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8 UNITED STATES DISTRICT COURT
9 FOR THE EASTERN DISTRICT OF CALIFORNIA
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11 VINEYARD INVESTIGATIONS,

12 Plaintiff,

13 v.

14 E. & J. GALLO WINERY,

15 Defendant.
16

No. 1:19-cv-01482-NONE-SKO

ORDER DENYING DEFENDANT'S
MOTION TO DISMISS

(Doc. No. 13)

17 **INTRODUCTION**

18 Plaintiff Vineyard Investigations initiated this action by filing a complaint on October 18,
19 2019 against defendant E. & J. Gallo Winery. (Doc. No. 1.) Therein, plaintiff alleges that
20 defendant infringes upon U.S. Patent Nos. 8,528,834 (“834 Patent”) and 6,947,810 (“810
21 Patent”) (collectively, the “Asserted Patents”) relating to the “intelligent monitoring and
22 management of crops such as grapevines.” (*Id.* ¶ 33.)

23 Plaintiff seeks: 1) judgment that the Asserted Patents have been and continue to be
24 infringed by defendant; 2) an accounting of damages resulting from defendant’s infringing acts;
25 3) a finding that defendant’s infringement is willful and enhancement of damages under 35
26 U.S.C. § 284; 4) a mandatory future royalty on each and every future sale by defendant of grapes
27 grown using technology that is found to infringe one or more of plaintiff’s patents; 5) attorney’s
28 fees; 6) costs; and 7) any further relief the court deems proper. (*Id.* at 43–44.)

1 On December 27, 2019, defendant filed a motion to dismiss on the grounds that the
2 Asserted Patents are patent-ineligible under 35 U.S.C. § 101 (“§ 101”). (Doc. No. 13.) Plaintiff
3 filed its opposition on January 24, 2020. (Doc. No. 17.) Defendant filed its reply on February 7,
4 2020. (Doc. No. 19.)

5 The court has determined the motion to dismiss is suitable for decision based on the
6 papers under Local Rule 230(g) and, for the reasons explained below, will deny defendant’s
7 motion to dismiss.¹

8 BACKGROUND

9 A. The Parties

10 Plaintiff is a corporation organized under California law with its principal place of
11 business in St. Helena, California. (Doc. No. 1 ¶ 4.) Dr. Paul W. Skinner founded plaintiff
12 Vineyard Investigations, a consulting company formerly known as Terra Spase, Inc. (*Id.* ¶ 13.)
13 Plaintiff “provides consulting and scientific expertise to the wine industry in California and
14 worldwide” on matters relating to “soil management, irrigation requirements, canopy
15 management, crop load, and fruit and wine quality management.” (*Id.* ¶ 5.) Plaintiff “owns a
16 portfolio of patents [including the Asserted Patents] and patent applications claiming inventions
17 of Dr. Skinner in the field of intelligent automated monitoring and maintenance of growing
18 crops.” (*Id.* ¶¶ 6, 22.)

19 Each of plaintiff’s patents and applications, including the Asserted Patents, “derives from,
20 and shares patent specification disclosures with, parent United States Patent No. 6,874,707, which
21 was filed on May 31, 2001 and was issued by the USPTO [United States Patent and Trademark
22 Office] on April 5, 2005.” (*Id.* ¶ 23.)

23 Defendant is a corporation organized under California law with its principal place of
24 business in Modesto, California. (*Id.* ¶ 7.) “Defendant grows and sells grapes for use in its own

25 ¹ The undersigned apologizes for the excessive delay in the issuance of this order. This court’s
26 overwhelming caseload has been well publicized and the long-standing lack of judicial resources
27 in this district has reached crisis proportion. Unfortunately, that situation sometimes results in the
28 court not being able to issue orders in submitted civil matters within an acceptable period of time.
This situation is frustrating to the court, which fully realizes how incredibly frustrating it is to the
parties and their counsel.

1 and in others' wines, in vineyards in California and in the Eastern District of California." (*Id.*)

2 **B. The Idea**

3 In 2000, while on a cross-country flight, Dr. Skinner arrived at an idea to design an
4 automated system to "supply every vine with exactly what it needed from a nutrition, water,
5 canopy vigor, and insect and disease prevention standpoint." (*Id.* ¶ 20.) "He began to develop a
6 'smart' drip irrigation system that would be controlled by an advanced system of sensing
7 technology, along with vine growth and disease risk models, to apply water and potentially
8 multiple other chemicals to individual vines when and where they needed them." (*Id.*) "On that
9 flight, Dr. Skinner began sketching his ideas for this automated vineyard management system,
10 creating drawings and initial notes of the invention." (*Id.*) "Dr. Skinner's original sketches
11 contained core ideas that would eventually make up his invented system, including . . . various
12 sources for sensor and external data inputs on plant growth characteristics used to control the
13 system." (*Id.*) "Dr. Skinner's contemplated data sources included sensors for soil moisture, soil
14 N (nitrogen) and K (potassium) status, soil pH, as well as vine canopy density (sun/shaded area,
15 *i.e.*, NDVI), vine evapo-transpiration (ET_o), vine microclimate (*e.g.*, temperature, relative
16 humidity), vine insect populations, cluster volume, growing degree days (GDD), yield and
17 harvest forecasts." (*Id.*)

18 **C. The '834 Patent**

19 The '834 Patent is entitled "Plant Growing System Using External Data and Having
20 Sensors Associated with Plants." (*Id.* ¶ 24.) Plaintiff alleges the '834 Patent "was duly and
21 lawfully issued by the USPTO on September 10, 2013." (*Id.*) Plaintiff avers it is the owner of all
22 right, title, and interest in the '834 Patent. (*Id.*)

23 The '834 Patent claims a "'system for monitoring and managing plant growth' in which:
24 'Combinations of data from sensors local to a vineyard, and from optional remote stations and
25 sensors, is combined with a control system to accurately control the dispensing of water and
26 chemicals such as insecticides, disease prevention fungicides and fertilizers.'" (*Id.* ¶ 25 (citing
27 '834 Patent at Abstract, 1:15–17, 3:9–15).)

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1 Plaintiff alleges that while the innovative systems of the '834 Patent could be applied to
2 many different crops, “some applications of the system are particularly adapted to improve the
3 growing of grapevines in a vineyard.” (*Id.* (citing '834 Patent at Abstract, 3:9–10, 3:52–55).)
4 “The systems and methods disclosed and claimed in the '834 patent provide significant
5 advantages in such an environment, where smart automation reduces the high cost of vine growth
6 management, and where soil and vine growth variability need to be addressed to improve yield
7 and fruit quality.” (*Id.* (citing '834 Patent at Abstract, 6:19–26).)

8 An example configuration of the '834 Patent “contains various types of in-field sensors
9 . . . and emitters . . . for dispensing water and other materials. *In addition to real-time data from*
10 *the in-field sensors, the controller [] of the example system also can receive and utilize external*
11 *data from a number of sources.”* (*Id.* ¶ 26 (emphasis added).) The “external data” in the invented
12 system can include “remotely sensed weather data, evapo-transpiration coefficients, crop
13 development data, and other information.” (*Id.* (citing '834 Patent at Abstract, 5:1–9).) “Sensor
14 and external data can be processed through a number of advanced modeling techniques described
15 in the patent.” (*Id.* (citing '834 Patent at Abstract, 5:10–35).) “This data and modeling are then
16 used as inputs into the automated, fine-grained control of the variable rate irrigation and nutrient
17 application system.” (*Id.* at Figure 1.)

18 Claim 1 of the '834 Patent recites:

19 1. An apparatus for dispensing materials to vegetation, the
20 apparatus comprising:

21 a conduit having a channel, wherein the channel is positioned in
proximity to the vegetation;

22 an outlet coupled to the channel for conveying a material from
23 the channel to the vegetation under the control of a central
24 controller, wherein the central controller is responsive to
external data for controlling material dispersing from one or
more emitters in fixed proximity to the vegetation;

25 one or more sensors in fixed proximity to the vegetation,
26 wherein each sensor is associated with one or more particular

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1 plan[t]² in the vegetation, wherein signals from me [sic] sensors
2 are transmitted to a central control system and are used to
3 control conveyance of the material to the vegetation.

4 '834 Patent at 8:62–9:10.

5 Claim 15 of the '834 Patent recites:

6 15. A method for dispensing materials to vegetation, wherein one or
7 more sensors for sensing a growth condition of the one or more
8 plants are in fixed proximity to the one or more plants, wherein
9 each sensor is associated with one or more particular plan[t] in the
10 vegetation, the method comprising:

11 obtaining external data for controlling material dispensing;

12 using a controller to receive signals from at least one of the sensors;
13 and

14 using the controller to control dispensing of a material via the one
15 or more emitters in response to the external data.

16 *Id.* at 10:16–26.

17 Plaintiff alleges that the inventions of the '834 Patent presented an “important advance
18 from existing vineyard drip irrigation systems at the time, which were manually controlled or
19 were automated in simplistic ways with a timer or computer.” (*Id.* ¶ 27 (citing '834 Patent at
20 1:29–38).) The existing systems “did not ‘provide a high level of automation’ like the systems of
21 the ['834 Patent], and did not address soil variability problems by ‘selectively provid[ing]
22 different amounts of water to different plants’ or plant areas.” (*Id.* (citing '834 Patent at 1:39–
23 44).) Moreover, plaintiff contends the '834 Patent provided “new and unconventional ways to
24 automatically integrate ‘sophisticated information’ about plant sizes, weather conditions and
25 forecasts, and soil conditions—which previously had only been used in the growing process, if at
26 all, via ‘human intervention’ that was ‘prone to errors and inefficiencies.’” (*Id.* (citing '834
27 Patent at 1:44–57).) Plaintiff avers that “Dr. Skinner’s patented innovations advanced the field

28 ² Based upon a review of the '834 Patent and '810 Patents, the court assumes the use of the term
“plan” in Claim 2 of the '834 Patent was a typographical error and that the Patent intended to use
the term “plant.” The same apparent typographical error occurs in Claim 15 of the '834 Patent in
a similar context. However, Claim 2 of the '810 Patent references “a plurality of sensors, wherein
each sensor is associated with, and in fixed proximity to, one of the plants.” The language in the
'810 Patent strongly suggest that the drafter(s) intended to use the term “plant” in the '834
Patents. Even if the court is incorrect in this assumption, the distinction does not appear to be
material to resolution of the pending motion.

1 and solves these and other problems in the prior art—including through his use of real-time
2 sensor and external data, processed according to various agricultural models, as control inputs to
3 a variable rate irrigation system.” (*Id.* (citing ’834 Patent at 8:13–22).)

4 Plaintiff asserts that Dr. Skinner understood at the time he developed his inventions that
5 the “sophisticated sensor and external data to automate vineyard management would have
6 significant positive effects and would be extremely valuable to growers.” (*Id.* ¶ 28.) For
7 example, “Dr. Skinner knew that properly adjusting water and chemical application in response to
8 weather data, soil moisture data, and other information can prevent crop failure, improve crop
9 quality and yield, and save growing and harvesting costs.” (*Id.* (internal citation omitted).)
10 Additionally, the “patented systems and methods provide the benefit that ‘delivery of materials
11 can be more precisely directed to where it is needed,’” resulting in improvements in yield and
12 grape quality because “each vine receives a more accurate and effective application of nutrients,”
13 further resulting in the ability to grow and sell more grapes at higher prices for those high quality
14 grapes. (*Id.* ¶¶ 28–29.) Plaintiff contends this invention was particularly valuable in “drought-
15 prone growing regions where water costs are a significant factor to profitability.” (*Id.* ¶ 30.)

16 **D. The ’810 Patent**

17 The ’810 Patent is entitled “System for Automated Monitoring and Maintenance of Crops
18 Including Sensors and Emitters Associated with Plants.” (*Id.* ¶ 31.) Plaintiff alleges the ’810
19 Patent “was duly and lawfully issued by the USPTO on September 20, 2005.” (*Id.*) Plaintiff
20 asserts it is the owner of all right, title, and interest in the ’810 Patent. (*Id.*)

21 The ’810 Patent claims inventions relate to the overall system described in the ’834 Patent
22 and “includes specific claims relating to use of in-field sensors providing inputs to the smart
23 automated control system.” (*Id.* ¶ 32 (citing ’810 Patent at 9:28–41 (claim 2)).) “These in-field
24 sensors can be attached to the conduit providing water and/or other nutrients.” (*Id.* (citing ’810
25 Patent at 3:24–31).) “They can also be placed at other locations in the vineyard, such as for soil
26 nutrient and moisture monitoring sensors that may need ground contact.” (*Id.* (citing ’810 Patent
27 at 5:46–51).) “The [’810 Patent] also discloses that the control for the system can be centralized
28 or distributed, and that control can be associated with individuals or groups of sensors and

emitters in order to assess and respond to variability in the vineyard.” (*Id.* (citing ’810 Patent at 5:52–67).)

Claim 2 of the ’810 Patent recites:

2. A system for application of a material to a plurality of plants, the system comprising:

a plurality of sensors, wherein each sensor is associated with, and in fixed proximity to, one of the plants;

a control system coupled to one or more of the sensors for receiving a signal from the sensors;

emitters for emitting the material to a plant, wherein each emitter is associated with, and in fixed proximity to, one of the plants; and

a control system for controlling emission of the material to a particular plant via the particular plant’s associated emitter in response to a signal from the particular plant’s associated sensor.

’810 Patent at 9:28–41.

According to plaintiff, the inventions claimed in the ’810 Patent “improved on the prior art and provided the same benefits as discussed above with respect to the ’834 Patent.” (*Id.* ¶ 33.) Plaintiff alleges that “[i]ndividually and together, the claimed inventions provide new and unconventional techniques for intelligent monitoring and management of crops such as grapevines—and do so by enabling the system to variably and ‘accurately control the dispensing of water’ and other chemicals and nutrients.” (*Id.* (citing ’810 Patent at Abstract).)

E. The Alleged Theft

At an unspecified time after plaintiff obtained patents on Dr. Skinner’s inventions, plaintiff and Dr. Skinner discussed and advertised the benefits of the inventions to winemaking professionals, including defendant’s executives and viticulturists. (*Id.* ¶ 34.) Plaintiff alleges that defendant then began infringing the Asserted Patents as early as 2013. (*Id.* ¶ 47.)

LEGAL STANDARDS

A. General Patent Concepts

A patent must “describe the exact scope of an invention and its manufacture to secure to [the patentee] all to which he is entitled, [and] to apprise the public of what is still open to them.” *See Markman v. Westview Instruments, Inc.*, 517 U.S. 370, 373 (1996) (internal quotation marks

1 and citation omitted). A patent application must contain a “specification” and at least one
2 drawing. 35 U.S.C. § 111. There are two distinct parts of a patent specification. The first is a
3 detailed “written description of the invention and of the manner and process of making and using
4 it,” set forth “in such full, clear, concise, and exact terms as to enable any person skilled in the art
5 . . . to make and use the same.” 35 U.S.C. § 112(a). The written description also “shall set forth
6 the best mode contemplated by the inventor or joint inventor of carrying out the invention.” *Id.*
7 Second, a patent “specification shall conclude with one or more claims particularly pointing out
8 and distinctly claiming the subject matter which the inventor or a joint inventor regards as his
9 invention.” 35 U.S.C. § 112(b). The claims define the scope of a patent grant, *Markman*, 517
10 U.S. at 372, but “do not set forth the invention in all of the detail required by the written
11 description.” *Lava Trading, Inc. v. Sonic Trading Mgmt., LLC*, No. 03 CIV. 842 (TPG), 2004
12 WL 1145833, at *3 (S.D.N.Y. May 20, 2004).

13 **B. Motions to Dismiss for Patent Eligibility**

14 Under Rule 12(b)(6) of the Federal Rules of Civil Procedure, a defendant may move to
15 dismiss a cause of action where the plaintiff has failed to “state a claim upon which relief can be
16 granted.” Fed. R. Civ. P. 12(b)(6); *see also Bell Atl. Corp. v. Twombly*, 550 U.S. 544, 555
17 (2007). In deciding a Rule 12(b)(6) motion, the court must assume the truth of all non-
18 conclusory, factual allegations made in the complaint and draw all reasonable inferences in favor
19 of the plaintiff. *Ashcroft v. Iqbal*, 556 U.S. 662, 679–80 (2009). Next, the court must determine
20 whether the complaint is “plausible on its face,” allowing the court to “draw the reasonable
21 inference that the defendant is liable for the misconduct alleged.” *Id.* “The plausibility standard
22 is not akin to a ‘probability requirement,’ but it asks for more than a sheer possibility that a
23 defendant has acted unlawfully.” *Id.*

24 Pursuant to statute, “[a] patent shall be presumed valid.” 35 U.S.C. § 282. Generally, “[a]
25 party seeking to establish that particular claims are invalid must overcome the presumption of
26 validity in 35 U.S.C. § 282 by clear and convincing evidence.” *State Contracting & Eng’g Corp.*
27 *v. Condotte Am., Inc.*, 346 F.3d 1057, 1067 (Fed. Cir. 2003). Courts within the Ninth Circuit are
28 split regarding the applicability of the clear and convincing standard in the context of a motion to

1 dismiss brought in this context. *Compare Modern Telecom Sys. LLC v. Earthlink, Inc.*, No.
2 CV14-0347-DOC, 2015 WL 1239992, at *7–8 (C.D. Cal. Mar. 17, 2015) (noting clear and
3 convincing evidence standard does not apply in motion to dismiss but holding defendant “still
4 bear[s] the burden of establishing that the claims are patent-ineligible under § 101”); *Timeplay,*
5 *Inc. v. Audience Entm’t LLC*, No. CV 15-05202-SJO (JCx), 2015 WL 9695321, at *5 (C.D. Cal.
6 Nov. 10, 2015) (same), with *Genetic Techs. Ltd. v. Agilent Techs., Inc.*, 24 F. Supp. 3d 922 (N.D.
7 Cal. 2014) (“The affirmative defense of patent ineligibility . . . must be established by clear and
8 convincing evidence, because every patent is presumed to be properly issued.”); *Wolf v. Capstone*
9 *Photography, Inc.*, No. 2:13-CV-09573, 2014 WL 7639820, at *5 (C.D. Cal. Oct. 28, 2014)
10 (holding that the clear and convincing standard should be applied to motions to dismiss under §
11 101). Unsurprisingly, the parties here also disagree as to whether the moving party must prove
12 invalidity by clear and convincing evidence at this stage of the litigation.

13 Assuming without holding that the heightened clear and convincing standard does not
14 apply, “[d]efendant’s burden in seeking to dismiss plaintiff’s claims based on patent ineligibility
15 is high because of the Patent’s presumptive validity.” *Boar’s Head Corp. v. DirectApps, Inc.*, No.
16 2:14-cv-01927-KJM-KJN, at *3 (E.D. Cal. July 28, 2015) (citing *CLS Bank Int’l v. Alice Corp.*
17 *Pty.*, 717 F.3d 1269, 1304 (Fed. Cir.), *aff’d* 573 U.S. 208 (2014)); *Timeplay*, 2015 WL 9695321,
18 at *5; *Earthlink*, 2015 WL 1239992, at *8). “Additionally, in applying § 101 jurisprudence at the
19 pleading stage, the Court construes the patent claims in a manner most favorable to Plaintiff.”
20 *Timeplay*, 2015 WL 9695321, at *5.

21 **C. Section 101**

22 “Section 101 defines the subject matter that may be patented under the Patent Act.” *Bilski*
23 *v. Kappos*, 561 U.S. 593, 601 (2010). “Whoever invents or discovers any new and useful process,
24 machine, manufacture, or composition of matter, or any new and useful improvement thereof,
25 may obtain a patent therefor.” 35 U.S.C. § 101; *see also Fort Properties, Inc. v. American*
26 *Master Lease, LLC*, 671 F.3d 1317, 1320 (Fed. Cir. 2012). However, § 101 specifically excludes
27 from patent eligibility laws of nature, natural phenomena, and abstract ideas. *Ass’n for Molecular*
28 *Pathology v. Myriad Genetics, Inc.*, 569 U.S. 576, 589 (2013); *Fort Properties, Inc.*, 671 F.3d at

1320. Without this exception, “there would be considerable danger that the grant of patents would ‘tie up’ the use of such tools and thereby ‘inhibit future innovation premised upon them.’” *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 566 U.S. 66, 86 (2012); *American Axle & Manufacturing, Inc. v. Neapco Holdings LLC*, 967 F.3d 1285, 1292 (Fed Cir. 2020). “This would be at odds with the very point of patents, which exist to promote creation.” *Myriad*, 569 U.S. at 589 (citing *Diamond v. Chakrabarty*, 447 U.S. 303, 309 (1980)).

However, the Supreme Court has also recognized that because “all inventions at some level embody, use, reflect, rest upon, or apply . . . abstract ideas,” this exclusionary principle cannot be so broad as to make something un-patentable simply because it involves, at some level, an abstract concept. *Mayo*, 566 U.S. at 71; *see also Neochloris, Inc. v. Emerson Process Management LLLP*, 140 F. Supp. 3d 763, 769 (N.D. Ill. 2015). If the concept has been applied to “a new and useful end,” transforming the abstract idea into an actual invention, the result may be eligible for patent protection. *Alice Corp. v. CLS Bank*, 573 U.S. 208, 217 (2014) (quoting *Gottschalk v. Benson*, 409 U.S. 63, 67 (1972)); *see also XY, LLC v. Trans Ova Genetics, LC*, 968 F.3d 1323, 1330 (Fed. Cir. 2020).

DISCUSSION

In moving to dismiss the complaint in this action, defendant argues that the claims in the Asserted Patents are not patent-eligible under 35 U.S.C. § 101. Defendant argues that the claims are directed to an abstract idea and lack an inventive concept. (Doc. No. 13 at 10.) Defendant also contends that the “abstract idea is delivering water and chemicals to a plant as needed—an activity humans have performed for a long time . . .” (*Id.* at 10, 16.) Defendant further argues that the claims “lack an inventive concept because the claims merely automate the abstract idea using generic computers and conventional irrigation equipment components, and do not claim or disclose any improvements in the computer itself or those components.” (*Id.*) In other words, defendant argues that the “patents simply use a generic computer (*i.e.*, control system) and known equipment working conventionally (*i.e.*, sensors and emitters) to automate routine irrigation tasks humans have been performing for decades, if not centuries.” (*Id.* at 14.) Defendant also asserts that Claim 2 of the ’810 Patent is representative of all the claims in the Asserted Patents.

1 Plaintiff counters by arguing that defendant has failed to meet its burden of proving
2 patent-ineligibility by clear and convincing evidence. (Doc. No. 17 at 4.) Specifically, plaintiff
3 contends: 1) patents are presumptively valid (*id.* at 4–6); 2) improved agricultural systems,
4 including the ones at issue here, are routinely found to be patent eligible (*id.* at 12–15); 3)
5 whether claimed inventions are unconventional is a question of law inappropriate for resolution
6 by way of motion to dismiss brought pursuant to Rule 12(b)(6) (*id.* at 15–18); 4) defendant failed
7 to meet its burden proving that Claim 2 of the '810 patent is representative of all the Asserted
8 Claims (*id.* at 18–20); 5) defendant has ignored the requirement to consider the claims as ordered
9 combinations (*id.* at 20–21); 6) defendant has failed to show claim construction is unnecessary
10 (*id.* at 21–23); and 7) the Asserted Patents are patent-eligible (*id.* at 23–31).

11 **A. Claim Construction**

12 As a threshold matter, the court must determine whether a claim construction hearing is
13 necessary in connection with the pending motion. The purpose of claim construction is to
14 determine the meaning and scope of the patent claims asserted to be infringed. *Oplus Techs., Ltd.*
15 *v. Sears Holding Corp.*, No. 12-cv-5707-MRP, 2013 WL 11521845, at *2 (C.D. Cal. Jan. 14,
16 2013). “In some cases, the ordinary meaning of claim language as understood by a person of skill
17 in the art may be readily apparent even to lay judges, and claim construction in such cases
18 involves little more than the application of the widely accepted meaning of commonly understood
19 words.” *Phillips v. AWH Corp.*, 415 F.3d 1303, 1314 (Fed. Cir. 2005) (citation omitted).

20 “Patent eligibility under § 101 is a question of law that may, in appropriate cases, be
21 decided on the pleadings without the benefit of a claims construction hearing.” *Earthlink*, 2015
22 WL 1239992, at *6 (citing *Content Extraction & Transmission LLC v. Wells Fargo Bank, Nat.*
23 *Ass’n*, 776 F.3d 1343, 1349 (Fed. Cir. 2014) (affirming the grant of a motion to dismiss based on
24 patent-ineligible subject matter under § 101 where no claim construction hearing was held)).
25 However, it may be “desirable—and often necessary—to resolve claim construction disputes
26 prior to a § 101 analysis, for the determination of patent eligibility requires a full understanding of
27 the basic character of the claimed subject matter.” *Bancorp Servs., L.L.C. v. Sun Life Assurance*
28 *Co. Can. (U.S.)*, 687 F.3d 1266, 1273–74 (Fed. Cir. 2012). *But see Content Extraction*, 776 F.3d

1 at 1349 (“Although the determination of patent eligibility requires a full understanding of the
2 basic character of the claimed subject matter, claim construction is not an inviolable prerequisite
3 to a validity determination under § 101.”).

4 Based on the undersigned’s review of the claims at issue in this case, the Asserted Patents
5 concern the relatively non-technical concepts of sensors, external data sources, control systems,
6 and emitters, which do not appear to be so “opaque such that claim construction would be
7 necessary to flush out [their] contours” before determining whether the claims are patent eligible.
8 *See Lumen View Tech. v. Findthebest.com, Inc.*, 984 F. Supp. 2d 189, 205 (S.D.N.Y. 2013)
9 (finding a claim construction hearing unnecessary before analyzing claims under § 101); (Doc.
10 No. 17 at 7 (describing the Asserted Claims, as a whole, as directed to an improved “system for
11 monitoring and managing plant growth” in which “[c]ombinations of data from sensors local to a
12 vineyard, and from optional remote [external] stations and sensors, is combined with a control
13 system to accurately control the dispensing of water and chemicals such as insecticides, disease
14 prevention fungicides and fertilizers.”) (citing ’834 Patent at Abstract, 3:9–15, 8:62–9:10).) As
15 such, the court concludes that a claim construction hearing is unnecessary in this case for a
16 determination of the patent eligibility of the Asserted Patents.

17 **B. The *Alice/Mayo* Two-Part Test**

18 The Supreme Court has established a two-step process for resolving § 101 patent
19 eligibility issues. *Alice*, 573 U.S. at 217–18 (citing *Mayo*, 566 U.S. at 77–78). First, a court must
20 “determine whether the claims at issue are directed to one of those patent-ineligible concepts,”
21 such as an abstract idea. *Id.* at 217 (citing *Mayo*, 566 U.S. at 77–78). If so, then the court must
22 ask “[w]hat else is there in the claims,” which requires consideration of “the elements of each
23 claim both individually and as an ordered combination to determine whether the additional
24 elements transform the nature of the claim into a patent-eligible application.” *Timeplay, Inc.*,
25 2015 WL 9695321, at *3 (internal citations and quotation marks omitted). “In this second step,
26 the court must ‘search for an inventive concept’—i.e., an element or combination of elements that
27 is ‘sufficient to ensure that the patent in practice amounts to significantly more than a patent upon
28 the [ineligible concept] itself.’” *Id.* (quotation marks omitted). Courts have recognized that “the

two steps of the *Alice/Mayo* test are easier to separate in recitation than in application.” *Id.* (citing *Ameranth, Inc. v. Genesis Gaming Sols., Inc.*, No. CV 11-00189-AG, 2014 WL 7012391, at *2 (C.D. Cal. Nov. 12, 2014)); *see also Elec. Power Grp., LLC v. Alstom S.A.*, 830 F.3d 1350, 1353 (Fed. Cir. 2016). Indeed, as one district court has observed “the proper application of the Supreme Court’s *Alice* standard is an evolving and sometimes hazy area of law.” *United Cannabis Corp. v. Pure Hemp Collective Inc.*, No. 18-cv-1922-WJM, 2019 WL 1651846, at *5 (D. Colo. Apr. 17, 2019).

The Supreme Court “has not established a definitive rule to determine what constitutes an ‘abstract idea’ sufficient to satisfy the first step of the *Mayo/Alice* inquiry.” *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1334 (Fed. Cir. 2016). “Rather, the Supreme Court and the Federal Circuit ‘have found it sufficient to compare claims at issue to those claims already found to be directed to an abstract idea in previous cases.’” *Iron Gate Security, Inc. v. Lowe’s Cos., Inc.*, No. 15-cv-8814-KBF, 2016 WL 4146140, at *6 (S.D.N.Y. Aug. 3, 2016) (quoting *Enfish*, 822 F.3d at 1334). Courts often examine the purpose of a challenged claim to determine whether it is abstract. *See Cal. Inst. Tech., v. Hughes Commc’ns, Inc.*, 59 F. Supp. 3d 974, 991 (C.D. Cal. 2014) (concluding that the court should “identify the purpose of the claim—in other words, what the claimed invention is trying to achieve—and ask whether that purpose is abstract,” making the *Alice/Mayo* step one “a sort of ‘quick look’ test, the object of which is to identify a risk of preemption and ineligibility”); *DDR Holdings, LLC v. Hotels.com, L.P.*, 773 F.3d 1245, 1258–59 (Fed. Cir. 2014). The court considers the patent’s claims as a whole to determine what their focus is. *See Diamond v. Diehr*, 450 U.S. 175, 188 (1981).

C. Patent Eligibility Under § 101

1. Step One of the *Alice/Mayo* Test

Under the first step of the *Alice/Mayo* test, the court must determine whether the claim at issue is directed to a “patent-ineligible concept,” including an abstract idea. *See Alice*, 573 U.S. at 217. When engaging in the first step analysis, courts should not “oversimplif[y]” key inventive concepts or “downplay” an invention’s benefits. *Enfish*, 822 F.3d at 1337–38; *see also McRO, Inc. v. Bandai Namco Games Am. Inc.*, 837 F.3d 1299, 1313 (Fed. Cir. 2016) (“courts ‘must be

1 careful to avoid oversimplifying the claims’ by looking at them generally and failing to account
2 for the specific requirements of the claims.”) (quoting *In re TLI Commc’ns*, 823 F.3d at 611).

3 Defendant cites the following language from the Asserted Patents: the invention
4 “automat[es] the growing of crops, such as grapevines,” using “data from sensors local to a
5 vineyard . . . combined with a control system to accurately control the dispensing of water and
6 chemicals such as insecticides, disease prevention materials and fertilizers.” (Doc. No. 13 at 18
7 (quoting ’810 Patent at 3:16–22; ’834 Patent at 3:7–15).) Defendant argues that this language
8 represents an abstract idea because it is directed to both a “longstanding activity (humans for
9 centuries have been adjusting the amounts of water and fertilizer provided to plants based on
10 seeing how well they are growing or the weather) and a fundamental business practice (collecting,
11 processing, and analyzing data), automated using only generic components.” (Doc. No. 13 at 18–
12 19 (citing *Valmont Indus., Inc. v. Lindsay Corp.*, No. 15-42-LPS, 2018 WL 5962469, at *6 (D.
13 Del. Nov. 14, 2018)); *BSG Tech LLC v. Buyseasons, Inc.*, 899 F.3d 1281, 1285 (Fed. Cir. 2018);
14 *Intellectual Ventures I LLC v. Symantec Corp.*, 838 F.3d 1307, 1318 (Fed. Cir. 2016); *Smart Sys.*
15 *Innovations, LLC v. Chicago Transit Auth.*, 873 F.3d 1364, 1368 (Fed. Cir. 2017); *Content*
16 *Extraction*, 776 F.3d at 1347; *In re TLI Commc’ns*, 823 F.3d at 613).)

17 In opposition to defendant’s contention in this regard, plaintiff argues that improved
18 agricultural systems much like the ones plaintiff asserts here are routinely held to be patent
19 eligible and are not directed to an abstract idea. (Doc. No. 17 at 12–15, 19–28 (citing *Capstan*
20 *AG Sys. v. Raven Indus., Inc.*, 228 F. Supp. 3d 1235, 1244–45 (D. Kan. 2017); *Agri-Labs Holding*
21 *LLC v. Taplogic, LLC*, 304 F. Supp. 3d 773, 785 (N.D. Ind. 2018).)

22 The court finds defendant’s argument unpersuasive because it is based on an
23 oversimplification of the Asserted Patents. In *Capstan AG*, the asserted patents were “directed to
24 an improved system and method for dispensing controlled amounts of liquid agricultural product
25 through a plurality of valves that [were] individually controlled or controlled in groups.” *Capstan*
26 *AG*, 228 F. Supp. at 1241. In other words, the two asserted patents aimed to “improve
27 agrochemical spraying technology by allowing users to control each sprayer nozzle, either
28 individually or by groups of nozzles.” *Id.* Analyzing step one of the *Alice/Mayo* test, the court

1 held in *Capstan AG* that the asserted patents “set out to solve a problem that is itself patent-
2 eligible: lack of precision in agrochemical spraying caused by the inability to control sprayer
3 nozzles individually.” *Id.* at 1244. While the asserted patents in *Capstan AG* utilized a
4 mathematical formula, the court nevertheless concluded that the formula was used to improve an
5 existing technological process—one where no system or method previously existed for
6 controlling the flow rate of individual nozzles in agrochemical spraying systems—and therefore
7 that the asserted patents were directed to patent-eligible subject matter. *Id.* at 1245–46.

8 In *Agri-Labs*, the asserted patent involved a method and system for soil sampling to
9 determine nutrient levels across various areas in fields. *See Agri-Labs*, 304 F. Supp. 3d at 781.
10 After the samples were collected and tested for nutritional deficiencies, the results would be
11 transferred to a fertilizer applicator, which would then adjust the flow of nutrients according to
12 recorded geographic positions. *See id.* Previously, a farmer who wanted to evaluate the
13 nutritional needs of soil would be required to collect samples from various places and mark them
14 with individual identifiers to memorialize the precise geographic position from which each
15 sample was collected, a method that was both time-consuming and prone to errors. *See id.* At the
16 summary judgment stage of the litigation in that case, the district court held that the asserted
17 patent was not directed to an abstract idea but instead was “directed to a specific technique
18 regarding soil sampling . . . [that] purport[ed] to solve issues associated with existing techniques
19 by coming to the end result more efficiently and accurately.” *Id.* at 785–86. The court concluded
20 that the invention embodied in the asserted patent “improve[d] the technological process of soil
21 sampling and the manner in which soil sample containers [were] tracked and associated with the
22 geographic location in the field from where the samples [were] obtained,” which was a method
23 and system that accomplished something the industry had not been previously able to accomplish
24 and resolved a particular problem related to collecting soil samples. *Id.* at 786.

25 Here, the ’834 Patent contains various types of in-field sensors and emitters for dispensing
26 water, fungicide, pesticide, and other materials to one or more plants while using real-time data
27 from in-field sensors and external data sources. (’834 Patent at Fig. 1; 5:1–9, 5:10–35.) Both the
28 localized sensor and external data can be processed through advanced modeling techniques

described in the patent.³ (See *id.* at 5:10–35.) “The data and modeling are then used as inputs into the automated, fine-grained control of the variable rate irrigation and nutrient application system.” (See *e.g., id.* at Fig. 1, 5:42–57 (“This is useful where different parts of a vineyard need different degrees of irrigation”), 3:9–15 (“Combinations of data from sensors local to a vineyard, and from optional remote stations and sensors, is combined with a control system, to accurately control the dispensing of water and chemicals such as insecticides, disease prevention materials, and fertilizers”); Doc. No. 1 ¶ 26.)

The Asserted Patents claim that they made specific improvements to the existing vineyard drip irrigation systems that existed at the time, which were manually controlled or automated with timers or computers. (See ’834 Patent at 1:29–38, 42–44 (“it is difficult to selectively provide different amounts of water to different plants, or even plant rows or areas”).) As plaintiff argues, “[s]uch prior systems did not ‘provide a high level of automation’ like the systems of the patented invention, and did not address soil variability problems by ‘selectively provid[ing] different amounts of water to different plants’ or plant areas.” (Doc. No. 17 at 25 (citing ’834 Patent at 1:39–44; Doc. No. 1 ¶ 27).) Accepting the claims as true, the Asserted Patents here, like those in *Capstan AG* and *Agri-Labs*, are directed to improve a system and method for the precise dispensing of water, fungicide, pesticide, and other chemicals to individual plants, in different areas of agricultural fields, in ways that were previously unavailable. See *Capstan AG*, 228 F. Supp. at 1239, 1241, 1244–46; *Agri-Labs*, 304 F. Supp. 3d at 781, 785–86.

The court has reviewed the cases that defendant relies upon in support of its argument and finds that they are distinguishable. In *Valmont*, for instance, the district court held that the asserted patent which involved the use of a hand-held portable device to remotely display and control irrigation systems was patent-ineligible. *Valmont*, 2018 WL 5962469, at *7. At step one, the court held that the invention was directed to the abstract idea of “remotely monitoring and

³ Plaintiff provides several examples of the modeling techniques, including through entering external data manually, receiving external data automatically via a communication link or a network such as the Internet, and using sensor data in combination with methods that are described in certain academic papers regarding the control of irrigation and application of other chemicals and materials. (See ’834 Patent at 5:10–35.)

controlling irrigation equipment.” *Id.* at *6. Here, however, the Asserted Patents do not simply remotely monitor and do not require human intervention to control the irrigation equipment. Rather, the Asserted Patents appear to improve upon the prior art which did not “provide a high level of automation” or “address soil variability problems ‘by selectively provid[ing] different amounts of water to different plants’ or plant areas.” (Doc. No. 17 at 25 (citing ’834 Patent at 1:39–44; Doc. No. 1 ¶ 27).) The Asserted Patents utilize various types of in-field sensors and emitters for dispensing water, fungicide, pesticide, and other materials to one or more plants while using real-time data from in-field sensors and external data sources, including weather data, crop growth models, growing degree days, evapo-transpiration coefficients, degree day insect models, disease risk models, irrigation requirements, crop nutrition requirements, and crop development data. (’834 Patent at Fig. 1; 5:1–35.) Using that real-time data from both in-field sensors *and* external data sources, the Asserted Patents then deliver precise amounts of water and specific chemicals to the individual plants as necessary, as “different parts of a vineyard need different degrees of irrigation,” and where “[s]ome plants may be exposed to insects or disease and not others.” (See *id.* at Fig. 1, 5:42–57, 3:9–15; Doc. No. 1 ¶ 26.) Moreover, “[w]ind and weather sensors can be used to prevent dispensing of harmful chemicals when a chance of unwanted high dispersion is likely,” and application can be immediately stopped “[s]hould a high wind come up during application of chemicals.” (’834 Patent at 8:27–33.) As plaintiff argues, this results in greater efficiency, higher yield and higher equality grapes, and less human error that existed with the prior art. (*Id.* at 1:50–57, 6:19–26.) The court therefore finds the decision in *Valmont* to be distinguishable from the present case.

In *BSG Tech*, the Federal Circuit held that patents related to systems and methods for indexing information stored in “wide access” databases were patent-ineligible, reasoning that “methods of organizing human activity” are abstract. 899 F.3d at 1283, 1285–86. However, *BSG Tech* is readily distinguishable from this case. The asserted claims in *BSG Tech* purported to overcome shortcomings in the way data is organized and categorized by, among other things, suggesting to database users ways in which to categorize and describe information based on historical usage. See *id.* at 1286. As the Federal Circuit explained there:

1 [The claimed invention] amounts to having users consider previous
2 item descriptions before they describe items to achieve more
3 consistent item descriptions. Whether labeled as a fundamental,
4 long-prevalent practice or a well-established method of organizing
5 activity, this qualifies as an abstract idea. *See also CyberSource
Corp. v. Retail Decisions, Inc.*, 654 F.3d 1366, 1372–73 (Fed. Cir.
2011) (holding that a claim whose “steps can be performed in the
human mind, or by a human using a pen and paper” is directed to an
“unpatentable mental process[]”).

6 *Id.*

7 Here, however, the Asserted Patents do more than merely perform steps that could be
8 accomplished within the human mind or by a human using pen and paper. The Asserted Patents
9 include elements of physical technology, including the use real-time in-field sensors and external
10 data sources to provide the precise delivery of water and certain chemicals to individual plants in
11 different areas of fields as they require. (*See id.* at Fig. 1, 5:42–57, 3:9–15; Doc. No. 1 ¶ 26.) As
12 such, *BSG Tech* does not support defendant’s motion to dismiss in this case.

13 In *Smart System Innovations*, the Federal Circuit held that patent claims related to a
14 computerized mass transit payment system were patent ineligible. 873 F.3d at 1368. The court
15 reasoned that because the claims were directed to the “formation of financial transactions in mass
16 transit and data collection related to such transactions,” these were merely directed to the abstract
17 idea of “collection, storage, and recognition of data” that did not “provide a method for
18 processing data that improve[d] existing technological processes.” *Id.* at 1372. Here, however,
19 the Asserted Patents claim to make specific improvements to the existing vineyard drip irrigation
20 systems that existed at the time, which were manually controlled or automated only with timers or
21 computers. (*See* ’834 Patent at 1:29–38, 42–44.) As plaintiff argues, “[s]uch prior systems did
22 not ‘provide a high level of automation’ like the systems of the patented invention, and did not
23 address soil variability problems by ‘selectively provid[ing] different amounts of water to
24 different plants’ or plant areas.” (Doc. No. 17 at 25 (citing ’834 Patent at 1:39–44; Doc. No. 1 ¶
25 27).)

26 For these same reasons, the court finds the decisions in *Content Extraction* and *In re TLI*
27 *Communications*, relied upon by defendant, to be distinguishable from this case. *See Content*
28 *Extraction*, 776 F.3d at 1347 (holding that claims involving collection, recognition, and storage of

1 data were directed to abstract idea); *In re TLI Commc'ns*, 823 F.3d at 613 (holding that a patent
2 was directed to an abstract idea where it related to the method and system for taking, transmitting,
3 and organizing digital images). Defendant has therefore not met its burden under § 101 at step
4 one of the *Alice/Mayo* test in moving to dismiss plaintiff's complaint. The court could end its
5 analysis at step one and deny defendant's motion to dismiss on that basis alone. Nevertheless, in
6 an abundance of caution, the court will examine the second step below.

7 2. Step Two of the *Alice/Mayo* Test

8 Even assuming, arguendo, that the '834 Patent is directed to an abstract idea, the
9 undersigned concludes that in moving to dismiss the complaint defendant has not met its burden
10 of establishing that the elements of the '834 Patent, alone *or in combination*, do not contain an
11 "inventive concept" sufficient to "transform the nature of the claim" from a purported abstract
12 idea into a patent-eligible application. *Alice*, 573 U.S. at 221 (citing *Mayo*, 566 U.S. at 72, 79–
13 80); *Bascom v. AT&T Mobility LLC*, 827 F.3d 1341, 1349–50 (Fed. Cir. 2016) (holding that an
14 ordered combination of claim limitations revealed an inventive concept that transformed an
15 abstract idea of filtering content into a patent-eligible invention where the prior art filters were
16 susceptible to hacking and the filter implementation was alleged to be versatile enough to adapt to
17 many users' preferences while also installed remotely) (citing *Alice*, 572 U.S. at 217); *Cellspin*
18 *Soft, Inc. v. Fitbit, Inc.*, 927 F.3d 1306, 1316–19 (Fed. Cir. 2019) (holding that claims setting
19 forth a method of connecting data capture device to a mobile device allowing users to
20 automatically publish content from a data capture device to a website revealed inventive concept
21 sufficient to transform an abstract idea into patent-eligible subject matter).

22 "The second step of the *Alice* test is satisfied when the claim limitations involve more than
23 performance of well-understood, routine, [and] conventional activities previously known to the
24 industry." *Berkheimer v. HP, Inc.*, 881 F.3d 1360, 1367 (Fed. Cir. 2018) (quoting *Content*
25 *Extraction*, 776 F.3d at 1347–48) (internal quotation marks omitted); *see also Aatrix Software,*
26 *Inc. v. Green Shades Software, Inc.*, 882 F.3d 1121, 1128 (Fed. Cir. 2018) ("If the elements
27 involve 'well-understood, routine, [and] conventional activity previously engaged in by
28 researchers in the field,' they do not constitute an 'inventive concept.'") (quoting *Mayo*, 566 U.S.

1 at 73). “The question of whether a claim element or combination of elements is well-understood,
2 routine and conventional to a skilled artisan in the relevant field is a question of fact . . . that . . .
3 must be proven by clear and convincing evidence.” *Berkheimer*, 881 F.3d at 1367; *Cellspin Soft,*
4 *Inc. v. Fitbit, Inc.*, 927 F.3d 1306, 1317–18 (Fed. Cir. 2019) (“We have no basis, at the pleadings
5 stage, to say that these claimed techniques [of employing a hypertext transfer protocol at a
6 specific location using an intermediary mobile device] were well-known or conventional as a
7 matter of law”).

8 Defendant argues that the Asserted Claims fail step two for the following reasons: 1) the
9 Asserted Claims do not provide an inventive concept because the claim elements “merely
10 automate a process otherwise performed by humans, using only generic of functionally described
11 generic components operating conventionally” (Doc. No. 13-1 at 17); 2) the “control system”
12 limitations fail to supply an inventive concept because they are simply generic computer
13 components (essentially akin to processors, interfaces, memory, and data that perform basic
14 computing functions without describing any specialized or innovative hardware or software (*id.* at
15 18–20); 3) the “sensor” limitations fail to supply an inventive concept because they are merely
16 generic sensors operating conventionally and do not comprise technological improvements over
17 known sensors, citing three other patents (*id.* at 20–24); 4) the “sensor” limitations further fail to
18 supply an inventive concept because the specifications contain no details of how the sensors can
19 be implemented (*id.* at 23); and 5) the “emitter” limitations fail to supply an inventive concept
20 because they are merely generic emitters operating conventionally (*id.* at 24–25).

21 In response, plaintiff argues that: 1) defendant fails to consider plaintiff’s claims “as a
22 whole” in light of their claimed advances and specific improvements over existing systems; 2)
23 defendant’s arguments raise questions of fact unsuitable for resolution a motion to dismiss; and 3)
24 use of the external data inputs were inventive and helped solve problems in the prior art. (Doc.
25 No. 17 at 29.)

26 The court agrees that the question of whether each of the claim elements of the Asserted
27 Patents (including the control systems, sensors, or emitters), were well-understood, routine, and
28 conventional at the time of the invention, is a question of fact that is not suitable for resolution by

1 way of a motion to dismiss. This is particularly true where plaintiff’s complaint (including the
2 Patents themselves), plausibly alleges facts that would satisfy the second step of *Alice*.⁴ See
3 *Cellspin Soft, Inc.*, 927 F.3d at 1317–18 (“We have no basis, at the pleadings stage, to say that
4 these claimed techniques were well-known or conventional as a matter of law”); *Berkheimer*, 881
5 F.3d at 1369–70 (vacating an order granting summary judgment in part as to certain claims
6 because “[w]hether something is well-understood, routine, and conventional to a skilled artisan at
7 the time of the patent is a factual determination.”); *Vaporstream, Inc. v. Snap Inc.*, No. 2:17-cv-
8 00220-MLH, 2018 WL 1116530, at *6 (S.D. Cal. Feb. 27, 2018) (denying defendant’s motion for
9 summary judgment, finding that questions of fact existed where plaintiff offered competing
10 expert testimony indicating the claim elements of the patents-in-suit, including the separate
11 displays, separate transmissions, and display-based keyboard, were well-understood, routine, and
12 conventional at the time of the invention).

13 In any event, the court finds merit in plaintiff’s argument that defendant has failed to
14 adequately acknowledge that each claim in the ’834 patent incorporates external data and appears
15 to use that data, in combination with the in-field sensors, to provide precise watering, pesticide,

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23 ⁴ Defendant argues that the sensors were conventional at the time of the invention, citing the
24 Hall, Douglas, and Reusch patents (see Doc. No. 13-1 at 22 n.6). While the court may take
25 judicial notice of the patents as matters of public records, see *Advanced Steel Recovery, LLC v. X-*
26 *Body Equipment, Inc.*, No. 2:16-cv-00148-KJM-EFB, 2016 WL 4192439, at *3 (E.D. Cal. Aug.
27 9, 2016), the court will not on a motion to dismiss determine whether the sensors were
28 conventional at the time of the invention based on the Hall, Douglas, and Reusch patents. See
Berkheimer, 881 F.3d at 1369 (“Whether a particular technology is well-understood, routine, and
conventional goes beyond what was simply known in the prior art. There mere fact that
something is disclosed in a piece of prior art, for example, does not mean it was well-understood,
routine, and conventional.”).

1 and other chemicals to the individual plants based on their needs.⁵ At the pleadings stage,
2 plaintiff’s plausible assertion that such improvements were not available in the prior art is
3 sufficient. (Doc. No. 17 at 29–31; *see also* Doc. No. 1 ¶ 33.) For example, the ’834 Patent states:
4 “While such irrigation systems have been proven effective, they do not provide a high level of
5 automation” and “require[] much human participation and [are] prone to errors and
6 inefficiencies.”⁶ (’834 Patent at 1:29–57.) Moreover, the “invention provides more accurate
7 timing of applications and better coverage of the vines, resulting in better disease management—
8 one of the primary factors of quality and yield.” (’834 Patent at 6:19–27; *see also* Doc. No. 1 ¶
9 33.) The ’834 Patent further provides:

10 By using the system of the present invention, efficiencies not
11 possible in the prior art can be realized. The control system can
12 accurately measure the pressure and volume of delivery of water
13 and chemicals. The delivery of materials can be more precisely
14 directed to where it is needed. The delivery is also performed as
needed so care of the crops is more accurate and effective and there
is less waste. No human intervention is necessary. Heavy
mechanical devices are eliminated at a concomitant savings in fuel
and maintenance costs.

16 ⁵ For this same reason, the court finds the decision in *Neochloris, Inc. v. Emerson Process Mgmt.*
17 *LLLP*, 140 F. Supp. 3d 763 (N.D. Ill. 2015), to be distinguishable from the present case. In
18 *Neochloris*, the court held that a patent that described the process of collecting and monitoring
19 water data was directed to an abstract idea and the system’s ability to reduce human error was not
20 an inventive concept sufficient to transform the abstract idea into a patent-eligible invention. *Id.*
21 at 771–75. However, in the instant matter plaintiff’s patent involves more than “computer and
22 software [that] simply make routine calculations to monitor and analyze water data.” *See id.* at
23 772. Rather, plaintiff has made a sufficient showing in opposition to the pending motion to
dismiss that the combination of the external data and data from the in-field sensors transform the
idea into an inventive concept. *See Alice*, 573 U.S. at 217 (“we consider the elements of each
claim both individually and ‘as an ordered combination’ to determine whether the additional
elements ‘transform the nature of the claim’ into a patent-eligible application.”) (quoting *Mayo*,
566 U.S. at 78–79).

24 ⁶ “[P]lausible and specific factual allegations [in the complaint] that aspects of the claims are
25 inventive are sufficient” for purposes of a motion to dismiss. *Cellspin Soft Inc.*, 927 F.3d at
26 1317–18 (holding that plaintiff “made specific, plausible factual allegations about why aspects of
27 its claimed inventions were not conventional, *e.g.*, its two-step, two-device structure requiring a
28 connection before data is transmitted” and district court erred by not accepting those allegations
as true) (citing *Aatrix*, 882 F.3d at 1128 (“There are concrete allegations in the second amended
complaint that individual elements and the claimed combination are not well-understood, routine,
or conventional activity.”))).

1 ('834 Patent at 8:13–22.) Accepting plaintiff's allegations as true, as the court must on a motion
2 to dismiss, the complaint and the patent claims, considered as a whole, sufficiently state an
3 inventive concept. Defendant's motion to dismiss the complaint therefore fails step two of the
4 *Alice/Mayo* test as well.

5 3. Representative Claims

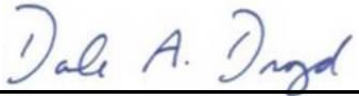
6 Defendant's arguments mainly relate to the patent ineligibility of Claim 2 of the '810
7 Patent, which defendant argues is "representative" of the Asserted Claims. (Doc. No. 13-1 at 10
8 n.2.) Plaintiff disputes the representativeness of Claim 2. (Doc. No. 17 at 18–20.)

9 A court "need not expressly address each asserted claim where the court concludes that
10 particular claims are representative because all the claims are 'substantially similar and linked to
11 the same abstract idea.'" *Voip-pal.com, Inc. v. Apple Inc.*, 411 F. Supp. 3d 926, 941 (N.D. Cal.
12 2019) (quoting *Content Extraction*, 776 F.3d at 1348 (quotation marks omitted); *Mortg. Grader,*
13 *Inc. v. First Choice Loan Servs. Inc.*, 811 F.3d 1314, 1324 n.6 (finding that the district court did
14 not err by discussing only one claim where the claims did not "differ in any manner that is
15 material to the patent-eligibility inquiry"); *Alice*, 573 U.S. at 224–25). Here, however, the court
16 will deny defendant's motion to dismiss on the merits. Therefore, it is not necessary to determine
17 at this stage of the litigation whether the specific claim defendant has directly, but unsuccessfully,
18 attacked is representative of other claims in the disputed patents.⁷

19 **CONCLUSION**

20 For the reasons set forth above, defendant's motion to dismiss (Doc. No. 13) is denied.
21 IT IS SO ORDERED.

22 Dated: **December 30, 2020**

23 
UNITED STATES DISTRICT JUDGE

24
25 ⁷ "Erroneously determining that a claim is representative has constitutional consequences." *Nice*
26 *Ltd. v. Callminer, Inc.*, No. 18-2024-RGA-SRF, 2020 WL 529709, at *4 (D. Del. Feb. 3, 2020),
27 *R. & R. adopted by* 2020 WL 1502290 (D. Del. Mar. 30, 2020) (citing *PPS Data, LLC v. Jack*
28 *Henry & Assocs., Inc.*, 404 F. Supp. 3d 1021, 1033 (E.D. Tex. 2019)). "In contrast, an erroneous
determination that a claim is not sufficiently representative 'presents no comparable
counterweight' because 'incremental increases in judicial economy . . . should never come at the
cost of constitutionally secured rights.'" *Id.*