

**IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE**

CONFLUENT SURGICAL, INC.,)
INTEGRA LIFESCIENCES)
CORPORATION AND INTEGRA)
LIFESCIENCES SALES LLC,)
)
Plaintiffs,)
)
v.)
)
HYPERBRANCH MEDICAL)
TECHNOLOGY, INC.,)
)
Defendant.)

Civil Action No. 17-688-LPS-CJB

REPORT AND RECOMMENDATION

In this action filed by Plaintiff Confluent Surgical, Inc., Integra Lifesciences Corporation and Integra Lifesciences Sales LLC (“Plaintiffs”) against Defendant HyperBranch Medical Technology, Inc. (“Defendant” or “HyperBranch”), Plaintiffs allege infringement of United States Patent Nos. 9,517,478 (the “478 patent”), 8,210,453 (the “453 patent”), 8,876,021 (the “021 patent”), 8,033,483 (the “483 patent”), 8,616,468 (the “468 patent”), 9,101,946 (the “946 patent”), and 9,700,290 (the “290 patent”) (collectively, “the asserted patents” or “the patents-in-suit”).¹ Presently before the Court is the matter of claim construction. The Court recommends that the District Court adopt the constructions as set forth below.

I. BACKGROUND AND STANDARD OF REVIEW

The Court hereby incorporates by reference the summary of the background of this

¹ The asserted patents make up two patent families. (See D.I. 98 at 4 n.2; Plaintiffs’ Markman Presentation, Slide 2) The ‘483 patent and the ‘021 patent share a common specification and are referred to as “Family 1.” (D.I. 98 at 4 n.2) The remaining five patents (the ‘453, ‘468, ‘946, ‘478 and ‘290 patents) share a different common specification and will be referred to as “Family 2.” (*Id.*)

matter set out in its March 7, 2019 Report and Recommendation (“March 7 R&R”). (D.I. 177 at 1-2) It additionally incorporates by reference the legal principles regarding claim construction set out in the March 7 R&R. (*Id.* at 2-4)

II. DISCUSSION

The parties had claim construction disputes regarding 15 terms or sets of terms (hereafter, “terms”). The Court has previously issued rulings as to certain of those terms, (D.I. 177; D.I. 194), and below addresses two additional disputed terms. The remainder of the disputed terms will be addressed in forthcoming Report and Recommendations.

A. “a source of pressurized air” / “a source of pressurized fluid”

The term “a source of pressurized air” appears in certain claims of the '478 patent, the '290 patent and the '946 patent, and the term “a source of pressurized fluid” appears in certain claims of the '453 patent. (D.I. 72 at 7) The use of the disputed term “a source of pressurized air” in claim 1 of the '478 patent is representative:

1. A spray assembly for dispensing a mixture, the spray assembly comprising:

a connector portion configured for operable engagement with a first source of component, a second source of component, and *a source of pressurized air*;

an elongated portion extending distally from the connector portion, the elongated portion including a first lumen configured for fluid communication with a first source of component, a second lumen configured for fluid communication with a second source of component, and a third lumen configured for fluid communication with *a source of pressurized air*;

a tip assembly operably connected to the elongated portion, the tip assembly defining an opening and a mixing chamber between a distal end of the elongated portion and the opening of the tip assembly, wherein each of the first lumen, the second lumen, and

the third lumen are in fluid communication with the mixing chamber; and

an insert member received in the mixing chamber, a distal end of the insert member defining an annular recess and at least one radially extending slot, the annular recess and the at least one radially extending slot operating to mix first and second components prior to the combination exiting the opening in the tip assembly.

('478 patent, col. 6:32-56 (emphasis added)) The use of the disputed term “a source of pressurized fluid” in claim 1 of the '453 patent is representative:

1. A spray assembly for dispensing a mixture, the assembly comprising:

a connector configured for operable engagement with a first and second source of component and *a source of pressurized fluid*;

a tip operably connected to the connector, the tip including an opening and defining a mixing chamber between the connector and the opening of the tip;

an elongated member extending between the connector and the tip, the elongated member including at least a first lumen configured for fluid communication with the first source of component, a second lumen configured for fluid communication with the second source of component, and a third lumen configured for fluid communication with the *source of pressurized fluid*; and

an insert member configured to be received in the mixing chamber, the insert member including at least one radially extending slot on a first end of the insert and at least a one radially extending slot on a second end of the insert, each of the radially extending slots being configured to mix the first and second source of components prior to the combination exiting the opening in the tip.

('453 patent, col. 6:28-49 (emphasis added))

The parties' competing proposed constructions for these terms are set out in the chart below:

Term	Plaintiffs' Proposed Construction	Defendant's Proposed Construction
"a source of pressurized air" / "a source of pressurized fluid"	"structure which provides pressurized air/fluid"	"a container that supplies air/fluid that has been brought to and maintained at an elevated pressure above ambient pressure"

(See D.I. 81 at 18) As reflected in the parties' proposals, there are two disputes at play here. First, the parties dispute whether the construction should include language explaining what it means for air/fluid to be "pressurized." (D.I. 79 at 21; D.I. 81 at 19) Second, the parties dispute how to define "source": must it be "a container" as HyperBranch proposes, or is it more properly defined as a "structure," as Plaintiffs propose? (D.I. 81 at 19)

With respect to "pressurized," HyperBranch asserts that the language of its proposed construction will help the factfinder understand the scope of the claim term. (D.I. 79 at 21) In support of its proposal, HyperBranch points to a dictionary definition defining "pressurized" as "brought to and maintained at an atmospheric pressure higher than that of the surroundings[.]" (*Id.* (quoting D.I. 80, ex. 8 at 1)) It also points to another dictionary that defines "pressurize" as "[t]o put (gas or liquid) under a greater than normal pressure." (*Id.* (quoting D.I. 80, ex. 2 at 1434)) Because the claim terms utilize the past tense form ("pressurized"), HyperBranch asserts that the "source of pressurized air/fluid" must be able to contain, and maintain, this previously pressurized air/fluid. (*Id.*)

Plaintiffs, for their part, initially respond that HyperBranch's language defining "pressurized" is unnecessary because the term "has a widely accepted meaning." (D.I. 81 at 19 (internal quotation marks and citation omitted)) The problem is that Plaintiffs never go on to explain what that widely accepted meaning actually is. (*Id.*; see also D.I. 101 at 10) Instead, the most specific critique that Plaintiffs make of HyperBranch's proposal relates to the proposed

requirement that the “‘source of pressurized air/fluid’” be “‘*maintained* at an elevated pressure[.]’” (D.I. 101 at 10 (emphasis in original); Plaintiffs’ Markman Presentation, Slide 97; D.I. 102 at ¶ 22) Plaintiffs assert that adding such a requirement to the claims would improperly exclude, for example, a cylinder full of pressurized air as the air is depleted from the cylinder, because in this process the pressure would decrease until the cylinder reaches ambient pressure. (D.I. 101 at 10; D.I. 102 at ¶ 22) Yet according to Plaintiffs, such a cylinder is “without question a ‘source of pressurized air[.]’” (D.I. 101 at 10)

The record with respect to this issue is not robust, but the Court does not see the problem with HyperBranch’s position. It seems like as to Plaintiffs’ hypothetical set out above, the referenced cylinder would still constitute a source of pressurized air—even under HyperBranch’s proposal and even as air is being depleted from the cylinder—so long as that air leaving the cylinder had been brought to and maintained at an elevated pressure above ambient pressure while it was still in the cylinder. In other words, Plaintiffs complain that the intrinsic record does not require “‘the source of pressurized air’ to be ‘maintained at an elevated pressure[.]’” (Plaintiffs’ Markman Presentation, Slide 97), but HyperBranch’s construction does not seem to require the *source* to be maintained at an elevated pressure. Rather, it requires the *air/fluid supplied by the source* to have previously been brought to an elevated pressure above ambient pressure and maintained as such while in the source. (D.I. 79 at 21; D.I. 98 at 13 (HyperBranch noting that the “‘source’ of this pressurized air/fluid must be able to contain and *maintain* *air/fluid* that has been previously pressurized”) (emphasis added))

With respect to the parties’ dispute over the proper terminology for the word “source,” the Court finds that “structure” most accurately captures the meaning of the word within the context of these claims. Although HyperBranch’s proposed construction utilizes the term

“container[,]” and even though Plaintiffs raised the issue in their opening brief, (D.I. 81 at 19), HyperBranch never explains why “container” is an appropriate synonym for “source,” (*see* D.I. 79 at 21; D.I. 98 at 13; D.I. 101 at 9). And Plaintiffs credibly assert that HyperBranch’s construction has no support in the intrinsic record. (*Id.*) In this regard, the specification simply explains that “[a]ir or other gaseous fluid[s] [are] provided to spray assembly **10** through air supply port **26**.” (’453 patent, col. 5:5-6) As Plaintiffs note, it thus seems like any structure that can provide pressurized air or fluid falls within the scope of the claims. (D.I. 81 at 19; *see also* D.I. 82 at ¶ 29 (Plaintiffs’ expert Dr. Bruce Kent Gale opining that a person of ordinary skill in the art would understand that any structure or component capable of supplying pressurized air/fluid would be covered by the claims, including, for example, air hoses, gas lines, air pumps, compressed gas cylinders or compressors)) In light of this record, the Court agrees with Plaintiffs that limiting the source of the pressurized air/fluid to “containers” is an unduly narrow approach.

For the above reasons, the Court recommends that “a source of pressurized air/fluid” be construed to mean “a structure that supplies air/fluid that has been brought to and maintained at an elevated pressure above ambient pressure.”

B. “outer sleeve”

The term “outer sleeve” is found in certain claims of the ’478 patent, ’290 patent, ’946 patent and ’468 patent. (D.I. 72 at 5) The use of the disputed term in claim 1 of the ’946 patent is representative:

1. A spray assembly for dispensing a mixture, the spray assembly comprising:

a connector portion configured for operable engagement with a first source of component, a second source of component, and a source of pressurized air;

an elongated portion extending distally from the connector portion, the elongated portion including an inner shaft and an *outer sleeve*, the inner shaft and the *outer sleeve* defining a vent lumen therebetween, the inner shaft defining a first lumen configured for fluid communication with the first source of component, a second lumen configured for fluid communication with the second source of component, and a third lumen configured for fluid communication with the source of pressurized air;

a tip assembly operably connected to the elongated portion, the tip assembly defining an opening and a mixing chamber between a distal end of the elongated portion and the opening of the tip assembly; and

an insert member received in the mixing chamber, a distal end of the insert member defining an annular recess and at least one radially extending slot, the annular recess and the at least one radially extending slot operating to mix first and second components prior to a combination of first and second components exiting the opening in the tip assembly.

('946 patent, col. 6:27-51 (emphasis added))

The parties' competing proposed constructions for the term are set out in the chart below:

Term	Plaintiffs' Proposed Construction	Defendant's Proposed Construction
"outer sleeve"	"an outer surface of the elongated body portion surrounding the inner shaft"	No construction necessary. If construction is necessary: "the outermost tube or tube-like part fitting over or around the inner shaft"

(See D.I. 81 at 26)² The parties' main dispute with respect to this term is whether an outer sleeve must "have [a] separate, distinct structure from the elongated body and/or inner shaft" (as

² Because the parties have clear disputes about what "outer sleeve" means, the Court easily rejects HyperBranch's position that no construction is necessary for this term. See

HyperBranch asserts), or whether an outer sleeve can be the “outer surface of the elongated body portion” (as Plaintiffs argue). (D.I. 79 at 28-29; D.I. 101 at 17-18)³

The Court agrees with HyperBranch’s position that the outer sleeve must be a distinct structure from the inner shaft. The ordinary meaning of “sleeve” is a part that fits over or around another structure. (D.I. 79 at 28 (citing D.I. 80, ex. 2 at 1696 (defining “sleeve” as “[a] part of a garment that covers all or part of an arm” or “[a] case into which an object or a device fits”)); Tr. at 203) And the specification consistently depicts an “outer sleeve” as a separate and distinct structure from the inner shaft. (’946 patent, col. 3:35-44 (explaining that “elongated body portion 30 of spray assembly 10 includes an inner multi-lumen shaft 40, an outer sleeve 50 (FIG. 6) surrounding inner shaft 40 and a transition member 60 extending distally from outer sleeve 50

O2 Micro Int’l Ltd. v. Beyond Innovation Tech. Co., 521 F.3d 1351, 1361 (Fed. Cir. 2008) (“A determination that a claim term ‘needs no construction’ or has the ‘plain and ordinary meaning’ may be inadequate . . . when reliance on a term’s ‘ordinary’ meaning does not resolve the parties’ dispute.”).

³ In addition to the parties’ primary dispute, Plaintiffs also pushed back against HyperBranch’s proposal’s requirements that the outer sleeve be the “outermost” part and that it be “tube or tube-like.” HyperBranch did not provide strong support for the proposition that either of these limitations should be imported into the construction for “outer sleeve.”

With respect to the “tube or tube-like” requirement, it is not in dispute that the figures in the patent specification depict the outer sleeve as a tube-like structure. (Tr. at 201; D.I. 81 at 26) However, HyperBranch does not point to anything in the specification that *requires* the outer sleeve to be a tube or tube-like. Moreover, two of the three dictionary definitions for “sleeve” that HyperBranch cites in support of its proposal say nothing about a sleeve being tube-like. (D.I. 80 at ¶ 106 (citing *id.*, ex. 2 at 1696)) The one dictionary definition that does define sleeve as a “tubular piece” specifies that such a definition comes in the machinery context. (*Id.* (citing *id.*, ex. 8 at 10)) And as for HyperBranch’s proposed language that the “outer sleeve” be the “outermost” part, it seemed to give up on this during the *Markman* hearing. (Tr. at 202-03) Thus, the Court will not adopt these other two limitations included in HyperBranch’s proposal, and focuses its discussion of this term below on the parties’ primary dispute.

about inner shaft 40”), FIG. 6) It therefore seems appropriate to require that an outer sleeve be a separate part that fits over or around the inner shaft.

But the Court is not persuaded that HyperBranch has demonstrated that the outer sleeve must be a “separate, distinct structure from the elongated body” portion. (D.I. 79 at 28) As noted above, for example, the patent specification at times explains that the “*elongated body portion 30* of spray assembly 10 *includes* an inner multi-lumen shaft, *an outer sleeve 50* (FIG. 6) surrounding inner shaft 40 and a transition member 60 extending distally from outer sleeve 50 about inner shaft 40.” ('946 patent, col. 3:35-39 (certain emphasis added)) Moreover, Figure 6 of the '946 patent, which is a cross-sectional end view of the claimed spray assembly, seems to depict an outer sleeve (element 50) that is a separate part from the inner shaft (element 40), but it does not point to anything as constituting a separate and distinct “elongated body” element:

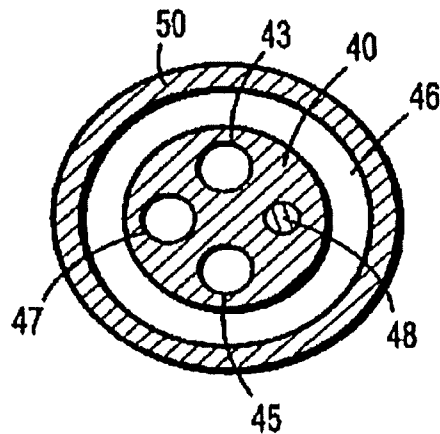


FIG. 6

('946 patent, FIG. 6)

Therefore, the Court recommends that “outer sleeve” be construed to mean “the outer part fitting over or around the inner shaft.”

III. CONCLUSION

For the foregoing reasons, the Court recommends that the District Court adopt the following construction:

1. “a source of pressurized air/fluid” should be construed to mean “a structure that supplies air/fluid that has been brought to and maintained at an elevated pressure above ambient pressure”
2. “outer sleeve” should be construed to mean “the outer part fitting over or around the inner shaft”

This Report and Recommendation is filed pursuant to 28 U.S.C. § 636(b)(1)(B), Fed. R. Civ. P. 72(b)(1), and D. Del. LR 72.1. The parties may serve and file specific written objections within fourteen (14) days after being served with a copy of this Report and Recommendation. Fed. R. Civ. P. 72(b). The failure of a party to object to legal conclusions may result in the loss of the right to de novo review in the district court. See *Henderson v. Carlson*, 812 F.2d 874, 878-79 (3d Cir. 1987); *Sincavage v. Barnhart*, 171 F. App’x 924, 925 n.1 (3d Cir. 2006).

The parties are directed to the Court’s Standing Order for Objections Filed Under Fed. R. Civ. P. 72, dated October 9, 2013, a copy of which is available on the District Court’s website, located at <http://www.ded.uscourts.gov>.

Dated: June 28, 2019



Christopher J. Burke
UNITED STATES MAGISTRATE JUDGE