

EDWARD R. REINES (Bar No. 135960)
edward.reines@weil.com
DEREK C. WALTER (Bar No. 246322)
derek.walter@weil.com
WEIL, GOTSHAL & MANGES LLP
Silicon Valley Office
201 Redwood Shores Parkway
Redwood Shores, CA 94065
Telephone: (650) 802-3000
Facsimile: (650) 802-3100

JACK NOLAN (admitted *pro hac vice*)
jack.nolan@weil.com
WEIL, GOTSHAL & MANGES LLP
New York Office
767 Fifth Avenue
New York, NY 10153
Telephone: (212) 310-8000
Facsimile: (212) 310-8007

*Attorneys for Defendant and Counter-
Plaintiff*
BIO-RAD LABORATORIES, INC.,

WILSON SONSINI GOODRICH & ROSATI, P.C.
AMY H. CANDIDO, State Bar No. 237829
(candido@wsgr.com)
SACHLI BALAZADEH-NAYERI, State Bar No.
341885
(snayeri@wsgr.com)
One Market Plaza
Spear Tower, Suite 3300
San Francisco, CA 94105-1126
Telephone: (415) 941-2000

ERIC P. TUTTLE, State Bar No. 248440
(eric.tuttle@wsgr.com)
701 Fifth Avenue, Suite 5100
Seattle, WA 98104-7036
Telephone: (206) 883-2500

ARIEL C. GREEN ANABA, State Bar No. 304780
(aanaba@wsgr.com)
633 West Fifth Street, Suite 1550
Los Angeles, CA 90071
Telephone: (323) 210-2900

LISA D. ZANG, State Bar No. 294493
(lzang@wsgr.com)
1900 Avenue of the Stars, 28th Floor
Century City, CA 90067
Telephone: (424) 446-6900

Attorneys for Plaintiff and Counter-Defendant
CHROMACODE, INC.

(Additional counsel listed on following page)

**UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF CALIFORNIA
SAN JOSE DIVISION**

CHROMACODE, INC., and CALIFORNIA
INSTITUTE OF TECHNOLOGY,

*Plaintiffs and Counter-
Defendants,*

vs.

BIO-RAD LABORATORIES, INC.,

*Defendant and Counter-
Plaintiff.*

Case No.: 5:23-cv-06360-EJD

**JOINT CLAIM CONSTRUCTION
STATEMENT**

Judge Edward J. Davila

1 CHRISTOPHER D. MAYS, State Bar No. 266510
2 (cmays@wsgr.com)
3 650 Page Mill Road
4 Palo Alto, CA 94304
5 Telephone: (650) 493-9300
6 Facsimile: (650) 565-5100

7 *Attorneys for Plaintiff and Counter-Defendant*
8 CHROMACODE, INC.

9 SHEPPARD, MULLIN, RICHTER & HAMPTON,
10 LLP

11 MARTIN R. BADER, SBN 222865
12 (mbader@sheppardmullin.com)
13 JESSE A. SALEN, SBN 292043
14 (jsalen@sheppardmullin.com)
15 12275 El Camino Real, Suite 100
16 San Diego, California 92130-4092
17 Telephone: 858.720.8900
18 Facsimile: 858.509.3691

19 DARREN M. FRANKLIN, SBN 210939
20 (dfranklin@sheppardmullin.com)
21 333 South Hope Street, 43rd Floor
22 Los Angeles, California 90071-1422
23 Telephone: 213.620.1780
24 Facsimile: 213.620.1398

25 BRADLEY C. GRAVELINE, *pro hac vice*
26 (bgraveline@sheppardmullin.com)
27 321 North Clark St., 32nd Floor
28 Chicago, Illinois 60654
Telephone: 312.499.6300
Facsimile: 312.499.6301

Attorneys for Plaintiffs and Counter-Defendants
CHROMACODE, INC. AND CALIFORNIA
INSTITUTE OF TECHNOLOGY

Pursuant to Patent Local Rule 4-3, the Patent Scheduling Order, Dkt. No. 47, the Joint Stipulation and Order re Filing of Second Amended Complaint and Amended Case Schedule, Dkt. No. 53, and the Order to Amend Patent Scheduling Order, Dkt. No. 62, Defendant and Counter-Plaintiff Bio-Rad Laboratories, Inc. (“Bio-Rad”) and Plaintiffs and Counter-Defendants ChromaCode, Inc. (“ChromaCode”), California Institute of Technology (“Caltech” and collectively with ChromaCode, “Plaintiffs”), by and through the undersigned counsel, hereby file their Joint Claim Construction Statement. Attached as Exhibits A, B and C hereto are copies of U.S. Patent Nos. 10,068,051 (the “’051 Patent”), 10,770,170 (the “’170 Patent”), and 11,827,921 (the “’921 Patent” and collectively with the ’051 Patent and the ’170 Patent, the “Asserted Patents”).

I. PATENT LOCAL RULE 4-3(A)

The parties agree upon the construction of the following terms:

None.

II. PATENT LOCAL RULES 4-3(B)-(C)

Pursuant to the Court’s standing order requiring that the parties submit no more than ten claim terms for construction, the following ten terms below are the key terms in dispute that are most likely to be case dispositive¹:

¹ The parties reserve the right to rely on the evidence cited by the other party and additional portions of the intrinsic record. Additionally, to the extent the parties cite figures from the patents, they reserve the right to rely on corresponding passages from the specification discussing those figures, and *vice versa*.

Claim Terms	Bio-Rad's Proposed Construction and Evidence in Support	Plaintiffs' Proposed Construction and Evidence in Support ²
"corresponds to the presence of a unique combination of presence or absence of said at least five polynucleotide analytes in said sample" '170 Patent Claim 1.	<u>Proposed Construction:</u> Indefinite <u>Supporting Evidence:</u> <i>See e.g.</i>, '170 Patent Claim 1. <i>See e.g.</i>, '170 Patent Figs. 1-8. <i>See e.g.</i>, '170 Patent Abstract. <i>See e.g.</i>, '170 Patent at: 1:47-3:2; 3:37-7:39; 7:51-8:24; 8:59-9:58; 10:8-11:45; 11:47-23:30; 26:45-35:9; 35:11-36:42; 36:57-37:3; 40:23-44:67; 45:8-49:5; 49:16-65:28. <i>See e.g.</i>, '170 Patent File History - May 23, 2018 Applicant Arguments/Remarks Made in Amendment at 5-8 - January 21, 2019 Applicant Arguments/Remarks Made in Amendment at 5-8	<u>Proposed Construction:</u>³ Not indefinite, plain and ordinary meaning <u>Supporting Evidence:</u> <u>'051 Patent</u> 1:46-60; 2:4-18; 3:37-44; 3:51-67; 4:1-16; 4:18-5:4; 5:5-19; 5:20-35; 5:36-60; 5:61-6:13; 6:14-39; 6:39-47; 6:59-67; 7:12-23; 8:59-67; 9:43-56; 11:13-44; 14:29-44; 17:61-18:15; 18:16-33; 18:34-42; 18:43-19:4; 19:18-34; 19:35-50; 19:64-20:9; 20:10-21; 20:21-50; 20:51-61; 20:62-21:7; 21:8-54; 22:66-23:6; 23:40-58; 25:1-30; 29:15-26; 28:47-29:11; 32:19-27; 32:28-36; 35:1-23; 38:23-32; 41:10-42; 41:52-67; 56:38-52; Tables 1-8 <u>'170 Patent</u> Specification passages corresponding to '051 passages cited above Claims 1, 20 <u>'921 Patent</u> Specification passages corresponding to '051 passages cited above

² The '051, '170, and '921 Patents are continuations of one another and share the same specification. For the sake of convenience, Plaintiffs have cited to the specification and figures for the '051 and incorporate by reference the corresponding passages and figures from the '170 and '921 Patents. Plaintiffs reserve the right to rely on equivalent passages and figures from any of the three Patents-in-Suit.

³ ChromaCode notes that this term was not on the parties' June 11, 2024, *agreed upon* list of ten terms for construction. On June 17 (the day before this Joint Claim Construction Statement was due), Bio-Rad unilaterally changed the list to include this term. ChromaCode reserves the right to raise this with the Court at an appropriate time. Bio-Rad notes this term was included substantially in Bio-Rad's disclosure of 20 terms for construction as well as being disclosed as indefinite in Bio-Rad's invalidity contentions. Bio-Rad served initial supporting evidence for this term on June 6, as did Plaintiffs. Plaintiffs have not been prejudiced by this addition.

Claim Terms	Bio-Rad's Proposed Construction and Evidence in Support	Plaintiffs' Proposed Construction and Evidence in Support ²
		Claims 4, 13, 14 <u>Shared Figures</u> Figures 1-8 <u>'051 File History</u> • Aug. 5, 2014, Application • Nov. 14, 2014, Preliminary Amendment • May 12, 2016, Restriction Requirement • November 3, 2016, Response to Restriction Requirement • November 23, 2016, Office Action • May 2, 2017, Response to Office Action • June 6, 2017, Office Action • Aug. 11, 2017 Office Action Response • Aug. 23, 2017 Office Action • September 22, 2017, Examiner Interview Summary • Oct. 20, 2017, Examiner Interview Summary • Nov. 6, 2017, Request for Continued Examination • November 24, 2017, Examiner Interview Summary • Jun 14, 2018, Notice of Allowance • July 3, 2018, Amendment after allowance <u>'170 File History</u> • March 7, 2018 Application • March 22, 2018 Preliminary Amendment • March 8, 2019, Office Action • May 23, 2019, Response to Office Action • July 22, 2019, Office Action • January 21, 2020 Request for Continued Examination

Claim Terms	Bio-Rad's Proposed Construction and Evidence in Support	Plaintiffs' Proposed Construction and Evidence in Support ²
		• May 4, 2020, Notice of Allowance • July 23, 2020 Amendment after Notice of Allowance • July 29, 2020 Response to Amendment <u>'921 File History</u> • May 1, 2020, Application • December 16, 2020, Preliminary Amendment • March 25, 2021, Information Disclosure Statement (and associated references) • December 28, 2022 Office Action • March 28, 2023 Response to Office Action • May 10, 2023, Office Action • July 10, 2023, Response to Office Action • August 10, 2023, Notice of Allowance • October 10, 2023, Amendment after Notice of Allowance • October 23, 2023 Notice of Allowance Extrinsic evidence: Bio-Rad's Patent L.R. 4-2 Disclosure of Preliminary Constructions and Evidence
"providing a sample solution volume . . . comprising at least seven hybridization probes" and "contacting . . ." '051 Patent Claim 1.	<u>Proposed Construction:</u> Indefinite <u>Supporting Evidence:</u> <i>See e.g.</i>, '051 Patent Claims 1, 3. <i>See e.g.</i>, '051 Patent Figs. 1-8. <i>See e.g.</i>, '051 Patent Abstract. <i>See e.g.</i>, '051 Patent at:	<u>Proposed Construction:</u> Not indefinite; plain and ordinary meaning <u>Supporting Evidence:</u> <u>'051 Patent</u> Abstract; 1:46-54; 2:33-45; 3:52-67; 4:17-42; 4:66-5:4; 5:20-6:47; 6:59-67; 7:12-37; 7:62-8:10; 8:40-57; 9:15-27; 10:26-50; 11:13-63; 12:17-28; 18:43-19:17; 21:54-22:65; 28:47-29:11; 29:27-47; 33:32-

Claim Terms	Bio-Rad's Proposed Construction and Evidence in Support	Plaintiffs' Proposed Construction and Evidence in Support ²
	1:30-42; 1:46-54; 2:33-45; 3:17-20; 3:52-67; 4:17-7:23; 7:49-8:23; 8:58-9:42; 10:26-50; 11:13-44; 11:48-25:30; 25:34-44; 27:49-28:17; 28:47-29:11; 29:15-47; 32:19-56; 33:32-36:21; 37:1-15; 38:48-61; 40:9-41:6; 42:30-47:45; 47:53-52:24; 52:31-67:67.	36:29; 37:1-38:37; 47:30-45:49; 40:23-41:6; 41:52-47:30; 52:8-24; 52:50-56:20; 56:24-37; 56:53-69:7; Claims 1-4; Plaintiffs also incorporate all <i>passim</i> references to “solutions” and “probes” in the patents’ shared specification. <u>'170 Patent</u> Specification passages corresponding to '051 passages cited above Claims 1, 2, 3, 4, 5, 9 <u>'921 Patent</u> Specification passages corresponding to '051 passages cited above Claims 1, 5, 6, 7, 14, 16, 18 <u>Shared Figures</u> 2-3, 6-7 <u>'051 File History</u> • Aug. 5, 2014, Application • Nov. 14, 2014, Preliminary Amendment • May 12, 2016, Restriction Requirement • November 3, 2016, Response to Restriction Requirement • November 23, 2016, Office Action • May 2, 2017, Response to Office Action • June 6, 2017, Office Action • Aug. 11, 2017 Office Action Response • Aug. 23, 2017 Office Action • September 22, 2017, Examiner Interview Summary

Claim Terms	Bio-Rad's Proposed Construction and Evidence in Support	Plaintiffs' Proposed Construction and Evidence in Support ²
		• Oct. 20, 2017, Examiner Interview Summary • Nov. 6, 2017, Request for Continued Examination • November 24, 2017, Examiner Interview Summary • Jun 14, 2018, Notice of Allowance • July 3, 2018, Amendment after allowance <u>'170 File History</u> • March 7, 2018 Application • March 22, 2018 Preliminary Amendment • March 8, 2019, Office Action • May 23, 2019, Response to Office Action • July 22, 2019, Office Action • January 21, 2020 Request for Continued Examination • May 4, 2020, Notice of Allowance • July 23, 2020 Amendment after Notice of Allowance • July 29, 2020 Response to Amendment <u>'921 File History</u> • May 1, 2020, Application • December 16, 2020, Preliminary Amendment • March 25, 2021, Information Disclosure Statement (and associated references) • December 28, 2022 Office Action • March 28, 2023 Response to Office Action • May 10, 2023, Office Action • July 10, 2023, Response to Office Action • August 10, 2023, Notice of Allowance

Claim Terms	Bio-Rad's Proposed Construction and Evidence in Support	Plaintiffs' Proposed Construction and Evidence in Support ²
		- October 10, 2023, Amendment after Notice of Allowance - October 23, 2023 Notice of Allowance
"non-degenerately," "degenerate" or "degeneracy" '051 Patent Claim 1. '921 Patent Claims 4, 13, 14.	<u>Proposed Construction:</u> "degenerate" or "degeneracy" means a situation where a legitimate result is not definitive, because it can indicate more than one possibility in terms of the presence or absence of an analyte. <u>Supporting Evidence:</u> <i>See e.g.</i>, '051 Patent Claim 1. <i>See e.g.</i>, '051 Patent Figs. 1-5, 7, 8 <i>See e.g.</i>, '051 Patent Abstract. <i>See e.g.</i>, '051 Patent at: 1:46-2:21; 3:35-7:37; 7:49-8:18; 8:20-23; 8:58-9:14; 9:34-56; 11:35-45; 17:60-19:50; 19:64-25:19; 29:15-26; 32:19-36; 41:10-67; 42:30-47:45; 47:53-52:24; 52:31-67:67. <i>See e.g.</i>, '051 Patent File History - May 2, 2017 Applicant Arguments/Remarks Made in Amendment at 8-11 - August 11, 2017 Response After Final Action at 16-20 - November 6, 2017 Applicant Arguments/Remarks	<u>Proposed Construction:</u> Plain and ordinary meaning <u>Supporting Evidence:</u> <u>'051 Patent</u> 1:46-60; 2:4-18; 3:37-44; 3:51-67; 4:1-16; 4:18-42; 4:43-65; 5:5-19; 5:20-35; 5:36-60; 5:61-6:13; 6:14-39; 6:39-47; 6:59-67; 7:12-23; 9:43-56; 11:13-44; 14:29-44; 17:24-38, 17:61-18:15; 18:16-33; 18:34-42; 18:67-19:4; 19:18-34; 19:35-50; 19:64-20:9; 20:10-21; 20:21-50; 20:51-61; 20:62-21:7; 21:8-54; 22:66-23:6; 23:40-58; 29:15-26; 28:47-29:11; 32:19-27; 32:28-36; 41:10-42; 41:52-67, 51:45-50; Tables 1-8; Plaintiffs also incorporate all <i>passim</i> references to "degenerate," "degeneracy," and "non-degenerate" in the patents' shared specification. <u>'170 Patent</u> Specification passages corresponding to '051 passages cited above Claim 1 <u>'921 Patent</u> Specification citations corresponding to '051 passages cited above Claims 1, 4, 13, 14

Claim Terms	Bio-Rad's Proposed Construction and Evidence in Support	Plaintiffs' Proposed Construction and Evidence in Support ²
	Made in Amendment at 11-12 <i>See e.g.</i>, '921 Patent Claim 1. <i>See e.g.</i>, '921 Patent Figs. 1-5, 7, 8 <i>See e.g.</i>, '921 Patent Abstract. <i>See e.g.</i>, '921 Patent at: 1:51-2:26; 3:56-7:44; 7:55-8:23; 8:25-28; 8:63-9:19; 9:39-61; 11:39-51; 16:46-18:25; 18:39-23:67; 27:51-62; 30:55-31:5; 39:43-40:28; 40:56-45:42; 45:49-50:19; 50:27-67:5. <i>See e.g.</i>, '921 Patent File History • March 23, 2023 Applicant Arguments/Remarks Made in Amendment at 6-9 • July 10, 2023 Arguments/Remarks Made in Amendment at 6-11	<u>Shared Figures</u> Figures 1, 2, 3, 5, 7, 8 <u>'051 File History</u> • Aug. 5, 2014, Application • Nov. 14, 2014, Preliminary Amendment • May 12, 2016, Restriction Requirement • November 3, 2016, Response to Restriction Requirement • November 23, 2016, Office Action • May 2, 2017, Response to Office Action • June 6, 2017, Office Action • Aug. 11, 2017 Office Action Response • Aug. 23, 2017 Office Action • September 22, 2017, Examiner Interview Summary • Oct. 20, 2017, Examiner Interview Summary • Nov. 6, 2017, Request for Continued Examination • November 24, 2017, Examiner Interview Summary • Jun 14, 2018, Notice of Allowance • July 3, 2018, Amendment after allowance <u>'170 File History</u> • March 7, 2018 Application • March 22, 2018 Preliminary Amendment • March 8, 2019, Office Action • May 23, 2019, Response to Office Action • July 22, 2019, Office Action • January 21, 2020 Request for Continued Examination

Claim Terms	Bio-Rad's Proposed Construction and Evidence in Support	Plaintiffs' Proposed Construction and Evidence in Support ²
		• May 4, 2020, Notice of Allowance • July 23, 2020 Amendment after Notice of Allowance • July 29, 2020 Response to Amendment <u>'921 File History</u> • May 1, 2020, Application • December 16, 2020, Preliminary Amendment • March 25, 2021, Information Disclosure Statement (and associated references) • December 28, 2022 Office Action • March 28, 2023 Response to Office Action • May 10, 2023, Office Action • July 10, 2023, Response to Office Action • August 10, 2023, Notice of Allowance • October 10, 2023, Amendment after Notice of Allowance • October 23, 2023 Notice of Allowance
“each [of said at least 5] hybridization probe[s]” '051 Patent Claim 1. '170 Patent Claim 1.	<u>Proposed Construction:</u> “each collection of hybridization probes specific for a polynucleotide analyte” <u>Supporting Evidence:</u> <i>See e.g.</i>, '051 Patent Claims 1, 2, 3. <i>See e.g.</i>, '051 Patent Figs. 1-3, 5, 7, 8 <i>See e.g.</i>, '051 Patent at: 2:33-45; 3:35-7:37; 7:49-8:11; 8:16-18; 8:20-23; 9:15-42; 10:26-50; 11:13-44; 11:47-	<u>Proposed Construction:</u> Plain and ordinary meaning <u>Supporting Evidence:</u> <u>'051 Patent</u> 2:33-45; 7:12-23; 7:24-37; 7:62-8:10; 8:40-57; 9:15-27; 10:26-50; 11:13-45; 11:45-63; 12:17-28; 33:32-42; 33:43-61; 33:62-34:12; 34:13-35; 34:36-62; 34:63-67; 35:1-23; 35:24-45; 35:46-57; 35:58-36:9; 36:10-21; 36:22-29; 37:1-15; 39:40-49; 40:23-40; 40:41-41:6; 41:52-67; 42:1-22; 42:25-47:30; 52:8-25; 52:50-56:18; 56:24-37; 56:53-

Claim Terms	Bio-Rad's Proposed Construction and Evidence in Support	Plaintiffs' Proposed Construction and Evidence in Support ²
	25:30; 33:33-37:15; 37:40-55; 39:41-49; 42:30-47:45; 47:53-52:24; 52:31-67:67. <i>See e.g.</i>, '170 Patent Claim 1. <i>See e.g.</i>, '170 Patent Figs. 1-3, 5, 7, 8 <i>See e.g.</i>, '170 Patent at: 2:35-47; 3:37-7:39; 7:51-8:13; 8:17-19; 8:21-24; 9:16-44; 10:26-50; 11:13-45; 11:47-23:30; 31:28-35:9; 35:32-47; 37:33-41; 40:23-44:67; 45:8-49:5; 49:16-65:28. <i>See e.g.</i>, '170 Patent File History • May 23, 2018 Applicant Arguments/Remarks Made in Amendment at 5-8 • January 21, 2019 Applicant Arguments/Remarks Made in Amendment at 5-8	69:7; Claims 1-3; Plaintiffs also incorporate all <i>passim</i> references to "probes" in the patents' shared specification. <u>'170 Patent</u> Specification passages corresponding to '051 passages cited above Claims 1, 2, 3, 4, 5, 6, 9, 20 <u>'921 Patent</u> Specification passages corresponding to '051 passages cited above Claims 1, 5, 6, 7, 14, 16, 17, 18 <u>Shared Figures</u> 2-3, 6-7 <u>'051 File History</u> • Aug. 5, 2014, Application • Nov. 14, 2014, Preliminary Amendment • May 12, 2016, Restriction Requirement • November 3, 2016, Response to Restriction Requirement • November 23, 2016, Office Action • May 2, 2017, Response to Office Action • June 6, 2017, Office Action • Aug. 11, 2017 Office Action Response • Aug. 23, 2017 Office Action • September 22, 2017, Examiner Interview Summary • Oct. 20, 2017, Examiner Interview Summary • Nov. 6, 2017, Request for Continued Examination

Claim Terms	Bio-Rad's Proposed Construction and Evidence in Support	Plaintiffs' Proposed Construction and Evidence in Support ²
		• November 24, 2017, Examiner Interview Summary • Jun 14, 2018, Notice of Allowance • July 3, 2018, Amendment after allowance <u>'170 File History</u> • March 7, 2018 Application • March 22, 2018 Preliminary Amendment • March 8, 2019, Office Action • May 23, 2019, Response to Office Action • July 22, 2019, Office Action • January 21, 2020 Request for Continued Examination • May 4, 2020, Notice of Allowance • July 23, 2020 Amendment after Notice of Allowance • July 29, 2020 Response to Amendment <u>'921 File History</u> • May 1, 2020, Application • December 16, 2020, Preliminary Amendment • March 25, 2021, Information Disclosure Statement (and associated references) • December 28, 2022 Office Action • March 28, 2023 Response to Office Action • May 10, 2023, Office Action • July 10, 2023, Response to Office Action • August 10, 2023, Notice of Allowance • October 10, 2023, Amendment after Notice of Allowance • October 23, 2023 Notice of Allowance

Claim Terms	Bio-Rad's Proposed Construction and Evidence in Support	Plaintiffs' Proposed Construction and Evidence in Support ²
“cumulative intensity signal(s)” '051 Patent Claims 1, 4.	<u>Proposed Construction:</u> “the signal or collection of signals from the probes that contact a given analyte” <u>Supporting Evidence:</u> <i>See e.g.</i>, '051 Patent Claims 1, 4. <i>See e.g.</i>, '051 Patent Figs. 1-5, 7, 8 <i>See e.g.</i>, '051 Patent Abstract. <i>See e.g.</i>, '051 Patent at: 1:55-2:53; 3:52-6:38; 7:49-8:18; 8:20-23; 8:58-9:56; 10:15-25; 11:48-25:30; 29:15-36:67; 37:18-38:47; 40:9-22; 41:10-31; 42:30-47:45; 47:53-52:24; 52:31-67:67. <i>See e.g.</i>, '051 Patent File History • May 2, 2017 Applicant Arguments/Remarks Made in Amendment at 8-11 • August 11, 2017 Response After Final Action at 16-20 • November 6, 2017 Applicant Arguments/Remarks Made in Amendment at 11-12	<u>Proposed Construction:</u> Plain and ordinary meaning. To the extent a construction is necessary, “signal representing the total intensity of the light emitted by a given probe” <u>Supporting Evidence:</u> <u>'051 Patent</u> 1:55-60; 2:4-18; 2:52-53; 3:52-67; 4:1-65; 5:20-6:38; 7:56-8:11; 8:20-23; 9:28-56; 9:34-56; 10:15-20; 10:51-11:6; 11:49-12:3; 14:3-17:60; 18:43-19:34; 19:51-25:44; 29:12-33:31; 36:10-21; 36:51-67; 37:16-38:22; 38:23-32; 39:9-37; 40:9-41:51; 41:52-67; 47:30-45; 47:47-51:50; 51:61-52:24; 52:8-56: 51; Claims 1, 4; Plaintiffs also incorporate all <i>passim</i> references to “intensity” and “intensities” in the patents’ shared specification. <u>'170 Patent</u> Specification passages corresponding to '051 passages cited above Claims 1, 3, 20 <u>'921 Patent</u> Specification passages corresponding to '051 passages cited above Claims 1, 3 <u>Shared Figures</u> 1-5, 7-8 <u>'051 File History</u>

Claim Terms	Bio-Rad's Proposed Construction and Evidence in Support	Plaintiffs' Proposed Construction and Evidence in Support ²
		• Aug. 5, 2014, Application • Nov. 14, 2014, Preliminary Amendment • May 12, 2016, Restriction Requirement • November 3, 2016, Response to Restriction Requirement • November 23, 2016, Office Action • May 2, 2017, Response to Office Action • June 6, 2017, Office Action • Aug. 11, 2017 Office Action Response • Aug. 23, 2017 Office Action • September 22, 2017, Examiner Interview Summary • Oct. 20, 2017, Examiner Interview Summary • Nov. 6, 2017, Request for Continued Examination • November 24, 2017, Examiner Interview Summary • Jun 14, 2018, Notice of Allowance • July 3, 2018, Amendment after allowance <u>'170 File History</u> • March 7, 2018 Application • March 22, 2018 Preliminary Amendment • March 8, 2019, Office Action • May 23, 2019, Response to Office Action • July 22, 2019, Office Action • January 21, 2020 Request for Continued Examination • May 4, 2020, Notice of Allowance • July 23, 2020 Amendment after Notice of Allowance • July 29, 2020 Response to Amendment

Claim Terms	Bio-Rad's Proposed Construction and Evidence in Support	Plaintiffs' Proposed Construction and Evidence in Support ²
		<u>'921 File History</u> • May 1, 2020, Application • December 16, 2020, Preliminary Amendment • March 25, 2021, Information Disclosure Statement (and associated references) • December 28, 2022 Office Action • March 28, 2023 Response to Office Action • May 10, 2023, Office Action • July 10, 2023, Response to Office Action • August 10, 2023, Notice of Allowance • October 10, 2023, Amendment after Notice of Allowance • October 23, 2023 Notice of Allowance
“cumulative [signal/intensity] measurement” '051 Patent Claim 1. '170 Patent Claim 1.	<u>Proposed Construction:</u> “the signal or collection of signals from the probes that contact the present analytes” <u>Supporting Evidence:</u> <i>See e.g.</i>, '051 Patent Claim 1. <i>See e.g.</i>, '051 Patent Figs. 1-5, 7, 8 <i>See e.g.</i>, '051 Patent Abstract. <i>See e.g.</i>, '051 Patent at: 1:55-2:53; 3:52-6:38; 7:49-8:18; 8:20-23; 8:58-9:56; 10:8-25; 11:48-25:30; 29:15-36:67; 37:18-38:47; 40:9-22; 41:10-31; 42:30-47:45; 47:53-52:24; 52:31-67:67.	<u>Proposed Construction:</u> '051 Patent Claim 1: “measurement of the cumulative intensity signal(s) in the volume” '170 Patent Claim 1: “measurement of the cumulative intensity of the signal(s) in the plurality of droplets” <u>Supporting Evidence:</u> <u>'051 Patent</u> 1:55-60; 2:4-18; 2:52-53; 3:52-67; 4:1-65; 5:20-6:38; 7:56-8:11; 8:20-23; 9:28-56; 9:34-56; 10:15-20; 10:51-11:6; 11:49-12:3; 14:3-17:60; 18:43-19:34; 19:51-25:44; 29:12-33:31; 36:10-21; 36:51-67; 37:16-38:22; 38:23-32; 39:9-37; 40:9-41:51; 41:52-67;

Claim Terms	Bio-Rad's Proposed Construction and Evidence in Support	Plaintiffs' Proposed Construction and Evidence in Support ²
	<i>See e.g.</i>, '051 Patent File History • May 2, 2017 Applicant Arguments/Remarks Made in Amendment at 8-11 • August 11, 2017 Response After Final Action at 16-20 • November 6, 2017 Applicant Arguments/Remarks Made in Amendment at 11-12 <i>See e.g.</i>, '170 Patent Claim 1. <i>See e.g.</i>, '170 Patent Figs. 1-5, 7, 8. <i>See e.g.</i>, '170 Patent Abstract. <i>See e.g.</i>, '170 Patent at: 1:56-2:55; 3:54-6:40; 7:51-8:19; 8:21-24; 8:59-9:58; 10:8-25; 11:47-23:30; 27:11-34:62; 35:11-36:42; 38:1-15; 39:1-20; 40:23-44:67; 45:8-49:5; 49:16-65:28. <i>See e.g.</i>, '170 Patent File History • May 23, 2018 Applicant Arguments/Remarks Made in Amendment at 5-8 • January 21, 2019 Applicant Arguments/Remarks Made in Amendment at 5-8	47:30-45; 47:47-51:50; 51:61-52:24; 52:8-58; 56:18-51; Claims 1, 4; Plaintiffs also incorporate all <i>passim</i> references to "intensity" and "intensities" in the patents' shared specification. <u>'170 Patent</u> Specification passages corresponding to '051 passages cited above Claims 1, 3, 20 <u>'921 Patent</u> Specification passages corresponding to '051 passages cited above Claims 1, 3 <u>Shared Figures</u> Figures 1-8 <u>'051 File History</u> • Aug. 5, 2014, Application • Nov. 14, 2014, Preliminary Amendment • May 12, 2016, Restriction Requirement • November 3, 2016, Response to Restriction Requirement • November 23, 2016, Office Action • May 2, 2017, Response to Office Action • June 6, 2017, Office Action • Aug. 11, 2017 Office Action Response • Aug. 23, 2017 Office Action • September 22, 2017, Examiner Interview Summary • Oct. 20, 2017, Examiner Interview Summary • Nov. 6, 2017, Request for Continued Examination

Claim Terms	Bio-Rad's Proposed Construction and Evidence in Support	Plaintiffs' Proposed Construction and Evidence in Support ²
		• November 24, 2017, Examiner Interview Summary • Jun 14, 2018, Notice of Allowance • July 3, 2018, Amendment after allowance <u>'170 File History</u> • March 7, 2018 Application • March 22, 2018 Preliminary Amendment • March 8, 2019, Office Action • May 23, 2019, Response to Office Action • July 22, 2019, Office Action • January 21, 2020 Request for Continued Examination • May 4, 2020, Notice of Allowance • July 23, 2020 Amendment after Notice of Allowance • July 29, 2020 Response to Amendment <u>'921 File History</u> • May 1, 2020, Application • December 16, 2020, Preliminary Amendment • March 25, 2021, Information Disclosure Statement (and associated references) • December 28, 2022 Office Action • March 28, 2023 Response to Office Action • May 10, 2023, Office Action • July 10, 2023, Response to Office Action • August 10, 2023, Notice of Allowance • October 10, 2023, Amendment after Notice of Allowance • October 23, 2023 Notice of Allowance

Claim Terms	Bio-Rad's Proposed Construction and Evidence in Support	Plaintiffs' Proposed Construction and Evidence in Support ²
"single sample solution volume" '051 Patent Claim 1.	<u>Proposed Construction:</u> Non-limiting <u>Supporting Evidence:</u> <i>See e.g.</i>, '051 Patent Claim 1. <i>See e.g.</i>, '051 Patent Figs. 1-8. <i>See e.g.</i>, '051 Patent Abstract. <i>See e.g.</i>, '051 Patent at: 1:30-42; 1:46-54; 3:17-20; 3:52-67; 4:17-7:37; 7:49-8:23; 8:58-9:42; 10:26-50; 11:48-25:30; 25:34-44; 27:49-28:17; 28:47-29:11; 29:15-47; 32:19-56; 33:32-36:21; 37:1-15; 37:19-39; 38:48-61; 40:9-41:6; 42:30-47:45; 47:53-52:24; 52:31-67:67. <i>See e.g.</i>, '051 Patent File History - May 2, 2017 Applicant Arguments/Remarks Made in Amendment at 8-11 - August 11, 2017 Response After Final Action at 16-20 - November 6, 2017 Applicant Arguments/Remarks Made in Amendment at 11-12	<u>Proposed Construction:</u> Limiting <u>Supporting Evidence:</u> <u>'051 Patent</u> Abstract; 1:30-42; 1:46-54; 2:33-45; 3:52-67; 4:17-42; 4:66-5:4; 5:20-6:47; 6:59-67; 7:1-37; 7:62-8:10; 8:40-57; 9:15-27; 10:26-50; 11:13-63; 12:17-28; 12:55-64; 18:43-19:17; 21:54-22:65; 28:47-29:11; 29:27-47; 32:19-55; 33:32-36:29; 37:1-15; 37:19-39; 38:23-32; 39:40-49; 40:23-41:6; 41:52-47:30; 52:8-24; 52:50-56:17; 56:24-37; 56:53-69:7; Claims 1-3; Plaintiffs also incorporate all <i>passim</i> references to "single volume" and "single sample" in the patents' shared specification. <u>'170 Patent</u> Specification passages corresponding to '051 passages cited above Claims 1, 11 <u>'921 Patent</u> Specification passages corresponding to '051 passages cited above Claims 1, 14 <u>Shared Figures</u> Figures 2-3, 6-7 <u>'051 File History</u> - Aug. 5, 2014, Application - Nov. 14, 2014, Preliminary Amendment - May 12, 2016, Restriction Requirement

Claim Terms	Bio-Rad's Proposed Construction and Evidence in Support	Plaintiffs' Proposed Construction and Evidence in Support ²
		• November 3, 2016, Response to Restriction Requirement • November 23, 2016, Office Action • May 2, 2017, Response to Office Action • June 6, 2017, Office Action • Aug. 11, 2017 Office Action Response • Aug. 23, 2017 Office Action • September 22, 2017, Examiner Interview Summary • Oct. 20, 2017, Examiner Interview Summary • Nov. 6, 2017, Request for Continued Examination • November 24, 2017, Examiner Interview Summary • Jun 14, 2018, Notice of Allowance • July 3, 2018, Amendment after allowance <u>'170 File History</u> • March 7, 2018 Application • March 22, 2018 Preliminary Amendment • March 8, 2019, Office Action • May 23, 2019, Response to Office Action • July 22, 2019, Office Action • January 21, 2020 Request for Continued Examination • May 4, 2020, Notice of Allowance • July 23, 2020 Amendment after Notice of Allowance • July 29, 2020 Response to Amendment <u>'921 File History</u> • May 1, 2020, Application • December 16, 2020, Preliminary Amendment • March 25, 2021, Information Disclosure

Claim Terms	Bio-Rad's Proposed Construction and Evidence in Support	Plaintiffs' Proposed Construction and Evidence in Support ²
		Statement (and associated references) • December 28, 2022 Office Action • March 28, 2023 Response to Office Action • May 10, 2023, Office Action • July 10, 2023, Response to Office Action • August 10, 2023, Notice of Allowance • October 10, 2023, Amendment after Notice of Allowance • October 23, 2023 Notice of Allowance
“exciting said at least one fluorophore to generate one or more signals if one or more of said at least five polynucleotide analytes is present in said plurality of droplets” '170 Patent Claim 1.	<u>Proposed Construction:</u> “exciting said at least one fluorophore to generate one or more signals if one or more of said at least five polynucleotide analytes contacts at least one probe in said plurality of droplets” <u>Supporting Evidence:</u> <i>See e.g.</i>, '170 Patent Claim 1; '051 Patent Claim 1. <i>See e.g.</i>, '170 Patent Figs. 1-8. <i>See e.g.</i>, '170 Patent Abstract. <i>See e.g.</i>, '170 Patent at: 1:47-3:2; 3:37-7:39; 7:51-8:24; 8:59-9:58; 10:8-11:45; 11:47-23:30; 27:11-35:9; 35:11-36:42; 36:57-37:3; 40:23-44:67; 45:8-49:5; 49:16-65:28.	<u>Proposed Construction:</u> Plain and ordinary meaning <u>Supporting Evidence:</u> <u>'051 Patent</u> 2:33-45; 7:12-23; 7:24-37; 7:62-8:10; 8:40-57; 9:15-27; 10:26-50; 11:13-45; 11:45-63; 12:17-28; 33:32-42; 33:43-61; 33:62-34:12; 34:12-35; 34:36-62; 34:63-67; 35:1-23; 35:24-45; 35:46-57; 35:58-36:9; 36:10-21; 36:22-29; 36:51-67; 37:1-15; 37:19-39; 37:56-38:22; 38:23-32; 38:62-39:8; 39:40-49; 40:23-40; 40:41-41:6; 41:52-67; 42:1-22; 42:25-47:30; 52:8-25; 52:50-56:18; 56:24-37; 56:53-69:7; Claims 1-3; Tables 1-8; Plaintiffs also incorporate all <i>passim</i> references to “fluorophores” in the patents’ shared specification. <u>'170 Patent</u>

Claim Terms	Bio-Rad's Proposed Construction and Evidence in Support	Plaintiffs' Proposed Construction and Evidence in Support ²
	<i>See e.g.</i>, '170 Patent File History • May 23, 2018 Applicant Arguments/Remarks Made in Amendment at 5-8 • January 21, 2019 Applicant Arguments/Remarks Made in Amendment at 5-8	Specification passages corresponding to '051 passages cited above Claims 1, 2, 3, 7, 12, <u>'921 Patent</u> Specification passages corresponding to '051 passages cited above Claims 1, 2, 3, 7, 14 <u>Shared Figures</u> Figures 2-3, 6-7 <u>'051 File History</u> • Aug. 5, 2014, Application • Nov. 14, 2014, Preliminary Amendment • May 12, 2016, Restriction Requirement • November 3, 2016, Response to Restriction Requirement • November 23, 2016, Office Action • May 2, 2017, Response to Office Action • June 6, 2017, Office Action • Aug. 11, 2017 Office Action Response • Aug. 23, 2017 Office Action • September 22, 2017, Examiner Interview Summary • Oct. 20, 2017, Examiner Interview Summary • Nov. 6, 2017, Request for Continued Examination • November 24, 2017, Examiner Interview Summary • Jun 14, 2018, Notice of Allowance • July 3, 2018, Amendment after allowance <u>'170 File History</u> • March 7, 2018 Application

Claim Terms	Bio-Rad's Proposed Construction and Evidence in Support	Plaintiffs' Proposed Construction and Evidence in Support ²
		• March 22, 2018 Preliminary Amendment • March 8, 2019, Office Action • May 23, 2019, Response to Office Action • July 22, 2019, Office Action • January 21, 2020 Request for Continued Examination • May 4, 2020, Notice of Allowance • July 23, 2020 Amendment after Notice of Allowance • July 29, 2020 Response to Amendment <u>'921 File History</u> • May 1, 2020, Application • December 16, 2020, Preliminary Amendment • March 25, 2021, Information Disclosure Statement (and associated references) • December 28, 2022 Office Action • March 28, 2023 Response to Office Action • May 10, 2023, Office Action • July 10, 2023, Response to Office Action • August 10, 2023, Notice of Allowance • October 10, 2023, Amendment after Notice of Allowance • October 23, 2023 Notice of Allowance
"wherein said method non-degenerately detects the presence or absence of the at least seven polynucleotide analytes in said single sample solution volume, in any combination of presence or absence"	<u>Proposed Construction:</u> Non-Limiting <u>Supporting Evidence:</u> <i>See e.g., '051 Patent Claim 1.</i>	<u>Proposed Construction:</u> Limiting <u>Supporting Evidence:</u> <u>'051 Patent</u> Abstract; 1:30-42; 1:46-54; 2:33-45; 3:52-67; 4:17-42;

Claim Terms	Bio-Rad's Proposed Construction and Evidence in Support	Plaintiffs' Proposed Construction and Evidence in Support ²
'051 Patent Claim 1.	<i>See e.g.</i>, '051 Patent Figs. 1-8 <i>See e.g.</i>, '051 Patent Abstract <i>See e.g.</i>, '051 Patent at: 1:30-2:67; 3:52-7:37; 7:49-8:23; 8:58-9:14; 9:28-56; 10:4-25; 10:51-11:44; 11:48-25:30; 25:34-44; 28:47-33:31; 35:1-23; 37:40-38:22; 40:23-41:6; 41:10-67; 42:30-47:45; 47:53-52:24; 52:31-67:67. <i>See e.g.</i>, '051 Patent File History • May 2, 2017 Applicant Arguments/Remarks Made in Amendment at 8-11 • August 11, 2017 Response After Final Action at 16-20 • November 6, 2017 Applicant Arguments/Remarks Made in Amendment at 11-12	4:66-5:4; 5:20-6:47; 6:59-67; 7:1-37; 7:62-8:10; 8:40-57; 9:15-27; 10:26-50; 11:13-63; 12:17-28; 12:55-64; 18:43-19:17; 21:54-22:65; 28:47-29:11; 29:27-47; 32:19-55; 33:32-36:29; 37:1-15; 37:19-39; 38:23-32; 39:40-49; 40:23-41:6; 41:52-47:30; 52:8-24; 52:50-56:17; 56:24-37; 56:53-69:7; Claims 1-3; Plaintiffs also incorporate all <i>passim</i> references to "single volume" and "single sample" in the patents' shared specification. <u>'170 Patent</u> Specification passages corresponding to '051 passages cited above Claims 1, 11 <u>'921 Patent</u> Specification passages corresponding to '051 passages cited above Claims 1, 14 <u>Shared Figures</u> Figures 2-3, 6-7 <u>'051 File History</u> • Aug. 5, 2014, Application • Nov. 14, 2014, Preliminary Amendment • May 12, 2016, Restriction Requirement • November 3, 2016, Response to Restriction Requirement • November 23, 2016, Office Action • May 2, 2017, Response to Office Action • June 6, 2017, Office Action • Aug. 11, 2017 Office Action Response • Aug. 23, 2017 Office Action

Claim Terms	Bio-Rad's Proposed Construction and Evidence in Support	Plaintiffs' Proposed Construction and Evidence in Support ²
		- September 22, 2017, Examiner Interview Summary - Oct. 20, 2017, Examiner Interview Summary - Nov. 6, 2017, Request for Continued Examination - November 24, 2017, Examiner Interview Summary - Jun 14, 2018, Notice of Allowance - July 3, 2018, Amendment after allowance <u>'170 File History</u> - March 7, 2018 Application - March 22, 2018 Preliminary Amendment - March 8, 2019, Office Action - May 23, 2019, Response to Office Action - July 22, 2019, Office Action - January 21, 2020 Request for Continued Examination - May 4, 2020, Notice of Allowance - July 23, 2020 Amendment after Notice of Allowance - July 29, 2020 Response to Amendment <u>'921 File History</u> - May 1, 2020, Application - December 16, 2020, Preliminary Amendment - March 25, 2021, Information Disclosure Statement (and associated references) - December 28, 2022 Office Action - March 28, 2023 Response to Office Action - May 10, 2023, Office Action - July 10, 2023, Response to Office Action - August 10, 2023, Notice of Allowance

Claim Terms	Bio-Rad's Proposed Construction and Evidence in Support	Plaintiffs' Proposed Construction and Evidence in Support ²
		- October 10, 2023, Amendment after Notice of Allowance - October 23, 2023 Notice of Allowance

III. PATENT LOCAL RULE 4-3(D)

The parties anticipate that the length of time necessary for the Claim Construction Hearing in this case is one and a half hours, exclusive of the case tutorial. The total length of time required for the coordinated Claim Construction Hearing in this case and the related case is anticipated to be three hours.

IV. PATENT LOCAL RULE 4-3(E)

The parties do not propose to call witnesses at the Claim Construction Hearing.

V. PATENT LOCAL RULE 4-3(F)

The Parties do not request any factual findings from the Court related to claim construction.

1 Dated: June 18, 2024

Respectfully submitted,

2 WILSON SONSINI GOODRICH & ROSATI, PC

3 By: /s/ Christopher D. Mays

4 Christopher D. Mays

5 cmays@wsgr.com

6 *Attorney for Plaintiff and Counter-Defendant*
CHROMACODE, INC.

8 Dated: June 18, 2024

SHEPPARD, MULLIN, RICHTER &
9 HAMPTON, LLP

10 By: /s/ Jesse Salen

11 Jesse Salen

jsalen@sheppardmullin.com

12 *Attorney for Plaintiffs and Counter-Defendants*
13 CHROMACODE, INC. AND CALIFORNIA
14 INSTITUTE OF TECHNOLOGY

15 Dated: June 18, 2024

WEIL, GOTSHAL & MANGES LLP

16 By: /s/ Derek C. Walter

17 Derek C. Walter

derek.walter@weil.com

18 *Attorneys for Defendant and Counter-Plaintiff*
19 BIO-RAD LABORATORIES, INC.

CIVIL LOCAL RULE 5-1 ATTESTATION

I, Christopher D. Mays, am the ECF user whose credentials were utilized in the electronic filing of this document. In accordance with Civil Local Rule 5-1(i)(3), I hereby attest that concurrence in the filing of this document has been obtained from any other signatory to this document.

/s/ Christopher D. Mays
Christopher D. Mays (Bar No. 266510)