

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28

UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF CALIFORNIA

ANGIOSCORE, INC.,

Plaintiff,

v.

TRIREME MEDICAL, INC., et al.,

Defendants.

Case No.: 12-CV-3393 YGR

**ORDER CONSTRUING CLAIMS IN DISPUTE;
GRANTING IN PART AND DENYING IN PART
DEFENDANTS' MOTION FOR SUMMARY
JUDGMENT OF NON-INFRINGEMENT**

INTRODUCTION

At the heart of this patent action is an angioplasty device named "Chocolate." Defendant Eitan Konstantino, an inventor of angioplasty devices, worked for plaintiff AngioScore, Inc. ("AngioScore"), a company that makes and sells angioplasty devices. Later, he started his own company, TriReme Medical, Inc., which has since reorganized as defendant TriReme Medical, LLC ("TriReme"). TriReme makes and sells the Chocolate device. AngioScore's operative Supplemental and Second Amended Complaint alleges that Chocolate infringes United States Patent No. 7,691,119, which AngioScore owns by assignment. (Dkt. No. 118 ¶¶ 14, 19; *id.*, Ex. A ("119 Patent").) AngioScore brings a single claim of patent infringement against TriReme, Konstantino, and two corporate entities associated with TriReme, namely, Quattro Vascular Pte Ltd. ("Quattro"), and QT Vascular Ltd. (f/k/a QT Vascular Pte. Ltd.) ("QTV").¹ Defendants answered, asserting counterclaims for (1) a declaration of noninfringement of the '119 Patent, (2) a declaration of

¹ AngioScore has sought leave to file a Third Amended Complaint that would add five additional claims arising from certain defendants' alleged business torts. (Dkt. No. 202.) The motion for leave to amend will be resolved in a separate order concurrently issued.

1 invalidity of the '119 Patent, (3) intentional and (4) negligent interference with prospective economic
 2 advantage (asserted by TriReme alone), (5) defamation, (6) false advertising under the Lanham Act,
 3 15 U.S.C. section 1125, (7) unfair competition in violation of California's Business and Professions
 4 Code section 17200, and (8) unfair competition under the common law. (Dkt. No. 127.)

5 Now before the Court is a motion for summary judgment filed by TriReme and Konstantino
 6 (herein, "Defendants") seeking a declaratory judgment that Chocolate does not infringe the '119
 7 Patent. (Dkt. No. 131 ("Motion").) The Motion presents two issues: (1) the proper construction of
 8 three disputed terms in the '119 Patent's only independent claim and (2) Chocolate's alleged
 9 infringement of the disputed terms once properly construed. The Motion is fully briefed, and the
 10 Court heard oral argument on February 14, 2014. (Dkt. Nos. 138-4 ("Opp'n"), 147 ("Reply"), 181
 11 ("Tr.")²)

12 In Section I of this Order, the Court summarizes relevant facets of the prior art and the patent-
 13 in-suit. In Section II, the Court engages in claim construction as to the three disputed terms. The
 14 Court concludes that the terms have the following meanings:

Term	Construction
end	"part of the device where the stent, catheter shaft, and balloon connect"
longitudinal expansion	"reshaping by straightening"
attached	Ordinary and customary meaning

15
16
17
18
19
20
21
22 The Court then turns to the summary judgment analysis in Section III. The Court concludes
 23 that, with respect to the disputed terms, either triable issues of material fact exist or Defendants have
 24 failed to carry their burden of showing their entitlement to judgment as a matter of law. Defendants
 25 have established, however, their entitlement to summary judgment on three points: (a) the struts of
 26

27 ² The Court received briefing on claim construction prior to vacating the planned claim
 28 construction hearing. (Dkt. Nos. 94 ("Pl. CC Brief"), 100 ("Defs. CC Response"), 106 ("Pl. CC
 Reply"); *see also* Dkt. No. 114 (vacating claim construction hearing following technology tutorial).)
 The Court refers to those briefs where appropriate.

1 Chocolate do not literally infringe the '119 Patent's claim of struts that connect from "end" to "end"
2 of the hypo tube; (b) AngioScore is barred from asserting the doctrine of equivalents to prove
3 infringement of the "longitudinal expansion" limitation in claim 1 of the '119 Patent; and, similarly,
4 (c) AngioScore is barred from asserting the doctrine of equivalents to prove infringement of the
5 "attached" limitation. Accordingly, the Court **GRANTS IN PART AND DENIES IN PART** Defendants'
6 Motion.

7 **I. BACKGROUND**

8 **A. ANGIOPLASTY BASICS**

9 The '119 Patent claims a balloon catheter with a non-deployable stent, which is a type of
10 medical device used in angioplasty. Angioplasty is a term encompassing procedures for surgically
11 repairing or clearing a blood vessel that has become occluded or blocked by plaque. This narrowing
12 of the blood vessels is called stenosis; the blockages themselves are commonly called lesions.

13 One type of angioplasty procedure is percutaneous transluminal angioplasty ("PTA"). In that
14 procedure, a surgeon inserts a catheter tube through the skin (i.e., percutaneously) and into a blood
15 vessel (i.e., transluminally). When the vessel leads to the heart, the procedure is a percutaneous
16 transluminal *coronary* angioplasty ("PTCA"). Both procedures begin the same way: the surgeon
17 inserts a surgical sheath through the patient's skin and into a blood vessel, often at the top of the leg,
18 in the femoral artery. The surgeon then inserts a guide wire through the sheath and threads it through
19 the patient's body to the site of the lesion. The guide wire then acts as a "monorail track" which the
20 surgeon may use to guide therapeutic devices into position in or near the lesion.

21 Different therapeutic devices have different effects. Most elementary and perhaps most
22 familiar among these devices is the angioplasty balloon used in "POBA" procedures ("Plain Old
23 Balloon Angioplasty"). Angioplasty balloons are generally long and thin, and, because they are
24 formed around a central catheter used to conduct the fluid that inflates the balloon, often called
25 "balloon catheters." The basic principle of the angioplasty balloon is that, while in its deflated state,
26 the surgeon may position the balloon inside a blockage, and then inflate the balloon to repair the
27 blockage. Inflation causes the balloon walls to compress the plaque against the vessel wall, thus
28 widening the vessel.

1 POBA angioplasties may present certain risks, however. Four are relevant here. The first is
2 the risk of the balloon moving during inflation. When the balloon inflates, irregularities in the shape
3 of the plaque, or other factors, may cause the balloon to slip and, thus, miss the surgeon's intended
4 target. Second, the balloon may deform during inflation as it encounters the uneven surface of the
5 plaque. Resistance from the plaque can result in portions of the balloon inflating more than others
6 and this deformation, in turn, can cause the overinflated portion of the balloon to exert too much
7 pressure on the vessel wall. Such pressure can lead to trauma, including coronary artery dissection,
8 a serious complication wherein the arterial wall cracks. A third, and similar, risk arises when the
9 balloon is longer than the lesion; in such cases, the portion of the balloon outside the lesion may
10 inflate more than the portion within the lesion, an effect called "dog-boning." That effect, too,
11 results in high pressure on the vessel wall and increased risk of trauma. Finally, the fourth potential
12 risk relevant here is the problem of restenosis. Even where the angioplasty procedure successfully
13 widens the treated vessel, trauma caused by the procedure may lead to the development of scar tissue
14 and eventual re-narrowing of the vessel.

15 To decrease these risks, inventors have developed various angioplasty devices addressing the
16 limitations of POBA. To counteract the problems of slippage and uneven pressure, "cutting" and
17 "gripping" balloons may be used. Such balloons have metallic elements like blades or wires affixed
18 to the exterior of the balloon along its working length. The metal elements focus the balloon's
19 pressure more predictably and also reduce the risk of slippage.

20 With respect to the problem of restenosis, doctors may couple a balloon with a "stent." A
21 stent is a small tube, commonly constructed of wire mesh. An uninflated balloon is placed inside the
22 stent, and then the surgeon positions both stent and balloon together within the lesion. When the
23 balloon inflates, the stent expands and is lodged within the vessel wall as a bolster. In the case of
24 "deployable" stents, when the balloon deflates, the stent remains expanded and is left behind in the
25 body when the surgeon retracts the balloon.

26 By contrast, non-deployable stents also exist. Such stents are removed from the body after
27 expansion in the vessel. They have the ability to contract as the balloon deflates so that the stent may
28 be retrieved without damage to the vessel walls. One way of fabricating such a stent is to construct it

1 from a material having a shape memory, meaning that, when bent or otherwise reshaped, the material
2 returns to its prior shape. With memory material, when a balloon is deflated, the stent, instead of
3 remaining expanded, returns to its original shape, and may be removed along with the deflated
4 balloon.

5 The manner of stent manufacture is pertinent to the case at bar. Stents, non-deployable and
6 otherwise, may be manufactured by laser-cutting a "hypo tube." Generally speaking, a hypo tube is a
7 medical-grade metal tube. They exist in a variety of sizes. Such tubes may be turned into stents by
8 using a laser to cut out much of the metal, leaving behind only the mesh structure of the stent.

9 **B. THE '119 PATENT SPECIFICATION AND CLAIMS**

10 The '119 Patent discloses an angioplasty balloon catheter with a specialized, non-deployable
11 stent, denominated herein the "'119 Device."³ The patent describes the background art, and the
12 problem to be solved by the patent, in part as follows:

13 When a balloon used for percutaneous transluminal angioplasty (PTA)
14 or percutaneous transluminal coronary angioplasty (PTCA) is inflated and
15 forced into contact with the plaque, the balloon can have a tendency to move
or slip longitudinally in relation to the lesion or the vessel wall being treated.

16 Cutting balloons (atherotomy) have recently shown clinical efficacy in
17 preventing the reoccurrence of some types of restenosis As the cutting
18 balloon is inflated, [microsurgical blades] move radially and open the
occluded artery by incising and compressing the arterial plaque in a controlled
19 manner. An additional advantage of the cutting balloon is that it maintains its
position during inflation by using the metal blades on the external surface of
the balloon to penetrate into the tissue and prevent the balloon from moving.

20 Accordingly, it is the principal objective of the present invention to
provide a PTA or PTCA balloon that, like a cutting balloon, has a reduced
21 potential of slippage when inflated in a vessel.

22 ('119 Patent, col. 1:6-27.)

23 The patent specification describes a non-deployable stent that may be used in conjunction
24 with a conventional balloon catheter, the latter encompassing "inner and outer members comprising a
25 guide wire lumen and a balloon inflation lumen, respectively."⁴ ('119 Patent, col. 1:63-67.) The

26 ³ The Court uses this term as a convenient reference only. The record discloses that the '119
27 Patent has never been reduced to commercial application.

28 ⁴ In the present context, "lumen" refers to the hollow bore of a catheter. *See Merriam
Webster*, <http://www.merriam-webster.com/medical/lumen> (last accessed June 10, 2014).

1 "proximal" end of the catheter—that is, the end closest to the surgeon, as opposed to the "distal" or
2 farther end—"has a luer hub for connecting an inflation means."⁵ (*Id.*, col. 2:2-3.) The proximal
3 and distal ends, or necks, of the balloon itself are cone-shaped when inflated. (*Id.*, col. 2:24-25.)
4 The stent is "disposed," that is, placed, over the balloon catheter. (*Id.*, col. 2:26-41, 4:14-16.)

5 The patent specifies that the stent is made from a nickel-titanium alloy called Nitinol. ('119
6 Patent, col. 2:26-40.) Nitinol is a well-known memory material used in medical devices. (*Id.*, col.
7 2:48-49.) The patent specification describes a Nitinol structure comprised of a "laser cut hypo tube
8 that expands upon inflation of the balloon, but collapses upon deflation of the balloon because of the
9 super-elastic properties of the Nitinol material rather than remain expanded in the deployed
10 condition, as would stents in general." (*Id.*, col. 2:36-40.) Specifically, the hypo tube is cut into a
11 structure having three to twelve "struts . . . with a pattern of radial and longitudinal bends." (*Id.*, col.
12 2:43-45.) The struts are wires, the cross-sectional shape of which may be round, square, or
13 triangular. (*Id.*; *id.*, col. 2:55-57.) The bends of the struts are "sinusoidal" in shape. (*Id.*, col. 2:50.)⁶
14 The sinusoidal bends in the struts are sized to accommodate "both radial and longitudinal expansion
15 of the [stent] in response to longitudinal and radial expansion of the balloon during inflation, so that
16 the [stent] maintains the balloon in its intended position during inflation." (*Id.*, col. 2:27-32; *see also*
17 *id.*, col. 2:53-54.) The stent also may feature one or more U-shaped circumferential connectors
18 which themselves accommodate balloon expansion. (*Id.*, col. 2:58-61, 3:35-49.)

19 Essentially, the '119 Patent describes a stent that expands as the balloon beneath it inflates
20 and shrinks as the balloon beneath it deflates. The specification describes how the parts of the '119
21 Device fit together:

22 The distal end of the hypo tube is adhered to the distal neck of the balloon or
23 the distal end of the catheter shaft, and the proximal end of the hypo tube is
24 either attached to the proximal neck of the balloon or to the proximal end of
the catheter shaft. The struts may be attached to the working region of the
balloon to assist the hypo tube in staying with the balloon as it inflates and

25 _____
26 ⁵ A luer hub is standardized fitting used in medical devices to make a leak-free connection
between one device's male part and a mating female part.

27 ⁶ The parties' initial claim construction briefs sought construction of the term "sinusoidal."
28 AngioScore's proposed construction was "generally S-shaped." Defendants' proposed construction
was "a succession of waves or curves with a reversing direction." (Pl. CC Brief at 7.)

1 deflates, and an adhesive, such as a cyanoacrylate adhesive, may be used to
2 tack the struts down onto balloon at various points.
3 ('119 Patent, col. 2:61-3:3 (references to figures omitted).) The specification also contains
4 mathematical formulas that specify that the "total length of the U-shaped connectors . . . must be
5 greater than the circumference of the inflated balloon." (*Id.*, col. 3:11-13.)

6 The '119 Patent has nine claims. The latter eight all depend on the first. As a result, if
7 Chocolate does not infringe claim 1, it does not infringe the '119 Patent. Claim 1 provides:

8 An angioplasty balloon catheter comprising:

9 a catheter shaft carrying an inflatable/deflatable balloon having a proximal end
10 and a distal end; and

11 a non-deployable radially expandible stent comprising a hypo tube disposed
12 over the balloon and comprising a proximal end; a distal end; and at least
13 three longitudinally aligned, radially-spaced struts, wherein each strut
14 extends from the proximal *end* to the distal *end* and prior to radial
15 expansion has one or more bends that allow *longitudinal expansion* of the
16 strut to accommodate radial expansion of the stent upon inflation of the
17 balloon; wherein the distal end of the hypo tube is *attached* to the distal
18 end of the catheter shaft and the proximal end of the tube is *attached* to the
19 proximal end of the catheter shaft and the stent is made of a material
20 having a memory so that the stent radially collapses and the struts
21 longitudinally shorten upon deflation of the balloon.

22 ('119 Patent, Claim 1 (disputed terms in bold italics).)

23 **II. CLAIM CONSTRUCTION**

24 **A. LEGAL FRAMEWORK**

25 Defendants' motion for summary judgment of non-infringement of claim 1 of the '119 Patent
26 requires the Court to undertake "a two-step analysis: (1) claim construction to determine the scope
27 and meaning of the claims asserted to be infringed, and then (2) a determination of whether the
28 properly construed claims encompass the accused device." *Zelinski v. Brunswick Corp.*, 185 F.3d
1311, 1315 (Fed. Cir. 1999) (citing *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 976 (Fed.
Cir. 1995) *aff'd*, 517 U.S. 370 (1996)). Claim construction is a question of law for the Court rather
than the finder of fact. *Pitney Bowes, Inc. v. Hewlett-Packard Co.*, 182 F.3d 1298, 1304 (Fed. Cir.
1999). The Court turns now to that task.⁷

⁷ As the parties know, this Court "may engage in rolling claim construction, in which the court revisits and alters its interpretation of the claim terms as its understanding of the technology evolves." *Pfizer, Inc. v. Teva Pharm., USA, Inc.*, 429 F.3d 1364, 1377 (Fed. Cir. 2005) (quoting *Jack*

1 Words in a patent claim generally are given the "ordinary and customary meaning" that they
2 would have to a person of ordinary skill in the art. *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312
3 (Fed. Cir. 2005) (en banc). "Importantly, the person of ordinary skill in the art is deemed to read the
4 claim term not only in the context of the particular claim in which the disputed term appears, but in
5 the context of the entire patent, including the specification." *Id.* at 1313. "[T]he specification is
6 always highly relevant to the claim construction analysis. Usually, it is dispositive; it is the single
7 best guide to the meaning of a disputed term." *Id.* at 1315 (internal quotation marks omitted). "[T]he
8 specification may reveal a special definition given to a claim term by the patentee that differs from
9 the meaning it would otherwise possess. In such cases, the inventor's lexicography governs." *Id.* at
10 1316 (citation omitted). "In addition to consulting the specification, we have held that a court should
11 also consider the patent's prosecution history, if it is in evidence." *Id.* at 1317 (internal quotation
12 marks omitted). "[B]ecause the prosecution history represents an ongoing negotiation between the
13 PTO and the applicant, rather than the final product of that negotiation, it often lacks the clarity of
14 the specification and thus is less useful for claim construction purposes." *Id.* Extrinsic evidence may
15 also "be useful to the court, but it is unlikely to result in a reliable interpretation of patent claim scope
16 unless considered in the context of the intrinsic evidence." *Id.* at 1319.⁸

17 The claim construction dispute now at bar focuses on three terms that Defendants selected to
18 demonstrate Chocolate's non-infringement of the '119 Patent. All three terms reside in the '119
19 Patent's first claim. The Court addresses them in turn.

20
21 *Guttman, Inc. v. Kopykake Enters., Inc.*, 302 F.3d 1352, 1361 (Fed. Cir. 2002)); *see also Pressure*
22 *Products Med. Supplies, Inc. v. Greatbatch Ltd.*, 599 F.3d 1308, 1315-16 (Fed. Cir. 2010) (affirming
district court's revisiting of previous claim construction during trial).

23 ⁸ The Court **DENIES** AngioScore's motion to strike the testimony and declarations of
24 Defendants' purported expert witness, Dr. Amir Belson. (Dkt. No. 139.) Expert opinion is
25 admissible, if at all, to aid the trier of fact. *See* Fed. R. Evid. 702; *Daubert v. Merrell Dow Pharms.,*
26 *Inc.*, 509 U.S. 579, 589 (1993). Claim construction, however, is a question not of fact but of law.
27 Thus, during claim construction, courts enjoy "complete discretion" in using expert opinion; they
28 may opt to "adopt the expert legal opinion as [the court's] own, to find guidance from it, or to ignore
it entirely, or even to exclude it." *Markman*, 52 F.3d at 983. Here, Belson's opinions are offered for
purposes of claim construction only, and may serve as no more than an aid for the Court. The Court
decides whether to rely on Belson's opinions, or any extrinsic evidence. While it lies within the
Court's discretion to exclude Belson's opinions, the Court perceives no reason to do so.

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28

B. TERMS

1. "End"

Term	AngioScore's Proposed Construction	Defendants' Proposed Construction
a non-deployable radially expansible stent comprising a hypo tube disposed over the balloon and comprising a proximal end; a distal end; and at least three longitudinally aligned, radially-spaced struts, wherein each strut extends from the proximal <i>end</i> to the distal <i>end</i>	"extends from the end region of the stent nearest the surgeon to the end region of the stent farthest from the surgeon"	Ordinary and customary meaning
<p><u>The Court's Construction</u> "part of the device where the stent, catheter shaft, and balloon connect"</p>		

Claim 1 of the '119 Patent claims struts that extend from one end of the stent to the other end. The parties' dispute centers on whether the claim encompasses an end *region* or simply an *end*. AngioScore urges the former construction, basing its position primarily on language in the patent specification that describes the distinctive bends of the patented device as residing on the ends of the struts. Defendants, for their part, have abandoned previous proposed constructions and now submit that the term "end" may be given its ordinary and customary meaning.

As set forth below, the Court, based on its review of the claim language and patent specification, declines to adopt either parties' position, both of which are unclear and manifestly litigation-driven. While taking pains to avoid imputing to the '119 Patent a level of specificity not present in the claims themselves, the Court concludes that, in the disputed passage in Claim 1, someone of ordinary skill in the art would understand "end" to mean that "part of the device where the stent, catheter shaft, and balloon connect."

a. Claim Language and Specification

The Court begins with the language of the claims. Claim 1 describes an "angioplasty balloon catheter" comprised of two fundamental elements: "a catheter shaft" and "a non-deployable radially expansible stent." ('119 Patent, col. 4:11, 4:12, 4:14.) Focusing first on the catheter shaft, the patent describes it only as "carrying an inflatable/deflatable balloon having a proximal end and a distal end." (*Id.*, col. 4:13.) Looking next to the stent, the patent recites that it is comprised of "a hypo

1 tube disposed over the balloon" and has "a proximal end, a distal end, and at least three . . . struts,
2 wherein each strut extends from the proximal end to the distal end" (*Id.*, col. 4:14-19.) The
3 paragraph also recites that "the distal end of the hypo tube is attached to the distal end of the catheter
4 shaft and the proximal end of the tube is attached to the proximal end of the catheter shaft" The
5 disputed language is found in the part of the claim describing the stent—specifically, describing that
6 the stent has three struts which extend from one end of the stent to the other. Thus, the "end" at issue
7 here is not necessarily *any* end mentioned in the patent; rather, it is the "end" of the stent.

8 Nevertheless, the Court looks to the rest of the language of the claims for indicia of the
9 disputed term's meaning. The only claim to refer to an "end" other than claim 1 is claim 8. Though
10 not at issue here, the Court examines claim 8 with a view to the principle that a word used in one
11 claim may elucidate a different claim's use of the same word. *E.g.*, *Phillips*, 415 F.3d at 1314.

12 Claim 8 provides:

13 The angioplasty balloon of claim 1 wherein the struts of the stent are
14 connected to each other intermediate the proximal end and distal end by
15 connectors that include a bend which allows longitudinal expansion of the
16 connectors to accommodate radial expansion of the balloon.

16 ('119 Patent, col. 4: 41-45.) Claim 8, then, holds that the U-shaped circumferential connectors of the
17 specification (*see id.*, col. 2:58-61, 3:35-49) connect the struts somewhere between "the proximal end
18 and distal end" of, apparently, the struts. Claim 8's reference to the proximal and distal ends of the
19 struts sheds no additional light on where the end of the stent begins or, more pertinently, ends.

20 Reading the claim language in light of the purpose of the limitation set forth therein, *see*
21 *Cohesive Techs., Inc. v. Waters Corp.*, 543 F.3d 1351, 1368 (Fed. Cir. 2008), the most that can be
22 said of the term "end" is that it refers to the portions of the '119 Device's two fundamental elements
23 that join together. Claim 1 describes, first, a catheter shaft with two ends. It then describes a stent
24 with two ends. Lastly, it discloses that the catheter shaft and the stent attach to each other at their
25 corresponding ends. The claim language establishes that the end of the stent is the part that connects
26 to the corresponding part of the catheter shaft, and vice-versa. Scrutiny of the claim language alone
27 does not, however, establish a specific meaning for the term "end." The Court therefore proceeds to
28 examining the patent specification.

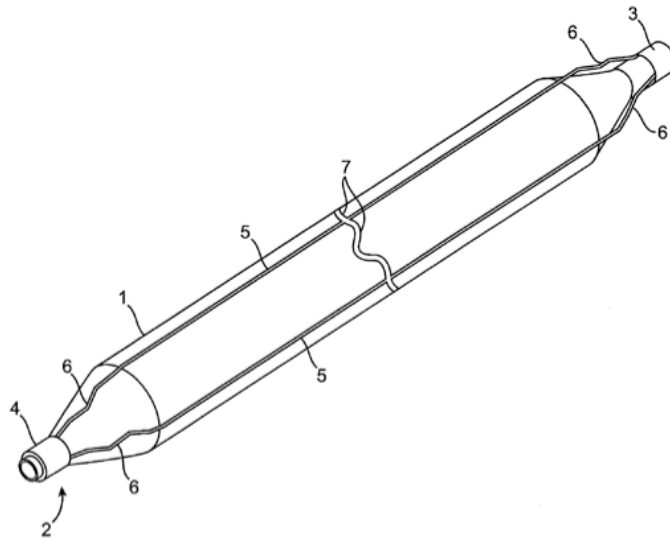
1 The patent specification describes the stent as having "a proximal end **3**, a distal end **4**, and,
2 *therebetween*, anywhere from 3-12 struts or wires **5** (depending on balloon size—but most likely 3-4
3 struts) with a pattern of radial and longitudinal bends." ('119 Patent, col. 2:41-45 (emphasis
4 supplied).) Because this sentence locates the struts *between* the proximal end and distal end of the
5 stent, it suggests a distinction between, on the one hand, the portion of the strut containing the
6 device's distinctive sinusoidal bends and, on the other, the "ends" of the stent. This distinction, if
7 accepted, would strongly contraindicate AngioScore's preferred construction, which conflates the
8 "end" of the stent with the bends in the struts.

9 The next paragraph further undermines AngioScore's proposed construction. Its first
10 sentence states: "As seen in FIGS. 1-4, each *end* of the linear, longitudinally aligned four struts **5** has
11 a sinusoidal bend **6** that allows the laser cut hypo tube to expand longitudinally when the balloon **1** is
12 inflated." ('119 Patent, col. 2:49-52 (emphasis supplied).) This language, on which AngioScore
13 heavily relies, places the bends at the end of the *strut*, not, as AngioScore suggests, the end of the
14 *stent*. AngioScore also points to the specification's use of the term "end" to refer to the necks at the
15 proximal and distal ends of the balloon. (*Id.*, col. 2:24-25.) In both instances, AngioScore reads the
16 specification's description of the ends of the *struts* or of the *balloon* to inform the meaning of "end"
17 as used in Claim 1, where it describes the ends of the *stent*. (Opp'n at 14; Pl. CC Brief at 15; Pl. CC
18 Reply Brief at 11.)⁹ The difficulty with AngioScore's position is that Claim 1 distinguishes between
19 the component parts of the stent such that the end of a strut is not necessarily the end of the stent.
20 Rather, the patent teaches that the struts are located *between*, and *connect*, the ends of the stent. The
21 ends of the struts are distinct from the ends of the stent, of which the struts form a part. (*See* '119
22

23 ⁹ AngioScore also proffers evidence purporting to show that, in patents not at issue here,
24 defendant Konstantino and defense expert witness Belson used the term "end" to describe a region.
25 (*See* Opp'n at 15.) This extrinsic evidence is inapposite, first, because neither Konstantino nor
26 Belson are inventors of the '119 Patent (Stowell Decl., Ex. F), and hence their uses of the term "end"
27 in other patents sheds no light on the proper construction of that term as used in the '119 Patent.
28 Second, the word "end" may carry different meanings in different contexts, so its meaning in one
patent does not necessarily explain its meaning in another. *See Cohesive Techs.*, 543 F.3d at 1368
("The word 'about' does not have a universal meaning in patent claims, and its meaning depends on
the technological facts of the particular case." (quoting *Pall Corp. v. Micron Separations, Inc.*, 66
F.3d 1211, 1217 (Fed. Cir. 1995) (alterations omitted))).

1 Patent, col. 4:19-22 (contrasting the stent and strut in that the struts expand *longitudinally* to
2 accommodate the stent's *radial* expansion).) The patent specification does not support equating the
3 bends of the struts with the end of the stent. Since this is the bedrock upon which AngioScore's
4 proposed construction rests, that construction founders.

5 The figures of the patent need not be relied on to reach this conclusion, but they support it.
6 The Court recognizes that the figures merely represent possible embodiments of the patent and
7 remains wary of inadvertently importing limitations from the figures into the patent claims
8 themselves. *See Computer Docking Station Corp. v. Dell, Inc.*, 519 F.3d 1366, 1374 (Fed. Cir.
9 2008); *Playtex Products, Inc. v. Procter & Gamble Co.*, 400 F.3d 901, 907-08 (Fed. Cir. 2005). That
10 said, the figures consistently identify the proximal end and distal end of the stent as a cylindrical
11 segment at the uttermost periphery of the device. The figure below, "a perspective view of an
12 inflated angioplasty balloon incorporating a non-deployable stent according to the present invention"
13 ('119 Patent, col. 1:31-33), labeled Figure 1 in the '119 Patent and Figure A here, is exemplary:



14
15
16
17
18
19
20
21
22
23
24 **Figure A**

25 In this figure, consistent with all the other embodiments, the stent has a proximal end
26 designated 3, a distal end designated 4, and struts designated 5. (*E.g.*, '119 Patent, col. 2:41-43.) The
27 balloon is designated 1 and the stent 2. (*E.g.*, *id.*, col. 2:11, 2:27.) The specification states that "each
28 end of the linear, longitudinally aligned four struts 5 has a sinusoidal bend 6." (*Id.*, col. 2:50-51.)

1 The bend is in the struts (5), not in the stent (2), of which the struts are a part. The figures enhance
2 the impression that claim 1's disputed instances of the term "end" refer to the ends of the hypo tube,
3 where the struts terminate and the catheter shaft and the stent attach to each other. The "end" of the
4 stent is therefore the part of the device where the stent, catheter shaft, and balloon connect.

5 The Court's construction, interpolated into the claim language, is consistent with the patent's
6 claims, written description, and figures; matches the patent's level of specificity; and would permit
7 the public (or, for that matter, a jury) to ascertain the meaning of "end" as used in the patent. The
8 disputed part of claim 1 reads as follows when the Court's construction (set in bold italics) is
9 interpolated:

10 An angioplasty balloon catheter comprising:

11 [. . .]

12 a non-deployable radially expansible stent comprising a hypo tube
13 disposed over the balloon and comprising a proximal end; a distal
14 end; and at least three longitudinally aligned, radially-spaced struts,
15 wherein each strut extends from the proximal ***part of the device
where the stent, catheter shaft, and balloon connect*** to the distal
***part of the device where the stent, catheter shaft, and balloon
connect*** [. . .] .

16 *b. The Parties' Arguments*

17 The Court can embrace neither AngioScore's proposed construction of "end region" nor
18 Defendants' proposal to give the term "end" its ordinary and customary meaning in the phrase "each
19 strut extends from the proximal end to the distal end." As to AngioScore's proposed construction,
20 the notion of an end "region" contains no limiting principle, that is, no way to determine where the
21 "end region" ends and the rest of the device begins. As such, it is unacceptably vague. It also is out
22 of step with the patent's own level of specificity, which distinguishes with reasonable care between
23 the particular elements of the invention and sub-elements thereof.

24 As to Defendants' proposal to use the term's ordinary and customary meaning, that meaning,
25 too, is unhelpfully vague and overbroad in light of the language of this patent. It bears noting that
26 Defendants previously advanced a construction of the phrase "extends from the proximal end to the
27 distal end" as "spans the entire length of the hypo tube." (Defs. CC Brief at 15; Defs. CC Reply at
28 10-11.) As AngioScore points out, Defendants adopted their current position only after their expert

1 conceded during his deposition that the struts do not, in fact, span the entire length of the hypo tube.
 2 (Opp'n at 15 (citing Dkt. No. 139-1 ("Hanle Decl."), Ex. 17, at 145:3-14).) The difficulty with
 3 Defendants' new suggestion to construe "end" with its ordinary and customary meaning is that doing
 4 so results in just as vague a meaning as AngioScore's proposed "end region" construction. Though
 5 semantically different, the terms are functionally equivalent. Thus, as was the case with "end
 6 region," the ordinary and customary meaning of "end" is unhelpful in defining with precision where
 7 any given end stops or starts. And, as was the case with AngioScore's proposed construction, the
 8 ordinary meaning of the term "end" is more general and imprecise than is the language of the '119
 9 Patent itself. The patent uses "end" primarily to distinguish the proximal side of the invention from
 10 the distal side of the invention. The term "end" has little meaning if decoupled from the notions of
 11 proximal or distal. To the extent that "end" has independent significance in the disputed passage in
 12 claim 1, it is as the part of the device where the stent, catheter shaft, and balloon connect. That is the
 13 construction that the Court adopts.¹⁰

14 2. "Longitudinal Expansion"

Term	AngioScore's Proposed Construction	Defendants' Proposed Construction
each strut . . . has one or more bends that allow <i>longitudinal expansion</i> of the strut to accommodate radial expansion of the stent upon inflation of the balloon surface	"elongation of the strut that decreases the initial bend in the strut"	"a growth in length of the strut along the axis of the catheter"
<u>The Court's Construction</u> "reshaping by straightening"		

21
 22 AngioScore contends that the term "longitudinal expansion" means "elongation of the strut
 23 that decreases the initial bend in the strut." Defendants contend that it means "a growth in length of
 24 the strut along the axis of the catheter." For the reasons set forth below, the Court construes the
 25 phrase "longitudinal expansion" to mean "reshaping by straightening."

26
 27 ¹⁰ Though the parties cite no prosecution history in connection with this term, the Court has
 28 reviewed the available prosecution history. The Court has located nothing that conflicts with the
 Court's construction of "end." On the contrary, the prosecution history reflects the inventor's reliance
 on the '119 Patent's attachment of the ends of the stent to the catheter shaft and balloon to overcome
 prior-art rejections. (See Dkt. No. 132 ("Stowell Decl."), Ex. N at 7, Ex. P at 2.)

1 straighten, which straightening achieves the limitation's purpose of accommodating balloon
2 expansion.

3 The Court's construction must give meaning to both words in the term "longitudinal
4 expansion." The Court turns to the latter term, "expansion," first. The claims, read in terms of the
5 specification, make plain that the "expansion" of the struts referred to in the patent is the
6 straightening of the struts' distinctive sinusoidal bends when the balloon inflates and applies force to
7 the interior of the struts. More specifically, the inflation of the working portion of the balloon
8 presses against the interior of the unbent medial or "working" segment of the struts; that outward
9 pressure moves the medial segment of the strut away from the bent ends of the strut, which, in
10 response, reshape into an at least somewhat straighter form. The word "expansion" in claim 1 refers
11 to reshaping of the strut by straightening.

12 The Court also addresses the word "longitudinal." Both sides acknowledge that, in the
13 nomenclature of the '119 Patent, the terms "longitudinal" and "radial" are opposed. The longitudinal
14 and radial dimensions are perpendicular to each other: the longitudinal direction aligns with the
15 longer side of a given element and the radial direction aligns with the shorter side. Defendants
16 contend that the descriptor "longitudinal" refers consistently throughout the patent to the direction
17 parallel to the axis of the catheter shaft, with the radial direction being perpendicular to that. Thus,
18 under Defendants' construction, when *any* element of the invention expands longitudinally, it
19 expands along the axis of the catheter shaft.

20 Defendants' position, however, contradicts claim 8. That claim uses "longitudinally" to refer
21 to the direction which, under Defendants' view, would be radial. Claim 8 describes the U-shaped
22 connectors that connect the struts together by encircling the stent crosswise, that is, perpendicular to
23 the long side of the stent. Claim 8 describes the bends in the U-shaped connectors as straightening
24 such that the connectors expand *longitudinally* to accommodate *radial* expansion of the stent.¹¹
25 Thus, claim 8 demonstrates that, in the '119 Patent, longitudinal and radial do not describe fixed
26 directions that apply to every element of the device, but rather directions that must be determined

27 ¹¹ Defendants averred at oral argument that the language of claim 8 was a mistake. (Tr. at
28 49:25-50:16.) As set forth herein, claim 8 is consistent with the rest of the patent. No evidence of
mistake appears before the Court.

1 with respect to a given element, with longitudinal and radial referring, respectively, to the longer and
2 shorter dimensions the element. It so happens that most of the elements of the '119 Device are
3 aligned parallel to the axis of the catheter shaft, and thus most of the references to longitude in the
4 '119 Patent refer to the dimension parallel to the axis of the catheter shaft. But claim 8, which
5 addresses the only element aligned perpendicular to the catheter shaft (the U-shaped connectors) uses
6 longitudinal to refer to the long side of the connectors. The connectors are aligned perpendicular to
7 the axis of the catheter shaft—that is, "radially," in Defendants' proposed construction. Claim 8
8 shows that Defendants' proposed construction cannot be correct. Claim 1's reference to "longitudinal
9 expansion" of the struts means that the expansion occurs in the direction parallel to the longer side of
10 the struts.

11 The Court's construction of "reshaping by straightening" encompasses this concept. Given
12 that the struts consist of metal wires, "straightening" necessarily means that when they expand, they
13 expand in a longitudinal direction. One skilled in the art would not mistake straightening of the
14 wire-like struts for a "radial" expansion of the strut, that is, a broadening of the girth of the wire. Nor
15 would lay jurors. The term "longitudinal expansion" means "reshaping by straightening."¹²

16 *b. The Parties' Arguments*

17 Both parties invoke the notion of lengthening in their proposed constructions, AngioScore by
18 saying that the struts "elongat[e]" and Defendants by proposing that longitudinal expansion means a
19 "growth in the length of the strut." The claim language, however, does not support the notion that
20 the struts lengthen, elongate, or grow. Such language inaccurately suggests that the metal wires
21 which comprise the struts somehow stretch, like a piece of putty being tugged from both ends. Not
22 so. Nothing in the patent indicates that the struts *themselves* increase in length. On the contrary,
23 claim 2 expressly provides that the stent and, hence, the struts, of the '119 Device are "made of an
24 alloy of nickel and titanium." (*Id.*, col. 4:30-31.) Nothing in the patent suggests this metal wire
25 somehow increases in length. Rather, when the working portion of the balloon expands and applies
26 radial pressure to the interior of the struts, the curvature of the bends in the struts decreases. The

27 ¹² As was the case with the previous term, the parties supplied no argument concerning the
28 prosecution history's impact, if any, on the construction of the term "longitudinal expansion," and the
Court's review of the prosecution history reveals nothing germane. (*See* Stowell Decl., Exs. O, P.)

1 effect is to permit the stent to increase in volume when pushed by the expanding surface of the
 2 balloon, and to do so without the struts' endpoints changing position in relation to the balloon. The
 3 struts of the '119 Device change shape, but are not claimed to *grow*. The parties' proposed claim
 4 constructions risk confusion. The "longitudinal expansion" referred to in the patent is a reshaping of
 5 the struts by straightening.

6 3. "Attached"

Term	AngioScore's Proposed Construction	Defendants' Proposed Construction
the distal end of the hypo tube is <i>attached</i> to the distal end of the catheter shaft and the proximal end of the tube is <i>attached</i> to the proximal end of the catheter shaft	"directly or indirectly attached"	"fixed directly to"
<u>The Court's Construction</u> Ordinary and customary meaning		

13 Claim 1 recites that, in the claimed stent, "the distal end of the hypo tube is **attached** to the
 14 distal end of the catheter shaft and the proximal end of the tube is **attached** to the proximal end of
 15 the catheter shaft" ('119 Patent, col. 4:23-26 (emphasis supplied).) The parties ground their
 16 proposed constructions of "attached" in the prosecution history. Defendants base their proposed
 17 construction ("fixed directly to") primarily on statements made during prosecution which, they say,
 18 triggered application of the doctrine of prosecution history estoppel. AngioScore responds that
 19 Defendants misreads the prosecution history and that neither it, the claim language, nor the
 20 specification requires direct, surface-to-surface attachment of the ends of the hypo tube to the ends of
 21 the catheter shaft. The Court ultimately concurs with AngioScore, though the Court declines to
 22 adopt AngioScore's proposed construction of "directly or indirectly attached." Rather, the Court
 23 relies on the plain meaning of the term "attached." Nothing before the Court suggests that the patent
 24 uses "attached" as a technical term of art requiring "elaborate interpretation." *See Brown v. 3M*, 265
 25 F.3d 1349, 1352 (Fed. Cir. 2001)

26 a. Claim Language and Specification

27 Claim 1 recites that "the distal end of the hypo tube is attached to the distal end of the
 28 catheter shaft and the proximal end of the tube is attached to the proximal end of the catheter shaft."

1 ('119 Patent, col. 4:22-25.) The claim is silent as to any distinction between direct versus indirect
2 attachment. Accordingly, the Court turns to the patent's specification, which provides, in pertinent
3 part:

4 The distal end 4 of the hypo tube is adhered to the distal neck of the
5 balloon or the distal end of the catheter shaft, and the proximal end 3 of the
6 hypo tube is either attached to the proximal neck of the balloon or to the
7 proximal end of the catheter shaft. The struts 5 may be attached to the
8 working region of the balloon 1 to assist the hypo tube in staying with the
9 balloon as it inflates and deflates, and an adhesive, such as a cyanoacrylate
adhesive, may be used to tack the struts down onto balloon at various points.

 Catheter shafts to which the balloon and laser cut hypo tube are attached
can have diameters ranging from 2.5 F to 8 F, and the distal end may be
tapered and slightly less in diameter than the proximal end.

10 ('119 Patent, col. 2:61-3:7.)

11 AngioScore argues that, in view of the specification's statement that the ends of the hypo tube
12 may adhere or attach to the corresponding "neck of the balloon" *or* to the corresponding end of the
13 catheter shaft, "[a] person of skill in the art would understand that the ends of the hypo tube need not
14 be attached *directly* to the catheter shaft, and may be attached, for example, via the legs of the
15 balloon, the non-expanding portions of the balloon proximal and distal to the inflatable portion of the
16 balloon that are attached to the catheter shaft." (Opp'n at 21; *see also* Pl. CC Brief at 19 (same
17 principle).) Defendants counter that the claims and specification disclose only one method of
18 attachment—namely, adhesion—and that, because adhesion requires direct contact between two
19 surfaces, "the specification's use of adhesion as a form of attachment supports Defendants'
20 construction." (Defs. CC Response at 15.)

21 While Defendants are correct to say that the only method of attachment specified therein is
22 adhesion, the specification does not provide that attachment *must* occur via adhesion. The language
23 in the specification falls short of the sort of precision and specificity needed to impute a limitation
24 not present in the language of the claims themselves. The specification does not conclusively
25 establish that attachment must be direct.

26 *b. Prosecution History*

27 Alone among the three disputed terms, the parties argue from the prosecution history for the
28 term "attached." Defendants argue that the inventor of the '119 Patent, during prosecution,

1 disclaimed all but direct attachment in overcoming prior-art rejections based on U.S. Patent No.
2 6,053,913 ("Tu") in view of U.S. Patent No. 6,106,548 ("Roubin"). Defendants invoke the doctrine
3 of prosecution disclaimer to narrow the scope of the '119 Patent's claim that the ends of the hypo
4 tube are "attached" to the catheter shaft to only those attachments where the elements are "fixed
5 directly to" each other.

6 "The doctrine of prosecution disclaimer 'protects the public's reliance on definitive statements
7 made during prosecution' by 'precluding patentees from recapturing through claim interpretation
8 specific meanings [clearly and unmistakably] disclaimed during prosecution.'" *Computer Docking*
9 *Station*, 519 F.3d at 1374-75 (quoting *Omega Eng'g, Inc. v. Raytek Corp.*, 334 F.3d 1314, 1323-24
10 (Fed. Cir. 2003)) (alteration in original). That is, it prevents claims from being construed "one way
11 in order to obtain their allowance and in a different way against accused infringers." *Id.* at 1375
12 (quoting *Chimie v. PPG Indus.*, 402 F.3d 1371, 1384 (Fed. Cir. 2005)). Under the doctrine of
13 prosecution disclaimer, patentees limit the scope of a claim when they make "a clear and
14 unmistakable disavowal of scope during prosecution." *Id.* (quoting *Purdue Pharma L.P. v. Endo*
15 *Pharms., Inc.*, 438 F.3d 1123, 1136 (Fed. Cir. 2006)). Such disavowal may occur where a patentee
16 "clearly characteriz[es] the invention in a way to try to overcome rejections based on prior art." *Id.*
17 However, "because the prosecution history represents an ongoing negotiation between the PTO and
18 the applicant, rather than the final product of that negotiation, it often lacks the clarity of the
19 specification" *Phillips*, 415 F.3d at 1317. This ambiguity cabins the application of the
20 prosecution disclaimer doctrine to "unambiguous disavowals" only. *See Grober v. Mako Products,*
21 *Inc.*, 686 F.3d 1335, 1341 (Fed. Cir. 2012), *reh'g denied* (Sept. 14, 2012). Alleged statements of
22 disavowal must be "both so clear as to show reasonable clarity and deliberateness . . . and so
23 unmistakable as to be unambiguous evidence of disclaimer." *Omega Eng'g*, 334 F.3d at 1325
24 (citations omitted).

25 Here, the patent examiner rejected an earlier iteration of the '119 Patent as obvious over Tu in
26 view of Roubin. (Stowell Decl., Ex. K at 2.) The examiner stated that Tu taught a "stent having
27 proximal and distal ends adapted to attach to a shaft of the balloon catheter" (*Id.*) In response,
28

1 the patentee distinguished Tu, which disclosed a stent that attached to the balloon at the proximal end
2 and, distally, either floated over the balloon or attached directly to its surface. The patentee argued:

3 In particular, it is now set forth that the stent has "proximal and distal ends
4 adapted to be attached to a shaft of the balloon catheter." Such attachment is
5 shown in the drawings, for example in Fig. 1, where proximal and distal ends
6 3 and 4 are adapted to be placed over the catheter shaft. *The teachings of Tu,*
7 *in contrast, clearly show that the stent either floats or is somehow attached to*
8 *the balloon and is not attached on to the catheter shaft, particularly*
9 *terminating well before the distal of the balloon.*

10 As the purpose of the present invention, in contrast to that of Tu et al., is to
11 provide a scoring/gripping structure which can be placed over a variety of
12 balloon catheters, which structure is not intended to be attached to the surface
13 of the balloon, *it is important to have the means for attaching the structure to*
14 *the catheter shaft.* In contrast, Tu et al. describes an electrode structure which
15 is intended to be somehow formed or conformed over the balloon and which is
16 not taught or suggested ever to be attached directly to the catheter shaft,
17 particularly at the distal end.

18 (*Id.*, Ex. J at 6 (emphases supplied).)

19 In later correspondence, the patentee argued:

20 The Examiner will appreciate that having the *direct attachment* to the catheter
21 shaft on the proximal and distal sides of the balloons will help assure the
22 proper alignment of the stent over the balloon as the balloon is expanded and
23 collapsed.

24 (*Id.*, Ex. L at 5 (emphasis supplied).)

25 Defendants argue that, by these statements, the inventor disclaimed any attachment between
26 the stent and the catheter shaft except for direct, surface-to-surface attachment. (*See* Defs. CC
27 Response at 15; Motion at 18-20; Reply at 11-14.) The Court is not persuaded. The statements
28 made by the patentee do not rise to the level of a clear and unmistakable disavowal of indirect
attachment. Rather, the statements contrast the invention of the '119 Patent with Tu, in that the
former requires attachment of both ends of the balloon to the catheter shaft, while the latter requires
attachment at only one end. The patentee's use of the word "direct" does not clearly or unmistakably
disavow all forms of attachment other than surface-to-surface attachment; rather, the patentee
disavowed attachments occurring somewhere other than on the ends of the balloon. At most, the
patent history is ambiguous on this point. It does not support application of prosecution history
estoppel. Thus, *AngioScore* is entitled to the full breadth of the claim term "attached."

1 That said, the Court declines to adopt AngioScore's proposed construction of "directly or
2 indirectly attached." Rather, the Court gives the term "attached" its ordinary and customary
3 meaning. The Court perceives the plain and ordinary meaning of "attached" to be more harmonious
4 with the patent, and somewhat narrower, than AngioScore's proposed construction. AngioScore's
5 proposal expressly contemplates indirect attachment, and, in doing so, invites arguments as to how
6 attenuated or "indirect" an attachment may become before it no longer "attaches." In contrast, the
7 plain and ordinary meaning, by refraining from emphasizing the notion of indirectness, more
8 accurately captures the term's emphasis on connection and junction. *E.g., Merriam-Webster*
9 *Dictionary*, <http://www.merriam-webster.com/dictionary/attached> (last accessed June 22, 2014).

10 For the reasons set forth above, the Court gives "attached," as used in claim 1, its plain and
11 ordinary meaning.

12 C. THE COURT'S CONSTRUCTIONS

13 Term	13 Construction
14 end	"part of the device where the stent, catheter 15 shaft, and balloon connect"
16 longitudinal expansion	"reshaping by straightening"
17 attached	Ordinary and customary meaning

19 III. SUMMARY JUDGMENT

20 Having construed the claims, the Court proceeds to the second step of the infringement
21 analysis, namely, determining "whether the properly construed claims read on the accused device."
22 *Pitney Bowes*, 182 F.3d at 1304.

23 A. LEGAL FRAMEWORK

24 1. Summary Judgment Principles

25 Summary judgment is appropriate if, viewing the evidence and drawing all reasonable
26 inferences in the light most favorable to the nonmoving party, there are no genuine disputed issues of
27 material fact, and the movant is entitled to judgment as a matter of law. Fed. R. Civ. P. 56(a);
28 *Celotex Corp. v. Catrett*, 477 U.S. 317, 322 (1986). At the summary judgment stage, the Court "does

1 not assess credibility or weigh the evidence, but simply determines whether there is a genuine factual
2 issue for trial." *House v. Bell*, 547 U.S. 518, 559-60 (2006). A fact is "material" if it "might affect
3 the outcome of the suit under the governing law," and a dispute as to a material fact is "genuine" if
4 there is sufficient evidence for a reasonable trier of fact to decide in favor of the nonmoving party.
5 *Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 248 (1986). Mere conclusory, speculative testimony
6 in affidavits and moving papers is insufficient to raise genuine issues of fact and defeat summary
7 judgment. *See Thornhill Publ'g Co. v. GTE Corp.*, 594 F.2d 730, 738 (9th Cir. 1979).

8 The moving party bears the initial burden of identifying those portions of the pleadings,
9 discovery, and affidavits that demonstrate the absence of a genuine issue of material fact. *Celotex*,
10 477 U.S. at 323. Where the moving party will have the burden of proof on an issue at trial, it must
11 affirmatively demonstrate that no reasonable trier of fact could find other than for the moving party,
12 but on an issue for which the opposing party will have the burden of proof at trial, the party moving
13 for summary judgment need only point out "that there is an absence of evidence to support the
14 nonmoving party's case." *Id.* at 325; *accord Soremekun v. Thrifty Payless, Inc.*, 509 F.3d 978, 984
15 (9th Cir. 2007). Once the moving party meets its initial burden, the nonmoving party must set forth,
16 by affidavit or as otherwise provided in Rule 56, "specific facts showing that there is a genuine issue
17 for trial." *Liberty Lobby*, 477 U.S. at 250 (internal quotation marks omitted). If the nonmoving
18 party's "evidence is merely colorable, or is not significantly probative, summary judgment may be
19 granted." *Id.* at 249-50 (internal citations omitted).

20 **2. Patent Infringement Principles**

21 While claim construction is a question of law, infringement is a question of fact. *Freedman*
22 *Seating Co. v. Am. Seating Co.*, 420 F.3d 1350, 1357 (Fed. Cir. 2005). "Thus, summary judgment of
23 non-infringement can only be granted if, after viewing the alleged facts in the light most favorable to
24 the non-movant, there is no genuine issue whether the accused device is encompassed by the claims."
25 *Pitney Bowes*, 182 F.3d at 1304.

26 "There are two types of infringement: literal infringement . . . and infringement under the
27 doctrine of equivalents." *Pozen Inc. v. Par Pharm., Inc.*, 696 F.3d 1151, 1167 (Fed. Cir. 2012). "To
28 establish literal infringement, every limitation set forth in a claim must be found in an accused

1 product, exactly." *Southwall Technologies, Inc. v. Cardinal IG Co.*, 54 F.3d 1570, 1575 (Fed. Cir.
2 1995). "To find infringement under the doctrine of equivalents, any differences between the claimed
3 invention and the accused product must be insubstantial." *Brilliant Instruments, Inc. v. GuideTech,*
4 *LLC*, 707 F.3d 1342, 1346-47 (Fed. Cir. 2013) (citing *Graver Tank & Mfg. Co. v. Linde Air Products*
5 *Co.*, 339 U.S. 605, 608 (1950)). "One way of proving infringement under the doctrine of equivalents
6 is to show, for each claim limitation, that the accused product 'performs substantially the same
7 function in substantially the same way with substantially the same result as each claim limitation of
8 the patented product.'" *Id.* at 1347 (quoting *Crown Packaging Tech., Inc. v. Rexam Beverage Can*
9 *Co.*, 559 F.3d 1308, 1312 (Fed. Cir. 2009)).

10 Broad application of the doctrine of equivalents is limited, however, by prosecution history
11 estoppel. *Conoco, Inc. v. Energy & Env'tl. Int'l, L.C.*, 460 F.3d 1349, 1363 (Fed. Cir. 2006). It does
12 so "by barring an equivalents argument for subject matter relinquished when a patent claim is
13 narrowed during prosecution." *Id.* (citing *Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co.*,
14 535 U.S. 722, 733-34 (2002)). The Federal Circuit has recognized two types of prosecution history
15 estoppel: (1) amendment-based estoppel, which occurs when the patentee makes "a narrowing
16 amendment to the claim," and (2) argument-based estoppel, which occurs when the patentee
17 "surrender[s] claim scope through argument to the patent examiner." *Id.* (citing *Deering Precision*
18 *Instruments, LLC v. Vector Distrib. Sys., Inc.*, 347 F.3d 1314, 1324 (Fed. Cir. 2003)).

19 As to amendment-based estoppel, "[w]hen a patentee makes a narrowing amendment to a
20 claim, the patent holder has the burden to demonstrate that the reason for the amendment was
21 unrelated to patentability (e.g., to avoid prior art)." *Id.* (citing *Warner-Jenkinson Co. v. Hilton Davis*
22 *Chem. Co.*, 520 U.S. 17, 33 (1997)). "When the record lacks explanation for the amendment,
23 [courts] presume that the PTO had a substantial reason related to patentability for including the
24 limiting element added by amendment." *Id.* (internal quotation marks omitted). The presumption is
25 rebuttable. *See id.* at 1363-64.

26 As to argument-based estoppel, the party invoking that doctrine must show "a clear and
27 unmistakable surrender of subject matter." *Id.* at 1364 (quoting *Deering Precision Instruments*, 347
28 F.3d at 1326). Unlike with amendment-based estoppel, no presumption of surrender applies. *Id.*

1 "The relevant inquiry is whether a competitor would reasonably believe that the applicant had
2 surrendered the relevant subject matter." *Id.* (quoting *Cybor Corp. v. FAS Technologies, Inc.*, 138
3 F.3d 1448, 1457 (Fed. Cir. 1998) (en banc)). Whether amendment-based or argument-based estoppel
4 is invoked, "[p]rosecution history estoppel is a legal question" *Cybor Corp.*, 138 F.3d at 1460.

5 **B. APPLICATION TO PATENT-IN-SUIT**

6 Both parties have grounded their summary judgment arguments in their preferred claim
7 constructions, which the Court has declined to adopt. Nevertheless, the Court has reviewed the
8 evidence to determine whether it entitles Defendants to a summary judgment of non-infringement
9 such that it would dispose of all disputed limitations. As set forth below, the Court concludes that it
10 does not. However, Defendants do establish the following: one, there is no literal infringement of
11 the challenged limitation that "each strut extends from the proximal end to the distal end," and, two,
12 AngioScore may not rely on the doctrine of equivalents to prove infringement of the disputed terms
13 "longitudinal expansion" or "attached."

14 **1. "Each Strut Extends from the Proximal End to the Distal End"**

15 Both the invention of the '119 Patent and the accused Chocolate device have struts that
16 extend along the longitudinal side of the balloon. (*Compare* '119 Patent, claim 1 (Figure A above)
17 *with* Dkt. No. 133-3 ("Konstantino Decl."), Ex. A (image of Chocolate device; Figure B below), Ex.
18 B (engineering schematic of Chocolate device (under seal), Ex. C (same (under seal))).¹³ Similar to

19 ¹³ Pursuant to Civil Local Rule 79-5(b), the Court **GRANTS** Defendants' motion to seal
20 exhibits B and C of the Konstantino Declaration, which consist of trade-secret engineering
21 schematics of the Chocolate device. (Dkt. No. 133.)

22 The Court **DENIES WITHOUT PREJUDICE** AngioScore's motion to seal various other exhibits.
23 (Dkt. No. 138.) The declaration submitted by Defendants, as the designating party, in support of the
24 motion to seal does not specify which portions of the exhibits are sealable, and instead asks to have
25 them sealed in their entirety. *See* Civ. L.R. 79-5(b) ("The request must be narrowly tailored to seek
26 sealing only of sealable material . . ."). Moreover, the declaration fails to articulate compelling
27 reasons that would override the public's right of access, and instead offers bare allegations of harm.
28 That does not suffice. *See In re Midland Nat. Life Ins. Co. Annuity Sales Practices Litig.*, 686 F.3d
1115, 1119 (9th Cir. 2012); *see also Dugan v. Lloyds TSB Bank, PLC*, 12-CV-02549-WHA NJV,
2013 WL 1435223, at *2 (N.D. Cal. Apr. 9, 2013) (requiring "particularized showing" rather than
"[b]road allegations of harm, unsubstantiated by specific examples or articulated reasoning," to
satisfy even the standard applicable to nondispositive motions). The motion is therefore denied
without prejudice to filing of amended submissions, consistent with the Court's concurrently issued
Order Denying without Prejudice Motions to Seal.

1 the '119 Device, the Chocolate device consists, in relevant part, of a metal, wire-like structure
2 disposed over an angioplasty balloon catheter. The metal structure of Chocolate is called a
3 "constraining structure," so dubbed because its function is to constrain the balloon upon expansion
4 such that the balloon bulges out past the limits of the metal structure to form "pillows"; these pillows,
5 in turn, are the portion of the device that compresses plaque. The purported purpose of the pillows,
6 and goal of the Chocolate device, is to diffuse pressure over a wider surface area and thus reduce
7 vessel trauma. (Konstantino Decl. ¶¶ 4-7, 14.)



8
9
10
11
12
13
14
15
16
17
18
19 *a. Literal Infringement*

20 AngioScore argues that, under its proposed construction of "end" as "end region" and under
21 the plain meaning of the claim language, the Chocolate device literally infringes the '119 Patent
22 because the struts of Chocolate extend from end *region* to end *region*. (Opp'n at 16.) However,
23 AngioScore acknowledges that, as seen in Figure B, the struts of the Chocolate device do not extend
24 from the extreme endpoint of one side to the extreme endpoint of the other side. Rather, Chocolate's
25 struts extend from the extreme endpoint of one side to the "end region" of the other side. (Dkt. No.
26 140-2 at 1; *see also* Konstantino Decl., Exs. B & C.)

27 Defendants contend that Chocolate does not literally infringe because the struts of Chocolate
28 do not each extend the entire length of the constraining structure. (Motion at 11-12; Reply at 2-3.)

1 Though the Court has not adopted Defendants' suggestion to construe the term "end" according to its
2 ordinary and customary meaning for one skilled in the art, the Court concludes that Defendants are
3 ultimately correct that Chocolate does not literally infringe. As AngioScore admits (Opp'n at 16), the
4 struts of the Chocolate device do not include the "end segments" that would allow them to extend
5 from the end of the device to the other, assuming that Chocolate has ends in the sense that the '119
6 Patent does, i.e., a part where the device's stent, catheter shaft, and balloon connect.¹⁴ Further, as
7 AngioScore and its expert acknowledge, the portion "missing" from Chocolate's struts is the portion
8 containing the '119 Patent's distinctive sinusoidal bend. (*Id.* at 16; Dkt. No. 138-6 ("Horzewski
9 Decl.") ¶¶ 18-20.) Thus, the struts of the Chocolate device do not satisfy claim 1's limitation that
10 "each strut extends from the proximal end to the distal end."

11 Defendants' Motion is **GRANTED** to the limited extent that it seeks summary judgment that
12 Chocolate does not literally infringe the '119 Patent's limitation of struts that extend from each "end"
13 of the stent.

14 *b. Availability of Doctrine of Equivalents*

15 AngioScore contends that Chocolate infringes the '119 Patent by the doctrine of equivalents.
16 Defendants' sole response is that AngioScore should be barred from asserting equivalence at all, for
17 two reasons: (1) AngioScore's alleged failure to provide "particularized testimony and linking
18 argument" in the Disclosure of Asserted Claims and Infringement Contentions (Stowell Decl., Ex. G
19 ("Disclosure")) filed pursuant to this District's Patent Local Rules 3-1 and 3-2, and (2) prosecution
20 history estoppel. As set forth below, the Court rejects both of Defendants' arguments and,
21 accordingly, concludes that Defendants fail to carry their burden of showing their entitlement to a
22 summary judgment of non-infringement.¹⁵

23 ///

24 ¹⁴ The Court assumes without deciding that Chocolate has "ends" in the sense that the '119
25 Device does. If Chocolate does not, then it would not infringe. *See, e.g., Cephalon, Inc. v. Watson*
26 *Pharm., Inc.*, 707 F.3d 1330, 1340 (Fed. Cir. 2013) ("To prove infringement, the patentee must show
that an accused product embodies *all* limitations of the claim" (emphasis supplied)).

27 ¹⁵ This conclusion does not carry with it any judgment, implicit or otherwise, as to whether
28 AngioScore demonstrates infringement under the doctrine of equivalents. That question is not before
the Court, as AngioScore did not file a cross-motion for summary judgment of infringement.

1 i. Compliance with Patent Local Rules

2 Defendants contend that, to rely on the doctrine of equivalents, AngioScore was obligated to
3 supply "particularized testimony and linking argument" in its Disclosure. (Motion at 13.) However,
4 the cases from which Defendants draw this principle do not speak to the showing required in an
5 initial disclosure of infringement contentions. Rather, they stand for the proposition that parties
6 asserting infringement must present particularized testimony and linking argument to carry their
7 ultimate *evidentiary* burden at trial or on summary judgment. *See Cephalon*, 707 F.3d at 1340
8 (affirming district court's finding of noninfringement following a bench trial); *Am. Calcar, Inc. v.*
9 *Am. Honda Motor Co., Inc.*, 651 F.3d 1318, 1338-39 (Fed. Cir. 2011) (requirement of particularized
10 testimony and linking argument "applies in the summary judgment context"); *Lear Siegler, Inc. v.*
11 *Sealy Mattress Co. of Michigan, Inc.*, 873 F.2d 1422, 1426 (Fed. Cir. 1989) (finding that "the jury in
12 this case was not . . . guided" by particularized testimony and linking argument); *see also Texas*
13 *Instruments Inc. v. Cypress Semiconductor Corp.*, 90 F.3d 1558, 1566-67 (Fed. Cir. 1996)
14 (explaining how requirement of particularized testimony and linking argument both aids and
15 constrains "the fact-finder"). The principle identified by Defendants does not apply to AngioScore's
16 Disclosure, and thus reliance on it is misplaced.

17 The standard applicable to AngioScore's Disclosure is rooted in the Court's Patent Local
18 Rules. Patent Local Rule 3-1(e) requires infringement plaintiffs to state in their initial disclosures
19 "[w]hether each limitation of each asserted claim is alleged to be literally present or present under the
20 doctrine of equivalents in the Accused Instrumentality." Patent L.R. 3-1(e). A general principle
21 emerges from the cases applying this rule: an infringement plaintiff does not satisfy its Rule 3-1(e)
22 disclosure obligations merely by stating in conclusory fashion that the doctrine of equivalents applies
23 to a particular limitation. *E.g., CSR Tech. Inc. v. Freescale Semiconductor*, C-12-02619 RS JSC,
24 2013 WL 503077, at *8 (N.D. Cal. Feb. 8, 2013) (a "boilerplate recitation is insufficient under Rule
25 3-1(e)"); *Implicit Networks Inc. v. Hewlett-Packard Co.*, C 10-03746 SI, 2011 WL 3954809, at *3
26 (N.D. Cal. Sept. 7, 2011) (plaintiff "cannot simply recite the doctrine of equivalents . . . without
27 providing specific analysis, on an element-by-element basis, as to its theory of why there is
28 infringement under the doctrine of equivalents"); *Rambus Inc. v. Hynix Semiconductor Inc.*, C-05-

1 00334 RMW, 2008 WL 5411564 (N.D. Cal. Dec. 29, 2008) ("The Patent Local Rules require a
2 limitation-by-limitation analysis, not a boilerplate reservation."). Rather, the infringement contention
3 must "provide reasonable notice to the defendant *why* the plaintiff believes it has a reasonable chance
4 of proving infringement." *Shared Memory Graphics LLC v. Apple, Inc.*, 812 F. Supp. 2d 1022, 1025
5 (N.D. Cal. 2010) (emphasis supplied). The Rule "does not necessarily require the patent holder to
6 produce evidence of infringement, but it must map specific elements of Defendants' alleged
7 infringing products onto the Plaintiff's claim construction." *Id.* Notably missing from these cases is
8 any discussion of a need to show that failure to disclose has resulted in prejudice. The reason why
9 seems apparent: one purpose of the Rule is "to require the party claiming infringement 'to crystallize
10 its theories of the case early in the litigation and *to adhere to those theories once disclosed.*" *Id.* at
11 1024 (quoting *Bender v. Advanced Micro Devices, Inc.*, C-09-1149 MMC(EMC), 2010 WL 363341,
12 at *1 (N.D. Cal. Feb. 1, 2010)) (emphasis supplied). Doing so, it is believed, helps to "hasten
13 resolution on the merits." *Id.* (quoting *FusionArc, Inc. v. Solidus Networks, Inc.*, C 06-
14 06760RMW(RS), 2007 WL 1052900 (N.D. Cal. Apr. 5, 2007)).

15 Here, AngioScore's Disclosure included its contention that the struts of Chocolate infringe the
16 '119 Patent's claim of "at least three longitudinally aligned, radially-spaced struts, wherein each strut
17 extends from the proximal end to the distal end." (Stowell Decl., Ex. G, at 6.) With respect to that
18 claim, AngioScore's Disclosure first described element by element the manner in which AngioScore
19 contends that Chocolate literally infringes. (*Id.*) It then recited:

20 Each limitation is literally present in the Chocolate Balloon Catheter.
21 However, to the extent Defendants allege that certain claim elements are not
22 present, AngioScore contends that any "missing" claim element is also met by
23 the Chocolate Balloon Catheter under the doctrine of equivalents. In
24 particular, Defendants' argument that the struts extend to only one end of the
25 hypo tube, but not both, because a small portion of the strut has been removed,
26 is an insubstantial difference.

27 (*Id.*)

28 AngioScore's Disclosure expressly articulates its theory of equivalence. The theory happens,
in this instance, to be a simple one: that while "a small portion of the strut has been removed," such
removal is inconsequential. Given the simplicity of the theory at hand, AngioScore's statement
satisfies the disclosure requirement imposed by Patent Local Rule 3-1(e), albeit minimally. (*See*

1 *infra* Section III.B.3.b (holding that different disclosure does not satisfy Rule 3-1.) Defendants
2 knew, or should have known, upon reading this part of the Disclosure why AngioScore thinks it can
3 demonstrate infringement of the '119 Patent by Chocolate with respect to the claimed struts.
4 Accordingly, AngioScore's statements in the Disclosure present no bar to AngioScore's reliance on
5 the doctrine of equivalents to prove infringement of the "end" limitation of claim 1.

6 ii. Prosecution History Estoppel

7 Defendants next argue that AngioScore may not assert the doctrine of equivalents because of
8 a narrowing amendment during prosecution. Specifically, Defendants contends that in order to avoid
9 prior art the patentee of the '119 Patent introduced a "specific structural limitation" that the strut was
10 required to "extend[] from," rather than "connect[]," the proximal end to the distal end of the stent.
11 (Stowell Decl., Ex. N, at 3.) Generally speaking, an amendment made during patent prosecution
12 estops the patentee from recapturing any subject matter disavowed by the amendment. It follows
13 that, for estoppel to arise, there must be some appreciable disavowal of subject matter. *See Festo*
14 *Corp.*, 535 U.S. at 736-37 (distinguishing between "narrowing amendments," which give rise to
15 estoppel, and merely "cosmetic" amendments, which do not). Thus, "[a] narrowing amendment may
16 occur when a preexisting claim limitation is narrowed by amendment or when a new claim limitation
17 is added by amendment." *Medtronic Navigation, Inc. v. Brainlab Medizinische Computersystems*
18 *GMBH*, 417 F. Supp. 2d 1188, 1195 (D. Colo. 2006) aff'd sub nom. *Medtronic Navigation, Inc. v.*
19 *BrainLab Medizinische Computersysteme GmbH*, 222 F. App'x 952 (Fed. Cir. 2007) (citing
20 *Honeywell Int'l v. Hamilton Sundstrand Corp.*, 370 F.3d 1131, 1141 (Fed. Cir. 2004) (en banc)).

21 Here, during prosecution of the '119 Patent and following a prior-art rejection over Tu, the
22 patentee amended the claim that would eventually become claim 1 of the '119 Patent. The claim was
23 amended in a variety of ways, including by replacing the word "connecting" with the words "extends
24 from" (set in boldface below). The amendments are set forth below with additions underlined and
25 deletions struck through:

26 An angioplasty balloon catheter comprising: [. . .]

27 a non-deployable stent comprising a hypo tube disposed over ~~adapted to be~~
28 ~~secured to the balloon~~ and comprising a proximal end; a distal end; at least
~~three linear~~, longitudinally aligned, radially-spaced struts, wherein each

1 strut **extends from connecting** the proximal end to the distal end and has,
2 each strut having one or more bends that allow expansion of the strut to
3 accommodate the inflation of the balloon; wherein the distal end of the
4 hypo tube is attached to the distal end of ~~and the stent having proximal and~~
5 ~~distal ends comprising rings which are adapted to attach to the catheter~~
6 ~~shaft and the proximal end of the tube is attached to the proximal end of~~
7 ~~the catheter shaft at the proximal and distal ends of the balloon on the~~
8 ~~balloon catheter and the stent is being made of a material having a memory~~
9 so that the stent collapses upon deflation of the balloon.

6 (Stowell Decl., Ex. N, at 3.)

7 Defendants argue that the replacement of "connecting" with "extends from" introduced a
8 "specific structural limitation" that "narrowed the claim." (Motion at 13.) The Court disagrees.
9 First, the amendment did not introduce a structural limitation, for the claim already contained one,
10 namely, that the struts extended from one end of the stent to the other. Second, the concept of
11 "extends from" is not appreciably narrower than the concept of "connecting." Defendants argue in
12 their Reply brief that "if the amendment was necessary to avoid the Tu patent" then the amendment
13 must have been meaningful (Reply at 4), but they articulate no reason why the amendment would
14 have been necessary to avoid the Tu patent. Defendants rely instead on the sheer number of
15 amendments to the claim language. The number of amendments alone does not illuminate why the
16 amendments were necessary to avoid Tu, if they were. Defendants do not persuade that amendment-
17 based estoppel applies here because, though amendment occurred, they fail to demonstrate either that
18 the amendments narrowed the claim or that they added a new limitation or claim term.

19 Having concluded that neither of Defendants' proffered grounds for estopping AngioScore
20 from invoking the doctrine of equivalents applies, the Court **DENIES** Defendants' motion for
21 summary judgment of non-infringement of the '119 Patent's limitation that "each strut extends from
22 the proximal end to the distal end" of the strut.

23 **2. "Longitudinal Expansion of the Strut"**

24 Defendants move for summary judgment of non-infringement with respect to the '119
25 Patent's limitation, in claim 1, that each strut, "prior to radial expansion" of the stent, "has one or
26 more bends that allow longitudinal expansion of the strut to accommodate radial expansion of the
27 stent upon inflation of the balloon." The Court has construed "longitudinal expansion" to mean
28 "reshaping by straightening" and, in so doing, rejected both Defendants' and AngioScore's proposed

1 constructions. For the reasons set forth below, Defendants fail to establish that the evidence now
2 before the Court entitles them to a declaratory judgment of non-infringement.

3 *a. Literal Infringement*

4 Defendants argue that the struts of Chocolate do not literally infringe because measurements
5 taken by Defendants' employees at the direction of defendant Konstantino purportedly demonstrate
6 that when Chocolate inflates, its struts, rather than expanding longitudinally, shrink. (Motion at 15;
7 Konstantino Decl. ¶¶ 10-15.) AngioScore presents its own set of measurements, taken by its expert,
8 which purport to show that the struts of Chocolate stretch, albeit by miniscule amounts. (Opp'n at
9 18; Dkt. No. 143 ("Levenston Decl.") ¶¶ 15-16 (claiming that precise measurements reveal that the
10 struts of Chocolate increase in length by approximately 0.2 percent during inflation, much of which
11 is due to a 1.1 percent increase in the length of the 10 millimeters closest to the end of the strut).)

12 Given the construction of "longitudinal expansion" to mean "reshaping by straightening," the
13 parties' dueling measurements ultimately bear a tangential relationship at most to the question of
14 whether Chocolate infringes that limitation. As explained in Section II.B.2, the '119 Patent does not
15 claim that the metal of the struts grows, elongates, or stretches. Rather, the '119 Patent claims struts
16 that reshape by straightening when exposed to the force generated by the inflating balloon beneath
17 the stent. The parties' measurements present a genuine dispute of fact, but the fact they dispute is
18 not, ultimately, a material fact that could support or ward off summary judgment. *See Liberty Lobby*,
19 477 U.S. at 247-48 ("[T]he mere existence of *some* alleged factual dispute between the parties will
20 not defeat an otherwise properly supported motion for summary judgment; the requirement is that
21 there be no *genuine* issue of *material* fact.") (emphases in original).

22 The pertinent question is whether the evidence before the Court, viewed in the light most
23 favorable to AngioScore, establishes Defendants' entitlement to a declaratory judgment of non-
24 infringement. With respect to literal infringement of the "longitudinal expansion" element of the
25 '119 Patent, the Court cannot say it does. The evidence does not establish that the struts of the
26 Chocolate device, "prior to radial expansion," contain no "bends that allow" reshaping by
27 straightening "to accommodate radial expansion of the" constraining structure of Chocolate "upon
28 inflation of the balloon." (119 Patent, col. 4:17-22.) Accordingly, Defendants' Motion is **DENIED** to

1 the extent it seeks a declaratory judgment that Chocolate does not literally infringe the "longitudinal
2 expansion" limitation of claim 1 of the '119 Patent.

3 *b. Availability of Doctrine of Equivalents and Patent Local Rules*

4 Defendants again contend that AngioScore may not offer equivalence arguments to prove
5 infringement of the "longitudinal expansion" limitation because "AngioScore did not even allege
6 infringement under the doctrine of equivalents for this limitation in its infringement contentions."
7 (Motion at 16; *see also* Reply at 10 (same).) In this instance, the Court agrees with Defendants. As
8 discussed in Section II.A.2.a, this Court's Patent Local Rules require early disclosure of an
9 infringement plaintiff's theories of infringement, sufficient to give defendants fair notice of the
10 reasons why the plaintiff believes the accused instrumentality infringes. *E.g.*, *CSR Tech.*, 2013 WL
11 503077, at *8.

12 Here, AngioScore listed the '119 Patent's "longitudinal expansion" claim among its
13 infringement contentions. (Stowell Decl., Ex. G, at p. 7 of internal exhibit A.) The contention gives
14 notice of AngioScore's theory of how the structures of Chocolate literally infringe the pertinent
15 limitations of the '119 Patent. (*Id.*) But nowhere in this contention does AngioScore invoke the
16 doctrine of equivalents, much less give Defendants notice of the reasons why it thinks Chocolate
17 infringes the "longitudinal expansion" limitation. (*See id.*) "The patent local rules were adopted by
18 this district in order to give infringement contentions and claim charts more 'bite.'" *OptimumPath,*
19 *LLC v. Belkin Int'l, Inc.*, C 09-01398 CW, 2011 WL 1399257 (N.D. Cal. Apr. 12, 2011) *aff'd*, 466 F.
20 App'x 904 (Fed. Cir. 2012) (quoting *MEMC Elec. Materials v. Mitsubishi Materials Silicon Corp.*, C
21 01-4925 SBA, 2004 WL 5363616 (N.D. Cal. Mar. 2, 2004)). Accordingly, the Court concludes that
22 AngioScore, because its disclosure does not give adequate notice of its equivalence theory, is barred
23 from asserting the doctrine of equivalents to prove that Chocolate infringes the '119 Patent's claim of
24 a stent that "prior to radial expansion has one or more bends that allow longitudinal expansion of the
25 strut to accommodate radial expansion of the stent upon inflation of the balloon." AngioScore may
26 advance only its disclosed contention of literal infringement.

27 Defendants Motion is **GRANTED** to the limited extent that it seeks a ruling that AngioScore is
28 barred from relying on the doctrine of equivalents to establish infringement of the "longitudinal

1 expansion" limitation in claim 1 of the '119 Patent. The Court need not and does not reach the
2 parties' arguments regarding prosecution history estoppel and vitiation.

3 **3. "Attached"**

4 With respect to the final limitation at issue, AngioScore alleges that Chocolate infringes both
5 literally and by equivalence the '119 Patent's limitation, in claim 1, that "the distal end of the hypo
6 tube is attached to the distal end of the catheter shaft and the proximal end of the tube is attached to
7 the proximal end of the catheter shaft." Having rejected both parties' proposed constructions of
8 "attached" and held that that term has no special meaning in the '119 Patent, the Court determines
9 that Defendants have failed to establish their entitlement to a summary judgment of non-
10 infringement with respect to the "attached" limitation. A genuine issue of material fact exists.

11 *a. Literal Infringement*

12 The parties agree that the wire structure of the Chocolate device attaches to the device's
13 catheter shaft only indirectly, in that the legs of the balloon, being fused directly to the catheter shaft,
14 intervene between the wire structure and the catheter shaft. (Motion at 20 (citing Konstantino Decl.
15 ¶¶ 16-18, Ex. C); Opp'n at 22 ("It is undisputed that the ends of the constraining structure are
16 attached to the 'legs' of the balloon, which are 'fused' by heat to the catheter shaft.")) Defendants
17 assert that this fact entitles them to summary judgment that Chocolate does not literally infringe the
18 '119 Patent's requirement of attachment between the hypo tube and the corresponding end of the
19 catheter shaft. As set forth in the Court's claim construction discussion, however, Defendants'
20 position relies on a limitation not present in the patent, namely, a limitation of direct, surface-to-
21 surface attachment with no intervening layers or connections. The term "attached" is broader than
22 that and nothing in the '119 Patent narrows it.

23 On the contrary, AngioScore presents evidence that once the balloon legs and the catheter
24 shaft of the Chocolate device are fused together, they become functionally indistinguishable.
25 Viewing that evidence in the light most favorable to AngioScore, and given the ordinary and
26 customary meaning of the term attached, which encompasses connection or junction by some amount
27 of intermediate means, the Court concludes that a genuine dispute exists as to whether the Chocolate
28 device literally infringes the '119 Patent's attachment limitation.

1 *b. Doctrine of Equivalents and Patent Local Rules*

2 Defendants argue that AngioScore may not invoke the doctrine of equivalents because it
3 failed to provide "particularized testimony and linking argument" in its infringement contentions.
4 While Defendants' argument misstates the relevant standard, *see supra* Section III.B.1.b.i, the Court
5 concludes that AngioScore's Disclosure statement did not give Defendants fair notice of its
6 equivalence theory. The portion of the Disclosure dealing with the "attached" limitation recites:

7 The hypo tube of the Chocolate Balloon Catheter is attached to the catheter
8 shaft at its proximal and distal ends as disclosed in the '119 patent
9 specification. [Citation.] [¶] Each limitation is literally present in the
10 Chocolate Balloon Catheter. However, to the extent Defendants allege that
11 certain claim elements are not present, AngioScore contends that any
12 "missing" claim element is also met by the Chocolate Balloon Catheter under
13 the doctrine of equivalents. *In particular, Defendants' argument that both
14 ends of each strut are not attached to the catheter shaft is an insubstantial
15 difference, as discussed above.*¹⁶

16 (Stowell Decl., Ex. G, at p. 9 of internal exhibit A (emphasis and footnote supplied).)

17 Here, unlike in the case of the "end" limitation (*see supra* Section III.B.1.b.i), AngioScore's
18 disclosure is merely a conclusory recitation of the standard for equivalence, providing no reasons
19 why AngioScore believed Chocolate's manner of attachment equivalent to that of the '119 Patent.
20 "Although more words are added to the boilerplate," no more information is added. *CSR Tech.*, 2013
21 WL 503077, at *9. AngioScore was required, however, to "specify in what way Defendant[s]
22 products infringe under the doctrine of equivalents, 'or drop the contention altogether.'" *Id.* (quoting
23 *Creagri, Inc. v. Pinnacliffe Inc., LLC*, 11-CV-06635-LHK-PSG, 2012 WL 5389775, at *6 (N.D. Cal.
24 Nov. 2, 2012)). When AngioScore disclosed its contention that Chocolate infringed the "end"
25 limitation under the doctrine of equivalents, it availed itself of an important word: "because." Not so
26 here. To be clear, the Patent Local Rules require no particular words, nor any quantity. Rather, they
27 require context-sensitive, element-by-element *notice* of the reasons why equivalence is alleged. *Cf.*
28 *Shared Memory Graphics*, 812 F. Supp. 2d at 1025-26 (identifying disclosures that satisfied

¹⁶ While the Disclosure avers that an insubstantial difference is "discussed above," AngioScore has not cited, nor has the Court been able to find, the referenced discussion. *Keenan v. Allan*, 91 F.3d 1275, 1279 (9th Cir. 1996) (courts are entitled to "rely on the nonmoving party to identify with reasonable particularity the evidence that precludes summary judgment") (quoting *Richards v. Combined Ins. Co. of Am.*, 55 F.3d 247, 251 (7th Cir. 1995)).

1 specificity requirement and therefore facilitated resolution of the case, as well as disclosures that did
2 neither). With respect to "attached," AngioScore disclosed no such information, only a conclusory
3 allegation of "insubstantial difference" decoupled from any explanation why the difference is
4 insubstantial. Because AngioScore did not disclose the basis of its equivalence contention in terms
5 specific enough to put Defendants on notice thereof, the Court **GRANTS** Defendants' motion for
6 summary judgment of non-infringement to the limited extent that it sought a ruling that AngioScore
7 is barred from relying on the doctrine of equivalents to establish infringement of the contested
8 "attached" limitation of the '119 Patent.

9 **CONCLUSION**

10 As set forth above, the Court **GRANTS IN PART AND DENIES IN PART** Defendants' Motion for
11 Summary Judgment of non-infringement (Dkt. No. 131). The accused instrumentality does not
12 literally infringe the '119 Patent's limitation of struts that extend from each "end" of the stent, and
13 AngioScore may not rely on the doctrine of equivalents to prove infringement of the contested
14 limitations "longitudinal expansion" or "attached." Defendants' Motion is otherwise denied.

15 Defendants' administrative motion to seal exhibits B and C to the Konstantino Declaration
16 (Dkt. No. 133) is **GRANTED**.

17 The administrative motion to seal that plaintiff filed in connection with its opposition brief
18 (Dkt. No. 138) is **DENIED WITHOUT PREJUDICE** to filing of amended submissions, consistent with
19 the Court's concurrently issued Order Denying without Prejudice Motions to Seal.

20 Plaintiff's motion to strike the declaration of Dr. Amir Belson (Dkt. No. 139) is **DENIED**.

21 This Order terminates Docket Nos. 131, 133, 138, and 139.

22 **IT IS SO ORDERED.**

23
24 Dated: June 25, 2014


YVONNE GONZALEZ ROGERS

UNITED STATES DISTRICT COURT JUDGE