

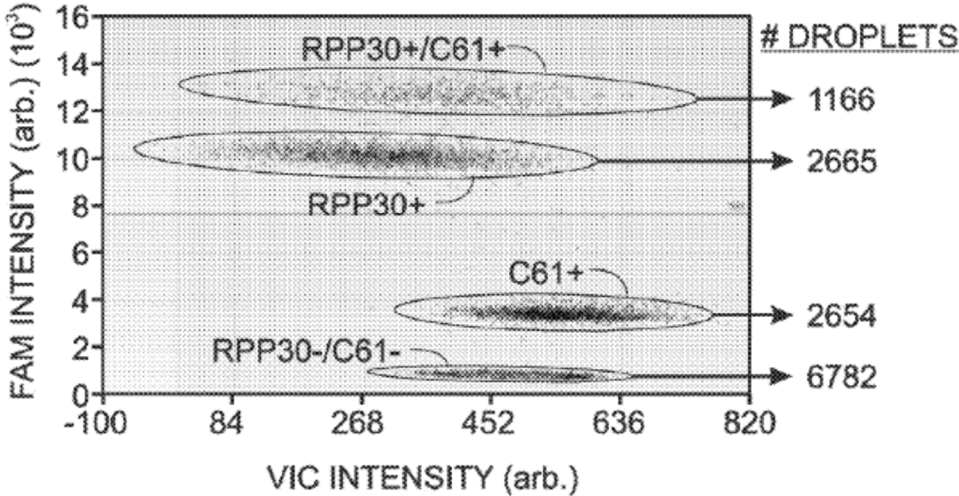
Appendix A

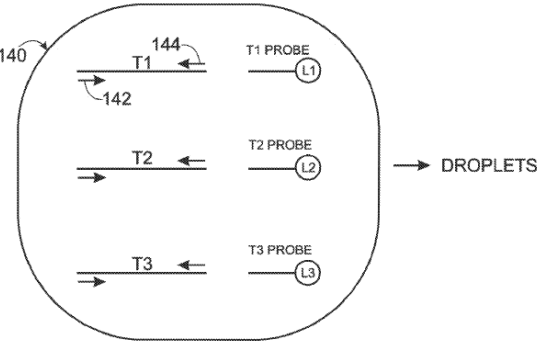
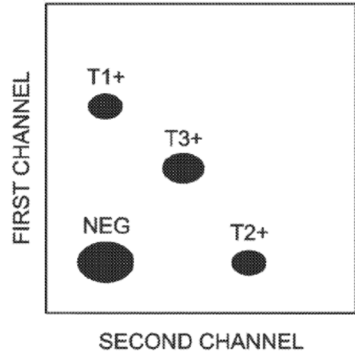
Invalidity of U.S. Patent No. 10,068,051

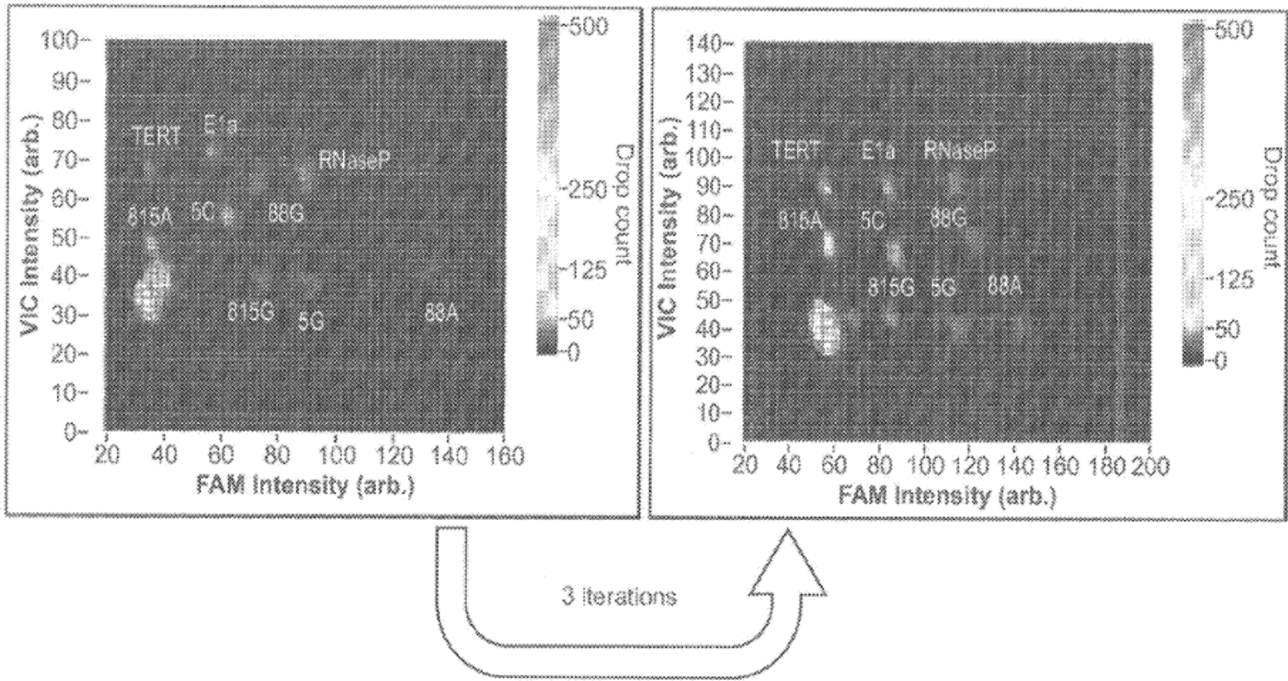
by U.S. Patent Publication 2013/0040841A1 (“Saxonov”) and U.S. Patent Publication 2011/0250597A1 (“Larson”)

Based upon the claim interpretations Plaintiffs appear to be asserting and the applications of those interpretations to Bio-Rad’s products in Plaintiffs’ Patent Local Rule infringement contentions, the combination of Saxonov and Larson renders obvious, alone or in combination with other prior art identified in Bio-Rad’s Patent Local Rule invalidity contentions, the Asserted Claims at least as described by illustrative examples, below. These invalidity contentions are not an admission by Bio-Rad that the Accused Products, including any current or past versions of such products are covered by, or infringe these claims, particularly when they are properly construed. Nothing in these contentions should be interpreted as acquiescence to an assertion of a particular claim construction by Plaintiffs.

<u>Claim</u>	<u>Invalidity Analysis</u>
1. A method of detecting the presence or absence of at least seven polynucleotide analytes, in any combination of presence or absence, in a single sample solution volume, the method comprising:	Saxonov and Larson teach detecting the presence or absence of multiple analytes in a single sample solution, including detecting multiple analytes in a single optical channel: “The present disclosure provides a system, including methods and apparatus, for performing a digital assay with multiplexed detection of two or more distinct targets in the same optical channel.” Saxonov ¶ 8. For example, Saxonov Fig. 5 depicts the detection of two analytes in a single optical channel (color):

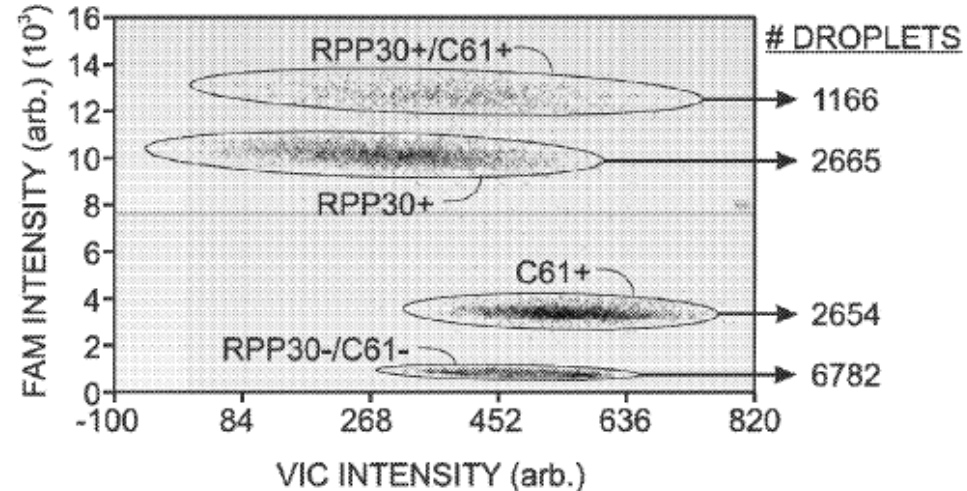
Claim	Invalidity Analysis
	Fig. 5  Saxonov teaches that the clusters representing different combinations of analytes may be “separated in two-dimensional intensity space and so in principle [are] more easily resolvable” by the use of more than one color or channel. Saxonov ¶ 20. And further teaches that signals in a single optical channel (color) may be from multiple targets “[o]ne or more signals may be created that are representative of light detected from the partitions, indicated at 48. The signal may represent an aspect of light, Such as the intensity of the light, detected in the same optical channel from reporters for two or more distinct targets. The signals optionally may include data collected in one or more different channels (e.g., in different wavelength ranges (color regimes) from reporters for the same and/or different targets). The light detected from each reporter may be light emitted from a luminophore. The light detected in a given channel may be detected with the same sensor at the same time such that light detected from different reporters is summed or accumulated without attribution to a particular reporter. Thus, the signal may be a composite signal that represents two, three, four, or more reactions and thus two, three, four, or more targets of the reactions.” Saxonov ¶ 36.

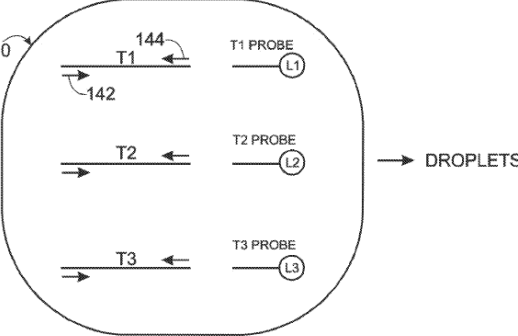
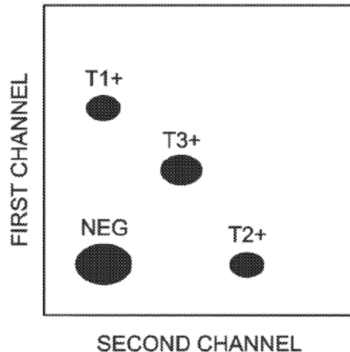
Claim	Invalidity Analysis
	Saxonov further discloses the use of more than one color, for example, describing that each analyte “may be at least predominantly or substantially exclusively detectable in only one [color], or may be substantially detectable in two or more [colors].” Saxonov ¶ 79; <i>see also</i> Saxonov ¶¶ 76-79, Figs. 9, 10. Fig. 9  Fig. 10  In describing Figures 9 and 10, Saxonov describes detection of three analytes in two optical channels: “For example, L1 of the T1 probe is substantially detectable in the first channel but not the second channel, L2 of the T2 probe is substantially detectable in the second channel but not the first channel, and L3 of the T3 probe is substantially detectable in both channels. More generally, L3 may generate a distinguishable intensity and/or a different ratio of

Claim	Invalidity Analysis
	signal intensities for amplification of the T3 target in each channel relative to the intensity and/or ratio produced by L1 for amplification of the T1 target and produced by L2 for amplification of the T2 target.” Saxonov ¶ 79. Larson similarly teaches methods using labeled probes comprising fluorophores to detect multiple polynucleotide analytes. <i>See, e.g.</i>, Larson ¶¶ 34, 35, 150, 156, Figs. 14, 15, 17. Larson Fig. 15 depicts a 9-plex dPCR assay for spinal muscular atrophy with only two fluorophores, showing the process of optimizing droplet intensities. Figs. 15a and 15b show 2-D histograms of droplet fluorescence intensity, shown as heat maps with hotter colors representing higher droplet counts, for the 9-plex assay against the synthetic model chromosome ((a)=Before optimization; (b)=after optimization). <i>see</i> ¶¶ 35, 150 (describing Fig. 15)  FIG. 15

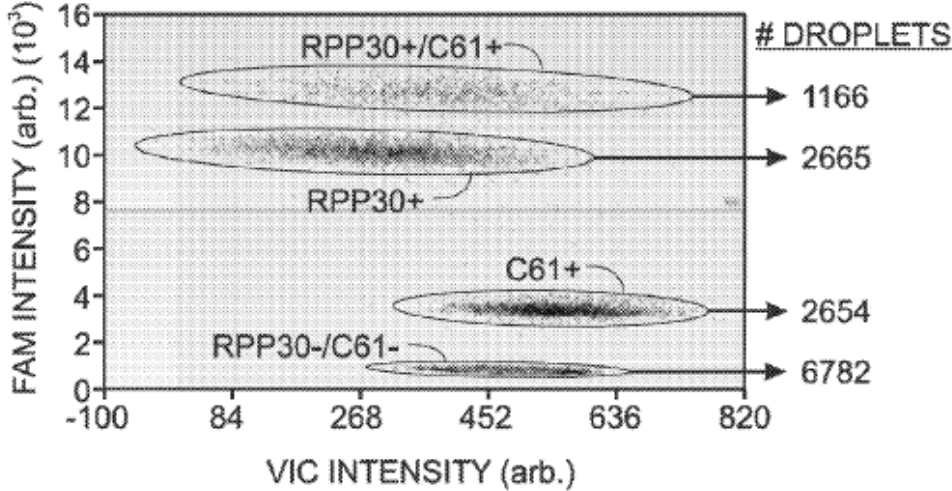
<u>Claim</u>	<u>Invalidity Analysis</u>
	To the extent Saxonov and Larson is argued by Plaintiffs or found by the Court to not explicitly teach certain limitations in the asserted claims, such limitations would have been inherent and/or obvious as described in Bio-Rad’s invalidity contentions.
a) providing a sample solution volume	Saxonov and Larson teach providing a sample solution volume: “[P]reparation may include combining the sample with reagents for amplification.” Saxonov ¶ 26. To the extent Saxonov and Larson is argued by Plaintiffs or found by the Court to not explicitly teach certain limitations in the asserted claims, such limitations would have been inherent and/or obvious as described in Bio-Rad’s invalidity contentions.
comprising or potentially comprising, at least one of at least seven polynucleotide analytes, and	Saxonov and Larson teach a sample solution volume comprising or potentially comprising at least one of at least seven polynucleotide analytes: Saxonov teaches that “[a] digital PCR assay can be multiplexed to permit detection of two or more different targets within each partition.” Saxonov ¶ 06, <i>see also</i> Saxonov ¶ 8 (“performing a digital assay with multiplexed detection of two or more distinct targets in the same [color]”). Saxonov further teaches the detection of three analytes using two colors and differing intensities. Saxonov ¶¶ 76-79, Figs. 9-10. Larson illustrates, as was known in the art, higher-plex assays for seven or more polynucleotide analytes. For example, Larson teaches a “9-plex assay for certain SMA related targets was also demonstrated with just two colors (probes containing FAM and VIC fluorophores).” Larson ¶ 150, Fig. 15. To the extent Saxonov and Larson is argued by Plaintiffs or found by the Court to not explicitly teach certain limitations in the asserted claims, such limitations would have been inherent and/or obvious as described in Bio-Rad’s invalidity contentions.

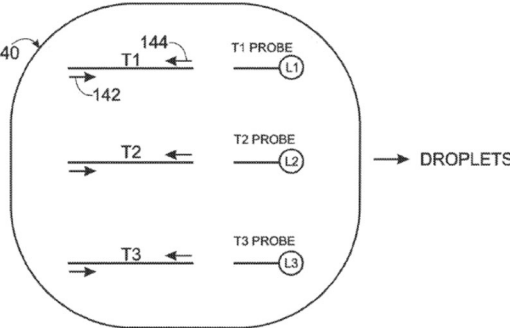
<u>Claim</u>	<u>Invalidity Analysis</u>
comprising at least seven hybridization probes, each hybridization probe corresponding to one of the at least seven polynucleotide analytes,	Saxonov and Larson teach using at least seven hybridization probes that each correspond to one of the polynucleotide analytes: Saxonov discloses the use of oligonucleotide probes that “may provide target specificity by hybridization” to each of the targets. Saxonov ¶¶ 49-50, Figs. 3, 9. For example, “FIG. 3 shows a pair of targets 80, 82 (‘Target 1’ and ‘Target 2’) and corresponding probes 84, 86 (‘Probe 1’ and ‘Probe 2’) that may be used to create a dedicated signal for each target in a digital PCR assay.” Saxonov ¶ 49, Figs. 3, 5. Saxonov Figures 9 and 10 depict using three distinct probes for three target polynucleotides, each with a unique color and intensity combination in a two color assay, with the probe for T3 including both colors. Saxonov ¶¶ 76-79, Figs. 9-10. To the extent Saxonov and Larson is argued by Plaintiffs or found by the Court to not explicitly teach certain limitations in the asserted claims, such limitations would have been inherent and/or obvious as described in Bio-Rad’s invalidity contentions.
wherein each hybridization probe comprises at least one fluorophore selected from four fluorophores, and	Saxonov and Larson teach the use of multiple fluorophores in an assay: Saxonov recites “FAM, VIC, ROX, TAMRA and JOE” as possible fluorophore labels. Saxonov ¶ 51, Fig. 3. Saxonov recites that these labels may be on hybridization probes. <i>See, e.g.</i>, Saxonov ¶ 49 (“[e]ach probe may include . . . a fluorophore.”), Fig. 3. Saxonov further teaches that each probe (or sets of probes) may comprise more than two fluorophores. Saxonov ¶¶ 76-78, 79 (each probe label “may be substantially detectable in two or more colors.”), Figs. 9, 10.

<u>Claim</u>	<u>Invalidity Analysis</u>										
	To the extent Saxonov and Larson is argued by Plaintiffs or found by the Court to not explicitly teach certain limitations in the asserted claims, such limitations would have been inherent and/or obvious as described in Bio-Rad’s invalidity contentions.										
wherein each hybridization probe, when excited and when contacted with its corresponding polynucleotide analyte, generates a cumulative intensity signal,	Saxonov and Larson teach the use of hybridization probes that when contacted with their corresponding polynucleotide analyte generate a cumulative intensity signal: Saxonov discloses generating cumulative intensity signals from labeled probes when they are hybridized to their corresponding polynucleotide targets. Saxonov ¶¶ 49-52, Fig. 3. Specifically, for example, Saxonov Figure 5 depicts assay results for the detection of two polynucleotides, C61 and RPP30. Fig. 5  The figure is a flow cytometry plot with FAM INTENSITY (arb.) (10³) on the y-axis and VIC INTENSITY (arb.) on the x-axis. The y-axis ranges from 0 to 16 with increments of 2. The x-axis ranges from -100 to 820 with major ticks at -100, 84, 268, 452, 636, and 820. Four distinct populations of droplets are identified and labeled with ellipses: RPP30+/C61+ (top-left), RPP30+ (middle-left), C61+ (middle-right), and RPP30-/C61- (bottom-right). Arrows point from each label to a corresponding number in the '# DROPLETS' column on the right. <table border="1"><thead><tr><th>Population</th><th># DROPLETS</th></tr></thead><tbody><tr><td>RPP30+/C61+</td><td>1166</td></tr><tr><td>RPP30+</td><td>2665</td></tr><tr><td>C61+</td><td>2654</td></tr><tr><td>RPP30-/C61-</td><td>6782</td></tr></tbody></table>	Population	# DROPLETS	RPP30+/C61+	1166	RPP30+	2665	C61+	2654	RPP30-/C61-	6782
Population	# DROPLETS										
RPP30+/C61+	1166										
RPP30+	2665										
C61+	2654										
RPP30-/C61-	6782										

<u>Claim</u>	<u>Invalidity Analysis</u>
	The C61+ droplets have a cumulative intensity of ~3000 in FAM (and negligible in VIC) and RPP30 + droplets have a cumulative intensity of ~10,000 in FAM (and negligible in VIC) while droplets positive for both have a cumulative intensity of ~13,000 in FAM (and negligible in VIC). Saxonov ¶¶ 63-67, Fig. 5. As an additional example, Saxonov discloses the detection of three analytes using two colors to provide three target-specific probes with each probe generating a cumulative intensity signal. Saxonov ¶¶ 76-79, Figs. 9-10. Fig. 9  Fig. 10 

<u>Claim</u>	<u>Invalidity Analysis</u>
	The three depicted cumulative intensity signals show the presence of three analytes in the droplets. Saxonov ¶¶ 60-67, 76-79, Figs. 3, 5, 10. Specifically, Saxonov discloses hybridization probes corresponding to targets that each generate cumulative intensity signals from VIC and FAM fluorophores once each probe is contacted with its corresponding polynucleotide, including probes generating cumulative intensity signals comprising multiple colors. <i>Id.</i> To the extent Saxonov and Larson is argued by Plaintiffs or found by the Court to not explicitly teach certain limitations in the asserted claims, such limitations would have been inherent and/or obvious as described in Bio-Rad's invalidity contentions.
further wherein each generated cumulative intensity signal comprises at least one signal generated by excitement of at least one of the four fluorophores;	Saxonov and Larson teach cumulative intensity signals comprising at least one signal generated by excitement of at least one of the four fluorophores: Saxonov discloses generating cumulative intensity signals from labeled probes by excitation of the fluorophore labels of the hybridization probes. For example, Saxonov Figure 5 depicts cumulative signals for the detection of two polynucleotides, C61 and RPP30, each generating a signal from the FAM fluorophore label. Saxonov ¶¶ 63-67, Fig. 5.

<u>Claim</u>	<u>Invalidity Analysis</u>
	Fig. 5  As an additional example, Saxonov discloses the detection of three analytes using two colors, i.e., two unique fluorophores, to provide three target-specific probes with each probe generating cumulative intensity signals. Saxonov ¶¶ 76-79, Figs. 9-10. To the extent Saxonov and Larson is argued by Plaintiffs or found by the Court to not explicitly teach certain limitations in the asserted claims, such limitations would have been inherent and/or obvious as described in Bio-Rad’s invalidity contentions.
b) contacting said sample solution volume with the plurality of hybridization probes and	Saxonov and Larson teach contacting the sample solution volume with the plurality of hybridization probes:

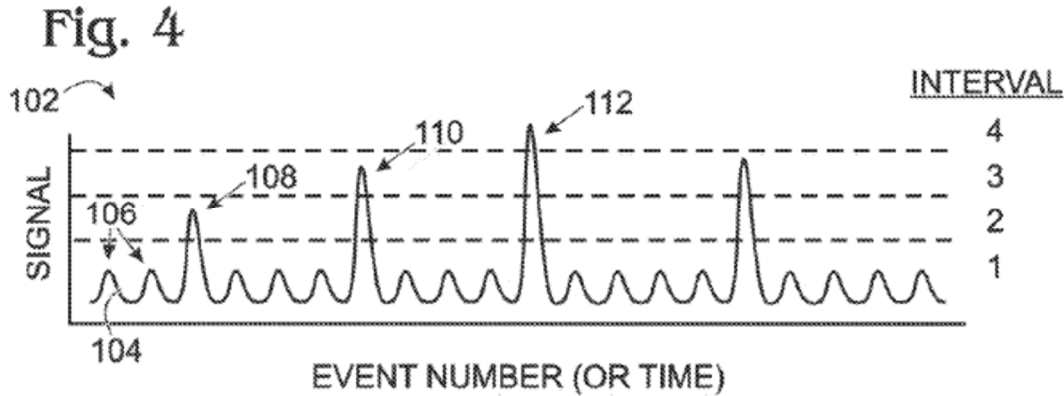
<u>Claim</u>	<u>Invalidity Analysis</u>
	Saxonov discloses contacting the sample solution volume with the plurality of hybridization probes in disclosing a sample having a volume comprising polynucleotide analytes and probes that hybridize to them. Saxonov ¶¶ 17-18, 77, Fig. 9. Fig. 9  To the extent it is argued that Saxonov does not teach this limitation, a POSA would have understood it to be known in the art to do so, as evidenced by Larson. Larson discloses solutions comprising target-specific probes that hybridize to target sequences, and merging these solutions with sample fluid droplets, containing the target polynucleotide(s). Larson ¶¶ 68 (“A [first sample fluid] droplet containing the nucleic acid is then caused to merge with the PCR reagents in the second [sample] fluid as described above, producing a droplet that includes Taq polymerase, deoxynucleotides of type A, C, G and T, magnesium chloride, forward and reverse primers, detectably labeled probes, and the target nucleic acid.”), 74 (“a first droplet formation module produces the sample droplets consistent with limiting or terminal dilution of target nucleic acid....The second droplet also includes detectably labeled probes for detection of the amplified target nucleic acid.”). To the extent Saxonov and Larson is argued by Plaintiffs or found by the Court to not explicitly teach certain limitations in the asserted claims, such limitations would have been inherent and/or obvious as described in Bio-Rad’s invalidity contentions.

<u>Claim</u>	<u>Invalidity Analysis</u>
exciting the hybridization probes to generate the cumulative intensity signal(s) if one or more of the at least seven polynucleotide analytes is present in the sample volume; and	Saxonov and Larson teach exciting hybridization probes to generate cumulative intensity signals to show the presence of polynucleotide analytes: Saxonov discloses the excitation of labels of hybridization probes to generate cumulative intensity signal(s) representing the presence of polynucleotide analytes in the sample volume. Saxonov ¶¶ 5, 20, 37, 79, Figs. 4-8, 10. To the extent it is argued that Saxonov does not teach this limitation, a POSA would have understood it to be known in the art to do so, as evidenced by Larson. Larson teaches the excitation of hybridization probes comprising fluorophores using a laser. Larson ¶¶ 156 (“As before with the 5- and 9-plex assays for SMA, TaqMan assays were used with FAM and VIC fluorophores (excited by a 488 nm laser). The fluorescence from the FAM and VIC fluorophores were recorded simultaneously with the fluorescence from the optical labels, requiring modifications to the optical layout of the instrumentation described for the SMA assay (the optical schematic for two-laser excitation and 4-color detection is shown in entirety in FIG. 16”), 195, Fig. 16. To the extent Saxonov and Larson is argued by Plaintiffs or found by the Court to not explicitly teach certain limitations in the asserted claims, such limitations would have been inherent and/or obvious as described in Bio-Rad’s invalidity contentions.
c) measuring the cumulative intensity signal(s), thereby generating a cumulative signal measurement,	Saxonov and Larson teach measuring cumulative intensity signals: For example, Saxonov depicts measuring signals in a graphical trace of light from signal(s) from probes in a digital PCR assay, “FIG. 4 is an exemplary graph showing a signal that may be created by detecting light emitted from the probes of FIG. 3 in a digital PCR assay performed in droplets, with the signal created by detecting light from each target together in the same channel from a fluid stream containing the droplets, in accordance with aspects of the present disclosure.” Saxonov ¶¶ 12, 53, Fig. 4. Additionally, Saxonov Figure 5 depicts measured intensities of different signals in droplets, including the intensities for C61+ droplets, RPP30+ droplets and RPP30+/C61+ droplets, which constitutes a cumulative signal measurement. Saxonov ¶¶ 13, 63, Fig. 5.

<u>Claim</u>	<u>Invalidity Analysis</u>
	To the extent Saxonov and Larson is argued by Plaintiffs or found by the Court to not explicitly teach certain limitations in the asserted claims, such limitations would have been inherent and/or obvious as described in Bio-Rad’s invalidity contentions.
wherein the cumulative signal measurement non-degenerately indicates the presence or absence of the at least seven polynucleotide analytes, in any combination of presence or absence,	Saxonov and Larson teach cumulative intensity signal measurements that non-degenerately represents the presence or absence of polynucleotide analytes in any combination of presence or absence: Saxonov discloses the unambiguous detection of multiple analytes using multiple different colors and signal intensities to distinguish between polynucleotides. Saxonov ¶¶ 13, 17-18, 63-67, 76-79, Figs. 5, 9-10. Saxonov further discloses detecting multiple analytes in the same droplets, for example, detecting “double-positive populations (T1+/T2+, T1+/T2+, and T2+/T3+)” and the “triple positive population (T1+/T2+/T3+).” Saxonov ¶ 78, Fig. 10. Further, as discussed above, a POSA would have understood Saxonov to teach or suggest an assay including up to at least seven polynucleotide analytes, and that doing so would have been obvious, including in view of Larson’s explicit teachings as to what was known in the art. In this detection of multiple analytes in the same droplets, Saxonov detects and measures cumulative color signal(s) generated by the probes labeled with those colors, specifically measuring “[i]ntensities produced by exemplary populations,” i.e., measuring the intensities of color signals resulting from different polynucleotide analytes in combination. Saxonov ¶¶ 15, 36, 73, 78-79, Figs. 4-5, 7, 10. Saxonov also teaches distinguishing analytes using labels having different color intensities. Saxonov ¶¶ 60-67, Fig. 5 (depicting signals from FAM fluorophore(s) where the signal intensity for the presence of C61 is a first value, or the presence of RPP30 is a second, higher value, and the combination of both C61 and RPP30 in presence is a third, even higher value). Saxonov further teaches that using both color and intensity to separate signals in “two dimensional intensity space” makes the signals for each analyte more resolvable, i.e., removes degeneracy. Saxonov ¶ 20.

<u>Claim</u>	<u>Invalidity Analysis</u>
	To the extent Saxonov and Larson is argued by Plaintiffs or found by the Court to not explicitly teach certain limitations in the asserted claims, such limitations would have been inherent and/or obvious as described in Bio-Rad's invalidity contentions.
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,	Saxonov and Larson teach the non-degenerate detection of the presence or absence of polynucleotide analytes in a sample solution volume, in any combination of presence or absence: <i>See supra</i>, generally; <i>see also supra</i>, preamble. To the extent Saxonov and Larson is argued by Plaintiffs or found by the Court to not explicitly teach certain limitations in the asserted claims, such limitations would have been inherent and/or obvious as described in Bio-Rad's invalidity contentions.
without requiring any step of immobilization of said polynucleotide analytes, physical separation of said polynucleotide analytes, or mass spectrometry.	Saxonov and Larson teach the performance of the described assays without immobilization, physical separation or mass spectrometry: The methods make no mention of physical separation, immobilization, or mass spectrometry. Specifically as to physical separation, although Saxonov teaches the formation of droplets, Saxonov teaches detecting and measuring multiple polynucleotide analytes in the same droplet, i.e., it does not teach physical separation of analytes. Saxonov ¶¶ 78-79, Figs. 9-10. To the extent Saxonov and Larson is argued by Plaintiffs or found by the Court to not explicitly teach certain limitations in the asserted claims, such limitations would have been inherent and/or obvious as described in Bio-Rad's invalidity contentions.
2. The method of claim 1, wherein said hybridization probes comprise an identical fluorophore, and wherein	Saxonov and Larson teach the use of hybridization probes that each include an identical fluorophore and are specific for different polynucleotide analytes:

<u>Claim</u>	<u>Invalidity Analysis</u>
said plurality of hybridization probes are specific for different polynucleotide analytes.	Saxonov teaches an assay wherein hybridization probes each contain an identical fluorophore and are specific for different polynucleotide analytes. Saxonov ¶¶ 63-67, Fig. 5 (depicting each polynucleotide analyte in an assay being encoded by a FAM fluorophore). Saxonov further describes that fluorophores used in exemplary assays “may be the same or different.” Saxonov ¶ 51. Saxonov also teaches labeling probes with more than one fluorophore, either of the same or different colors. Saxonov ¶ 51 (“one probe may be labeled with a different number of fluorophores than the other probe”), 79 (describing probes “substantially detectable in two or more optical [colors]”), 36 (describing signals including multiple colors “from reporters for the same and/or different targets”). To the extent Saxonov and Larson is argued by Plaintiffs or found by the Court to not explicitly teach certain limitations in the asserted claims, such limitations would have been inherent and/or obvious as described in Bio-Rad’s invalidity contentions.
3. The method of claim 1, wherein said detecting is performed with a plurality of hybridization probes comprising different fluorophores, wherein said plurality of hybridization probes are specific for different analytes	Saxonov and Larson teach the use of hybridization probes that comprise different fluorophores that are specific to different analytes: <i>See supra</i> Claim 1, describing hybridization probes. Further, Saxonov discloses using a plurality of hybridization probes specific for different polynucleotide analytes that comprise different fluorophores. <i>See, e.g.</i>, Saxonov ¶¶ 20 (“In the same or other embodiments, some targets may be analyzed in one channel (e.g., a FAM channel), and one or more other targets may be analyzed in one or more other channels (e.g., a VIC channel).”), 51 (“Fluorophores 92, 94, which may be the same or different, create detectable but distinguishable signals in the same channel, allowing multiplexing in that channel.”), Fig. 3. Saxonov also specifically teaches an exemplary assay wherein hybridization probes comprise one or two unique fluorophores. Saxonov ¶¶ 76-79, Figs. 9, 10.

<u>Claim</u>	<u>Invalidity Analysis</u>
	To the extent Saxonov and Larson is argued by Plaintiffs or found by the Court to not explicitly teach certain limitations in the asserted claims, such limitations would have been inherent and/or obvious as described in Bio-Rad’s invalidity contentions.
4. The method of claim 1, wherein said cumulative intensity signal(s) are generated during a polymerase chain reaction.	Saxonov and Larson teach cumulative intensity signals that are generated during a polymerase chain reaction: Saxonov teaches generating a color signal during PCR amplification of a target polynucleotide. Saxonov ¶ 5, 53 (“FIG. 4 shows an exemplary graph 102 of data corresponding to an exemplary digital PCR assay for Target 1 and Target 2 performed in droplets.” and “The graph plots a signal 104 that represents light detected from probes 84, 86 (and/or one or more modified (e.g., cleavage) products thereof) (see FIG.3). The signal is created from light detected over time...”), Figs. 3-4. Fig. 4  To the extent Saxonov and Larson is argued by Plaintiffs or found by the Court to not explicitly teach certain limitations in the asserted claims, such limitations would have been inherent and/or obvious as described in Bio-Rad’s invalidity contentions.

<u>Claim</u>	<u>Invalidity Analysis</u>
5. The method of claim 1, further comprising transmitting information concerning the presence or absence of said polynucleotide analytes through a computer network.	Saxonov and Larson teach transmitting information concerning the presence or absence of polynucleotide analytes through a computer network: Saxonov depicts a number of images that would require a computer to generate. <i>See e.g.</i>, Saxonov ¶¶ 63-67, Fig. 5. Further, Saxonov explicitly teaches a “data processing assembly,” Saxonov ¶ 45, that “communicates with and controls operation of any suitable combination of the assemblies,” <i>Id.</i>, and that these assemblies may be “operatively connected to one another.” <i>Id.</i> To the extent Saxonov and Larson is argued by Plaintiffs or found by the Court to not explicitly teach certain limitations in the asserted claims, such limitations would have been inherent and/or obvious as described in Bio-Rad’s invalidity contentions.
6. The method of claim 1, further comprising providing information concerning the presence or absence of said polynucleotide analytes to a health care professional, wherein the health care professional makes a clinical decision based on said information.	Saxonov and Larson teach providing information concerning the presence or absence of polynucleotide analytes to a healthcare professional to make a clinical decision: As discussed above, Saxonov and Larson teach transmitting information concerning the presence or absence of polynucleotide analytes through a computer network. <i>See supra</i> Claim 5. Saxonov teaches an assay for the detection of the C61 gene, which is a disease marker. Saxonov ¶¶ 63-67, Fig. 5. Larson specifically discloses that “methods of the invention may be used to monitor a patient for recurrence of a cancer.” Larson ¶ 177. To the extent Saxonov and Larson is argued by Plaintiffs or found by the Court to not explicitly teach certain limitations in the asserted claims, such limitations would have been inherent and/or obvious as described in Bio-Rad’s invalidity contentions.
	Saxonov and Larson teach performing at least one step of said method using a computer:

<u>Claim</u>	<u>Invalidity Analysis</u>
7. The method of claim 1, wherein at least one step of said method is performed using a computer.	Saxonov teaches that the methods use an “[a]pparatus 60 [that] may include a partitioning assembly, such as a droplet generator 62 (“DG”), a thermal incubation assembly, such as a thermocycler 64 (“TC”), a detection assembly (a detector) 66 (“DET”), and a data processing assembly...” Saxonov ¶ 45. Larson similarly discloses that a computer is used for droplet detection, stating that “suitable detection apparatuses include ... processors (e.g., computers and software).” Larson ¶ 89. To the extent Saxonov and Larson is argued by Plaintiffs or found by the Court to not explicitly teach certain limitations in the asserted claims, such limitations would have been inherent and/or obvious as described in Bio-Rad’s invalidity contentions.
8. The method of claim 7, wherein said computer is located on a remote server.	Saxonov and Larson teach performing at least one step of said method using a computer located on a remote server: Saxonov teaches the computers, as described above, and teaches: “a data processing assembly (a processor) 68 (‘PROC’), or any combination thereof, among others. The data processing assembly may be, or may be included in, a controller that communicates with and controls operation of any suitable combination of the assemblies Any suitable combination of the assemblies may be operatively connected to one another.” Saxonov ¶ 45. To the extent Saxonov and Larson is argued by Plaintiffs or found by the Court to not explicitly teach certain limitations in the asserted claims, such limitations would have been inherent and/or obvious as described in Bio-Rad’s invalidity contentions.
9. The method of claim 7, wherein said computer is located on a thermal cycler.	Saxonov and Larson teach performing at least one step of said method using a computer located on a thermal cycler: Saxonov discloses an exemplary apparatus for performing the assay that includes a “thermal incubation assembly, such as a thermocycler” and “a processor.” Saxonov ¶ 45. Saxonov further discloses that the processor “may be, or may be included in, a controller that communicates with and controls operation of any suitable combination of assemblies.” Saxonov ¶ 45. Saxonov also discloses that the combination of assemblies “may be operatively connected to one another and/or...unconnected to the other assemblies.” Saxonov ¶ 45.

<u>Claim</u>	<u>Invalidity Analysis</u>
	To the extent Saxonov and Larson is argued by Plaintiffs or found by the Court to not explicitly teach certain limitations in the asserted claims, such limitations would have been inherent and/or obvious as described in Bio-Rad's invalidity contentions.