

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

RAINDANCE TECHNOLOGIES, INC.,	:	
et al.,	:	
	:	
Plaintiffs,	:	
	:	
v.	:	Civil Action No. 15-152-RGA
	:	
10X GENOMICS, INC.,	:	
	:	
Defendant.	:	

MEMORANDUM ORDER

Pending is a motion to dismiss, arguing that Plaintiffs fail to state a claim. (D.I. 15).

Plaintiffs' first amended complaint is thirty-five pages long, but its essential factual allegations do not take up much space. Plaintiffs have seven patents, six of which are all method claims, and the seventh of which alleges systems and methods.¹ At a high level, the asserted claims are methods “for conducting an auto catalytic reaction in a microfluidic system,” “for conducting a reaction in plugs in a microfluidic system,” “[for] a microfluidic system comprising . . . polymerase chain reactions,” and “of conducting a reaction within at least one plug.”

What does Defendant do to infringe these claims? It sells the “10X Genomics platform,” which Plaintiff first heard about on January 14, 2015. (¶14).² The platform consists of at least two products – the “GemCode Instrument” for \$75,000, and “GemCode Reagents” for \$500 per

¹ I note that one patent (that of Count II) has been cancelled and therefore is no longer in the case. (D.I. 26 at 5 n.1).

² Paragraph references are to the first amended complaint. (D.I. 12).

sample. Software is involved. Defendant has a website that provides some description of these items. (§§15, 21). One Plaintiff has a “patented and proven RainDrop® digital droplet system.” (§11). That Plaintiff and Defendant are “close competitors in the emerging field of using microfluidic devices to deliver biological reagents so that complex genetic analysis may be simplified and scaled.” (§12). Plaintiffs quote various things that Defendant says about the GemCode Platform on its website, such as, the “GemCode Platform is a molecular barcoding and analysis suite for a broad range of applications including targeted, exome, and whole genome sequencing.” (§15). And, the GemCode Instrument is “designed to rapidly and efficiently automate the equivalent of over a million pipetting steps for highly parallel sample partitioning and molecular barcoding. . . . The instrument utilizes advanced microfluidics that partition 8 samples in parallel in ~5 minutes.” (*Id.*). And, the “GemCode reagent delivery system partitions arbitrarily long DNA molecules (including >100kb) and prepares sequencing libraries in parallel such that all fragments produced within a partition share a common barcode. A simple workflow combines large partition numbers with a massively diverse barcode library to generate >100,000 barcode containing partitions in a matter of minutes.” (§16). There are some diagrams and pictures that appear to originate at conferences where Defendant was promoting its product. What I gather from these diagrams and snapshots is that Defendant’s product provides a “barcoded primer library” which interacts somehow with DNA enzymes (or maybe the DNA in enzymes) and oil, with the interacted molecules being collected together, treated in some fashion (cycled and pooled) to form some sort of mixture. (*See* §§16, 17, 18). Another of Defendant’s explanations describes four steps in its process: (1) “Molecular barcoding in GEMs,” (2) “Pool, Ligate right adapter,” (3) “Sample indexing PCR [polymerase chain reaction],” and (4) “Sequence and Analyze.” (D.I. 19). The final factual allegation about Defendant’s product is

that the “GemCode Software maps short read data to original long molecules using the barcodes provided by the reagent delivery system.” (¶20).

Plaintiffs filed this suit on February 12, 2015, after first learning about Defendant’s activities and products slightly less than a month before. The amended complaint was filed two months later. It does not appear from Plaintiff’s reliance on promotional materials that it has purchased one of Defendant’s products to see how it actually works.

Count I’s asserted patent is U.S. Patent No. 8,658,430, which claims:

1. A method for droplet formation, the method comprising the steps of:

providing a plurality of aqueous fluids each in its own aqueous fluid channel in fluid communication with one or more immiscible carrier fluid channels;

forming droplets of aqueous fluid surrounded by an immiscible carrier fluid in the aqueous fluid channels;

applying a same constant pressure to the carrier fluid in each of the immiscible carrier fluid channels; and

adjusting pressure in one or more of the aqueous fluid channels, thereby to produce droplets of aqueous fluid in one or more outlet fluid channels.

There is nothing in the complaint (at least so far as I can see) that hints at the role of pressure in Defendant’s products.

Count III’s asserted patent is U.S. Patent No. 8,304,193, which claims:

1. A method for conducting an autocatalytic reaction in plugs in a microfluidic system, comprising the steps of:

providing the microfluidic system comprising at least two channels having at least one junction;

flowing an aqueous fluid containing at least one substrate molecule and reagents for conducting an autocatalytic reaction through a first channel of the at least two channels;

flowing an oil through the second channel of the at least two channels;

forming at least one plug of the aqueous fluid containing the at least one substrate

molecule and reagents by partitioning the aqueous fluid with the flowing oil at the junction of the at least two channels, the plug being substantially surrounded by an oil flowing through the channel, wherein the at least one plug comprises at least one substrate molecule and reagents for conducting an autocatalytic reaction with the at least one substrate molecule; and

providing conditions suitable for the autocatalytic reaction in the at least one plug such that the at least one substrate molecule is amplified.

Whether Plaintiffs' collection of factual assertions alleges infringement of this claim is hazier to me. It is not obvious to me that what Plaintiffs describe is an "autocatalytic reaction." The requirements of the next to last element might be met, but involves quite a bit of supposition. I think, but am not sure, that partitioning samples is the same as amplification. I think I see (in the simple explanations of Defendant's product) a microfluidic system, two channels, a junction, a substrate molecule, a reagent, and oil.

I have not reviewed as closely the asserted patents of Counts IV through VII. I do not think I need to do so. Plaintiff makes no attempt to relate any their factual assertions with any of the asserted claims. Since it is clear to me that Plaintiff is going to need to file another amended complaint, it ought to do so before I spend any more time reviewing its current defective complaint.

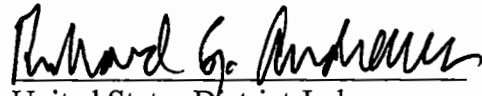
Effective December 1, 2015, Federal Rule of Civil Procedure 84 and the Appendix of Forms were "abrogated." Under existing standards, that is, *Iqbal* and *Twombly*, it is clear to me that Plaintiffs have not plausibly alleged indirect infringement on Counts I and III (and, I expect, on Counts IV through VII, although in the interest of conserving resources, I am not going to decide that now). See *Ashcroft v. Iqbal*, 556 U.S. 662 (2009); *Bell Atl. Corp. v. Twombly*, 550 U.S. 544 (2007). Further, I believe that I have discretion whether or not to apply the post-December 1, 2015 direct infringement pleading standard to the amended complaint, and I believe

that it would be in the interest of justice to do so. I also note, to foreclose future unnecessary argument, that for indirect infringement, Defendant's knowledge of the patents is established at least as of the filing of the lawsuit.

Thus, I am going to grant Defendant's motion in its entirety, with leave to replead. Plaintiffs have not plausibly alleged any infringement, but Plaintiffs might very well be able to do so, particularly if they have analyzed Plaintiffs' products and not just its website.

Defendant's motion to dismiss (D.I. 15) is **GRANTED**. Plaintiffs' amended complaint is **DISMISSED WITHOUT PREJUDICE**. Plaintiff has three weeks to file a second amended complaint.

IT IS SO ORDERED this 4 day of March 2016.


United States District Judge