UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/820,541	08/06/2015	Edward Yoshio UECHI	974192-4000	1771

28765 7590 01/22/2020

Winston & Strawn LLP
1700 K Street NW, 2nd Floor
Patent Department
Washington, DC 20006

EXAMINER
MINCARELLI, JAN P

ART UNIT	PAPER NUMBER
3689	

NOTIFICATION DATE	DELIVERY MODE
01/22/2020	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentdocket@winston.com
sfanelli@winston.com

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte EDWARD YOSHIO UECHI

Appeal 2018-003538
Application 14/820,541
Technology Center 3600

Before ANTON W. FETTING, NINA L. MEDLOCK, and MATTHEW S. MEYERS, *Administrative Patent Judges*.

FETTING, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE[1]

Edward Yoshio Uechi (Appellant[2]) seeks review under 35 U.S.C. § 134 of a final rejection of claims 1, 8–12, 15, and 21–33, the only claims pending in the application on appeal.[3] We have jurisdiction over the appeal pursuant to 35 U.S.C. § 6(b).

The Appellant invented a way of tracking and optimizing productivity of agricultural products. Specification 1:7–8.

An understanding of the invention can be derived from a reading of exemplary claim 10, which is reproduced below (bracketed matter and some paragraphing added).

> 10. A computer-based method for processing information related to origin, production and distribution of an agriculture product[4], wherein each step is conducted by one or more special purpose computer servers designed to serve as a storage server for storing data records in accordance with a logical data model, which method comprises:
>
> [1] collecting various, diverse agricultural, administrative and environmental data from each of several sources that include personal computers, mobile phones, farm machines and third party computer servers, wherein the collecting of data includes:

---

[1] Our Decision will make reference to the Appellant's Appeal Brief ("Appeal Br.," filed September 19, 2017) and Reply Brief ("Reply Br.," filed February 13, 2018), and the Examiner's Answer ("Ans.," mailed December 14, 2017), and Final Action ("Final Act.," mailed March 28, 2017).

[2] We use the word "Appellant" to refer to "applicant" as defined in 37 C.F.R. § 1.42. Appellant identifies the real party in interest as Edward Yoshio Uechi. Appeal Br. 3.

[3] Appellant presented oral hearing arguments December 5, 2019.

[4] The claims and Specification use the phrase "agriculture product" and "agricultural product" interchangeably.

[2] assigning a Farm Plot Number to the agriculture product first planted or managed at an origin site;

[3] compiling daily farming activities for the agriculture product, and

associating the compiled activities to the agriculture product via the Farm Plot Number;

[4] compiling harvest activities related to the harvesting of the agriculture product at the origin site, and

associating the compiled activities to the agriculture product via the Farm Plot Number;

[5] compiling post–harvest activities for the agriculture product, and

associating the compiled activities to the agriculture product via the Farm Plot Number, including all activities related to processing, packaging, and shipping of the agricultural product, in the form of data records that document

(1) preparing the agricultural product for packaging once it arrives at a packing facility and packaging the agricultural product for shipment to market,

or

(2) converting the agricultural product into a new product, and then packaging the converted agricultural product for shipment to market;

with either (1) or (2) in combination with data records that document shipping information including the agricultural product's point of origin, final destination for sale, estimated time of departure and arrival, and transportation identification including shipping container or shipping pallet identification;

[6] compiling and maintaining all data in a single database by the one or more special purpose computer servers retrieving and merging disparate data sets from the various sources, and

associating the compiled activities with the agriculture product via the Farm Plot Number,

wherein the data is compiled without changing or modifying the Farm Plot Number during the entire term of the agricultural production cycle;

[7] providing information in a generated report summarizing the compiled data for authenticating all activities related to the agriculture product's origin, production and distribution,

wherein the server generated report is produced upon receiving a single user input of the Farm Plot Number by which all data associated with that user input is included for compilation and is then presented on a graphical user interface or outputted in a printed form;

[8] wherein each of the Web service application computer program products communicate with the remote computer system via a fixed IP address or a specific Internet domain name to create a restricted connection between two known and registered computers by controlled user access;

[9] wherein the combined computer programs together provide alternative interfaces and procedures tailored to collect data both manually and automatically for merging into a single database from several sources provided by controlled user access of multiple registered users; and

[10] wherein the compiled data enables a consumer of the agricultural product to access and retrieve all of the collected, merged and compiled data by querying the computer server(s) with a single input of the Farm Plot Number.

The Examiner relies upon the following prior art:

Name	Reference	Date
Dlott	US 7,440,901 B1	Oct. 21, 2008
Pickett	US 7,761,334 B2	July 20, 2010
Macy	US 9,084,389 B2	July 21, 2015
Brown	US 2008/0189142 A1	Aug. 7, 2008
Farmer	US 2010/0106660 A1	Apr. 29, 2010
Gross	US 2016/0117462 A1	Apr. 28, 2016

Claims 1, 8–12, 15, and 21–33 stand rejected under 35 U.S.C. § 101 as directed to a judicial exception without significantly more.[5]

Claims 1, 8–12, 15, 21, 22, 24, 25, 28–31, and 33 stand rejected under 35 U.S.C. § 103 as unpatentable over Dlott, Pickett, and Farmer.

Claim 23 stands rejected under 35 U.S.C. § 103 as unpatentable over Dlott, Pickett, Farmer, Macy, and Brown.

Claims 26, 27, and 32 stand rejected under 35 U.S.C. § 103 as unpatentable over Dlott, Pickett, Farmer, and Gross.

ISSUES

The issues of eligible subject matter turn primarily on whether the claims recite more than abstract conceptual advice of results desired.

The issues of obviousness turn primarily on whether the prior art shows it was predictable to index farm data on land plot identifiers.

[5] A rejection under 35 U.S.C. § 112(b) (Final Act. 2) was withdrawn. Ans. 3.

FACTS PERTINENT TO THE ISSUES

The following enumerated Findings of Fact (FF) are believed to be supported by a preponderance of the evidence.

Facts Related to the Prior Art:

Dlott

01. Dlott is directed to agricultural certification compliance, agricultural regulatory compliance, agricultural process management, and agricultural product marketing, and more particularly, to capturing and providing data about agricultural products, practices and conditions with high integrity and credibility. Dlott 1:7–16.

02. Dlott describes that Figure 12 is a block diagram illustrating an exemplary collection 400 of data records 102 that may be maintained within the database 103 of the agricultural management information system 50. Figure 12 also illustrates that the collection 400 of records 102 may be indexed by a common product code (e.g., a Universal Product Code (UPC) 402 or a lot code 404). Specifically, the UPC 402 or the lot code 404 may comprise the unique identifier 120 of an agricultural product data record 102, as illustrated in Figure 5. Each of the records 102 may be linked to further records and reports pertaining to a specific agricultural product, or agricultural product lot, so that a hierarchical data structure of records and reports that comprises the collection 400 is defined. An exemplary chain of custody 406 for an agricultural product is also illustrated in Figure 12. Dlott 17:62–18:10.

03. Dlott describes how, having captured the location data (e.g., the location code 202) and the product data (e.g., the product data code 204), a custodian 48 may where appropriate and possible capture product identification data as embodied within a product identification code 206 (e.g., a Universal Product Code (UPC)) embodied within a barcode associated with a particular agricultural product as illustrated in Figure 7. It will be appreciated that a product identification code 206 may not be associated with an individual product at all locations along a chain of custody, and may only become associated with an individual product and during a packaging stage. For example, at a unit of production 18 (e.g., a farm unit producing thousands of lettuce heads), a product identification code 206 is not associated with each individual agricultural product. However, at a downstream packaging custodian 152, such product identification codes 206 may be associated with each individual agricultural product. Dlott 13:62–14:11.

04. Dlott describes how a user may, in a manner similarly described with reference to Figure 15, input information pertaining to an agricultural production system (e.g., a unit of production identifier), responsive to which the report tool 474 of the certification server 454 locates records associated with the relevant agricultural production system 15 (e.g., a field of land). Dlott 23:1–5.

05. Dlott describes a custodian entering product data reflecting a condition pertaining to the product at the first location identified by the relevant location code. Dlott 8:14–18.

Pickett

06. Pickett is directed to automated tracing of a crop or an agricultural product. Pickett 1:12–13.

Farmer

07. Farmer is directed to commodity inspection. Farmer para. 6.

ANALYSIS

Claims 1, 8–12, 15, and 21–33 rejected under 35 U.S.C. § 101 as directed to a judicial exception without significantly more

STEP 1[6]

Claim 10, as a method claim, nominally recites one of the enumerated categories of eligible subject matter in 35 U.S.C. § 101. The issue before us is whether it is directed to a judicial exception without significantly more.

STEP 2

The Supreme Court

> set forth a framework for distinguishing patents that claim laws of nature, natural phenomena, and abstract ideas from those that claim patent-eligible applications of those concepts. First, . . . determine whether the claims at issue are directed to one of those patent-ineligible concepts. If so, we then ask, "[w]hat else is there in the claims before us? To answer that question, . . . consider the elements of each claim both individually and

[6] For continuity of analysis, we adopt the steps nomenclature from the 2019 Revised Patent Subject Matter Eligibility Guidance, 84 Fed. Reg. 50 (Jan. 7, 2019) ("Revised Guidance").

> "as an ordered combination" to determine whether the additional elements "transform the nature of the claim" into a patent-eligible application. [The Court] described step two of this analysis as a search for an "'inventive concept'"—i.e., an element or combination of elements that is "sufficient to ensure that the patent in practice amounts to significantly more than a patent upon the [ineligible concept] itself."

Alice Corp. v. CLS Bank Int'l, 573 U.S. 208, 217–18 (2014) (citations omitted) (citing *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 566 U.S. 66 (2012)). To perform this test, we must first determine what the claims are directed to. This begins by determining whether the claims recite one of the judicial exceptions (a law of nature, a natural phenomenon, or an abstract idea). Then, if the claims recite a judicial exception, determining whether the claims at issue are directed to the recited judicial exception, or whether the recited judicial exception is integrated into a practical application of that exception, i.e., that the claims "apply, rely on, or use the judicial exception in a manner that imposes a meaningful limit on the judicial exception, such that the claim is more than a drafting effort designed to monopolize the judicial exception." Revised Guidance, 84 Fed. Reg. at 54. If the claims are directed to a judicial exception, then finally determining whether the claims provide an inventive concept because the additional elements recited in the claims provide significantly more than the recited judicial exception.

STEP 2A Prong 1

At a high level, and for our preliminary analysis, we note that method claim 10 recites collecting data, assigning data, compiling and associating activity data, including data with data, compiling and maintaining more data, and providing report data. Collecting and associating data is retrieving data.

Assigning data is data creation. Compiling and maintaining data is data processing. Including data with data is data update. Providing report data is data transmission. Thus, claim 10 recites retrieving, creating, processing, updating, and transmitting data. None of the limitations recites technological implementation details for any of these steps, but instead recites only results desired by any and all possible means.

From this we see that claim 10 does not recite the judicial exceptions of either natural phenomena or laws of nature.

Under Supreme Court precedent, claims directed purely to an abstract idea are patent ineligible. As set forth in the Revised Guidance, which extracts and synthesizes key concepts identified by the courts, abstract ideas include (1) mathematical concepts,[7] (2) certain methods of organizing human activity,[8] and (3) mental processes.[9] Among those certain methods of organizing human activity listed in the Revised Guidance are commercial or legal interactions. Like those concepts, claim 10 recites the concept of managing agricultural business information. Specifically, claim 10 recites operations that would ordinarily take place in advising one to report an

---

[7] *See, e.g.*, *Gottschalk v. Benson*, 409 U.S. 63, 71–72 (1972); *Bilski v. Kappos*, 561 U.S. 593, 611 (2010); *Mackay Radio & Tel. Co. v. Radio Corp. of Am.*, 306 U.S. 86, 94 (1939); *SAP Am., Inc. v. InvestPic, LLC*, 898 F.3d 1161, 1163 (Fed. Cir. 2018).

[8] *See, e.g.*, *Bilski*, 561 U.S. at 628; *Alice*, 573 U.S. at 219–20; *Ultramercial, Inc. v. Hulu, LLC*, 772 F.3d 709, 715 (Fed Cir. 2014); *Smart Sys. Innovations, LLC v. Chicago Transit Auth.*, 873 F.3d 1364, 1383 (Fed. Cir. 2017); *In re Marco Guldenaar Holding B.V.*, 911 F.3d 1157, 1160–61 (Fed. Cir. 2018).

[9] *See, e.g.*, *Benson*, 409 U.S. at 67; *CyberSource Corp. v. Retail Decisions, Inc.*, 654 F.3d 1366, 1371–72 (Fed. Cir. 2011); *Intellectual Ventures I LLC v. Symantec Corp.*, 838 F.3d 1307, 1318 (Fed. Cir. 2016).

agriculture product's origin, production and distribution data from compiled and associated data. The advice to report an agriculture product's origin, production and distribution data from compiled and associated data involves providing information in a generated report related to the agriculture product's origin, production and distribution, which is a managerial act, and collecting various, diverse agricultural, administrative and environmental data, which is an act ordinarily performed in the stream of agricultural management. For example, claim 10 recites "providing information in a generated report summarizing the compiled data for authenticating all activities related to the agriculture product's origin, production and distribution," which is an activity that would take place whenever one is managing an agricultural business. Similarly, claim 10 recites "collecting various, diverse agricultural, administrative and environmental data," which is also characteristic of agriculture management.

The Examiner determines the claims to be directed to collecting and compiling data regarding an agricultural product. Final Act. 5.

The preamble to claim 10 recites that it is a method for processing information related to origin, production and distribution of an agriculture product. The steps in claim 10 result in reporting an agriculture product's origin, production and distribution data from compiled and associated data absent any technological mechanism other than a conventional computer for doing so.

As to the specific limitations, limitations 1–7 recite generic and conventional retrieving, creating, processing, updating, and transmitting of agriculture data, which advise one to apply generic functions to get to these results. Limitations 8–10 are not steps but process parameters and attributes

of the process results. The limitations, thus, recite advice for reporting an agriculture product's origin, production and distribution data from compiled and associated data. To advocate reporting an agriculture product's origin, production and distribution data from compiled and associated data is conceptual advice for results desired and not technological operations.

The Specification, at 1:7–8, describes the invention as relating to tracking and optimizing productivity of agricultural products. Thus, all this intrinsic evidence shows that claim 10 recites managing agricultural business information. This is consistent with the Examiner's determination. Final Act. 5–6.

This in turn is an example of commercial or legal interactions as a certain method of organizing human activity because agriculture is a commercial enterprise and managing commercial enterprises is a way of organizing human activity in that enterprise. The concept of managing agricultural business information by reporting an agriculture product's origin, production and distribution data from compiled and associated data is one idea for collecting the type of data needed for such management. The steps recited in claim 10 are part of how this might conceptually be premised.

Our reviewing court has found claims to be directed to abstract ideas when they recited similar subject matter. *Digitech Image Techs., LLC v. Elecs. for Imaging, Inc.*, 758 F.3d 1344, 1351 (Fed. Cir. 2014) (process of taking plural data sets and combining them into a single data set); *Content Extraction & Transmission LLC v. Wells Fargo Bank, Nat'l Ass'n*, 776 F.3d 1343, 1347 (Fed. Cir. 2014) (collecting, recognizing, and storing data); *Intellectual Ventures I LLC v. Erie Indem. Co.*, 850 F.3d 1315, 1327 (Fed.

Cir. 2017) (creating an index and using that index to search for and retrieve data).

From this we conclude that at least to this degree, claim 10 recites managing agricultural business information by reporting an agriculture product's origin, production and distribution data from compiled and associated data, which is a commercial and legal interaction, one of certain methods of organizing human activity identified in the Revised Guidance, and, thus, an abstract idea.

STEP 2A Prong 2

The next issue is whether claim 10 not only recites, but is more precisely directed to this concept itself or whether it is instead directed to some technological implementation or application of, or improvement to, this concept, i.e., integrated into a practical application.[10]

> At the same time, we tread carefully in construing this exclusionary principle lest it swallow all of patent law. At some level, "all inventions ... embody, use, reflect, rest upon, or apply laws of nature, natural phenomena, or abstract ideas." Thus, an invention is not rendered ineligible for patent simply because it involves an abstract concept. "[A]pplication[s]" of such concepts " 'to a new and useful end,' " we have said, remain eligible for patent protection.
>
> Accordingly, in applying the § 101 exception, we must distinguish between patents that claim the " 'buildin[g] block[s]' " of human ingenuity and those that integrate the building blocks into something more.

Alice, 573 U.S. at 217 (citations omitted, alterations in original).

[10] *See, e.g.*, *Alice*, 573 U.S. at 223, discussing *Diamond v. Diehr*, 450 U.S. 175 (1981).

Taking the claim elements separately, the operation performed by the computer at each step of the process is expressed purely in terms of results, devoid of implementation details. Steps 1 and 3–6 are pure data gathering steps including gathering relationship data. Limitations describing the nature of the data do not alter this. Step 2 recites basic conventional data operations such as generating, updating, and storing data. Step 7 is insignificant post solution activity, such as storing, transmitting, or displaying the results. All steps recite generic computer processing expressed in terms of results desired by any and all possible means and so present no more than conceptual advice. All purported inventive aspects reside in how the data are interpreted and the results desired, and not in how the process physically enforces such a data interpretation or in how the processing technologically achieves those results. Limitations 8–10 are not steps. Limitation 8 only recites the internet address as a process parameter. Limitations 9 and 10 recite attributes of the process results, but not structural or process limitations.

Viewed as a whole, Appellant's claim 10 simply recites the concept of managing agricultural business information by reporting an agriculture product's origin, production and distribution data from compiled and associated data as performed by a generic computer. This is no more than conceptual advice on the parameters for this concept and the generic computer processes necessary to process those parameters, and does not recite any particular implementation.

Claim 10 does not, for example, purport to improve the functioning of the computer itself. Nor does it effect an improvement in any other technology or technical field. The Specification only spells out different

generic equipment[11] and parameters that might be applied using this concept and the particular steps such conventional processing would entail based on the concept of managing agricultural business information by reporting an agriculture product's origin, production and distribution data from compiled and associated data under different scenarios. It does not describe any particular improvement in the manner a computer functions. Instead, claim 10 at issue amounts to nothing significantly more than an instruction to apply managing agricultural business information by reporting an agriculture product's origin, production and distribution data from compiled and associated data using some unspecified, generic computer. Under our precedents, that is not enough to transform an abstract idea into a patent-eligible invention. *See Alice*, 573 U.S. at 225–26.

None of the limitations reflects an improvement in the functioning of a computer, or an improvement to other technology or technical field, applies or uses a judicial exception to effect a particular treatment or prophylaxis for a disease or medical condition, implements a judicial exception with, or uses a judicial exception in conjunction with, a particular machine or manufacture that is integral to the claim, effects a transformation or reduction of a particular article to a different state or thing, or applies or uses the judicial exception in some other meaningful way beyond generally linking the use of the judicial exception to a particular technological

[11] The Specification describes using a generic database server, storage server, and web server. Although these devices are described as special purpose computers, such specialization relates to no more than programming for these generic functions. Spec. 8:12–27. Thus, referral to such servers amounts to no more than adopting the conceptual idea of distributed processing for generic functions.

environment, such that the claim as a whole is more than a drafting effort designed to monopolize the exception.

We conclude that claim 10 is directed to achieving the result of managing agricultural business information by advising one to report an agriculture product's origin, production and distribution data from compiled and associated data, as distinguished from a technological improvement for achieving or applying that result. This amounts to commercial or legal interactions, which fall within certain methods of organizing human activity that constitute abstract ideas. The claim does not integrate the judicial exception into a practical application.

STEP 2B

The next issue is whether claim 10 provides an inventive concept because the additional elements recited in the claim provide significantly more than the recited judicial exception.

The introduction of a computer into the claims does not generally alter the analysis at *Mayo* step two.

> [T]he mere recitation of a generic computer cannot transform a patent-ineligible abstract idea into a patent-eligible invention. Stating an abstract idea "while adding the words 'apply it'" is not enough for patent eligibility. Nor is limiting the use of an abstract idea "'to a particular technological environment.'" Stating an abstract idea while adding the words "apply it with a computer" simply combines those two steps, with the same deficient result. Thus, if a patent's recitation of a computer amounts to a mere instruction to "implemen[t]" an abstract idea "on ... a computer," that addition cannot impart patent eligibility. This conclusion accords with the preemption concern that undergirds our § 101 jurisprudence. Given the ubiquity of computers, wholly generic computer implementation is not generally the sort of "additional featur[e]" that provides any "practical assurance that the

> process is more than a drafting effort designed to monopolize the [abstract idea] itself."

Alice, 573 U.S. at 223–24 (citations omitted, alterations in original).

"[T]he relevant question is whether the claims here do more than simply instruct the practitioner to implement the abstract idea . . . on a generic computer." *Alice*, 573 U.S. at 225. They do not.

Taking the claim elements separately, the function performed by the computer at each step of the process is purely conventional. Using a computer for retrieving, creating, processing, updating, and transmitting data amounts to electronic data query and retrieval—one of the most basic functions of a computer. Limitations 8–10 are not steps, but recitations of a process parameter and process result attributes. All of these computer functions are generic, routine, conventional computer activities that are performed only for their conventional uses. *See Elec. Power Grp., LLC v. Alstom S.A.*, 830 F.3d 1350, 1353 (Fed. Cir. 2016). *See also In re Katz Interactive Call Processing Patent Litig.*, 639 F.3d 1303, 1316 (Fed. Cir. 2011) ("Absent a possible narrower construction of the terms 'processing,' 'receiving,' and 'storing,' . . . those functions can be achieved by any general purpose computer without special programming"). None of these activities is used in some unconventional manner nor does any produce some unexpected result. Appellant does not contend it invented any of these activities. In short, each step does no more than require a generic computer to perform generic computer functions. As to the data operated upon, "even if a process of collecting and analyzing information is 'limited to particular content' or a particular 'source,' that limitation does not make the collection and analysis other than abstract." *SAP Am., Inc.*, 898 F.3d at 1168.

Considered as an ordered combination, the computer components of Appellant's claim 10 add nothing that is not already present when the steps are considered separately. The sequence of data reception-creation-processing-update-transmission is equally generic and conventional. *See Ultramercial*, 772 F.3d at 715 (sequence of receiving, selecting, offering for exchange, display, allowing access, and receiving payment recited an abstraction), *Inventor Holdings, LLC v. Bed Bath & Beyond, Inc*., 876 F.3d 1372, 1378 (Fed. Cir. 2017) (sequence of data retrieval, analysis, modification, generation, display, and transmission), *Two-Way Media Ltd. v. Comcast Cable Commc'ns, LLC*, 874 F.3d 1329, 1339 (Fed. Cir. 2017) (sequence of processing, routing, controlling, and monitoring). The ordering of the steps is therefore ordinary and conventional.

We conclude that claim 10 does not provide an inventive concept because the additional elements recited in the claim do not provide significantly more than the recited judicial exception.

REMAINING CLAIMS

Claim 10 is representative. The remaining method claims merely describe process parameters. We conclude that the method claims at issue are directed to a patent-ineligible concept itself, and not to the practical application of that concept.

As to the structural claims, they

> are no different from the method claims in substance. The method claims recite the abstract idea implemented on a generic computer; the system claims recite a handful of generic computer components configured to implement the same idea. This Court has long "warn[ed] ... against" interpreting § 101 "in ways that make patent eligibility 'depend simply on the draftsman's art.'

Alice, 573 U.S. at 226 (alteration in original). As a corollary, the claims are not directed to any particular machine.

LEGAL CONCLUSION

From these determinations we further determine that the claims do not recite an improvement to the functioning of the computer itself or to any other technology or technical field, a particular machine, a particular transformation, or other meaningful limitations. From this we conclude the claims are directed to the judicial exception of the abstract idea of certain methods of organizing human activity as exemplified by the commercial and legal interaction of managing agricultural business information by advising one to report an agriculture product's origin, production and distribution data from compiled and associated data, without significantly more.

APPELLANT'S ARGUMENTS

As to Appellant's Appeal Brief arguments, we adopt the Examiner's determinations and analysis from Final Action 5–9 and Answer 3–11 and reach similar legal conclusions. We now turn to the Reply Brief.

We are not persuaded by Appellant's argument that "the ordered combination of steps that result[s] in a composite webpage containing all of the information regarding the product due to the merging of data from various electronic sources using a logical data model" should render the claims eligible. Reply Br. 2. These steps are no more than those of conventional data processing to retrieve data from related tables of data and report the query results which has been held non-eligible.

> [W]e agree with the district court that the invention is drawn to the abstract idea of "creating an index and using that index to search for and retrieve data." As the patent itself observes, the invention relates to "locating information in a database, and ... using an index that includes tags and metafiles to locate

> the desired information." This type of activity, i.e., organizing and accessing records through the creation of an index-searchable database, includes longstanding conduct that existed well before the advent of computers and the Internet. For example, a hardcopy-based classification system (such as library-indexing system) employs a similar concept as the one recited by the '434 patent. There, classifiers organize and cross-reference information and resources (such as books, magazines, or the like) by certain identifiable tags, e.g., title, author, subject. Here, tags are similarly used to identify, organize, and locate the desired resource.
>
> We have previously held other patent claims ineligible for reciting similar abstract concepts that merely collect, classify, or otherwise filter data. . . . Here, the claimed creation of an index used to search and retrieve information stored in a database is similarly abstract.

Intellectual Ventures I LLC., 850 F.3d at 1327 (citations omitted).

We are not persuaded by Appellant's argument that the claims are analogous to those in *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327 (Fed. Cir. 2016). Reply Br. 2. The claims differ from those found patent eligible in *Enfish*, where the claims were "specifically directed to a *self-referential* table for a computer database." 822 F.3d at 1337. The claims thus were "directed to a specific improvement to the way computers operate" rather than an abstract idea implemented on a computer. *Id.* at 1336. Here, by contrast, the claims are not directed to an improvement in the way computers operate. Though the claims purport to accelerate the process of finding agricultural data, our reviewing court has held that speed and accuracy increases stemming from the ordinary capabilities of a general purpose computer "do[] not materially alter the patent eligibility of the claimed subject matter." *Bancorp Servs., L.L.C. v. Sun Life Assurance Co. of Can. (U.S.)*, 687 F.3d 1266, 1278 (Fed. Cir.

2012). Instead, the claims are more analogous to those in *FairWarning IP, LLC v. Iatric Sys., Inc.*, 839 F.3d 1089 (Fed. Cir. 2016), wherein claims reciting "a few possible rules to analyze the audit log data" were found directed to an abstract idea because they asked "the same questions (though perhaps phrased with different words) that humans in analogous situations detecting fraud have asked for decades." 839 F.3d at 1094, 1095.

We are not persuaded by Appellant's argument that the claims contain an inventive concept that is also found in the specific ordered combination of the limitations, similar to the Federal Circuit's findings in *BASCOM* (*BASCOM Glob. Internet Servs., Inc. v. AT&T Mobility LLC*, 827 F.3d 1341 (Fed. Cir. 2016)). Reply Br. 2. Initially, we remind Appellant that *BASCOM* did not find claims eligible on the substance, but rather that the Appellees did not provide sufficient evidence to support a Rule 12(b)(6) motion to dismiss in which facts are presumed in the non-movant's favor.

The key fact in *BASCOM* was the presence of a structural change in "installation of a filtering tool at a specific location, remote from the end-users, with customizable filtering features specific to each end user. This design gives the filtering tool both the benefits of a filter on a local computer and the benefits of a filter on the ISP server." *BASCOM*, 827 F.3d at 1350. The instant claims have no analogous structural benefit. This structural change occurred in the context of the internet as it existed at filing in March 1997 when dial up internet service was still prevalent. It was not the idea of having user customizable filtering located separately from the user that was inventive, but the manner of accomplishing it in that context, as the relatively primitive internet architecture at that time did not readily lend

itself to such filtering. Filtering located separately from the user was already performed. "To overcome some of the disadvantages of installing filtering software on each local computer, another prior art system relocated the filter to a local server." *Id.* at 1344. But it was known that allowing user customization there was desirable. "However, the one-size-fits-all filter on the local server was not ideal." *Id.*

The *BASCOM* filter was invented prior to the now prevalent use of self-identifying devices with media access control (MAC) addresses. Thus, absent that, "*BASCOM* explains that the inventive concept rests on taking advantage of the ability of at least some ISPs to identify individual accounts that communicate with the ISP server, and to associate a request for Internet content with a specific individual account." *Id.* at 1350. Thus, *BASCOM* solved the problem of how to create the structural relationship known to be desired by finding a way to relate a user to a centrally located filter at a time when how to do so was unclear. It was not the structural relation per se, but how it was accomplished that was inventive. No analogous technological hurdle is described in the instant record. Indeed, the whole point appears to be to simply use existing database technology to introduce indexing data by a particular data field.

Appellant further argues that the asserted claims are akin to the claims found patent-eligible in *DDR Holdings, LLC v. Hotels.com, L.P.*, 773 F.3d 1245 (Fed. Cir. 2014). Reply Br. 2–3. In *DDR Holdings*, the Court evaluated the eligibility of claims "address[ing] the problem of retaining website visitors that, if adhering to the routine, conventional functioning of Internet hyperlink protocol, would be instantly transported away from a host's website after 'clicking' on an

advertisement and activating a hyperlink." *Id.* at 1257. There, the court found that the claims were patent eligible because they transformed the manner in which a hyperlink typically functions to resolve a problem that had no "pre-Internet analog." *Id.* at 1258. The court cautioned, however, "that not all claims purporting to address Internet-centric challenges are eligible for patent." *Id.* For example, in *DDR Holdings* the court distinguished the patent-eligible claims at issue from claims found patent-ineligible in *Ultramercial*. *See id.* at 1258–59 (citing *Ultramercial, Inc. v. Hulu, LLC*, 772 F.3d 709, 715–16 (Fed. Cir. 2014)). As noted there, the *Ultramercial* claims were "directed to a specific method of advertising and content distribution that was previously unknown and never employed on the Internet before." *Id.* at 1258 (quoting *Ultramercial*, 772 F.3d at 715–16). Nevertheless, those claims were patent ineligible because they "merely recite[d] the abstract idea of 'offering media content in exchange for viewing an advertisement,' along with 'routine additional steps such as updating an activity log, requiring a request from the consumer to view the ad, restrictions on public access, and use of the Internet.'" *Id.*

Appellant's asserted claims are analogous to claims found ineligible in *Ultramercial* and distinct from claims found eligible in *DDR Holdings*. The ineligible claims in *Ultramercial* recited "providing [a] media product for sale at an Internet website"; "restricting general public access to said media product"; "receiving from the consumer a request to view [a] sponsor message"; and "if the sponsor message is an interactive message, presenting at least one query to the consumer and allowing said consumer access to said media product after receiving a response to said at least one

query." 772 F.3d at 712. Similarly, Appellant's asserted claims recite retrieving, creating, processing, updating, and transmitting data. This is precisely the type of Internet activity found ineligible in *Ultramercial*.

Appellant further argues that the asserted claims are akin to the claims found patent-eligible in *Core Wireless Licensing S.A.R.L. v. LG Elecs., Inc.*, 880 F.3d 1356 (Fed. Cir. 2018). Reply Br. 3. But the court in *Trading Techs. Int'l, Inc. v. IBG LLC* addressed Appellant's *Core Wireless* argument.

> Relying principally on *Core Wireless*, TT argues the claimed invention provides an improvement in the way a computer operates. We do not agree. The claims of the '999 patent do not improve the functioning of the computer, make it operate more efficiently, or solve any technological problem. Instead, they recite a purportedly new arrangement of generic information that assists traders in processing information more quickly.

Trading Techs. Int'l, Inc. v. IBG LLC, 921 F.3d 1084, 1093 (Fed. Cir. 2019) (citations omitted). The instant claims do not improve the functioning of the computer, make it operate more efficiently, or solve any technological problem. Instead, they recite a purportedly new arrangement of generic information that assists users in processing information more quickly.

> We are not persuaded by Appellant's argument that
>
> multiple features of the present invention, such as the single FPN identifier, logical data model, and connections with mobile phones and farm machines, make the present claims very specific to the tracking and documenting of an agricultural product from even prior to being grown (due to measurement of land conditions and treatments) through all phases of commerce to the grocer so that the consumer can readily confirm how the product was cultivated, processed and packaged.

Reply Br. 3. These features are specific only in the sense they are specified using words. The argument amounts to the benefit of collecting a lot of data and the agricultural context of that data. There is nothing inventive abut collecting data. Nor is there anything particularly inventive about choosing a context. "The Supreme Court and [the Federal Circuit] have repeatedly made clear that merely limiting the field of use of the abstract idea to a particular existing technological environment does not render the claims any less abstract." *Affinity Labs of Tex., LLC v. DirecTV, LLC*, 838 F.3d 1253, 1258 (Fed. Cir. 2016).

We are not persuaded of Examiner error by Appellant's argument that separately argued claim 26 also relies on web services for data collection. Reply Br. 3. Again, this is no more than reciting a conceptual idea to use such services without reciting technological implementation details.

Claims 1, 8–12, 15, 21, 22, 24, 25, 28–31, and 33 rejected under 35 U.S.C. § 103 as unpatentable over Dlott, Pickett, and Farmer

The claims recite collecting many different items of data describing the production, collection, and distribution of agricultural products. The claims then recite producing a report based on a single data item among those collected, viz. a land plot identifier. The issue is whether such an identifier was a predictable data item to do so with, as the technology for doing so was old and well known relational and hierarchical database technology. The easy answer, before getting into Appellant's arguments, is that any data field collected is a predictable field to base a report on, if only because the fact that the field was included indicated a motivation to analyze

the data based on that field whenever it showed unusual values or whenever it identified other data with unusual values.

As to Appellant's Appeal Brief arguments, we adopt the Examiner's determinations and analysis from Final Action 10–62 and Answer 11–17 and reach similar legal conclusions. We now turn to the Reply Brief.

> We are not persuaded by Appellant's argument that the claims recite a Farm Plot Number as a single unique identifier to be assigned to an agriculture product first planted or managed at an origin site and to allow further data of all subsequent activities relating to that product to be are collected, and associated with it so that a final display or composite webpage containing all of the activity information can be viewed and/or printed by a potential or actual consumer of the agricultural product.

Reply Br. 4. Aside from a plot of land being a naturally predictable index item in any agricultural context, Dlott explicitly describes using the field of land identifier to create a report. FF 04. Dlott also separately describes using the land identifier in combination with a product identifier for such indexing. FF 03. Appellant does not contend that one of ordinary skill did not know how to eliminate the product identifier and just use the agriculture land identifier, only that Dlott does not describe this. It would have been obvious to eliminate an item, such as the product identifier, for the purpose of eliminating its function. *See In re Larson*, 340 F.2d 965 (CCPA 1965) (Omission of additional framework and axle which served to increase the cargo carrying capacity of prior art mobile fluid carrying unit would have been obvious if this feature was not desired.); and *In re Kuhle*, 526 F.2d 553 (CCPA 1975) (deleting a prior art switch member and thereby eliminating its function was an obvious expedient).

We are not persuaded by Appellant's argument that

> Dlott fails to include processing and shipping details and instead just documents custody of the product from one party to another. Dlott does not teach that a single number could be used for collecting all information and as evidence of this, column 14 lines 1-11 of Dlott explains that "a product identification code 206 may not be associated with an individual product at all locations along a chain of custody, and may only become associated with an individual product and during a packaging [packing] stage."

Reply Br. 4 (alteration in original). Again, Appellant fails to address the portions of Dlott cited *supra*. The portion Appellant cites simply describes the inherent limitation of any system to only be able to access records pertaining to a data field if the data so described existed. Dlott simply states that it does not find records pertaining to a product lot (as contrasted with an agricultural land parcel lot) until after that lot comes into existence. This in no way negates Dlott's separate descriptions of retrieving data based on agricultural land parcel lot. As to whether Dlott describes all of the recited data fields, all of those data fields are well known attributes associated with agricultural production, collection, and distribution and so are at least predictable components of the data collected.

We are not persuaded by Appellant's argument that "Dlott is further deficient in that he discloses no system for combining the data from these different identifiers in a logical or organized way." Reply Br. 4. The asserted logical or organized way Appellant argues is recited as the combination of compiling and associating data. This is a standard database accumulation technique. To the extent this argument also refers to the equipment recited, data collection from production equipment was itself conventional at the time of filing.

We are not persuaded by Appellant's argument that Dlott

> is much more complicated than the present invention which logically combines and merges all relevant data into a single location. The report that is generated and displayed or printed is not one that any farmer could generate as it would not contain the data obtained from these physical steps and in particular any data obtained from post harvesting activities such as packaging and shipping to retail stores for purchase by consumers.

Reply Br. 4. Appellant only argues that certain data might not have been collected in Dlott. But as all the recited data fields were known to be associated with agricultural production, collection, and distribution, they were all at least predictable.

We are not persuaded by Appellant's argument that "the rejections are nothing more than a hindsight reconstruction of the prior art using Applicant's claims as a guide and attributing features to the prior art that are actually disclosed in the present specification and claims." Reply Br. 5. Again, Appellant's claim recites no more than collecting data in a database and producing a report based on agricultural land plot identifiers. As databases were notoriously well known and a land plot used to grow on was a notoriously well-known agricultural data item, this can hardly be considered hindsight.

Claim 23 rejected under 35 U.S.C. § 103 as unpatentable over Dlott, Pickett, Farmer, Macy, and Brown

This rejection is not separately argued.

Claims 26, 27, and 32 rejected under 35 U.S.C. § 103 as unpatentable over Dlott, Pickett, Farmer, and Gross

This rejection is not separately argued in the Reply Brief. We adopt the Examiner's determinations from the Answer in response to the Appeal Brief arguments.

CONCLUSIONS OF LAW

The rejection of claims 1, 8–12, 15, and 21–33 under 35 U.S.C. § 101 as directed to a judicial exception without significantly more is proper.

The rejection of claims 1, 8–12, 15, 21, 22, 24, 25, 28–31, and 33 under 35 U.S.C. § 103 as unpatentable over Dlott, Pickett, and Farmer is proper.

The rejection of claim 23 under 35 U.S.C. § 103 as unpatentable over Dlott, Pickett, Farmer, Macy, and Brown is proper.

The rejection of claims 26, 27, and 32 under 35 U.S.C. § 103 as unpatentable over Dlott, Pickett, Farmer, and Gross is proper.

CONCLUSION

The rejection of claims 1, 8–12, 15, 21–25, 28–31, and 33 is affirmed.

In summary:

Claims Rejected	35 U.S.C. §	Basis	Affirmed	Reversed
1, 8–12, 15, 21–33	101	Eligibility	1, 8–12, 15, 21–33	
1, 8–12, 15, 21, 22, 24, 25, 28–31, 33	103	Dlott, Pickett, Farmer	1, 8–12, 15, 21, 22, 24, 25, 28–31, 33	
23	103	Dlott, Pickett, Farmer, Macy, Brown	23	
26, 27, 32	103	Dlott, Pickett, Farmer, Gross	26, 27, 32	
Overall Outcome			1, 8–12, 15, 21–33	

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a). *See* 37 C.F.R. § 1.136(a)(1)(iv) (2011).

AFFIRMED