

IN THE UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF DELAWARE

BOSTON SCIENTIFIC CORP., )  
 BOSTON SCIENTIFIC SCIMED, INC., )  
 )  
 Plaintiff, )  
 )  
 v. ) Civ. No. 16-275-SLR/SRF  
 )  
 EDWARDS LIFESCIENCES CORP., )  
 )  
 Defendant. )

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EDWARDS LIFESCIENCES )  
 CORP., EDWARDS LIFESCIENCES )  
 PVT, INC., and EDWARDS )  
 LIFESCIENCES LLC, )  
 )  
 Counterclaim and )  
 Third-Party Plaintiffs, )  
 )  
 v. )  
 )  
 BOSTON SCIENTIFIC CORP., )  
 BOSTON SCIENTIFIC SCIMED, INC., )  
 and SADRA MEDICAL, INC., )  
 )  
 Counterclaim and )  
 Third-Party Defendants. )

**MEMORANDUM ORDER**

At Wilmington this 1<sup>st</sup> day of June, 2017, having heard argument on, and  
having reviewed the papers submitted in connection with, the parties' proposed claim  
constructions;

IT IS ORDERED that the disputed claim language of U.S. Patent Nos. 8,992,608 (“the ‘608 patent”); 7,510,575 (“the ‘575 patent”); 9,168,133 (“the ‘133 patent”); and 9,339,383 (“the ‘383 patent”) shall be construed consistent with the tenets of claim construction set forth by the United States Court of Appeals for the Federal Circuit in *Phillips v. AWH Corp.*, 415 F.3d 1303 (Fed. Cir. 2005), as follows:

1. “[A]n expandable anchor.”<sup>1</sup> **“An expandable frame that engages the patient’s tissue to hold the replacement valve in place.”** This construction is consistent with the plain and ordinary meaning of the word “anchor,”<sup>2</sup> the figures of the ‘608 patent,<sup>3</sup> and the specification.<sup>4</sup>

2. “[D]istal;” **“distal end.”**<sup>5</sup> **“Farthest end along the catheter from the control handle.”** The parties disagreed about the reference point for determining the “distal end.” This construction is consistent with the context of the invention,<sup>6</sup> the fact that the patent claims are not limited to aortic heart valves, and plaintiffs’ prior statements

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<sup>1</sup>Claim 1 of the ‘608 patent.

<sup>2</sup> “[A] reliable or principal support,” “something that serves to hold an object firmly.” <https://www.merriam-webster.com/dictionary/anchor>. “[A] device for holding fast or checking motion.” <http://www.dictionary.com/browse/anchor>.

<sup>3</sup> ‘608 patent, figures 5F, 6F, 7, 9F, 12C, 13, 34, 38A, 38B, 38C, 39G, 40D, and 41E.

<sup>4</sup> See ‘608 patent, 6:63-7:15; 7:25-29; 12:10-18.

<sup>5</sup> Claim 1 of the ‘608 patent.

<sup>6</sup> That is, the delivery system for replacing a heart valve, as opposed to the patient’s anatomy. See, e.g., ‘608 patent, col. 14:21-29; 17:31-34 and figure 39C.

regarding the appropriate reference point to those of skill in the art.<sup>7</sup>

3. “[P]roximally.”<sup>8</sup> **“Toward the nearest end along the catheter from the control handle.”** See the reasoning in paragraph 2.

4. “[C]ommissure support element.”<sup>9</sup> **“A structure that supports the commissures of the replacement valve leaflets.”** The only dispute between the parties regarding this limitation is whether a “commissure support element” must be a “longitudinal bar,” as suggested by defendants. The court does not find sufficient support in the specification to impose this structural limitation.

5. “[F]laps.” **“Fabric projecting from the anchor.”**<sup>10</sup> “[P]ockets.” **“Cavities formed by the fabric seal.”**<sup>11</sup> Not indefinite, as defendants argue, as these terms denote structure,<sup>12</sup> and both the specification<sup>13</sup> and the art<sup>14</sup> provide guidance such that a person of ordinary skill in the art would, as a practical matter, generally know the

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<sup>7</sup>See, e.g., D.I. 93, ex. 4; D.I. 116, exs. 7 - 10.

<sup>8</sup>Claim 1 of the ‘608 patent.

<sup>9</sup>Claim 1 of the ‘608 patent.

<sup>10</sup>Claim 1 of the ‘608 patent.

<sup>11</sup>Claims 2 and 3 of the ‘608 patent.

<sup>12</sup>As opposed to being terms of degree or of uncertain methods of measurement. Neither are they subjective qualifiers or do they refer to mixed method/device elements.

<sup>13</sup>See claims 1 and 3 of the ‘608 patent, as well as col. 14:21-29 and figures 32-34.

<sup>14</sup>See, e.g., the sampling of defendants’ patents (provided by plaintiffs) that use these terms: U.S. Patent Nos. 8,758,432 (claims 9-18, “flap”); 9,498,330 (claims 1-3, 6, 8-10, “flap”); 7,704,277 (claim 2, “pocket”); 8,460,370 (claims 1-4, 9-11, “pocket”).

magnitude of the flaps and pockets from the context of the patent.<sup>15</sup>

6. “[D]eployed state.”<sup>16</sup> **“State of fabric seal when anchor is expanded.”**

Defendants’ proposed construction - “implanted state” - adds more ambiguity than it resolves.

7. “[S]upport beams [bars].”<sup>17</sup> **“Beams/bars that retain their longitudinal dimension in order to provide support for the valve assembly.”** Although some of the asserted claims add qualifiers such as “longitudinal,” “rigid,” and “of fixed length,” the common specification<sup>18</sup> for the ‘575, ‘133, and ‘383 patents only describes the support beams/bars as providing anchorage for the delicate valve assembly by their structure, that is, by being constant in their length and longitudinal in their dimension. See, e.g., figures 2, 8a-8b, 9a, 9f, 14, 21, 23e, 24a, 25a , and 25c. See also, ‘575 patent, col. 12:57-61, 13:31-41. The court declines to embrace plaintiffs’ proposed construction,<sup>19</sup> as the word “structure” is neither helpful nor necessary; the claims describe the support beams/bars as supporting the valve assembly, not the “valve;” and the specification includes embodiments where the support beams/bars are not “integral”

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<sup>15</sup>See, e.g., D.I. 109 ¶¶ 21-27.

<sup>16</sup>Claims 1 and 2 of the ‘608 patent.

<sup>17</sup>Claims 1-3 of ‘575 patent; claims 1-2, 4-5, 12-13, and 17 of the ‘133 patent; and claims 1-5, 7-8, and 12-19 of the ‘383 patent.

<sup>18</sup>The court will cite to the ‘575 patent.

<sup>19</sup>“A structure integral to the support stent [frame] that supports the longitudinal dimension of the valve such that the longitudinal dimension of the valve is substantially fixed.”

to the support stent.<sup>20</sup>

8. “[L]ongitudinally rigid support beams [bar portions] of fixed length.”<sup>21</sup>  
“Rigid support beams [bar portions] of a constant length in the longitudinal direction that provide support for the valve assembly.” See ¶ 7 *supra*.

9. “[L]ongitudinal support bars of fixed length.”<sup>22</sup> “Support beams/bar portions of a constant length in the longitudinal direction that provide support for the valve assembly.” See ¶ 7 *supra*.

10. “[A]nchored at least in part to the support beams.”<sup>23</sup> “Secured at least in part to the support beams.” This construction is consistent with the plain and ordinary meaning of the word “anchor”<sup>24</sup> and with the context of the inventions.<sup>25</sup> Given the above constructions for the term “support beams,” plaintiffs’ additional qualifier “such that the longitudinal dimension of the valve is substantially fixed” is not necessary and adds an element of ambiguity to the construction.

11. “[A]nchored within the [annular] support frame.”<sup>26</sup> “Secured inside of the [annular] support frame.” See ¶ 10 *supra*.

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<sup>20</sup>See, e.g., ‘383 patent, claims 5 and 19; ‘575 patent, col. 4:18-21, 44-51 and figure 32a.

<sup>21</sup>Claim 1 of the ‘575 patent; claim 12 of the ‘383 patent.

<sup>22</sup>Claim 1 of the ‘133 patent; claim 14 of the ‘383 patent.

<sup>23</sup>Claim 1 of the ‘575 patent.

<sup>24</sup>See footnote 2 *supra*.

<sup>25</sup>See, e.g., Claim 1, 8 and 18 of the ‘575 patent; col. 3:14-17.

<sup>26</sup>Claim 1 of the ‘133 patent; claims 1 and 14 of the ‘383 patent.

12. “[C]onnecting member:”<sup>27</sup> Plain and ordinary meaning within the context of each claim.

13. “[A]n annular cuff mounted on the outside of the support frame:”<sup>28</sup> “A ring-shaped cuff that is positioned around, and attached to, the outside of the support frame.” “[A]n annular cuff disposed along an outer surface of the support frame.”<sup>29</sup> “A ring-shaped cuff that is positioned around the outside of the support frame.” This construction is consistent with the plain and ordinary meaning of the words “mount”<sup>30</sup> and “dispose.”<sup>31</sup> The only discussion of an “annular cuff” is in reference to “cuff portion 21” of figure 1, where it is described as being “wrapped around the support stent . . . to enhance the stability,” and “[p]referably . . . attached to the support beams.” See ‘575 patent, col: 13:22-25 (emphasis added) and figure 1. Although the court is not sure how the annular cuff can enhance stability without being fixed securely to the support stent, nevertheless, the words chosen by the patentees - “mount” and “dispose” - support the differing constructions.

14. “[A] plurality of annularly spaced expandable web-like constructions extending and connected between the support beams to form a circular profile.”<sup>32</sup>

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<sup>27</sup>Claims 5, 6, 19, and 20 of the ‘383 patent.

<sup>28</sup>Claim 11 of the ‘133 patent.

<sup>29</sup>Claim 16 of the ‘133 patent.

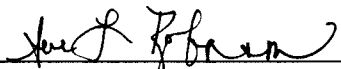
<sup>30</sup>“To attach to a support.” <https://www.merriam-webster.com/dictionary/mount>.

<sup>31</sup>“To put in place.” +<https://www.merriam-webster.com/dictionary/dispose>.

<sup>32</sup>Claim 1 of the ‘575 patent.

**“A plurality of expandable web-like constructions located and connected between the support beams to form the circular profile of the support stent in the expanded configuration.”** Compare ‘575 patent, col. 19:11-13 and figure 21 with claim 20 of the ‘575 patent, which describes the “web-like portions” as “extending between and directly connecting a plurality of . . . support beams;” i.e., plaintiffs’ proposed construction<sup>33</sup> does not account for claim differentiation.

15. The court has provided constructions in quotes for the claim limitations at issue. The parties are expected to present the claim constructions consistently with any explanation or clarification herein provided by the court, even if such language is not included within the quotes.

  
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Senior United States District Judge

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<sup>33</sup>“A plurality of expandable web-like constructions **in between and joined directly to the support beams** to form the circular profile in the expanded configuration.” (Emphasis added)