UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
13/628,628	09/27/2012	B. Scott Boding	79900-847212(018900US)	7781

66945   7590   11/02/2018
KILPATRICK TOWNSEND & STOCKTON LLP/VISA
Mailstop: IP Docketing - 22
1100 Peachtree Street
Suite 2800
Atlanta, GA 30309

EXAMINER
KAZIMI, HANI M

ART UNIT	PAPER NUMBER
3691	

NOTIFICATION DATE	DELIVERY MODE
11/02/2018	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):

ipefiling@kilpatricktownsend.com
KTSDocketing2@kilpatrick.foundationip.com

PTOL-90A (Rev. 04/07)

UNITED STATES PATENT AND TRADEMARK OFFICE

_____

BEFORE THE PATENT TRIAL AND APPEAL BOARD

_____

Ex parte SCOTT B. BODING[1]

_____

Appeal 2017-006818
Application 13/628,628
Technology Center 3600

_____

Before CAROLYN D. THOMAS, JEREMY J. CURCURI, and
MICHAEL M. BARRY, *Administrative Patent Judges*.

THOMAS, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellant seeks our review under 35 U.S.C. § 134(a) of the
Examiner's Final Rejection of claims 1–21, all the pending claims in the
present application. *See* Claims Appendix. We have jurisdiction over the
appeal under 35 U.S.C. § 6(b).

We AFFIRM.

The present invention relates generally to an identity chaining fraud
detection method that allows each current transaction to be linked to other
transactions. *See* Abstract.

_____

Claim 1 is illustrative:

    1.   A method comprising:

          receiving, over a network, a first transaction at a central server computer from a first merchant computer, wherein the first transaction is associated with a first plurality of identities, wherein the first transaction is associated with a plurality of first transaction data and wherein each identity in the first plurality of identities corresponds to a different first transaction datum from the plurality of first transaction data;

          receiving, over the network, a second transaction at the central server computer from a second merchant computer, wherein the second transaction is associated with a second plurality of identities, wherein the second transaction is associated with a plurality of second transaction data and wherein each identity in the second plurality of identities corresponds to a different second transaction datum from the plurality of second transaction data;

          processing, by a chaining engine executing on the central server computer, transaction data from a plurality of merchant computers comprising the second merchant computer, to identify a plurality of transactions including the second transaction that are each associated with at least one identity from the first plurality of identities associated with the first transaction;

          linking, by the chaining engine executing on the central server computer, the first transaction to each of the plurality of transactions, including the second transaction, to generate a chain of linked transactions, wherein the first transaction is linked to the second transaction through a first identity that is included in the first plurality of identities and the second plurality of identities;

          comparing, by the chaining engine executing on the central server computer, each transaction in the chain of linked transactions to a negative list database of identities associated with one or more fraudulent activities to determine whether the first transaction is fraudulent, wherein the negative list database corresponds to a third merchant computer;

          matching, by the chaining engine executing on the central server computer, a second identity from the second

2

plurality of identities associated with the second transaction to
an identity from the negative list database of identities, wherein
the second identity is not included in the first plurality of
identities associated with the first transaction;

      based on the matching, sending over the network,
by the central server computer, a first message to the first
merchant computer indicating a first fraud alert for the first
transaction;

      based on the matching, sending over the network,
by the central server computer, a second message to the second
merchant computer indicating a second fraud alert for the
second transaction; and

      updating, by the central server computer, the
negative list database of the third merchant computer to include
a third identity from the second plurality of identities of the
second transaction, the third identity not previously included in
the negative list database.

Appellant appeals the following rejection:

Claims 1–21 are rejected under 35 U.S.C. § 101 because the claimed
invention is directed to non-statutory subject matter (Final Act. 2–5).

We review the appealed rejections for error based upon the issues
identified by Appellant, and in light of the arguments and evidence produced
thereon. *Ex parte Frye*, 94 USPQ2d 1072, 1075 (BPAI 2010) (precedential).

ANALYSIS

Rejection under § 101

Issue: Did the Examiner err in finding that the claims are directed to
patent-ineligible subject matter?

Alice Corp. Pty. v. CLS Bank Int'l, 134 S. Ct. 2347 (2014), identifies a
two-step framework for determining whether claimed subject matter is
judicially excepted from patent eligibility under § 101. According to *Alice*

step one, "[w]e must first determine whether the claims at issue are directed to a patent-ineligible concept," such as an abstract idea. *Alice*, 134 S. Ct. at 2355. "If the claims are not directed to an abstract idea [or other patent-ineligible concept], the inquiry ends. If the claims are 'directed to' an abstract idea, then the inquiry proceeds to the second step of the *Alice* framework." *McRO, Inc. v. Bandai Namco Games Am. Inc.*, 837 F.3d 1299, 1312 (Fed. Cir. 2016). In analyzing whether a claim is directed to an abstract idea, we look to other decisions where similar concepts were previously found abstract by the courts. *See Amdocs (Israel) Ltd. v. Openet Telecom, Inc.*, 841 F.3d 1288, 1294 (Fed. Cir. 2016).

In this regard, with respect to independent method claims 1 and 17, and similarly, system claim 9, the Examiner determines that the claims are directed to the abstract idea of "fundamental commercial or business practices of identifying fraudulent transactions allowing each current transition to be linked to other transactions through commonly shared identities to form chains of linked transactions . . . similar to *Cybersource Corp.*" (Final Act. 3). The Examiner further determines that "the claims are similar to organizing information through mathematical correlations (*Digitech*)[,] comparing new and stored information and using rules to identify options (*SmartGene*) . . . [,] a method of organizing human activities" (*id.*) and "[l]inking transactions is similar to using categories to organize, store[,] and transmit information (*Cyberfone*)" (*id.* at 5).

Appellant challenges the Examiner's determinations on the ground that the alleged abstract idea "is an oversimplification of the claims and ignores most of the recitations of at least the independent claims . . . [and]

the *Office Action* fails to identify any similarity to any relevant or applicable case" (App. Br. 11–12). We disagree with Appellant's contentions.

Firstly, we point out that the Examiner did indeed cite numerous other decisions where similar concepts were previously found abstract by the courts, e.g., *Cybersource, Digitech, SmartGene*, and *Cyberfone* (*see* Final Act. 3–5; *see also* Ans. 4–14), which will be described *infra*.

Here, the claimed sequence of steps in claim 1 cover employing a central server computer for receiving a first and a second transaction, processing transaction data from a plurality of merchant computers, linking the first transaction to each of the plurality of transactions, comparing each transaction in the chain of linked transactions to a negative list database of identities, matching a second identity with the second transaction, based on the matching, sending a first and second message, and updating the negative list database (*see* claim 1). The Examiner addressed each claimed step in the analysis (*see* Ans. 5–6) and we agree with the Examiner that the description of the abstract idea is tethered to the claim language (*id.* at 6). Thus, we find unavailing Appellant's contention that the Examiner is ignoring most of the recitations of at least the independent claims.

Also, we point out that information collection and analysis, including when limited to particular content, is within the realm of abstract ideas. *See, e.g., Elec. Power Grp. LLC v. Alstom S.A.*, 830 F.3d 1350, 1353 (Fed. Cir. 2016) (holding that "collecting information, analyzing it, and displaying certain results of the collection and analysis" are "a familiar class of claims 'directed to' a patent-ineligible concept."); *Digitech Image Techs., LLC v. Elecs. for Imaging, Inc.*, 758 F.3d 1344, 1350 (Fed. Cir. 2014) ("organizing information through mathematical correlations"); *Content Extraction*, 776

F.3d at 1347 ("1) collecting data, 2) recognizing certain data within the collected data set, and 3) storing that recognized data in a memory" are directed to an abstract idea); *LendingTree, LLC v. Zillow, Inc.*, 656 F. App'x 991, 996 (Fed. Cir. 2016) (claims directed to "a loan-application clearinghouse, or more simply, coordinating loans" are abstract).

Furthermore, in *Cyberfone*, the Court held that "using categories to organize, store, and transmit information is well-established," and "the well-known concept of categorical data storage, i.e., the idea of collecting information in classified form, then separating and transmitting that information according to its classification, is an abstract idea that is not patent-eligible." *Cyberfone Sys., LLC v. CNN Interactive Grp., Inc.*, 558 F. App'x 988, 992 (Fed. Cir. 2014).

Here, as similarly noted in the above-cited cases, information is received, processed, organized (i.e., linked), compared, matched, transmitted, and updated. Therefore, we find that the Examiner's cogent analysis relying on judicial examples, shows the Examiner provided an adequate basis for determining that the claims are directed to an abstract idea.

Appellant also contends that "claim 1 is directed to an improvement to conventional computers and systems used in the art in a manner similar to *Enfish*" (App. Br. 14) because "linking, comparing, matching, and updating negative list data between merchant computers in a network are not directed to just any data structure, but to a specific manner of synchronizing specific data to provide an improved network of computers" (*id.* at 15).

The Court acknowledged in *Mayo*, that "all inventions at some level embody, use, reflect, rest upon, or apply laws of nature, natural phenomena,

or abstract ideas." *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 566
U.S. 66, 70–71 (2012). We, therefore, look to whether the claims focus on a
specific means or method that improves the relevant technology or are
instead directed to a result or effect that itself is the abstract idea, and merely
invoke generic processes and machinery. *See Enfish, LLC v. Microsoft
Corp.*, 822 F.3d 1327, 1336 (Fed. Cir. 2016).

In *Enfish*, for example, the court noted that "[s]oftware can make non-
abstract improvements to computer technology just as hardware
improvements can [.]" *Enfish*, 822 F.3d at 1335. The court put the question
as being "whether the focus of the claims is on [a] specific asserted
improvement in computer capabilities . . . or, instead, on a process that
qualifies as an 'abstract idea' for which computers are invoked merely as a
tool." *Id.* at 1335–36. In *Enfish*, the court found that the "plain focus of the
claims" there was on "an improvement to computer functionality itself, not
on economic or other tasks for which a computer is used in its ordinary
capacity." *Id.* at 1336.

The present case is different from *Enfish* because the focus of the
claims here is not on an improvement in computer capabilities or upon an
innovative way to use computers or other devices, but is focused on an
independently abstract idea that uses generic and routine equipment as tools;
that abstract idea being collecting and linking transaction data so as to
identify fraudulent transactions. We agree with the Examiner that "[t]he
improvement is in the process of fraud prevention and risk mitigation" (Ans.
7). That is, here the arguably innovative technique of the appealed claims is
inextricably a part of the abstract idea of linking data itself to decide which
transaction is fraudulent. Appellant does not point to anything in the claim

7

that persuasively resembles the inventive self-referential data structure at issue in *Enfish*. Appellant also does not direct our attention to anything in the Specification to persuasively indicate that the invention provides an improvement in the computer's technical functionality. Paragraphs 52–58 of Appellant's Specification merely list an interface, a processor, engines, and databases for implementing the invention. However, Appellant fails to illustrate how these components are improved.

Moreover, nothing in the claims, understood in light of the Specification, requires anything other than an off-the-shelf, conventional computer used for collecting and processing/analyzing various information/data. Therefore, unlike in *Enfish*, the claims are directed not to an improvement in computer capabilities, but to the results of applying an abstract idea.

Appellant further contends that "the claims improve the technical field according to a specific set of steps that does not preempt any other method in the field" (App. Br. 18). Although pre-emption "might tend to impede innovation more than it would tend to promote it, 'thereby thwarting the primary object of the patent laws'" *(Alice*, 134 S. Ct. at 2354 (citing *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 566 U.S. 66, 71 (2012))), "the absence of complete preemption does not demonstrate patent eligibility" *(Ariosa Diagnostics, Inc. v. Sequenom, Inc.*, 788 F.3d 1371, 1379 (Fed. Cir. 2015)). Moreover, because we find the claimed subject matter covers patent-ineligible subject matter, the pre-emption concern is necessarily addressed.

8

We now turn to the second step of the *Alice* framework: "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*, 134 S. Ct. at 2355 (alteration in original) (quoting *Mayo*, 566 U.S. at 72–73).

The Examiner determines that "[t]he additional element(s) or combination of elements . . . amount(s) to no more than: (i) mere instructions to implement the idea on a computer, and/or (ii) recitation of generic computer structure that serves to perform generic computer functions that are well-understood, routine, and conventional activities" (Final Act. 3).

Appellant contends that "the Office fails to provide any evidence that the specific method of updating databases recited in the claims is 'generic,' 'routine,' or 'conventional,' as is clear from the lack of a 35 U.S.C. § 102 rejection" (App. Br. 16), because "previous computer systems used to detect fraud did not link transaction data between merchant computers as they occurred" (*id.* at 17).

Firstly, we point out that Appellant's contention is not commensurate with the scope of claim 1 because claim 1 does not specifically recite linking transaction data "*as they occur*" or in "real-time" (App. Br. 21) (*see* claim 1). As written, claim 1 *reads on* linking the transaction data at any time, i.e., in the future. Furthermore, Appellant concedes that "it is common in the art to verify data and provide notification messages" (App. Br. 23), and that previously cited prior art "Ganti evaluates data using a set of rules and then send[s] an alert message" (*id.* at 24), and "Ellingson can access a database of

identities and match them to a particular transaction" (*id.* at 25). These known techniques all suggest linking data in various ways.

Secondly, a finding of novelty or non-obviousness does not require that the claimed subject matter is patent-eligible. Although the second step in the *Mayo/Alice* framework is termed a search for an "inventive concept," the analysis is not an evaluation of novelty or nonobviousness, but, rather, is a search for "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.*, 134 S. Ct. at 2355. "Groundbreaking, innovative, or even brilliant discovery does not by itself satisfy the § 101 inquiry." *Ass'n for Molecular Pathology v. Myriad Genetics, Inc.*, 569 U.S. 576, 591 (2013). A novel and non-obvious claim directed to a purely abstract idea is, nonetheless, patent-ineligible. *See Mayo*, 566 U.S. at 90. *See also Diamond v. Diehr*, 450 U.S. 175, 188–89 (1981) ("The 'novelty' of any element or steps in a process, or even of the process itself, is of no relevance in determining whether the subject matter of a claim falls within the § 101 categories of possibly patentable subject matter.").

To the extent Appellant argues that the Examiner must provide factual evidence that the specific method of updating databases recited in the claims is well-understood, routine, and conventional (App. Br. 16), "[i]t has been clear since *Alice* that a claimed invention's use of the ineligible concept to which it is directed cannot supply the inventive concept that renders the invention 'significantly more' than that ineligible concept." *BSG Tech LLC v. Buyseasons, Inc.*, 899 F.3d 1281, 1290 (Fed. Cir. 2018). Put another way, Appellant cannot rely on the abstract idea itself as providing significantly

10

more than the abstract idea. Here, the Examiner determined that the claims were directed to the abstract idea of "fundamental commercial or business practices of identifying fraudulent transactions allowing each current transaction to be linked to other transactions . . . similar to organizing information through mathematical correlations . . . and comparing new and stored information and using rules to identify options" (Final Act. 3). Appellant fails to explain how the identified limitations, such as "linking . . . the first transaction to each of the plurality of transactions" and "updating . . . the negative list database," are not part of such abstract ideas (e.g., organizing information through mathematical correlations).

The Federal Circuit recently dealt with a similar situation in explaining that "[w]e may assume that the techniques claimed are groundbreaking, innovative, or even brilliant, but that is not enough for eligibility." *SAP Am., Inc. v. InvestPic, LLC*, 898 F.3d 1161, 1163 (Fed. Cir. 2018) (quotation omitted).

> The claims here are ineligible because their innovation is an innovation in ineligible subject matter. Their subject is nothing but a series of mathematical calculations based on selected information and the presentation of the results of those calculations (in the plot of a probability distribution function). No matter how much of an advance in the finance field the claims recite, the advance lies entirely in the realm of abstract ideas, with no plausibly alleged innovation in the non-abstract application realm. An advance of that nature is ineligible for patenting.

Id. The same is true here where Appellant has not explained how the advance is in anything other than the abstract idea.

Because Appellant's independent claims 1, 9, and 17[2] are directed to a patent-ineligible abstract concept under the first prong of *Alice* and do not recite something "significantly more" under the second prong of the *Alice* analysis, we sustain the Examiner's rejection of these claims as well as respective dependent claims 2–8, 10–16, and 18–21 under 35 U.S.C. § 101 as being directed to non-statutory subject matter in light of *Alice* and its' progeny.

For the foregoing reasons, Appellant's contentions are unpersuasive as to error in the rejection under 35 U.S.C. § 101.

DECISION

We affirm the Examiner's § 101 rejection.

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

AFFIRMED

---

[2] *Alice* also confirmed that if a patent's systems claims are no different in substance from its method claims, they will rise and fall together. 134 S. Ct. at 2360.