis of the tubular member."

Consistent with the construction of "substantially parallel" for claim 1 of the '762 patent, the court construes "substantially parallel" to mean that "a 'slot' is a long and narrow opening or groove, an opening whose length is substantially greater than its width. The claim requires slots in the tubular members that run largely or approximately parallel to the longitudinal axis."

G. Claim 19 of the '762 patent.

1. "Biologically inert coating."

Consistent with the construction of "biologically inert coating" for claim 9 of the '762 patent, the court construes "biologically inert coating" to mean "a coating that is not biologically active."


United States District Judge