

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

JOINT CLAIM CONSTRUCTION STATEMENT

Pursuant to the Court's December 12, 2022 Scheduling Order (Dkt. 26) and Local Rule 805.1(f), the parties submit the following joint claim construction statement. All terms listed in the attached chart were identified by GCE.

Regarding 805.1(f)(3), which requires the parties to identify any witnesses they anticipate calling at a claim construction hearing (if one is held), neither 3B nor GCE anticipates calling any live witnesses unless requested by the Court. Each reserves the right to examine any witnesses called by the other party.

Dated: May 22, 2023

Respectfully submitted,

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VBOX, Inc. - Exhibit 2001
CGE Gas Control Equipment Inc. v. VBOX, Inc.
IPR2023-00527

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Proposed Terms / Elements for Construction	Patent / Asserted Claims	GCE's Proposed Construction and Supporting Materials	3B's Responsive Proposed Construction and Supporting Materials
"separation cartridge"	'628 Patent, claims 1, 11, 12	<u>GCE's Construction:</u> "a housing/container that holds multiple adsorbent columns for gas separation and provides separate inlet and outlet ports for each adsorbent column"	<u>3B's Construction:</u> Plain and ordinary meaning, which is "a cartridge configured to separate gas"
	'614 Patent, claims 1-3, 8, 9, 12	<u>Exemplary Intrinsic Support:</u> '628 Patent, 2:54-58; 4:7-42; 4:60-5:4; 11:67-12:3; 12:6-14; 18:30-40; 18:57-19:3; FIGS. 5, 7, 15, 16 '628 Patent File History, 237; 253-55 - U.S. Patent No. 7,954,490 File History, 341 - U.S. Patent Appl. No. 13/096,362 File History, 50; 58-59; 465 - U.S. Patent Appl. No. 13/795,977 File History, 15-20; 27-28; 477 - U.S. Patent No. 10,702,669 File History, 16; 255-56; 297-98; 541-47; 560-61 - Intrinsic evidence from <i>GCE Gas Control Equip. Inc. v. Vbox, Inc.</i>, IPR2023-00527 (PTAB) '614 Patent, 2:54-58; 4:7-42; 4:60-5:4; 11:67-12:3; 12:6-14; 18:30-40; 18:57-19:3; FIGS. 5, 7, 15, 16 - Intrinsic evidence from <i>GCE Gas Control Equip. Inc. v. Vbox, Inc.</i>, IPR2023-00326 (PTAB)	<u>Exemplary Intrinsic Evidence:</u> '628 Patent: All claims; Abstract; Figures 1-19; Col. 1:1 – Col. 3:52; Col. 3: 60 – 66; Col. 4:7-15, 18-21, 29-36; Col. 4:43 – 5:4; Col. 6:4-32; Col. 6: 37 – Col 7:48; Col. 8:33-53; Col. 8:66 – Col. 9:2; Col. 9:40-49; Col. 10:39 – Col. 11:6; Col. 11:11-16; Col. 11:59 – 12:20; Col. 12:61 – Col. 13:43; Col. 13:47-59; Col. 14:4-8; Col. 14:18-23; Col. 15:31-45, 62-65; Col. 18:30 – Col. 19:13; Col. 19:15-20; Col. 20:52-63; Col. 21:22-28; Col. 22:31-47; Col. 26:5-12. '614 Patent: All claims; Abstract; Figures 1-19; Col. 1:1 – Col. 3:52; Col. 3: 60 – 66; Col. 4:7-15, 18-21, 29-36; Col. 4:43 – 5:4; Col. 6:4-32; Col. 6: 37 – Col 7:48; Col. 8:33-53; Col. 8:66 – Col. 9:2; Col. 9:40-49; Col. 10:39 – Col. 11:6; Col. 11:11-16; Col. 11:59 – 12:20; Col. 12:61 – Col. 13:43; Col. 13:47-59; Col. 14:4-8; Col. 14:18-23; Col. 15:31-45, 62-65; Col. 18:30 – Col. 19:13; Col. 19:15-20; Col. 20:52-63; Col. 21:22-28; Col. 22:31-47; Col. 26:5-12.

			• ‘628 File History: Entirety of originally filed application filed June 13, 2018 including original specification, originally filed claims, and originally filed figures; Office Actions Mailed November 14, 2018 and May 8, 2019; Applicant Responses dated November 28, 2019 and May 10, 2019; Notice of Allowance, Notice of Allowability, and Detailed Action with Reasons for Allowance, dated May 29, 2019 [3B0000640-648, 0000718-773, 0000840-849, 0000857-878, 0000972-1014] • ‘614 File History: Entirety of originally filed application filed May 14, 2020 including original specification, originally filed claims, and originally filed figures; Preliminary Amendment filed July 23, 2020; Office Action Mailed May 24, 2022; Notice of Allowance and Notice of Allowability, dated June 9, 2022 [3B0000008-12, 0000020-24, 0000090-99, 00000140-201] • File History for U.S. App. No. 13/096,362 (IPR2023-00527 Ex. 1050), at 48-54, 500-502. • File History for U.S. App. No. 13/795,977 (IPR2023-00527 Ex. 1051), at 3-12, 14-30, 512-514. • File History for U.S. 10,702,669 (IPR2023-00527 Ex. 1052), at 13-20, 148-155, 162-203, 251-264, 288-315, 358-379, 381-400,
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			467-481, 490-510, 540-551, 553-570, 1080-1082. • Intrinsic evidence from <i>GCE Gas Control Equip. Inc. v. Vbox, Inc.</i>, IPR2023-00527 (PTAB) and/or <i>GCE Gas Control Equip. Inc. v. Vbox, Inc.</i>, IPR2023-00326 (PTAB)
		<u>Exemplary Extrinsic Support:</u> • U.S. Patent Appl. Pub. No. 2002/0033095 to Warren (“Warren”) • U.S. Patent No. 6,651,658 to Hill, Radtke, Schneider and Bixby (“Hill ’658”) • U.S. Patent No. 7,438,745 to Deane, Taylor and Li (“Deane ’745”) • U.S. Patent No. 5,827,358 to Kulish and Swank (“Kulish”) • U.S. Patent Application Publication No. 2005/0072426 to Deane, Taylor, Bare, March, Merchant and Smith (“Deane ’426”) • The American Heritage Dictionary of the English Language “cartridge” (Houghton Mifflin Co. 4th ed., 2000) • New Oxford American Dictionary “cartridge”; “separation” (Oxford University Press 2001) • Bloomsbury English Dictionary “cartridge”; “separation” (Bloomsbury Publishing 2d ed., 2004) • Webster’s Third New International Dictionary “cartridge”; “separation” (Merriam-Webster 2002)	<u>Exemplary Extrinsic Evidence:</u> • The American Heritage Dictionary of the English Language “cartridge” (Houghton Mifflin Co. 4th ed., 2000) • Bloomsbury English Dictionary “cartridge” (Bloomsbury Publishing 2d ed., 2004) • Declaration of one or more experts, either affirmatively or in rebuttal to any expert declaration from GCE, to be disclosed as set forth in the Fed. R. Civ. P. 26(b)(4)(A) and the Court’s December 12, 2022 Scheduling Order

		• Search of “separation cartridge” with priority dates before February 9, 2005 from Google Patents, https://patents.google.com/?q=%22separation+cartridge%22&before=priority:20050205&num=100 • Extrinsic evidence from <i>GCE Gas Control Equip. Inc. v. Vbox, Inc.</i>, IPR2023-00527 (PTAB) • Extrinsic evidence from <i>GCE Gas Control Equip. Inc. v. Vbox, Inc.</i>, IPR2023-00326 (PTAB) • Declaration of one or more experts, to be disclosed as set forth in the Fed. R. Civ. P. 26(b)(4)(A) and the Court’s December 12, 2022 Scheduling Order	
“receptacle”	’628 Patent, claim 1, 11	<u>GCE’s 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,” <i>-or-</i>	<u>3B’s Construction:</u> ¹ Plain and ordinary meaning, which is “a space configured to receive and contain something”

¹ 3B notes that GCE changed its proposed constructions on May 22, 2023 - the day this Joint Claim Construction Statement and opening Claim Construction Briefs were due. Specifically, GCE (1) removed the assertion that the term was “otherwise indefinite” from the construction proposed in the first bullet point; and (2) added the construction proposed in the second bullet point as an alternative. 3B reserves the right to add additional evidence to the extent necessary for 3B to address the new alternative construction. 3B further notes that while the construction proposed in the second bullet point was offered as a proposed compromise construction to 3B on May 11, 2023, 3B rejected the proposal on May 15, 2023 and was not informed until May 22, 2023 that GCE was including this construction as a proposed alternative construction.

	'614 Patent, claim 1	• “a structure configured to releasably receive and at least partially contain the separation cartridge”	
		<u>Exemplary Intrinsic Support:</u> • '628 Patent, 11:61-12:14; 17:35-38 • U.S. Patent No. 10,702,669 File History, 149; 183-84; 301-02 • U.S. Patent No. 10,357,628 File History 115-22; 135-39 • Intrinsic evidence from <i>GCE Gas Control Equip. Inc. v. Vbox, Inc.</i>, IPR2023-00527 (PTAB) • '614 Patent, 11:61-12:14; 17:35-38 • Intrinsic evidence from <i>GCE Gas Control Equip. Inc. v. Vbox, Inc.</i>, IPR2023-00326 (PTAB)	<u>Exemplary Intrinsic Evidence:</u> • '628 Patent: All claims; Abstract; Figures 1-19; Col. 1:1 – Col. 3:52; Col. 3:60-67; Col. 4:7-21, 29-34, 60-63; Col. 11:59 – 12:20; Col. 12:41-45; Col. 12:61 – Col. 13:50; Col. 14:31-36, 48-50; 17:35-38; Col. 18:30-19:13; Col. 26:5-12. • '614 Patent: All claims; Abstract; Figures 1-19; Col. 1:1 – Col. 3:52; Col. 3:60-67; Col. 4:7-21, 29-34, 60-63; Col. 11:59 – 12:20; Col. 12:41-45; Col. 12:61 – Col. 13:50; Col. 14:31-36, 48-50; 17:35-38; Col. 18:30-19:13; Col. 26:5-12. • '628 File History: Entirety of originally filed application filed June 13, 2018 including original specification, originally filed claims, and originally filed figures; Office Actions Mailed November 14, 2018 and May 8, 2019; Applicant Responses dated November 28, 2019 and May 10, 2019; Notice of Allowance, Notice of Allowability, and Detailed Action with Reasons for Allowance, dated May 29, 2019 [3B0000640-648, 0000718-773, 0000840-849, 0000857-878, 0000972-1014] • '614 File History: Entirety of originally filed application filed May 14, 2020 including original specification, originally

			filed claims, and originally filed figures; Preliminary Amendment filed July 23, 2020; Office Action Mailed May 24, 2022; Notice of Allowance and Notice of Allowability, dated June 9, 2022 [3B0000008-12, 0000020-24, 0000090-99, 00000140-201] • File History for U.S. 10,702,669 (IPR2023-00527 Ex. 1052), at 13-20, 148-155, 162-203, 251-264, 288-315, 358-379 • Intrinsic evidence from <i>GCE Gas Control Equip. Inc. v. Vbox, Inc.</i>, IPR2023-00527 (PTAB) and/or <i>GCE Gas Control Equip. Inc. v. Vbox, Inc.</i>, IPR2023-00326 (PTAB)
		<u>Exemplary Extrinsic Support:</u> • Warren • Dechene • The American Heritage Dictionary of the English Language “receptacle” (Houghton Mifflin Co. 4th ed., 2000) • New Oxford American Dictionary “receptacle” (Oxford University Press 2001) • Bloomsbury English Dictionary “receptacle” (Bloomsbury Publishing 2d ed., 2004) • Webster’s Third New International Dictionary “receptacle” (Merriam-Webster 2002) • Search of “receptacle” with priority dates before February 9, 2005 from Google Patents,	<u>Exemplary Extrinsic Evidence:</u> • GCE Petition in <i>GCE Gas Control Equip. Inc. v. Vbox, Inc.</i>, IPR2023-00527 (PTAB) and/or <i>GCE Gas Control Equip. Inc. v. Vbox, Inc.</i>, IPR2023-00326 (PTAB) • Webster’s Third New International Dictionary “receptacle” (Merriam-Webster 2002) • Declaration of one or more experts, either affirmatively or in rebuttal to any expert declaration from GCE, to be disclosed as set forth in the Fed. R. Civ. P. 26(b)(4)(A) and the Court’s December 12, 2022 Scheduling Order

		https://patents.google.com/?q=receptacle&before=priority:20050209&num=100 - Extrinsic evidence filings from <i>GCE Gas Control Equip. Inc. v. Vbox, Inc.</i>, IPR2023-00527 (PTAB) - Extrinsic evidence from <i>GCE Gas Control Equip. Inc. v. Vbox, Inc.</i>, IPR2023-00326 (PTAB) - Declaration of one or more experts, to be disclosed as set forth in the Fed. R. Civ. P. 26(b)(4)(A) and the Court's December 12, 2022 Scheduling Order	
"selectively removable [from a receptacle]"	'628 Patent, claim 1, 11 '614 Patent, claim 1	<u>GCE's Construction:</u> "withdrawable or separable as a whole from a receptacle," -or- "can be individually chosen to be withdrawn" [from the receptacle]	<u>3B's Construction:</u> ² Plain and ordinary meaning, which is "can be chosen to be removed" [from a receptacle]
		<u>Exemplary Intrinsic Support:</u> '628 Patent, 2:54-58; 3:6-8; 9:20-61; 10:61-11:33; 11:61-12:3; 12:15-20; 12:28-32; 12:61-64; 13:25-46; 14:29-32; 14:48-	<u>Exemplary Intrinsic Evidence:</u> '628 Patent: All claims; Abstract; Figures 1-19; Col. 2:54-Col. 3:35; Col. 11:60-12:14; Col. 18:30-19:13

² 3B notes that GCE changed its proposed constructions on May 22, 2023 - the day this Joint Claim Construction Statement and opening Claim Construction Briefs were due. Specifically, GCE (1) removed the assertion that the term was "otherwise indefinite" from the construction proposed in the first bullet point; and (2) added the construction proposed in the second bullet point as an alternative. 3B reserves the right to add additional evidence to the extent necessary for 3B to address the new alternative construction. 3B further notes that while the construction proposed in the second bullet point 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.

		50; 16:56-60; 17:22-26; 19:5-9; 19:32-35; 20:9-25; 20:26-30 • U.S. Patent No. 10,357,628 File History 115-22; 135-39 • Intrinsic evidence from <i>GCE Gas Control Equip. Inc. v. Vbox, Inc.</i>, IPR2023-00527 (PTAB) • '614 Patent, 2:54-58; 3:6-8; 9:20-61; 10:61-11:33; 11:61-12:3; 12:15-20; 12:28-32; 12:61-64; 13:25-46; 14:29-32; 14:48-50; 16:56-60; 17:22-26; 19:5-9; 19:32-35; 20:9-25; 20:26-30 • Intrinsic evidence from <i>GCE Gas Control Equip. Inc. v. Vbox, Inc.</i>, IPR2023-00326 (PTAB)	• '614 Patent: All claims; Abstract; Figures 1-19; Col. 2:54-Col. 3:35; Col. 11:60-12:14; Col. 18:30-19:13 • '628 File History: Entirety of originally filed application filed June 13, 2018 including original specification, originally filed claims, and originally filed figures; Office Actions Mailed November 14, 2018 and May 8, 2019; Applicant Responses dated November 28, 2019 and May 10, 2019; Notice of Allowance, Notice of Allowability, and Detailed Action with Reasons for Allowance, dated May 29, 2019 [3B0000640-648, 0000718-773, 0000840-849, 0000857-878, 0000972-1014] • '614 File History: Entirety of originally filed application filed May 14, 2020 including original specification, originally filed claims, and originally filed figures; Preliminary Amendment filed July 23, 2020; Office Action Mailed May 24, 2022; Notice of Allowance and Notice of Allowability, dated June 9, 2022 [3B0000008-12, 0000020-24, 0000090-99, 00000140-201] • File History for U.S. 10,702,669 (IPR2023-00527 Ex. 1052), at 13-20, 148-155 • Intrinsic evidence from <i>GCE Gas Control Equip. Inc. v. Vbox, Inc.</i>, IPR2023-00527 (PTAB) and/or <i>GCE Gas Control Equip. Inc. v. Vbox, Inc.</i>, IPR2023-00326 (PTAB)
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		<u>Exemplary Extrinsic Support:</u> • Dechene • The American Heritage Dictionary of the English Language “select” (Houghton Mifflin Co. 4th ed., 2000) • New Oxford American Dictionary “selectively”; “remove” (Oxford University Press 2001) • Bloomsbury English Dictionary “selectively”; “remove” (Bloomsbury Publishing 2d ed., 2004) • Webster’s Third New International Dictionary “selectively”; “select”; “remove”; “removeable” (Merriam-Webster 2002) • Search of “selectively removable” with priority dates before February 9, 2005 from Google Patents, https://patents.google.com/?q=%22selectively+removable%22&before=priority:20050205&num=100 • Extrinsic evidence from <i>GCE Gas Control Equip. Inc. v. Vbox, Inc.</i>, IPR2023-00527 (PTAB) • Extrinsic evidence from <i>GCE Gas Control Equip. Inc. v. Vbox, Inc.</i>, IPR2023-00326 (PTAB) • Declaration of one or more experts, to be disclosed as set forth in the Fed. R. Civ. P. 26(b)(4)(A) and the Court’s December 12, 2022 Scheduling Order	<u>Exemplary Extrinsic Evidence:</u> • GCE Petition in <i>GCE Gas Control Equip. Inc. v. Vbox, Inc.</i>, IPR2023-00527 (PTAB) and/or <i>GCE Gas Control Equip. Inc. v. Vbox, Inc.</i>, IPR2023-00326 (PTAB) • The American Heritage Dictionary of the English Language “select” and “selection” and “selective” and “remove” and “removable” (Houghton Mifflin Co. 4th ed., 2000) • Declaration of one or more experts, either affirmatively or in rebuttal to any expert declaration from GCE, to be disclosed as set forth in the Fed. R. Civ. P. 26(b)(4)(A) and the Court’s December 12, 2022 Scheduling Order
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“axis”	'628 Patent, claims 1, 11	<u>GCE’s Construction:</u> “the centerline of the bed of adsorbent material”	<u>3B’s Construction:</u> Plain and ordinary meaning, which is “a reference line”
		<u>Exemplary Intrinsic Support:</u> '628 Patent, 11:3-6; FIGS 15, 16 - Intrinsic evidence from <i>GCE Gas Control Equip. Inc. v. Vbox, Inc.</i>, IPR2023-00527 (PTAB)	<u>Exemplary Intrinsic Evidence:</u> '628 Patent: All claims; Abstract; Figures 1-19; Col. 1:1-14; Col. 2:53 – Col. 3:52; Col. 3:60-64; Col. 4:18-21, 29-34; Col. 11:3-6; Col. 11:59 – 12:3; Col. 12:14, 61-62; Col. 13:3-5, 42-44, 47-50; Col. 18:30 – Col. 19:13; Col. 26:5-12 '614 Patent: All claims; Abstract; Figures 1-19; Col. 1:1-14; Col. 2:53 – Col. 3:52; Col. 3:60-64; Col. 4:18-21, 29-34; Col. 11:3-6; Col. 11:59 – 12:3; Col. 12:14, 61-62; Col. 13:3-5, 42-44, 47-50; Col. 18:30 – Col. 19:13; Col. 26:5-12 - File History for U.S. 10,702,669 (IPR2023-00527 Ex. 1052), at 13-20, 148-155, 162-203, 251-264, 288-315, 358-379, 381-400, 467-481, 490-510, 540-551, 553-570, 1080-1082 '628 File History: Entirety of originally filed application filed June 13, 2018 including original specification, originally filed claims, and originally filed figures; Office Actions Mailed November 14, 2018 and May 8, 2019; Applicant Responses dated November 28, 2019 and May 10, 2019; Notice of Allowance, Notice of Allowability, and Detailed Action with Reasons for Allowance, dated May 29, 2019

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		<u>Exemplary Extrinsic Support:</u> • The American Heritage Dictionary of the English Language “axis” (Houghton Mifflin Co. 4th ed., 2000) • New Oxford American Dictionary “axis” (Oxford University Press 2001) • Bloomsbury English Dictionary “axis” (Bloomsbury Publishing 2d ed., 2004) • Webster’s Third New International Dictionary “axis” (Merriam-Webster 2002) • Search of “axis” with priority dates before February 9, 2005 from Google Patents, https://patents.google.com/?q=axis&before=priority:20050205&num=100 • Extrinsic evidence from <i>GCE Gas Control Equip. Inc. v. Vbox, Inc.</i>, IPR2023-00527 (PTAB) • Declaration of one or more experts, to be disclosed as set forth in the Fed. R. Civ. P. 26(b)(4)(A) and the Court’s December 12, 2022 Scheduling Order	<u>Exemplary Extrinsic Evidence:</u> • The Penguin Dictionary of Mathematics “axis” (Penguin Books 3rd ed. 2003) • U.S. Patent No. 7,438,745 to Deane (IPR2023-00326 Ex.1039) • The American Heritage Dictionary of the English Language “axis” (Houghton Mifflin Co. 4th ed., 2000) • Declaration of one or more experts, either affirmatively or in rebuttal to any expert declaration from GCE, to be disclosed as set forth in the Fed. R. Civ. P. 26(b)(4)(A) and the Court’s December 12, 2022 Scheduling Order
“disposed along [an]/[the] axis”	’628 Patent, claims 1, 11	<u>GCE’s Construction:</u> • “arranged on the axis such that the axis passes through” •	<u>3B’s Construction:</u> Plain and ordinary meaning, which is “arranged on the axis”

		<u>Exemplary Intrinsic Support:</u> • '628 Patent, 4:43-5:4; 18:30-56; FIGS 15, 16	<u>Exemplary Intrinsic Evidence:</u> • '628 Patent: All claims; Abstract; Figures 1-19; Col. 1:1-14; Col. 2:53 – Col. 3:52; Col. 3:60-64; Col. 4:18-21, 29-34; Col. 8:24-28; Col. 11:3-6; Col. 11:59 – 12:3; Col. 12:14, 61-62; Col. 13:3-5, 42-44, 47-50; Col. 18:30 – Col. 19:13; Col. 26:5-12 • '614 Patent: All claims; Abstract; Figures 1-19; Col. 1:1-14; Col. 2:53 – Col. 3:52; Col. 3:60-64; Col. 4:18-21, 29-34; 8:24-28; Col. 11:3-6; Col. 11:59 – 12:3; Col. 12:14, 61-62; Col. 13:3-5, 42-44, 47-50; Col. 18:30 – Col. 19:13; Col. 26:5-12 • '628 File History: Entirety of originally filed application filed June 13, 2018 including original specification, originally filed claims, and originally filed figures; Office Actions Mailed November 14, 2018 and May 8, 2019; Applicant Responses dated November 28, 2019 and May 10, 2019; Notice of Allowance, Notice of Allowability, and Detailed Action with Reasons for Allowance, dated May 29, 2019 [3B0000640-648, 0000718-773, 0000840-849, 0000857-878, 0000972-1014] • File History for U.S. 10,702,669 (IPR2023-00527 Ex. 1052), at 13-20, 148-155, 162-203, 251-264, 288-315, 358-379, 381-400, 467-481, 490-510, 540-551, 553-570, 1080-1082. • Intrinsic evidence from <i>GCE Gas Control Equip. Inc. v. Vbox, Inc.</i>, IPR2023-00527
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			(PTAB) and/or <i>GCE Gas Control Equip. Inc. v. Vbox, Inc.</i> , IPR2023-00326 (PTAB)
		<u>Exemplary Extrinsic Support:</u> • The American Heritage Dictionary of the English Language “disposed”; “along” (Houghton Mifflin Co. 4th ed., 2000) • New Oxford American Dictionary “disposed”; “along” (Oxford University Press 2001) • Bloomsbury English Dictionary “disposed”; “along” (Bloomsbury Publishing 2d ed., 2004) • Webster’s Third New International Dictionary “disposed”; “along” (Merriam-Webster 2002) • Search of “disposed along” with priority dates before February 9, 2005 from Google Patents, https://patents.google.com/?q=(disposed+along)&before=priority:20050205&num=100 • Declaration of one or more experts, to be disclosed as set forth in the Fed. R. Civ. P. 26(b)(4)(A) and the Court’s December 12, 2022 Scheduling Order	<u>Exemplary Extrinsic Evidence:</u> • New Oxford American Dictionary “dispose”; “along” (Oxford University Press 2001) • Bloomsbury English Dictionary “dispose”; “along” (Bloomsbury Publishing 2d ed., 2004) • The Oxford American College Dictionary “dispose” (Oxford University Press, Inc. 2002) • Declaration of one or more experts, either affirmatively or in rebuttal to any expert declaration from GCE, to be disclosed as set forth in the Fed. R. Civ. P. 26(b)(4)(A) and the Court’s December 12, 2022 Scheduling Order
“a first bed of adsorbent material configured to	’614 Patent, claim 13	<u>GCE’s Construction:</u> • “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	<u>3B’s Construction:</u> No construction necessary. <i>“A separation cartridge containing:”</i> should not be added into claim 13, as GCE proposes; GCE

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;		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	does not attempt to construe any of the actual quoted claim language in the claim term GCE identified.
		<u>Exemplary Intrinsic Support:</u> • ‘614 Patent, 2:54-58; 4:7-42; 4:60-5:4; 11:67-12:3; 12:6-14; 18:30-40; 18:57-19:3; FIGS. 5, 7, 15, 16 • ‘628 Patent File History, 237; 253-55 • U.S. Patent No. 7,954,490 File History, 341 • U.S. Patent Appl. No. 13/096,362 File History, 50; 58-59; 465 • U.S. Patent Appl. No. 13/795,977 File History, 15-20; 27-28; 477 • U.S. Patent No. 10,702,669 File History, 16; 255-56; 297-98; 541-47; 560-61 • Intrinsic evidence from <i>GCE Gas Control Equip. Inc. v. Vbox, Inc.</i>, IPR2023-00326 (PTAB)	<u>Exemplary Intrinsic Evidence:</u> • ‘628 Patent: All claims; Abstract; Figures 1-19; Col. 1:1-14; Col. 2:53 – Col. 3:52; Col. 3:60-64; Col. 4:18-21, 29-30; Col. 6:37 – Col. 7:19; Col. 10:40-45, 61-64; Col. 11:59 – 12:14; 14:14-18; Col. 18:30- Col. 19:13; Col. 23:27-40; Col. 26:5-12 • ‘614 Patent: All claims; Abstract; Figures 1-19; Col. 1:1-14; Col. 2:53 – Col. 3:52; Col. 3:60-64; Col. 4:18-21, 29-30; Col. 6:37 – Col. 7:19; Col. 10:40-45, 61-64; Col. 11:59 – 12:14; 14:14-18; Col. 18:30- Col. 19:13; Col. 23:27-40; Col. 26:5-12 • ‘614 File History: Entirety of originally filed application filed May 14, 2020 including original specification, originally filed claims, and originally filed figures;

a second outlet oriented in the direction, wherein the second outlet is configured to expel product gas flowing downstream of the second bed;”			Preliminary Amendment filed July 23, 2020; Office Action Mailed May 24, 2022; Notice of Allowance and Notice of Allowability, dated June 9, 2022 [3B0000008-12, 0000020-24, 0000090-99, 00000140-201] • File History for U.S. 10,702,669 (IPR2023-00527 Ex. 1052), at 251-264, 288-315, 358-379, 381-400, 467-481, 490-510, 540-551, 553-570, 1080-1082. • Intrinsic evidence from <i>GCE Gas Control Equip. Inc. v. Vbox, Inc.</i>, IPR2023-00527 (PTAB) and/or <i>GCE Gas Control Equip. Inc. v. Vbox, Inc.</i>, IPR2023-00326 (PTAB)
		<u>Exemplary Extrinsic Support:</u> • Warren • Hill ’658 • Deane ’745 • Kulish • Deane ’426 • The American Heritage Dictionary of the English Language “cartridge” (Houghton Mifflin Co. 4th ed., 2000) • New Oxford American Dictionary “cartridge”; “separation” (Oxford University Press 2001) • Bloomsbury English Dictionary “cartridge”; “separation” (Bloomsbury Publishing 2d ed., 2004) • Webster’s Third New International Dictionary “cartridge”; “separation” (Merriam-Webster 2002)	<u>Exemplary Extrinsic Evidence:</u> • Declaration of one or more experts, either affirmatively or in rebuttal to any expert declaration from GCE, to be disclosed as set forth in the Fed. R. Civ. P. 26(b)(4)(A) and the Court’s December 12, 2022 Scheduling Order

		• Search of “separation cartridge” with priority dates before February 9, 2005 from Google Patents, https://patents.google.com/?q=%22separation+cartridge%22&before=priority:20050205&num=100 • Extrinsic evidence from <i>GCE Gas Control Equip. Inc. v. Vbox, Inc.</i>, IPR2023-00326 (PTAB) • Declaration of one or more experts, to be disclosed as set forth in the Fed. R. Civ. P. 26(b)(4)(A) and the Court’s December 12, 2022 Scheduling Order	
(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”	’614 Patent, claims 1, 8, 12, 13	<u>GCE’s Construction:</u> • Indefinite	<u>3B’s Construction:</u> 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.”
(claim 8) “when fluid flows through the separation cartridge, fluid flows along the first line in the second		<u>Exemplary Intrinsic Support:</u> • The ’614 Patent’s specification does not provide sufficient disclosure such that the terms can be understood with reasonable certainty	<u>Exemplary Intrinsic Evidence:</u> • ’628 Patent: All claims; Abstract; Figures 1-19; Col. 1:1-14; Col. 2:53 – Col. 3:52; Col. 3:60-64; Col. 4:18-21, 29-30; Col. 6:37 – Col. 7:19; Col. 10:40-45, 61-64; Col. 11:59 – 12:14; 14:14-18; Col. 18:30- Col. 19:13; Col. 23:27-40; Col. 26:5-12

direction” / “when fluid flows through the separation cartridge . . . fluid flows along the second line in the first direction” (claim 13) “fluid flowing along the first line contacts 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”		<u>Exemplary Extrinsic Support:</u> Declaration of one or more experts, to be disclosed as set forth in the Fed. R. Civ. P. 26(b)(4)(A) and the Court’s December 12, 2022 Scheduling Order	‘614 Patent: All claims; Abstract; Figures 1-19; Col. 1:1-14; Col. 2:53 – Col. 3:52; Col. 3:60-64; Col. 4:18-21, 29-30; Col. 6:37 – Col. 7:19; Col. 10:40-45, 61-64; Col. 11:59 – 12:14; 14:14-18; Col. 18:30- Col. 19:13; Col. 23:27-40; Col. 26:5-12 ‘614 File History: Entirety of originally filed application filed May 14, 2020 including original specification, originally filed claims, and originally filed figures; Preliminary Amendment filed July 23, 2020; Office Action Mailed May 24, 2022; Notice of Allowance and Notice of Allowability, dated June 9, 2022 [3B0000008-12, 0000020-24, 0000090-99, 00000140-201] - Intrinsic evidence from <i>GCE Gas Control Equip. Inc. v. Vbox, Inc.</i>, IPR2023-00527 (PTAB) and/or <i>GCE Gas Control Equip. Inc. v. Vbox, Inc.</i>, IPR2023-00326 (PTAB) <u>Exemplary Extrinsic Evidence:</u> - New Oxford American Dictionary “along” (Oxford University Press 2001) - Bloomsbury English Dictionary “along” - The Oxford American College Dictionary “contact” and “flow” (Oxford University Press, Inc. 2002) - GCE Petition and Reply in <i>GCE Gas Control Equip. Inc. v. Vbox, Inc.</i>, IPR2023-00326 (PTAB) and any evidence cited therein - Declaration of Knaebel (Ex. 1003) in <i>GCE Gas Control Equip. Inc. v. Vbox, Inc.</i>,
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			IPR2023-00326 (PTAB) and any evidence cited therein • Declaration of one or more experts, either affirmatively or in rebuttal to any expert declaration from GCE, to be disclosed as set forth in the Fed. R. Civ. P. 26(b)(4)(A) and the Court's December 12, 2022 Scheduling Order
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CERTIFICATE OF SERVICE

I hereby certify that, on May 22, 2023, I caused the foregoing to be electronically filed with the Clerk of the District Court using the CM/ECF system. As such, under Local Rule 102.1(c), the corresponding notice of electronic filing constitutes a certificate of service as to all counsel of record to whom electronic notice is sent.

/s/ Robert M. Masters

Robert M. Masters