

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

GCE GAS CONTROL EQUIPMENT, INC,

Plaintiff/Counter-Defendant,

v.

3B MEDICAL MANUFACTURING, LLC,

Defendant/Counter-Plaintiff

Case No. 8:22-cv-02550-TDC

JURY TRIAL DEMANDED

3B MEDICAL MANUFACTURING, LLC's
OPENING CLAIM CONSTRUCTION BRIEF

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I. INTRODUCTION

The function of claim construction is to define the metes and bounds of the claims of a patent and to resolve issues regarding their meaning. *See O2 Micro Int'l Ltd. v. Beyond Innovation Tech. Co.*, 521 F.3d 1351, 1360 (Fed. Cir. 2008). During claim construction, a court is tasked with finding the correct construction of each of the disputed terms consistent with the intrinsic and extrinsic record. At this point in the process, the Parties have each proposed different constructions for the disputed claim terms. As demonstrated below, 3B Medical Manufacturing, LLC's ("3B's") proposed constructions are correct because they are consistent with their plain and ordinary meaning and this record. By contrast, GCE Gas Control Equipment, Inc.'s ("GCE's") proposed constructions advance improper interpretations of the claims in a strained attempt to avoid being held liable for patent infringement. Indeed, GCE's proposed constructions violate fundamental tenets of claim construction law. In particular, GCE asks the Court to import limitations from the specification and to construe terms in a manner that is inconsistent with the claims themselves. GCE also contends one of the disputed claim terms is indefinite and one of the disputed terms is indefinite in the alternative.

Importantly, 3B did not identify any claim terms for construction because 3B believes each of the asserted claims is understandable to a person of ordinary skill in the art. On the other hand, GCE's Claim Construction Statement identified thirteen terms for construction despite the Parties' agreement to a limit of 10 terms per party. [*See* Dkt. 27, p. 10]. Of those thirteen terms, GCE initially contended that seven were indefinite, and three would be indefinite if GCE's construction was not adopted.¹ GCE has now dropped its indefiniteness theory as to all but two terms (one of the first seven

¹ On May 22, 2023 – the deadline for this brief – GCE informed 3B that it was no longer contending two these three terms were indefinite in the alternative and that it was moving forward with a second, alternative proposed construction for those terms. 3B addressed these new alternative constructions to the extent possible in the short time period it had before filing this brief, but will further address them in 3B's Response Brief, if necessary.

and one of the other three in the alternative). GCE's rapid retreat shows that GCE is trying to throw everything it can at the wall to see what sticks.

As to the remaining terms, 3B proposes simple, understandable constructions that are consistent with the plain and ordinary meaning of each of the disputed terms. For these and many other reasons, this Court should adopt the correct constructions presented by 3B.

II. TECHNOLOGY OF THE PATENTS-IN-SUIT

A. Portable oxygen concentrators

The patents-in-suit, U.S. Patent Nos. 10,357,628 ("the '628 Patent") and 11,389,614 ("the '614 Patent") (Exs. 1 and 2), relate to portable oxygen concentrators, which are portable devices used by patients that require supplemental oxygen. [*See, e.g.*, Ex. 1, '628 Patent at 1:17-21]². Portable oxygen concentrators are able to convert ambient air, which contains about 78% nitrogen and 21% oxygen, into relatively pure oxygen. [*Id.* at 3:45-53].

Individuals suffering from certain diseases or lung conditions may benefit from receiving supplemental oxygen, which can help these individuals maintain normal and productive lives. [*Id.* at 1:22-34].

Before the inventions in the patents-in-suit were conceived, supplemental oxygen was primarily provided through high pressure gas cylinders, liquid oxygen in vacuum-insulated containers, and in-home oxygen concentrators. [*Id.* at 1:36-49]. The high-pressure cylinder and liquid oxygen options both require refilling, which hinders the mobility of the user. [*Id.*]. The in-home oxygen concentrators also hindered mobility, as these concentrators were relatively large and heavy, emitted excessive heat, and were relatively noisy. [*Id.*].

² For brevity, at times 3B cites to the '628 Patent or the '614 Patent only. The '628 Patent is nearly identical to the '614 Patent, with the exception being the claims

In contrast, the patents-in-suit relate to portable oxygen concentrators, which are less bulky, lighter, and permit users to receive oxygen therapy while traveling with significantly more freedom than traditional oxygen tanks. [*Id.* at 3:45-53]. Instead of a dedicated oxygen tank, portable oxygen concentrators are able to produce their own oxygen from ambient air. [*Id.*].

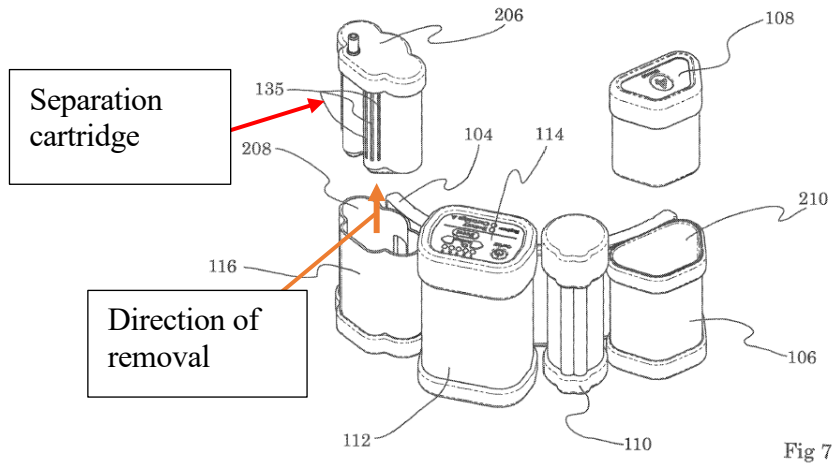
Portable oxygen concentrators can include separation cartridges that contain a material, known as adsorbent, that is able to separate nitrogen from the ambient air, leaving relatively pure oxygen—specifically, up to 95% oxygen. [*Id.*]. This relatively pure oxygen is then delivered to the patient. [*Id.*]. Adsorbent material typically resembles small beads. [*Id.* at 18:41-46]. The beads are often packed together to form a bed of adsorbent material. The bed of adsorbent material can be referred to in different ways, such as a bed, an adsorbent bed, a column, or an adsorbent column.

Over time, the adsorbent material may become less effective at separating nitrogen from ambient air. [*Id.* at 12:1-15]. When this happens, the adsorbent material must be replaced. [*Id.*]. Thus, the patents-in-suit describe separation cartridges that are relatively easy to remove and replace. [*Id.*]. The patents-in-suit are even titled: “Removable cartridge for oxygen concentrator.” [*Id.* at Title].

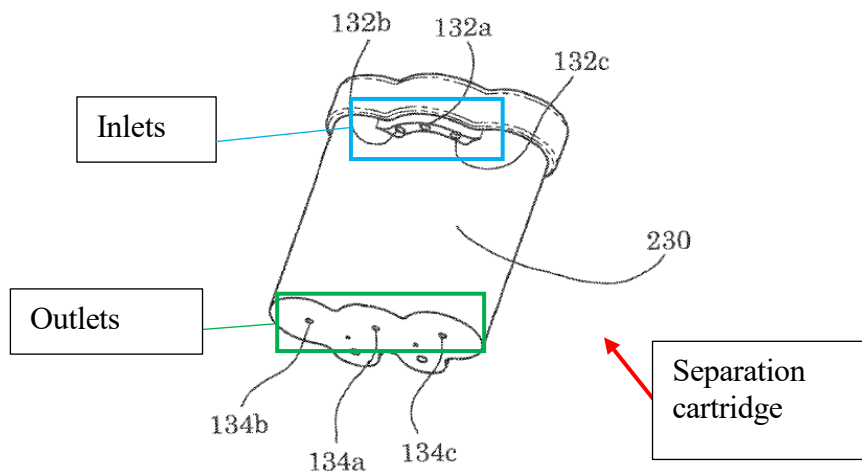
Increasing the ease with which separation cartridges can be removed and replaced allows the user to remove and replace the cartridges without the assistance of the manufacturer. In other words, when a separation cartridge needs replacing, the entire oxygen concentrator unit does not need to be sent away for service. Rather, the patient or their caregiver can quickly replace the cartridge themselves.

B. The claimed arrangements improve ease of replacement

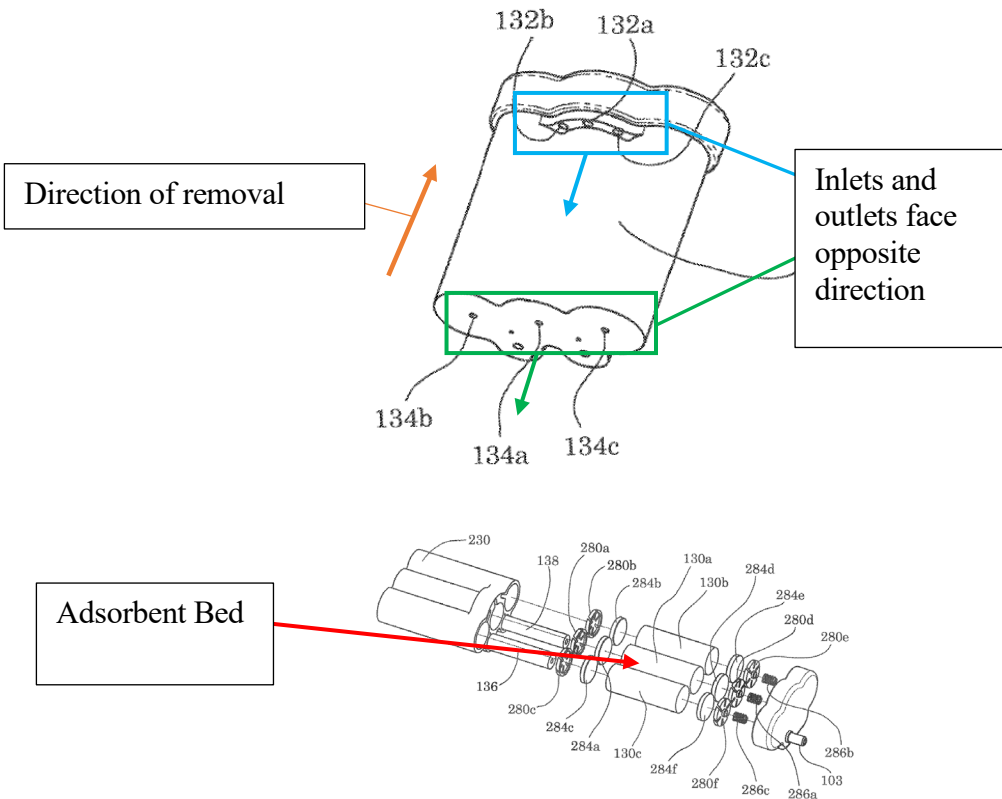
The patents-in-suit describe an example oxygen concentrator 100 that can include, among other things, an adsorbent, or separation, cartridge 206, which is removable from a receptacle 208 of a cartridge module 116. [*See, e.g.*, Ex. 1, ’628 Patent at 11:61-12:3]. The separation cartridge is “easily removable to facilitate replacement.” [*Id.*].



The patents-in-suit describe an example separation cartridge that can include inlet ports 132a-132c and outlet ports 134a-134c configured to direct fluid relative to adsorbent columns 130a-130c. [See *e.g. Id.* at 4:60-66; Figures 15 and 16].



As shown in the above figures, the inlet and outlet face toward the receptacle, which is a direction opposite the direction that the separation cartridge is removed.



During use, ambient air flows into one of the inlets 132a-132c and is directed internally to the corresponding adsorbent bed 130a-130c where the nitrogen in the ambient air is adsorbed as the air passes through the adsorbent bed 130a-130c. [See '628 Patent at 4:60-5:4; 18:30-56]. Relatively pure oxygen is expelled through the outlet 134a-134c. [*Id.*].

Keeping this background in mind, some of these elements will be discussed further below as part of the terms GCE seeks to construe.

III. LEGAL AUTHORITY

A. Claim Construction Law

“It is a bedrock principle of patent law that the claims of a patent define the invention to which the patentee is entitled the right to exclude.” *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312 (Fed. Cir. 2005) (*en banc*) (quotations and citations omitted). The function of claim construction is to define the

metes and bounds of the claims of the patent and to resolve issues regarding their meaning. *See O2 Micro Int'l Ltd. v. Beyond Innovation Tech. Co.*, 521 F.3d 1351, 1360 (Fed. Cir. 2008).

To determine the meaning of the claims, courts start by considering the intrinsic evidence. *Phillips*, 415 F.3d at 1313; *C.R. Bard, Inc. v. U.S. Surgical Corp.*, 388 F.3d 858, 861 (Fed. Cir. 2004) (citations omitted). The intrinsic evidence includes the claims themselves, the specification, and the prosecution history. *Phillips*, 415 F.3d at 1314; *C.R. Bard, Inc.*, 388 F.3d at 861.

The general rule is that each claim term is construed according to its ordinary and accustomed meaning as understood by one of ordinary skill in the art at the time of the invention in the context of the patent. *Phillips*, 415 F.3d at 1312-13. There are two exceptions to this general rule: “1) when a patentee sets out a definition and acts as his own lexicographer, or 2) when the patentee disavows the full scope of a claim term either in the specification or during prosecution.” *Thorner v. Sony Comput. Entm't Am. LLC*, 669 F.3d 1362, 1365 (Fed. Cir. 2012), citing *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1580 (Fed. Cir. 1996).

“The claim construction inquiry . . . begins and ends in all cases with the actual words of the claim.” *Renishaw PLC v. Marposs Societa' per Azioni*, 158 F.3d 1243, 1248 (Fed. Cir. 1998). “[I]n all aspects of claim construction, ‘the name of the game is the claim.’” *Apple Inc. v. Motorola, Inc.*, 757 F.3d 1286, 1298 (Fed. Cir. 2014) (internal citations omitted). Further, it is well settled that the preferred claim construction gives meaning to all of the terms of the claim. *In re Power Integrations, Inc.*, 884 F.3d 1370, 1376 (Fed. Cir. 2018), citing *Merck & Co. v. Teva Pharm. USA, Inc.*, 395 F.3d 1364, 1372 (Fed. Cir. 2005).

“[C]laims ‘must be read in view of the specification, of which they are a part.’” *Phillips*, 415 F.3d at 1314-15 (citation omitted). But, the Federal Circuit has held “while we read claims in view of the specification, of which they are a part, we do not read limitations from the embodiments in the

specification into the claims.” *Mastermine Software, Inc. v. Microsoft Corp.*, 874 F.3d 1307, 1310 (Fed. Cir. 2017) (quoting *Hill-Rom Servs., Inc. v. Stryker Corp.*, 755 F.3d 1367, 1371 (Fed. Cir. 2014)); *see also Phillips*, 415 F.3d at 1323; *Comark Commc'ns, Inc. v. Harris Corp.*, 156 F.3d 1182, 1187 (Fed. Cir. 1998) (quotations omitted) (“[a]lthough the specification may aid the court in interpreting the meaning of disputed claim language, particular embodiments and examples appearing in the specification will not generally be read into the claims.”). “[I]t is improper to read limitations from a preferred embodiment described in the specification—even if it is the only embodiment—into the claims absent a clear indication in the intrinsic record that the patentee intended the claims to be so limited.” *Cisco Sys. v. TQ Delta, LLC*, 928 F.3d 1359, 1364 (Fed. Cir. 2019) (quoting *Liebel-Flarsheim Co. v. Medrad, Inc.*, 358 F.3d 898, 913 (Fed. Cir. 2004)); *see also Phillips*, 415 F.3d at 1323 (“[A]lthough the specification often describes very specific embodiments of the invention, we have repeatedly warned against confining the claims to those embodiments.”).

The prosecution history is another tool to supply the proper context for claim construction because, like the specification, the prosecution history provides evidence of how the U.S. Patent and Trademark Office (“PTO”) and the inventor understood the patent. *Phillips*, 415 F.3d at 1317.

Although extrinsic evidence, such as dictionaries and testimony from expert witnesses, can also be useful, it is “less significant than the intrinsic record in determining the legally operative meaning of claim language.” *Id.* (citation and quotation omitted).

Additionally, all claims in a patent family should be interpreted consistently. *NTP, Inc. v. Research In Motion, Ltd.*, 418 F.3d 1282, 1293 (Fed. Cir. 2005) (when “patents all derive from the same parent application and share many common terms, we must interpret the claims consistently across all asserted patents.”). And the independent claims of a patent should not be interpreted in a way that contradicts or conflicts with the language of a dependent claim. *Phillips*, 415 F.3d at 1314-

15. In fact, “the presence of a dependent claim that adds a particular limitation gives rise to a presumption that the limitation in question is not present in the independent claim.” *Id.* at 1315. It is also improper to add redundant words into the claims, especially when those words are present later in the claims. *See TMI Prods. v. Rosen Entm’t Sys., L.P.*, 610 Fed. Appx. 968, 971-972 (Fed. Cir. 2015) (rejecting construction of a term that would render other language in the claim redundant).

“A claim construction that renders asserted claims facially nonsensical ‘cannot be correct.’” *Becton, Dickinson & Co. v. Tyco Healthcare Grp., LP*, 616 F.3d 1249, 1255 (Fed. Cir. 2010), (quoting *Schoenhaus v. Genesco, Inc.*, 440 F.3d 1354, 1357 (Fed. Cir. 2006)). Indeed, a proposed construction will only hold if, when substituting the proposed construction for the disputed term, the claim still makes sense. *Schoenhaus*, 440 F.3d at 1357 (“If the phrase ‘orthotic device’ is interpreted consistently throughout the patent, then plaintiffs’ proposed definition will only hold if, substituting either of the two proffered meanings in place of the phrase ‘orthotic device’, claim 2 makes sense.”).

B. Indefiniteness

“[A] patent is invalid for indefiniteness if its claims, read in light of the specification delineating the patent, and the prosecution history, fail to inform, with reasonable certainty, those skilled in the art about the scope of the invention.” *Nautilus, Inc. v. Biosig Instruments, Inc.*, 572 U.S. 898, 901 (2014); *see also* 35 U.S.C. §112. Because “patents are presumed to be valid, any fact critical to a holding on indefiniteness must be proven by the challenger by clear and convincing evidence.” *One-E-Way, Inc. v. ITC*, 859 F.3d 1059, 1062 (Fed. Cir. 2017) (citation and quotation omitted). When a party advocating for a construction of indefiniteness fails to provide clear and convincing evidence, courts will deem the claims to be definite. *Id.*; *see also iCeutica Pty Ltd. v. Lupin Ltd.*, 2018 U.S. Dist. LEXIS 16523, at *21 (D. Md. Feb. 1, 2018).

IV. ARGUMENT

GCE has taken the position that several terms need to be construed by the Court. However, GCE’s proposed constructions are not consistent with the plain and ordinary meaning of the disputed terms. Instead, GCE has identified terms for construction in an attempt to (1) improperly narrow them by reading in additional limitations or the preferred embodiment to try to avoid liability for its infringement; and/or (2) claim they are indefinite so as to invalidate the claims. As to these terms identified by GCE, 3B has proposed constructions that are consistent with the plain and ordinary meaning of each of the terms, again, only because GCE identified them for construction.

A. “Separation Cartridge”

Term	Patent / Asserted Claims	GCE’s Proposed Construction	3B’s Proposed Construction
“separation cartridge”	’628 Patent, claims 1, 11, 12 ’614 Patent, claims 1-3, 8, 9, 12	“a housing/container that holds multiple adsorbent columns for gas separation and provides separate inlet and outlet ports for each adsorbent column”	Plain and ordinary meaning, which is “a cartridge configured to separate gas”

1. 3B’s Proposed Construction

The plain and ordinary meaning of a “separation cartridge” is “a cartridge configured to separate gas.” The written description of the patents-in-suit explains that “[t]he cartridge is removable from an oxygen concentrator which separates oxygen from ambient air.” [*See* Ex. 1, ’628 Patent at 2:54-58; *see also* 15:40-43 (“...links product control pump 154 to separation cartridge 206 through main valve 140 to transport oxygen rich gas separated by cartridge 206.”)]. Further, the claims themselves support the plain and ordinary meaning, and 3B’s construction. For instance, claim 1 of the ’628 Patent recites, in relevant part, “the separation cartridge comprising ... a bed of adsorbent material configured to preferentially adsorb nitrogen.” [*See Id.*, claim 1]. This claim, for example,

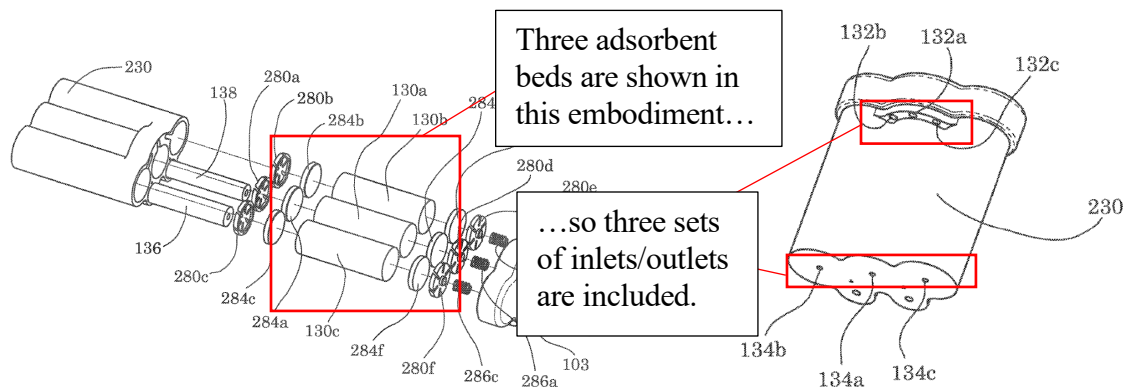
provides additional specifics of the gas to be separated as well which is consistent with the plain and ordinary meaning of “separation cartridge.”

2. GCE’s Proposed Construction

GCE contends that “separation cartridge” should be construed as “a housing/container that holds multiple adsorbent columns for gas separation and provides separate inlet and outlet ports for each adsorbent column.” Under GCE’s proposed construction, a “separation cartridge” would require multiple adsorbent columns, as well as separate inlet and outlet ports for each column. However, this is not the plain an ordinary meaning of “separation cartridge.” 3B believes that GCE is proposing this improperly narrow construction in an attempt to avoid a finding of infringement of its accused device, which has only one column of adsorbent material in each separation cartridge.

The term “separation cartridge,” on its own, does not need not be construed to include any columns, inlets, or outlets, because the claims already introduce those features. Further, GCE’s construction requiring the separation cartridge to include “multiple adsorbent columns” ignores both the rest of the claim language as well as the specification’s disclosure that while multiple columns/beds of adsorbent are disclosed in some embodiments, the separation cartridge can have just one single adsorbent column or bed. [Ex. 1, ’628 Patent, 7:13-20 (explaining that the adsorption process can “be accomplished with a single column, or with a plurality of columns.”)].

To begin, the specification does describe a separation cartridge that has “adsorbent columns 130a-130c,” “inlet ports 132a-132c,” and “outlet ports 134a-134c.” [Ex. 1, ’628 Patent, 4:43-47, 60-63; 18:30-40]. An example separation cartridge 206 is shown in Figures 7, 15, and 16. In the example, the separation cartridge 206 includes three adsorbent columns 130a-130c. [*Id.*]. Since there are three columns, the separation cartridge likewise includes three inlets 132a-132c and three outlets 134a-134c—one of each, per column. [*Id.*].



However, it is improper to construe the claims to require the all of the elements of this example embodiment. In fact, the specification makes it clear that while multiple columns are disclosed in some embodiments, the separation cartridge can have just one single column. [Ex. 1, '628 Patent, 7:13-20 (explaining that the adsorption process can “be accomplished with a single column, or with a plurality of columns” but that “[i]f a plurality of columns are used, it is preferable to have a multiple of three.”)]. This is significant as GCE contends the claim *must* have more than one adsorbent column. The text of the patents-in-suit is clear: a single column is sufficient.

Additionally, incorporating the terms “inlet” and “outlet” into the construction of “separation cartridge” would be inappropriate at least because the claims of the '628 patent that use this term already separately require the separation cartridge to have an “inlet” and an “outlet.” [See e.g. Ex. 1, '628 Patent at claims 1, 11, and Ex. 2, '614 Patent at claims 1, 12, and 16]; *TMI Prods.*, 610 Fed. Appx. at 971-972 (rejecting construction of a term that would render other language in the claim redundant); *Power Integrations*, 884 F.3d at 1376 (the preferred claim construction gives meaning to all of the terms of the claim) (citations omitted); *Phillips*, 415 F.3d at 1314; see also *ACTV, Inc. v. Walt Disney Co.*, 346 F.3d 1082, 1088 (Fed. Cir. 2003) (“the context of the surrounding words of the claim also must be considered in determining the ordinary and customary meaning of those terms”). Construing “separation cartridge” to include “inlets” or “outlets” would improperly render those same

elements recited in other parts of the claims as redundant or meaningless. *Id.* This further reinforces that the plain and ordinary meaning of this term is the correct construction as other portions of the claims reciting a separation cartridge already define what additional features the separation cartridge includes.

In addition to improperly reading “inlet” and “outlet” into the construction, GCE’s effort to read multiple adsorbent beds into the claims also conflicts with the plain language of the claims. Specifically, by way of example, claim 1 of the ’628 Patent recites, in relevant part, a “separation cartridge comprising ... a bed of adsorbent material configured to preferentially adsorb nitrogen.” [Ex. 1, ’628 Patent at claim 1, *see also* claim 11; Ex. 2, ’614 Patent at claims 1, 12, and 16]. GCE’s construction improperly tries to read multiple adsorbent beds (and corresponding inlets and outlets) into the construction of “separation cartridge” when the claim already recites “a bed of adsorbent material” (singular), not multiple adsorbent beds.

Further, the patent owner knew how to claim multiple adsorbent beds in a single separation cartridge, but specifically did not do so in the independent claims. [*See, e.g.*, Ex. 1, ’628 Patent at Claim 21 (“wherein the bed of adsorbent material is one of a plurality of beds of adsorbent material within the separation cartridge”); Ex. 2, ’614 Patent at claim 16 (“wherein the first and second beds are contained within a common separation cartridge”)]. Because other claims in the patents-in-suit, including claims that depend from the claims at issue, specify that there are multiple columns in the separation cartridge, it is improper to read multiple adsorbent columns to be required by only the term “separation cartridge.” *Phillips*, 415 F.3d at 1315 (“[T]he presence of a dependent claim that adds a particular limitation gives rise to a presumption that the limitation in question is not present in the independent claim.”); *Beachcombers v. WildeWood Creative Products, Inc.*, 31 F.3d 1154, 1162 (Fed. Cir. 1994) (interpretation that renders dependent claim superfluous is “presumptively unreasonable”

under doctrine of claim differentiation); *Trs. of Columbia Univ. v. Symantec Corp.*, 811 F.3d 1359, 1370 (Fed. Cir. 2016) (rejecting construction that was too limiting because “in a situation where dependent claims have no meaningful difference other than an added limitation, the independent claim is not restricted by the added limitation in the dependent claim.”) (citations omitted).

Moreover, claim 12 of the '614 Patent claims “[a] separation cartridge for a portable oxygen concentrator, comprising:...” as the preamble of the claim. [Ex. 2, '614 Patent at claim 12]. That is, claim 12 is claiming the separation cartridge itself as opposed to other claims which recite a portable oxygen concentrator with a separation cartridge as an element of the portable oxygen concentrator. [*Id.* at claim 12]. Claim 12 then goes on to identify the elements of the separation cartridge for that particular claim. [*Id.*]. GCE’s proposed construction would be inconsistent with the actual claimed elements of the separation cartridge in claim 12 of the '614 Patent. *Becton, Dickinson & Co.*, 616 F.3d at 1255 (“A claim construction that renders asserted claims facially nonsensical cannot be correct.”) (citations and quotation omitted).

In summary, 3B’s construction is the correct one because while the patents-in-suit disclose an embodiment with multiple inlets, outlets, and beds of adsorbent material, it is improper to limit the claims to a specification embodiment, the claims do not otherwise require those limitations, and some of those limitations are recited separately in dependent claims. *Kara Tech. Inc. v. Stamps.com Inc.*, 582 F.3d 1341, 1347-48 (Fed. Cir. 2009) (“[T]he claims, not specification embodiments, define the scope of patent protection. The patentee is entitled to the full scope of his claims, and we will not limit him to his preferred embodiment or import a limitation from the specification into the claims.”) (citations omitted); *Aventis Pharma S.A. v. Hospira, Inc.*, 675 F.3d 1324, 1330-31 (Fed. Cir. 2012) (“general descriptions of the characteristics of embodiments [in the specification] do not suffice to limit the claims”); *see also Phillips*, 415 F.3d at 1323 (“[A]lthough the specification often describes

very specific embodiments of the invention, we have repeatedly warned against confining the claims to those embodiments.”) (citations omitted); *Laryngeal Mask Co. v. Ambu A/S*, 618 F.3d 1367, 1372 (Fed. Cir. 2010) (“we do not generally limit claims to the preferred embodiment”).

B. “Receptacle”

Term	Patent / Asserted Claims	GCE’s Proposed Construction	3B’s Proposed Construction
“receptacle”	’628 Patent, claims 1, 11 ’614 Patent, claim 1	<u>GCE’s Original Proposed Construction</u> : “a structure that releasably interfaces with the inlet(s) and outlet(s) of the separation cartridge and at least partially contains the separation cartridge,” or otherwise indefinite <u>GCE’s 5-22-23 Revised Proposed Construction</u> : ³ “a structure that releasably interfaces with the inlet(s) and outlet(s) of the separation cartridge and at least partially contains the separation cartridge,” -or- “a structure configured to releasably receive and at least partially contain the separation cartridge”	Plain and ordinary meaning, which is “a space configured to receive and contain something”

³ This is the first of two terms where GCE informed 3B on May 22, 2023 that it was moving forward with a revised alternative proposed construction. 3B addressed the new alternative constructions to the extent possible in the time period remaining before it filed this brief, and will further address them in 3B’s Response Brief, if necessary. 3B further notes that while the alternative construction in GCE’s Revised Proposed Construction was offered as a proposed compromise construction to 3B on May 11, 2023, 3B rejected the construction on May 15, 2023 and was not informed until May 22, 2023 that GCE was including this construction as a proposed alternative construction. GCE no longer contends this term is indefinite.

1. 3B's Proposed Construction

The plain and ordinary meaning of “receptacle” is “a space configured to receive and contain something.” Figure 7 of the '628 Patent, shown below, illustrates an example oxygen concentrator. In the figure, the power pack and adsorbent cartridge have been removed from their respective associated receptacles 208 and 210. [Ex. 1, '628 Patent].

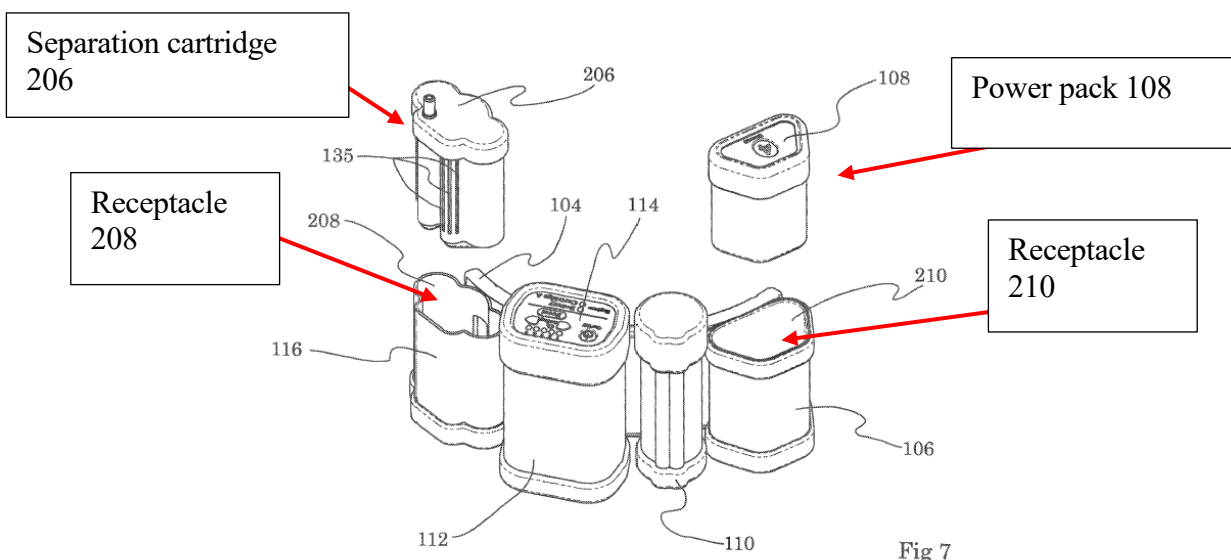


Figure 7 illustrates a “[p]ower pack 108 [that] has been removed from receptacle 210 of power module 106.” [Ex. 1, '628 Patent at 11:65-66]. This drawing further shows an “[a]dsorbent cartridge 206 [that] has been removed from receptacle 208 of cartridge module 116.” [*Id.* at 11:66-12:1]. The specification explains that “[a]dsorbent cartridge 206 and power pack 108 are easily removable to facilitate replacement.” [*Id.* at 12:1-3]. Moreover, by way of example, claim 1 of the '628 Patent recites, in relevant part, “a cartridge module comprising a housing, the housing defining a receptacle.” [*Id.*, claim 1]. Claim 1 further recites “a separation cartridge selectively removable from the receptacle.” [*Id.*, claim 1]. It is clear from at least these excerpts of the specification and claim 1 of the '628 Patent that the housing of the cartridge module defines a receptacle, or space, that receives and contains something. In the asserted claims, it is the separation cartridge that is received and contained in the

receptacle. However, the specification also identifies another receptacle for receiving and containing the power module. Therefore, a construction of “receptacle” should also take into account the specification’s consistent use of the term receptacle in both instances. 3B’s proposed construction is consistent with all of these examples from the intrinsic record.

Further, the term “receptacle” is a well-known and easily-understood term, which means to receive and contain. [*See* Ex. 3, Webster’s Third New International Dictionary (2002) (Defining “receptacle” as “one that receives and contains something”)]. The claims use the word “receptacle” consistent with its plain and ordinary meaning.

2. GCE’s Proposed Constructions

GCE first proposes that “receptacle” should be construed as “a structure that releasably interfaces with the inlet(s) and outlet(s) of the separation cartridge and at least partially contains the separation cartridge.”

First, importing additional elements of the already separately claimed “inlet(s),” “outlet(s),” and “separation cartridge” into the construction of “receptacle” is inappropriate. This is at least because the independent claims that recite the term “receptacle” already separately identify the separation cartridge, as well as an inlet and an outlet and the required structural arrangement of these elements. [*See* Ex. 1, ‘628 Patent, claims 1, 11 and their dependent claims; Ex. 2, ‘614 Patent, Claim 1 and its dependent claims]; *TMI Prods.*, 610 Fed. Appx. at 971-972 (rejecting construction of a term that would render other language in the claim redundant); *Power Integrations*, 884 F.3d at 1376 (the preferred claim construction gives meaning to all of the terms of the claim) (citations omitted); *Phillips*, 415 F.3d at 1314; *see also ACTV, Inc.*, 346 F.3d at 1088 (“the context of the surrounding words of the claim also must be considered in determining the ordinary and customary meaning of those terms”). Construing “receptacle” to include a “separation cartridge,” “inlets,” or “outlets” would

improperly render those same elements recited in other parts of the claims as redundant or meaningless.

Additionally, there is nothing about the plain and ordinary meaning of the term “receptacle” that would mean “releasably interfaces.” GCE is attempting to import features described in the specification into the claims even though they are not claimed. This is not proper. *Aventis Pharma*, 675 F.3d at 1330-31 (“general descriptions of the characteristics of embodiments [in the specification] do not suffice to limit the claims”); *see also Phillips*, 415 F.3d at 1323 (“[A]lthough the specification often describes very specific embodiments of the invention, we have repeatedly warned against confining the claims to those embodiments.”); *Laryngeal*, 618 F.3d at 1372 (“we do not generally limit claims to the preferred embodiment”); *Kara Tech. Inc.*, 582 F.3d at 1347-48 (“we will not limit [the patentee] to [the] preferred embodiment or import a limitation from the specification into the claims.”). And while the plain and ordinary meaning of the term “receptacle” does not in any way require something that “releasably interfaces,” it further does not require a “separation cartridge,” “inlets,” or “outlets.” The separation cartridge, inlet, and outlet are separately recited in the claims, as is any relationship between the receptacle and separation cartridge of the oxygen concentrator. [*See e.g.* Ex. 1, ’628 Patent, Claim 1 (“a separation cartridge selectively removable from the receptacle...”)].

GCE also now submits a new alternative proposed construction, which is an implicit acknowledgement that GCE’s first proposed construction is incorrect. Regardless, GCE’s alternative construction likewise improperly requires the receptacle to “releasably receive” the separation cartridge. The requirement of “releasably receive” is improper for the same reasons as “releasably interfaces” discussed herein. Moreover, the fact that GCE is now proposing two different constructions, each with different requirements, demonstrates that GCE is scrambling in a belated

effort to find a construction that fits its own theories of its case, as opposed to applying the correct construction to this term - the plain and ordinary meaning.

C. “Selectively Removable”

Term	Patent / Asserted Claims	GCE’s Proposed Construction	3B’s Proposed Construction
“selectively removable [from a receptacle]”	’628 Patent, claims 1, 11 ’614 Patent, claim 1	GCE’s <u>Original Proposed Construction</u> : “withdrawable or separable as a whole from a receptacle,” or otherwise indefinite GCE’s <u>5-22-23 Revised Proposed Construction</u> ⁴ : “withdrawable or separable as a whole from a receptacle,” -or- “can be individually chosen to be withdrawn” [from the receptacle]	Plain and ordinary meaning, which is “can be chosen to be removed” [from a receptacle]

1. 3B’s Proposed Construction

The plain and ordinary meaning of “selectively removable” is “can be chosen to be removed.”⁵ To be “selectively removable,” something must be able to be chosen to be removed. 3B’s construction is consistent with the specification showing components such as a separation cartridge or a power pack which can be chosen to be removed. Again, for example, Figure 7 illustrates a

⁴ This is the second of two terms where GCE informed 3B on May 22, 2023 that it was moving forward with a revised alternative proposed construction. 3B addressed the new alternative construction to the extent possible in the short time period remaining before it filed this brief, and will further address them in 3B’s Response Brief, if necessary. 3B further notes that while the alternative construction in GCE’s Revised Proposed Construction was offered as a proposed compromise construction to 3B on May 11, 2023, 3B rejected the construction on May 15, 2023 and was not informed until May 22, 2023 that GCE was including this construction as a proposed alternative construction. GCE no longer contends this term is indefinite.

⁵ In the proposed construction, 3B includes the words “from a receptacle” in brackets because it is not actually part of the construction but simply follows the term “selectively removable” in the cited claims. GCE proposed the term in this manner so 3B provides its construction in that context though the construction of “selectively removable” comes before the bracketed portion.

“[p]ower pack 108 [that] has been removed from receptacle 210 of power module 106,” and an “[a]dsorbent cartridge 206 [that] has been removed from receptacle 208 of cartridge module 116.” [Ex. 1, ’628 Patent at 11:65-12:1]. The specification explains that “[a]dsorbent cartridge 206 and power pack 108 are easily removable to facilitate replacement.” [*Id.* at 12:1-3].

Further, the terms “selectively” and “removable” are well-known and easily-understood terms. [See Ex. 6, The American Heritage Dictionary of the English Language (2000) (Defining “selective” as “of or characterized by selection”, “selection” as “one that is selected”, “select” as “to take as a choice from among several; pick out”, and “removable” as “that can be removed.”)]. The patents-in-suit, including the claims themselves, use the term “selectively removable” consistent with its plain and ordinary meaning.

2. GCE’s Proposed Constructions

GCE, on the other hand, first contends that this term should be construed to mean “withdrawable or separable as a whole from a receptacle.”

At a minimum, GCE’s proposed construction completely reads the word “selectively” out of the phrase “selectively removable,” which is improper. *See Power Integrations*, 884 F.3d at 1376 (the preferred claim construction gives meaning to all of the terms of the claim) (citations omitted). That is, GCE’s construction proposes a construction of “removable,” but improperly ignores the term “selectively.” The term “selectively” means “can be chosen.” GCE also attempts to import into the claim a requirement of “as a whole” without any basis. There is simply no reason to adopt such a construction in view of the plain and ordinary meaning of the term as explained herein.

GCE also now submits a new alternative proposed construction, which is an implicit acknowledgement that GCE’s first proposed construction is incorrect. While this new construction appears to acknowledge that “selectively” means “can be chosen,” GCE’s alternative construction now requires the term “selectively removable” to include “individually chosen.” This is improper at

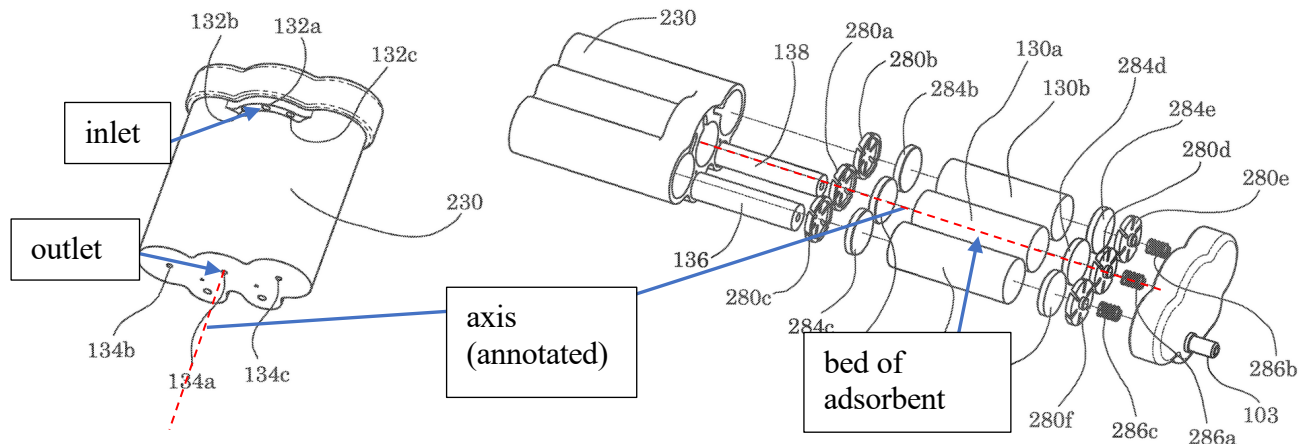
least because it is importing a new requirement (“individually chosen”) without any basis – just as GCE sought to do with the phrase as “as a whole” in its first proposed construction discussed herein. Moreover, the fact that GCE is now proposing two different constructions, each with different requirements, again demonstrates that GCE is attempting to find a construction that fits its own theories of its case, as opposed to applying the correct construction to this term - the plain and ordinary meaning.

D. “Axis”

Term	Patent / Asserted Claims	GCE’s Proposed Construction	3B’s Proposed Construction
“axis”	’628 Patent, claims 1, 11	“the centerline of the bed of adsorbent material”	Plain and ordinary meaning, which is “a reference line”

1. 3B’s Proposed Construction

The plain and ordinary meaning of “axis” is “a reference line.” The patents-in-suit claim particular orientations of the bed of adsorbent material, the inlet, and the outlet. In order to describe these arrangements, the claims of the ’628 Patent introduce an “axis.” The claims use the term “axis” as follows: “wherein the bed of adsorbent material is disposed along an axis, one of the inlet and the outlet is disposed along the axis, and the other of the inlet and the outlet is spaced-apart from the axis.” [See Ex. 1, ’628 Patent at Claim 1]. An example of this orientation is represented in the Figures 15-16, which are annotated below:



As understood from mathematics, the term “axis” is “a reference line.” [See Ex. 7, The Penguin Dictionary of Mathematics, Third Edition (2003) (defining “axis” as in general a “reference line”)]; *Inverness Medical Switzerland GmbH v Princeton Biomeditech Corp.*, 309 F.3d 1365, 1369 (Fed. Cir. 2002) (“technical dictionaries, encyclopedias and treatises ... may be used for established specialized meanings in particular fields of art.”). 3B’s proposed construction is consistent with the plain and ordinary meaning of this term.

2. GCE’s Proposed Construction

GCE contends that “axis” should be construed as “the centerline of the bed of adsorbent material.” However, this construction is improper for a number of reasons. While the term “axis” *can* refer to a centerline, or central axis, an axis is not necessarily a central axis. As such, when referring to a central axis, it is common to specifically call out a “centerline,” or “central axis,” or an “axis of symmetry,” or the like. Indeed, the ’628 Patent refers to “a central axis” when describing an aspect of the invention that does not relate to the separation cartridge 206. [See Ex. 1, ’628 Patent at 11:3-7 (“...a rotary valve that moves 360E (one full revolution about a central axis)...”); see also Ex. 7, The Penguin Dictionary of Mathematics, Third Edition (2003) (defining “axis” as in general a “reference line” while separately providing a specific definition of an “axis of symmetry”)]. Here, the

specification did refer to a “central axis” when describing a rotary valve, but specifically did not recite a “central axis” or “centerline” in the claims at issue.

The identified claims are introducing the concept of an “axis” to describe the relative orientation of the bed of adsorbent, the inlet, and the outlet. The “axis” serves as a reference line, much the way a traditional x-y graph is used to plot points relative to the x and y axes. On x-y graphs, the x and y axes are not centerlines, but they are each an axis because they are reference lines. The claims use the term “axis” consistent with how the term is used in mathematics to describe a spatial relationship of certain structures, much like points plotted on an x-y graph. In this context, the proper construction of axis is “a reference line.”

Further, a prior art reference that was cited in the prosecution of the ’628 Patent uses the term “axis” to refer to non-central axes. [Ex. 4, U.S. Patent No. 7,438,745 to *Deane* at col. 28:26-29; Figure 19E (axes 1942, 1944, 1948a, 1948b are non-central axes)]. This prior art reference used the term axis many times to refer to non-central axes, and not to centerlines, contrary to what GCE proposes to construe “axis” to mean. Likewise, when this prior art reference refers to a “central” axis it specifically calls it “central.” *Id.* (referring to axis 1946 as a “central lower lateral axis”). So, when one intends to refer to a “central” axis, they specifically call it out using the word “central.” GCE is improperly attempting to require an axis—which is not referred to in the claims as a “central” axis—to be a “centerline.” *See also Dogleg Right Partners, LP. v. Taylor Made Golf Co.*, No. 2:07-CV-533-TJW-CE, 2011 U.S. Dist. LEXIS 29474, at *10 (E.D. Tex. Mar. 22, 2011)(adopting parties’ agreed separate constructions of “axis” and “centerline,” with “axis” meaning “A reference line from which distances or angles are measured in a coordinate system...” and being broader than “centerline.”)

Finally, while Figure 16 of the ’628 Patent does show an example of a line that would be an axis through a center of a bed of adsorbent, the claims are not limited to, nor do they recite, a “central

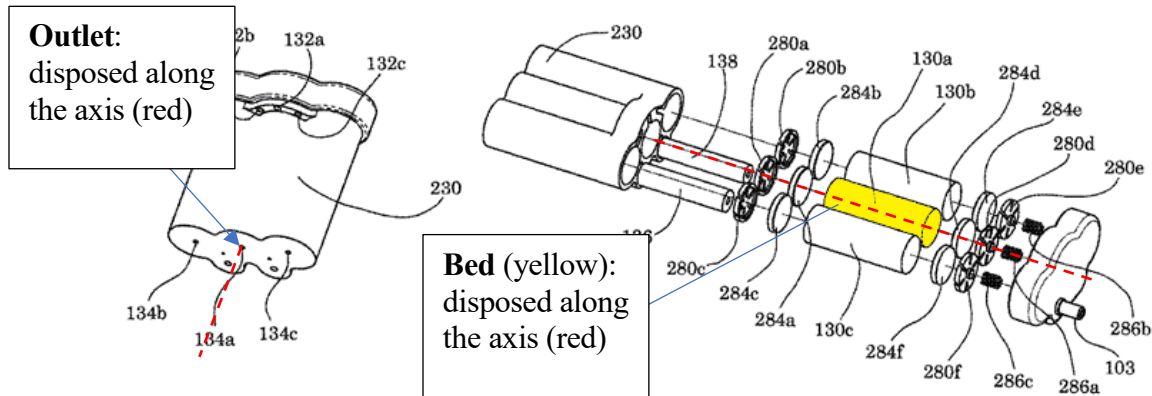
axis.” This is yet another improper attempt by GCE to limit the claims to a preferred embodiment and to import limitations into the claims. *Aventis Pharma*, 675 F.3d at 1330-31 (“general descriptions of the characteristics of embodiments [in the specification] do not suffice to limit the claims”); *see also Phillips*, 415 F.3d at 1323 (“[A]lthough the specification often describes very specific embodiments of the invention, we have repeatedly warned against confining the claims to those embodiments.”); *Laryngeal*, 618 F.3d at 1372 (“we do not generally limit claims to the preferred embodiment”); *Kara Tech. Inc.*, 582 F.3d at 1347-48 (“we will not limit [the patentee] to [the] preferred embodiment or import a limitation from the specification into the claims.”). GCE’s construction should be rejected.

E. “Disposed Along...”

Term	Patent / Asserted Claims	GCE’s Proposed Construction	3B’s Proposed Construction
“disposed along [an]/[the] axis”	’628 Patent, claims 1, 11	“arranged on the axis such that the axis passes through”	Plain and ordinary meaning, which is “arranged on the axis”

1. 3B’s Proposed Construction

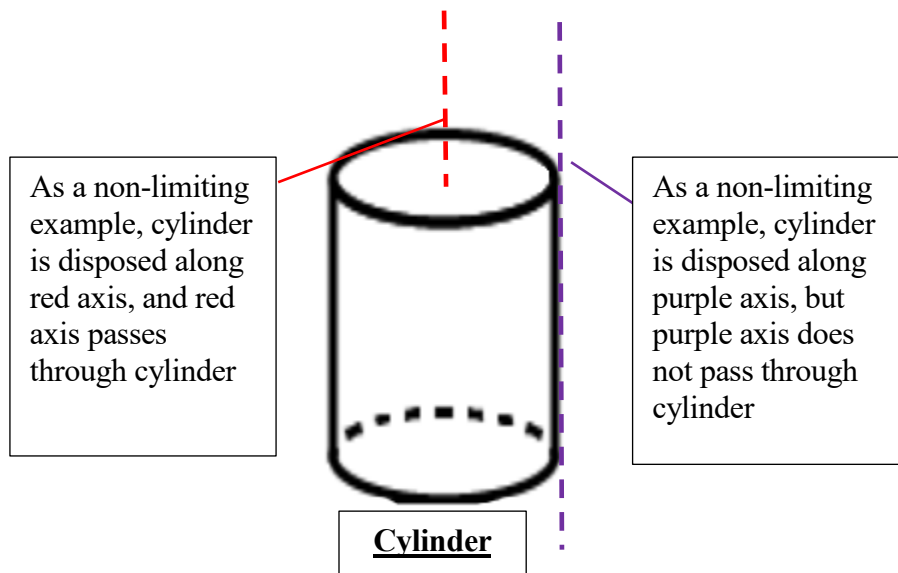
The plain and ordinary meaning of “disposed along [an]/[the] axis” is “arranged on the axis.” The claims use “disposed along” as follows: “wherein the bed of adsorbent material is disposed along an axis, one of the inlet and the outlet is disposed along the axis...” [*See, e.g.*, Ex. 1, ’628 Patent at Claim 1]. As shown in Figures 15 and 16 of the ’628 Patent, the bed of adsorbent material and the outlet are arranged along the axis. [*See Id.* at Figures 15 and 16, annotated below]:



Both Parties have proposed constructions that include “arranged on the axis.” However, GCE adds more to its proposed construction in an attempt to improperly narrow the meaning of “disposed along.”

2. GCE’s Proposed Construction

GCE contends that the disputed term should be construed as “arranged on the axis such that the axis passes through.” Thus, in addition to the plain and ordinary meaning as proposed by 3B, GCE seeks to further require that the axis “passes through” the corresponding structures. However, GCE’s construction is not the correct one because an object can be “disposed along” an axis without that axis passing through the object. Here is an example:



As shown in the example above, the cylinder is disposed along the example purple axis, because the cylinder is arranged on the purple axis, but the purple axis does not pass through the cylinder. GCE's construction requiring "that the axis passes through" should be rejected.

F. Addition of "Separation Cartridge" into Claim 13 of the '614 Patent

Term	Patent / Asserted Claims	GCE's Proposed Construction	3B's Proposed Construction
"a first bed of adsorbent material configured to preferentially adsorb nitrogen; a first inlet oriented in a direction, wherein the first inlet is configured to direct a flow of ambient air to the first bed; a first outlet oriented in the direction, wherein the first outlet is configured to expel product gas flowing downstream of the first bed; a second bed of adsorbent material configured to preferentially adsorb nitrogen; a second inlet oriented in the direction, wherein the second inlet is configured to direct a flow of ambient air to the second bed; a second outlet oriented in the direction, wherein the second outlet is configured to expel product gas flowing	'614 Patent, claim 13	"a separation cartridge containing: (i) a first bed of adsorbent material configured to preferentially adsorb nitrogen; (ii) a first inlet oriented in a direction, wherein the first inlet is configured to direct a flow of ambient air to the first bed; (iii) a first outlet oriented in the direction, wherein the first outlet is configured to expel product gas flowing downstream of the first bed; (iv) a second bed of adsorbent material configured to preferentially adsorb nitrogen; (v) a second inlet oriented in the direction, wherein the second inlet is configured to direct a flow of ambient air to the second bed; and (vi) a second outlet oriented in the direction, wherein the second outlet is configured to expel product gas flowing downstream of the second bed"; or otherwise indefinite	No construction necessary. <i>"A separation cartridge containing:"</i> should not be added into claim 13, as GCE proposes; GCE does not attempt to construe any of the actual quoted claim language in the claim term GCE identified.

downstream of the second bed;”			
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1. 3B’s Proposed Construction

No construction is necessary for this lengthy claim term identified by GCE. As will be explained below, GCE does not seek to have words that are actually recited in claim 13 construed. Instead, GCE wants to improperly add the limitation of “a separation cartridge containing” to qualify much of the language in the body of the claim. While this may seem innocuous, it is not as will be explained further below. Nonetheless, there is no basis for simply adding additional limitations to a claim in this manner. Thus, this Court should adopt 3B’s proposal that no construction is necessary for this term and decline to add the limitations GCE seeks to import into the claim.

2. GCE’s Proposed Construction

Again, GCE seeks to have the Court construe a term that constitutes a lengthy portion of what is recited in Claim 13 of the ’614 Patent. [Ex. 2, Claim 13]. As shown in the table below, GCE does not seek to construe a single word of the lengthy term it identified. This is apparent simply by comparing the identified disputed term to GCE’s proposed construction. As shown in red and italics below, GCE instead improperly seeks to (1) add the additional limitation of “a separation cartridge containing:” into the claim to limit certain aspects of the claim, and (2) add roman numerals for each of the various limitations identified:

Term	GCE’s Proposed Construction
	<i>“a separation cartridge containing:</i>
a first bed of adsorbent material configured to preferentially adsorb nitrogen;	<i>(i)</i> a first bed of adsorbent material configured to preferentially adsorb nitrogen;
a first inlet oriented in a direction, wherein the first inlet is configured to direct a flow of ambient air to the first bed;	<i>(ii)</i> a first inlet oriented in a direction, wherein the first inlet is configured to direct a flow of ambient air to the first bed;

a first outlet oriented in the direction, wherein the first outlet is configured to expel product gas flowing downstream of the first bed;	(iii) a first outlet oriented in the direction, wherein the first outlet is configured to expel product gas flowing downstream of the first bed;
a second bed of adsorbent material configured to preferentially adsorb nitrogen;	(iv) a second bed of adsorbent material configured to preferentially adsorb nitrogen;
a second inlet oriented in the direction, wherein the second inlet is configured to direct a flow of ambient air to the second bed;	(v) a second inlet oriented in the direction, wherein the second inlet is configured to direct a flow of ambient air to the second bed; and
a second outlet oriented in the direction, wherein the second outlet is configured to expel product gas flowing downstream of the second bed	(vi) a second outlet oriented in the direction, wherein the second outlet is configured to expel product gas flowing downstream of the second bed

This is not proper. What GCE proposes is to require all of the elements recited the identified claim term to be contained in a single separation cartridge. Since claim 13 does not recite a separation cartridge, this appears to be yet another attempt by GCE to improperly require multiple beds, inlets, and outlets in a single separation cartridge to be present in this independent claim – much like GCE attempts in its improper construction of the term “separation cartridge.” *See Supra*, at Section IV(A). However, claim 13 is not drafted so narrowly nor does it require all of the recited elements to be in a single separation cartridge.

To provide some context, claim 13 of the '614 Patent is reproduced in its entirety below with the identified disputed claim term identified in red and italics:

13. A portable oxygen concentrator, comprising:
a first bed of adsorbent material configured to preferentially adsorb nitrogen;
a first inlet oriented in a direction, wherein the first inlet is configured to direct a flow of ambient air to the first bed;
a first outlet oriented in the direction, wherein the first outlet is configured to expel product gas flowing downstream of the first bed;
a second bed of adsorbent material configured to preferentially adsorb nitrogen;
a second inlet oriented in the direction, wherein the second inlet is configured to direct a flow of ambient air to the second bed;

a second outlet oriented in the direction, wherein the second outlet is configured to expel product gas flowing downstream of the second bed;

a power pack removable from the portable oxygen concentrator;
a pump electrically coupled to the power pack, the pump operable to cause a flow of fluid to move relative to the first and second beds of adsorbent material;
a user interface configured to allow a patient to adjust and monitor operation of the portable oxygen concentrator;
a carrying device for transporting the portable oxygen concentrator;
wherein a first line extending parallel to the direction passes through the first outlet,
wherein a second line spaced-apart from the first line and extending parallel to the first line passes through the first inlet,
wherein the portable oxygen concentrator is configured such that, during use, fluid flowing along the first line contacts the adsorbent material of the first bed and fluid flowing along the second line does not contact the adsorbent material of the first bed,
wherein a third line extending parallel to the direction passes through the second outlet,
wherein a fourth line spaced-apart from the third line and extending parallel to the third line passes through the second inlet, and
wherein the portable oxygen concentrator is configured such that, during use, fluid flowing along the third line contacts the adsorbent material of the second bed and fluid flowing along the fourth line does not contact the adsorbent material of the second bed.

[Ex. 2, '614 Patent, Claim 13 (emphasis added)]. The claim is clearly directed to “[a] portable oxygen concentrator, comprising” the elements recited following this preamble of the claim. While GCE attempts to have the Court construe the disputed term (red and italicized, above) so as to require that each of the elements in this term are part of a separation cartridge, there is no support for this in the claims.

For example, claim 1 of the '614 Patent, produced in relevant part below, specifically claims a portable oxygen concentrator that comprises a separation cartridge and further defines its features including, but not limited to, an inlet, an outlet, and a bed of adsorbent material:

1. A portable oxygen concentrator, comprising:

a separation cartridge selectively removable from a receptacle by movement relative to the receptacle in a first direction, *the separation cartridge comprising an inlet* oriented in a second direction opposite the first direction, *an outlet* oriented in the second direction, *and a bed of adsorbent material* configured to preferentially adsorb nitrogen; ...

[Ex. 2, *See* '614 Patent at claim 1 (emphasis added). If the patentee intended to claim “a separation cartridge” as part of the disputed term found in claim 13 of the '614 Patent, it is clear that it would have done so. However, it did not require that feature in claim 13 of the '614 Patent.

In fact, GCE’s construction is rebutted by other instances in other dependent claims where the patents-in-suit do just that as to the beds of adsorbent material. Under GCE’s proposed construction, claim 13 would be construed as requiring, in part, “a separation cartridge containing: ... a first bed of adsorbent material ... [and] a second bed of adsorbent material.” This means that a single separation cartridge would have to include a first bed and a second bed of adsorbent material. However, dependent claim 16 of the '614 Patent – which depends from independent claim 13 – recites: “[t]he portable oxygen concentrator as recited in claim 13, wherein the first and second beds are contained within a common separation cartridge.” [Ex. 2, '614 Patent, Claim 16]. Under GCE’s proposed construction, claim 16 would be rendered meaningless as it would not add anything to claim 13. *TMI Prods.*, 610 Fed. Appx. at 971-972 (rejecting construction of a term that would render other language in the claim redundant); *Power Integrations*, 884 F.3d at 1376 (the preferred claim construction gives meaning to all of the terms of the claim) (citations omitted); *Phillips*, 415 F.3d at 1314. Under the doctrine of claim differentiation, claim 1 must be construed in a way that leaves it broader than claim 16. *Beachcombers*, 31 F.3d at 1162 (interpretation that renders dependent claim superfluous is “presumptively unreasonable” under doctrine of claim differentiation); *Trs. of Columbia Univ.*, 811 F.3d at 1370 (“in a situation where dependent claims have no meaningful difference other than an added limitation, the independent claim is not restricted by the added limitation in the dependent

claim”) (citations omitted). For this additional reason, GCE’s proposed construction cannot be correct and should be rejected.

To the extent GCE contends that this term is “otherwise indefinite,” 3B is not aware of the basis for GCE’s contention. GCE did not identify any basis for invalidity in their initial invalidity contentions based on indefiniteness as it relates to the complete quoted language identified as this term. GCE understood the term with enough certainty to propose a construction here. It is just an incorrect construction. But since the term can be understood with reasonable certainty, the term is not indefinite.

G. “Contact” / “Does Not Contact”

Term	Patent / Asserted Claims	GCE’s Proposed Construction	3B’s Proposed Construction
(claims 1, 12) “fluid flowing along the first line contacts the adsorbent material of the bed” / “fluid flowing along the second line does not contact the adsorbent material of the bed” (claim 8) “when fluid flows through the separation cartridge, fluid flows along the first line in the second direction” / “when fluid flows through the separation cartridge . . . fluid flows along the second line in the first direction” ⁶ (claim 13) “fluid flowing along the first line contacts	’614 Patent, claims 1, 8, 12, 13	Indefinite	Plain and ordinary meaning. As to “contact” and “does not contact,” the plain and ordinary meanings are “touch” and “does not touch,” respectively. As to “fluid [flowing/flows] along,” the plain and ordinary meaning is “fluid [moving/moves] on.”

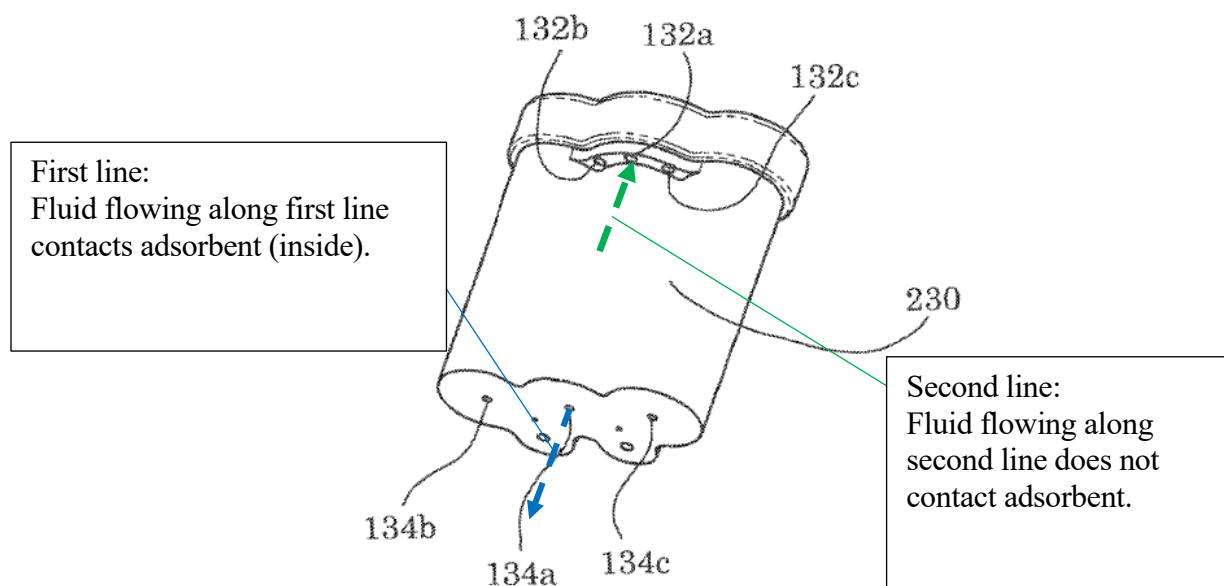
⁶ The phrases from claim 8 are not a proper term for the Court to consider as to indefiniteness as GCE did not identify any basis for invalidity in their initial invalidity contentions based on indefiniteness as it relates to this quoted language in claim 8. Accordingly, this portion of claim 8 need not be considered by the Court.

the adsorbent material of the first bed” / “fluid flowing along the second line does not contact the adsorbent material of the first bed” / “fluid flowing along the third line contacts the adsorbent material of the second bed” / “fluid flowing along the fourth line does not contact the adsorbent material of the second bed”			
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1. 3B’s Proposed Construction

The above grouping of large phrases (which are not even a proper single claim term for construction) should be given their plain and ordinary meanings.

As to the phrases “contact” and “does not contact,” the plain and ordinary meanings are “touch” and “does not touch,” respectively. As to “fluid [flowing/flows] along,” the plain and ordinary meaning is “fluid [moving/moves] on.” As shown below, the example first and second lines as defined by the claims are shown (added by annotation) in Figure 15. The claims containing these terms specify that, in use, fluid flowing along the first line contacts adsorbent while the fluid flowing along the second line does not contact adsorbent.



The specification discloses that there is no intermixing of fluid between beds (i.e., each adsorbent bed is “hermetically sealed,” meaning each bed is airtight) and that, in this example, the inlet ports 132a-132c receive ambient air, which has not contacted adsorbent, while the outlet ports 134a-134c expel product gas, which is gas that has contacted adsorbent. [See Ex. 2, '614 Patent at 18:30-56].

As to the claim terms “contact” and “does not contact,” these terms quite simply mean “touch” and “does not touch,” respectively. For example, fluid flowing along the second line above (green) will not touch adsorbent. Fluid flowing along the first line above (blue) will touch adsorbent, which is present inside the case 230. [See also Ex. 1 at Figure 16]. 3B’s position as to the term “contact” has been echoed by at least one court. See *INOVA Diagnostics, Inc. v. Euro-Diagnostica AB*, 2009 U.S. Dist. LEXIS 74899, at *22 (S.D. Cal. Aug. 24, 2009) (accepting the parties’ joint construction of “contacting” meaning “touching”). The dictionary also defines “contact” as “the state or condition of

physical touching.” [See Ex. 8, The Oxford American College Dictionary (2002), definition of “contact”].

As to the claim terms related to “fluid flowing along” one of the first or second reference lines, these claim terms refer to fluid that moves along one of the above lines. Again, fluid that moves along the green line does not touch adsorbent, but fluid moving along the blue line will touch adsorbent. The dictionary defines “flow” as “move along.” See [See Ex. 8, The Oxford American College Dictionary (2002), definition of “flow”].

To the extent the Court determines any construction is necessary, the phrases “contact,” “does not contact,” and “fluid [flowing/flows] along,” should be given their plain and ordinary meaning as proposed by 3B. Additionally, none of the terms in the group identified by GCE are indefinite.

2. GCE’s Proposed Construction

To begin, it is unclear exactly what part of, or why, GCE believes these multiple, different terms grouped together are indefinite. 3B will respond to GCE’s contention as to indefiniteness once GCE provides its position in its opening brief. However, the ’614 Patent is entitled to a presumption of validity. 35 U.S.C. §282 (“A patent shall be presumed valid.”).

3B further notes that GCE filed an *Inter Partes Review* (IPR) in the Patent Office regarding the ’614 Patent including attempts to challenge the validity of the claims containing these identified terms. 3B strongly disputes both GCE’s allegations as to invalidity and the various opinions GCE relies on in the form of a declaration of Kent Knaebel, which GCE submitted in an attempt to support its IPR. Nonetheless, Mr. Knaebel – who GCE contends qualifies as a person of ordinary skill in the art – was able to understand these claim terms with reasonable certainty so as to be able to (wrongly) allege that prior art disclosed these limitations. [See Ex. 9, Excerpt of Declaration of Kent Knaebel filed in IPR2023-00326 at pp. 162-167, 180-182, 200-203].

The only dispute here is whether these claim terms are indefinite. While 3B does not agree with many positions taken by GCE and Mr. Knaebel in the IPR, it is indisputable that Mr. Knaebel understood this group of terms GCE contends are now indefinite. Accordingly, GCE's position that these claim terms are indefinite is directly refuted by Mr. Knaebel. *Sonix Tech. Co. v. Publ'ns Int'l, Ltd.*, 844 F.3d 1370, 1380 (Fed. Cir. 2017) (reversing finding of indefiniteness where, among other things, application of a term by an expert "provide[s] evidence that a skilled artisan did understand the scope of this invention with reasonable certainty.")

Additionally, the Examiner also did not find these terms to be indefinite during the prosecution of the '614 Patent and understood them with reasonable certainty. [*See* Ex. 5, Excerpt of '614 Patent File History at pp. 20-24].

CARLSON, GASKEY & OLDS, P.C.

Dated: May 22, 2023

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CERTIFICATE OF SERVICE

I HEREBY CERTIFY that on May 22, 2023, I filed the foregoing document with the Clerk of the Court using the Court's CM/ECF system, which will serve a copy on all counsel of record.

Dated: May 22, 2023

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INDEX OF EXHIBITS

Exhibit 1	US Patent 10,357,628
Exhibit 2	US Patent 11,389,614
Exhibit 3	Webster's Third New International Dictionary (2002)
Exhibit 4	US Patent 7,438,745
Exhibit 5	Excerpt of '614 Patent File History
Exhibit 6	The American Heritage Dictionary of the English Language (2000)
Exhibit 7	The Penguin Dictionary of Mathematics, Third Edition (2003)
Exhibit 8	The Oxford American College Dictionary (2002)
Exhibit 9	Excerpts of Declaration of Kent Knaebel filed in IPR2023-00326