

United States District Court
For the Northern District of California

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IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF CALIFORNIA

MEDTRONIC, INC., et al.,
Plaintiffs
v.
AGA MEDICAL CORPORATION,
Defendant

No. C 07-567 MMC

ORDER CONSTRUING CLAIMS

Before the Court are the parties' respective submissions regarding the proper construction of five disputed and five undisputed terms as contained in three patents, specifically, U.S. Patent 5,067,957 ("957 Patent"), U.S. Patent 5,190,546 ("546 Patent"), and U.S. Patent 6,306,141 ("141 Patent"). Plaintiffs Medtronic, Inc., Medtronic USA, Inc., and Medtronic Vascular, Inc. (collectively, "Medtronic") and defendant AGA Medical Corporation ("AGA") have submitted briefing and evidence in support thereof. The matter came on regularly for hearing on January 22, 2008. James J. Elacqua of Dechert LLP appeared on behalf of Medtronic. Peter J. Armenio and Young J. Park of Kirkland & Ellis LLP appeared on behalf of AGA. Having considered the papers submitted and the arguments of counsel, the Court rules as follows.

1 **A. Disputed Terms¹**

2 **1. “Shape Memory Alloy,” “Displays,” and “Behavior”**

3 The terms “shape memory alloy,” “displays,” and “behavior” appear in the ‘957
4 Patent, Claims 1-3, 5-13, 16-17, 30-31, 33, 36-37, and 40-41, in the ‘546 Patent, Claim 27,
5 and in the ‘141 Patent, Claims 1-14 and 17-21. The parties identify the use of the disputed
6 terms as follows:

- 7 a. “a shape memory alloy which displays stress-induced martensite
8 behavior at body temperature”; and
9 b. “pseudoelastic shape memory alloy . . . display/displays/displaying
10 reversible stress-induced martensite at about body/human body
11 temperature.”

12 With respect to the former, Medtronic argues the proper construction is “a shape
13 memory alloy that exhibits the characteristics of stress-induced martensite at body
14 temperature.” With respect to the latter, Medtronic argues the proper construction is “a
15 pseudoelastic shape memory alloy . . . that exhibits reversible stress-induced martensite at
16 about body/human body temperature.” AGA proposes a single construction for both
17 phrases: “a shape memory alloy containing at least nickel, titanium and vanadium that can
18 form stress-induced martensite at body temperature.”²

19 The Court finds “shape memory alloy which displays stress-induced martensite
20 behavior at body temperature” is properly construed as “a shape memory alloy that exhibits
21 stress-induced martensite at body temperature.”³ The Court also finds “pseudoelastic
22 shape memory alloy . . . display/displays/displaying reversible stress-induced martensite at
23 about body/human body temperature” is properly construed as “pseudoelastic shape

24 ¹ As to each of the disputed terms, where the Court has adopted a party’s proposed
25 construction, that construction is set forth below without further discussion. Where the
26 Court has adopted one party’s construction, but with some modification, an explanation is
27 provided.

28 ² The parties’ respective positions as set forth herein are, unless otherwise indicated,
taken from their briefs.

³ The Court’s construction omits the words “the characteristics of,” to address AGA’s
argument that said construction be understood as requiring that the “shape memory alloy”
actually exhibit stress-induced martensite, rather than merely appear to do so.

1 memory alloy . . . that exhibits reversible stress-induced martensite at about body/human
2 body temperature.”

3 **2. “Stent”**

4 The term “stent” appears in the ‘141 Patent, Claims 2-3, 6-14, and 17-21. Medtronic
5 argues “stent” should be construed as “a supporting device.” AGA argues “stent” should be
6 construed as “a device used to maintain the patency of a body vessel.”⁴

7 The Court finds “stent” is properly construed as “a supporting device.”

8 **3. “Guide Wire”**

9 The term “guide wire” appears in the ‘141 Patent, Claims 1-5, 17, 19, and 21.
10 Medtronic argues “guide wire” should be construed as “a device that assists in positioning
11 another device.” AGA argues “guide wire” should be construed as “a wire that is used to
12 guide a placement device within the body.”⁵

13 The Court finds “guide wire” is properly construed as “a wire or catheter that assists
14 in positioning another device.”⁶

15 **4. “Hollow Restraining Member”**

16 The term “hollow restraining member” appears in the ‘957 Patent, Claims 10-13.
17 Medtronic argues “hollow restraining member” should be construed as “a hollow device that
18 prevents the transformation of the shape memory alloy element back into its original
19 shape.” AGA argues “hollow restraining member” should be construed as “an elongated
20 hollow structure that can deform the shape memory alloy.”⁷

21 _____
22 ⁴ At the claim construction hearing, AGA expanded its proposed construction to
replace the word “vessel” with the word “structure.”

23 ⁵ At the claim construction hearing, AGA expanded its proposed construction to
24 include the words “or a device” following the word “wire.”

25 ⁶ The Court’s construction replaces the word “device” with “wire or catheter.” This
26 modification is supported by the specification and the prosecution history, wherein the term
“catheter” is used interchangeably with the term “guide wire.” See, e.g., ‘141 Patent, col. 9,
27 l. 38 (identifying Figure 7, 104 as a “transport catheter”); Yang Decl. in Supp. of Opening
Claim Constr. Brief Ex. 15 at 11 (identifying Figure 7, 104 as a “guide wire”).

28 ⁷ At the claim construction hearing, AGA omitted from its proposed construction the
word “elongated.”

1 The Court finds “hollow restraining member” is properly construed as “a hollow
2 device that prevents the transformation of the shape memory alloy element back into its
3 original shape.”⁸

4 **5. “Hollow Placement Device”**

5 The term “hollow placement device” appears in the ‘957 Patent, Claims 30-31, 33,
6 and 36 and in the ‘141 Patent, Claims 1-5, 17, and 21. Medtronic argues “hollow
7 placement device” should be construed as “a hollow device capable of stressing or
8 deforming a shape memory alloy element.” AGA argues “hollow placement device” should
9 be construed as “an elongated hollow tube for positioning an object within the body.”⁹

10 The Court finds “hollow placement device” is properly construed as “a hollow device
11 for positioning an object within the body.”¹⁰

12 **B. Undisputed Terms**

13 The Court adopts the following constructions, jointly submitted by the parties. (See
14 Amended Joint Claim Construction and Prehearing Statement, filed November 16, 2007,
15 Ex. D.)

16 1. The term “stress induced martensite” (‘957 Patent, Claims 1-3, 5-13, 16-17, 30-
17 31, 33, 36-37, 40-41; ‘546 Patent, Claim 27; ‘141 Patent, Claims 1-14, 17-21) is construed
18 as “martensite that forms from austenite due to stress.”

19 2. The term “transverse dimension” (‘141 Patent, Claim 9) is construed as “in a
20 direction perpendicular to the longitudinal axis.”

21
22 ⁸ To the extent the “hollow restraining member” may perform additional functions, as
23 set forth in a particular claim or claims, the Court finds it unnecessary to repeat those
24 functions in the construction of the term itself. See, e.g., ‘957 Patent, col. 12, ll. 5-9
(directing placement of “the memory alloy element within a hollow restraining member . . .
for placing the alloy in its stress-induced martensitic state and the memory alloy element in
its deformed shape”).

25 ⁹ At the claim construction hearing, AGA omitted from its proposed construction the
26 words “elongated tube.”

27 ¹⁰ To the extent the “hollow placement device” may perform additional functions, as
28 set forth in a particular claim or claims, the Court finds it unnecessary to repeat those
functions in the construction of the term itself. See, e.g., ‘141 Patent, col. 11, ll. 8-9
(describing the “hollow placement device” as “stressing the memory alloy element”).

1 3. The terms “reversible stress induced martensite” and “reversible stress induced
2 martensitic state” (‘957 Patent, Claims 5-13, 16-17, 30-31, 33, 36-37, 40-41; ‘546 Patent,
3 Claim 27; ‘141 Patent, Claims 1-5, 11-14, 17-21) are construed as “stress induced
4 martensite that can revert to austenite.”

5 4. The terms “extruding” and “extruded” (‘957 Patent, Claims 30-31, 33, 36; ‘141
6 Patent, Claims 1-5, 17, 21) are construed as “forced out.”

7 5. The terms “restraining means” and “restraint” (‘957 Patent, Claims 1-3, 5-13, 16-
8 17, 30-31, 33, 36-37, 40-41; ‘141 Patent, Claims 11-14, 17, 19) are construed as “a device
9 component that prevents the transformation of the shape memory alloy element back into
10 its original shape.”

11 **IT IS SO ORDERED.**

12 Dated: February 6, 2008



MAKINE M. CHESNEY
United States District Judge

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