

UPDATE SECTION 101: PATENT-ELIGIBLE SUBJECT MATTER

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Patent Eligibility

- Section 101 of the U.S. Patent Act controls what types of inventions are eligible for patent protection in the United States.
- The test for patent eligibility under Section 101 is extremely important, BUT the actual statutory language provides very little guidance:

35 U.S.C. § 101: “Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.”

- This simple provision has caused a great deal of confusion among inventors, patent attorneys, district court judges, and even the Justices on the U.S. Supreme Court.

Logjam Over?

- ◎ Two significant changes in last year:
 - New USPTO Guidelines on Section 101
 - Berkheimer Decision

New Guidelines - Background

- ⦿ January 2019, the United States Patent and Trademark Office (USPTO) announced revised guidance for subject matter eligibility under 35 U.S.C. § 101. (Federal Register 50 Vol. 84, No. 4 Monday, January 7, 2019)
- ⦿ Intention: provide a more concrete framework for analyzing whether claims, as a whole, are merely “directed to” an abstract idea.

New Guidelines - Background

- ⦿ Federal Register Notice notes that courts have been comparing patent claims considered to those previously determined to be directed to abstract ideas, as the Federal Circuit explicitly explained in *Enfish LLC v. Microsoft Corp.*
- ⦿ “While that approach was effective soon after *Alice* was decided, it has since become impractical.”

New Guidelines - Background

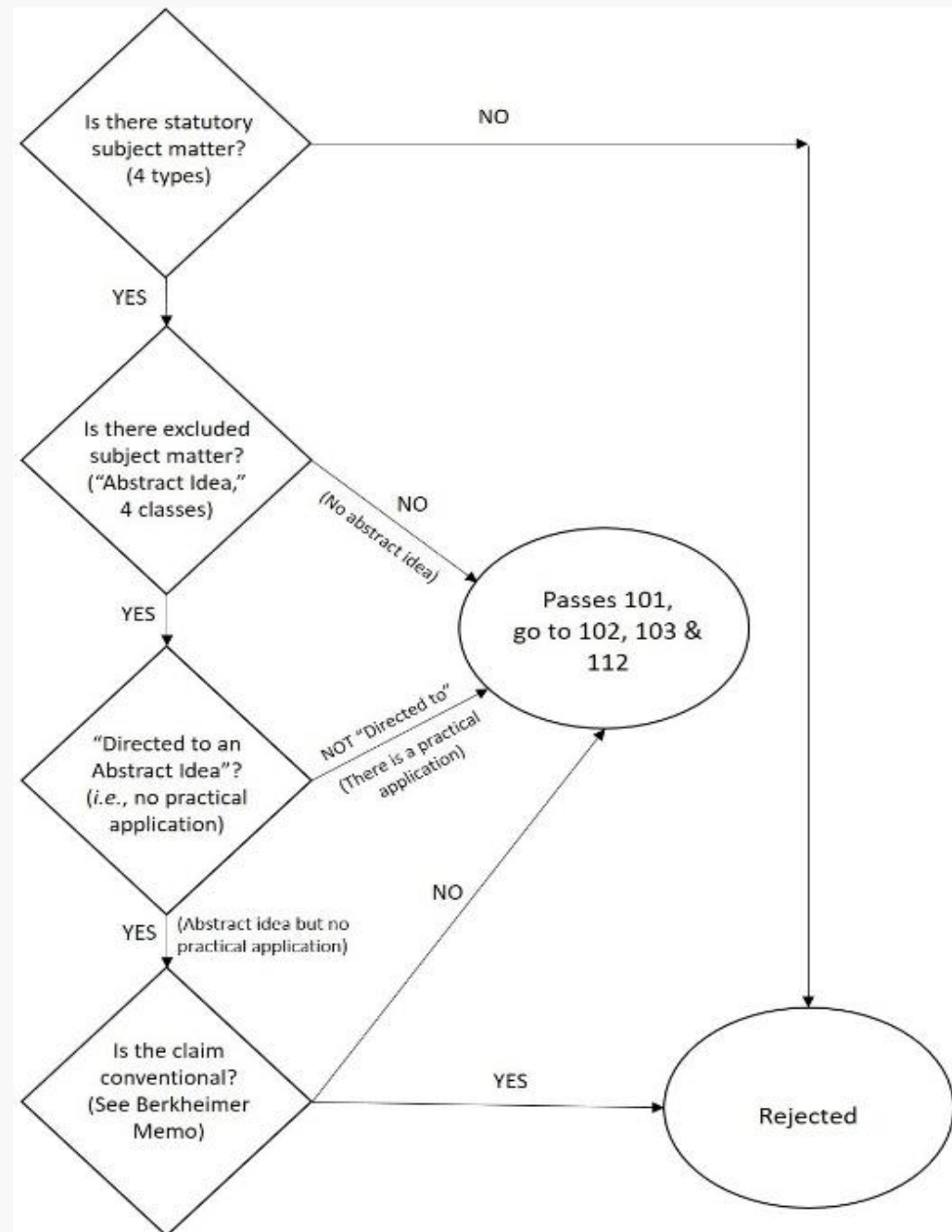
- ① “The Federal Circuit has now issued numerous decisions identifying subject matter as abstract or non-abstract in the context of specific cases, and that number is continuously growing.”
- ① “In addition, similar subject matter has been described both as abstract and not abstract in different cases. The growing body of precedent has become increasingly more difficult for examiners to apply in a predictable manner, and concern have been raised that different examiners within and between technology centers may reach inconsistent results.”

New Guidelines - Overview

- ◎ The Guidance attempts to remedy this uncertainty by revising the USPTO's analysis under the first step (Step 2A) of the Alice/Mayo test.
- ◎ The Guidance does not substantively change the current analysis under Steps 1 and 2B.

New Guidelines – Overview

<https://www.akerman.com/print/content/52776/Illustrating-the-New-USPTO-Guidance-with-a-Flowchart.pdf>



New Guidelines – Overview

Two primary changes to how patent examiners apply the first step of the U.S. Supreme Court’s *Alice/Mayo* test, which determines whether a claim is “directed to” a judicial exception.

1. First Prong: Is claim directed to an abstract idea?
2. Second Prong: Whether an abstract idea “is integrated into a practical application of that exception

First Prong

- ⦿ Examiners must determine if a claim falls within three “enumerated groupings of abstract ideas”
 - Mathematical concepts - mathematical relationships, mathematical formulas or equations, mathematical calculations
 - Certain methods of organizing human activity – includes commercial or legal activity, marketing, managing personal relationships
 - Mental processes – concepts performed in the human mind (including an observation, evaluation, judgment, opinion)

First Prong

- ◎ To support a finding that the claim “falls within” one of these categories, Examiners must identify “specific limitations” in the claim (both individually and in combination) and determine whether the limitations fall within any of the three enumerated categories.

First Prong

- ⦿ USPTO fills a void intentionally left ambiguous by both the Supreme Court and the Federal Circuit.
 - Courts have refused to define the term abstract idea despite that being the critical term in the Supreme Court's extra-statutory patent eligibility test.
 - Without a definition for the term abstract idea rulings have been seemingly subjective, and even arbitrary.

Second Prong

- ⦿ Is abstract idea “is integrated into a practical application of that exception”?
- ⦿ An abstract idea is “integrated” into a practical application if the application “applies, relies on, or uses the judicial exception in a manner that imposes a meaningful limit on the judicial exception

Second Prong

- ⦿ The new procedure closely resembles the traditional (but largely unapplied) “preemption” analysis under § 101.
 - [A] claim that integrates a judicial exception into a practical application *will 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.*

Second Prong

- ⦿ Examiners evaluate integration into a practical application by
 - (a) identifying “additional elements...beyond the judicial exception(s)”
 - (I.e., Claim language not used in First Prong?)
 - “(b) evaluating those additional elements ***individually and in combination*** to determine whether they integrate the exception into a practical application,”

Second Prong

- ◎ Categories of practical application
 - Applies to an improvement in the functioning of a computer or other technology.
 - Effects a particular treatment or prophylaxis for a disease or medical condition.
 - 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.
 - Uses the judicial exception in some other meaningful way beyond generally linking the use of the judicial exception to a particular technological environment, such that the claim as a whole is ***more than a drafting effort designed to monopolize the exception.***

Second Prong

- ⦿ Examples in which a judicial exception has not been integrated into a practical application . . .
 - merely recites the words “apply it” (or an equivalent), or merely includes instructions to implement an abstract idea on a computer, or merely uses a computer as a tool to perform an abstract idea;
 - adds insignificant extra-solution activity to the judicial exception; and
 - does no more than generally link the use of a judicial exception to a particular technological environment or field of use.

Second Prong

- ⦿ But importantly, the revised Step 2A specifically excludes consideration of whether the additional elements represent well-understood, routine, conventional (WURC) activity.
- ⦿ Accordingly, in revised Step 2A examiners should give weight to all additional elements, whether or not they are well-known or conventional, when evaluating whether a judicial exception has been integrated into a practical application.
- ⦿ Thus, old and conventional elements are given weight in determining whether the claim in question recites a practical application of a judicial exception.

Second Prong

- Practical implementation v technological solution
- Showing claimed invention provided a solution to a *technological problem* under Step 2A difficult since the problem being solved might not be viewed by the USPTO as “technological” in nature but rather as a business or financial problem.
- Easier to show that an inventive solution has a “practical application” by virtue of solving a technological, business or financial problem

New Guidelines

- ⦿ New Guidelines have given patent practitioners reasons to be cautiously optimistic.
- ⦿ But, guidelines and memorandums from the USPTO are “intended to instruct examiners on how to apply the law to the facts.
- ⦿ The board and Federal Circuit are not bound by such guidelines.

Berkheimer Decision

- ⦿ Examines Step 2B: whether the claim recites additional elements that amount to significantly more than the judicial exception.
- ⦿ “Whether something is well-understood, routine, and conventional to a skilled artisan at the time of the patent is a factual determination. “
- ⦿ “The mere fact that something is disclosed in a piece of prior art, for example, does not mean it was well-understood, routine, and conventional.”

Berkheimer Decision

- ⦿ Berkheimer requires that Step 2B must be answered using evidence, such as:
 - prior art,
 - expert testimony, or
 - the applicant's own admission, and
 - not merely conjecture or assumptions

How is PTAB Using Berkheimer?

- ⦿ Is the applicant arguing that the claimed invention includes an “additional element” that provides “significantly more”?
- ⦿ If so, is the “additional element” itself abstract?
- ⦿ If the “additional element” is an abstract concept, then the analysis stops because there is no need for factual evidence.

How is PTAB Using Berkheimer?

- ◉ The PTAB generally holds claims directed to fundamental economic practices and organizing human behavior to be abstract regardless of arguments about “additional elements.” (<https://www.law360.com/articles/1114069/patent-eligibility-lessons-from-ptab-s-use-of-berkheimer>)
 - trading platforms (Appeal 2017-005996, Patent Application No. 10/015,738),
 - techniques for accessing financial information (Appeal 2017-006665, Patent Application No. 11/750,178),
 - payment processing (Appeal 2017-001777, Patent Application No. 14/321,145), and
 - advertising content delivery services (Appeal 2017-002977, Patent Application No. 12/916,504), are abstract.
 - influencing purchasing decisions (Appeal 2017-004362, Patent Application No. 13/209,069), and
 - generating a workflow to manage tasks in a health care facility (Appeal 2017-004865, Patent Application No. 13/228,497).

How is PTAB Using Berkheimer

- However, claims directed to computer software and medical diagnostics may have “additional elements” with “something more.”
(<https://www.law360.com/articles/1114069/patent-eligibility-lessons-from-ptab-s-use-of-berkheimer>)
 - medical instruments (Appeal 2017-001113, Patent Application No. 14/391,183)
 - computer software related to pharmacology applications (Appeal 2018-005300, Patent Application No. 13/079,489),
 - predicting protein structures (Appeal 2017-000910, Patent Application No. 12/142,707), and identifying therapeutic target (Appeal 2016-007941, Patent Application No. 12/621,408).

How is PTAB Using Berkheimer?

- If the additional element is not abstract, has the examiner provided factual evidence showing that the “additional element” is conventional, well-understood or routine?
 1. A citation to an express statement in the specification or to a statement made by an applicant during prosecution that demonstrates WURC elements.
 2. A citation to one or more of the court decisions discussed in MPEP § 2106.05(d)(II) noting WURC elements.
 3. A citation to a publication that demonstrates the WURC element(s).
 4. A statement that the examiner is taking official notice of WURC element(s).

Practice Tips

- ⦿ Guidelines and Berkheimer provide a road map for avoiding and responding to patent eligibility rejections.
- ⦿ Identify technical problems and technical solutions in the specification.
- ⦿ Describe the innovativeness of the invention in a technical manner (i.e., as a technological solution to a technological problem).

Practice Tips

- ⦿ Avoid saying that anything is “conventional,” “routine” or “well-understood.”
 - Avoid describing a general-purpose computer in the specification
 - Avoid boilerplate in the application to make sure that it does not describe a general-purpose computer.
 - Avoid language re one of skill in the art will understand . . .

Practice Tips

- ⦿ During prosecution, control narrative: focus on framing subject-matter rejections as dispute about facts.
 - Press on sufficiency of factual evidence.
 - Make sure that the missing evidence is related to technology.
 - Cite the problems identified in the specification when making arguments.
 - Consider the claim elements “as a whole” when arguing non-conventionality

Practice Tips

⦿ Appeal:

- Stay in the game
- Request hearing?

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte

Appeal Application

Technology

Before BIBHU R. MOHANTY, NINA L. MEDLOCK, and
ROBERT J. SILVERMAN, *Administrative Patent Judges*.

MOHANTY, *Administrative Patent Judge*.

DECISION ON APPEAL STATEMENT OF THE CASE

The Appellants seek our review under 35 U.S.C. § 134 of rejection in the Final Office Action² of claims 9, 11, and 15-20, which are all the claims pending in the application. We have jurisdiction under 35 U.S.C. § 6(b).

Oral arguments were presented on March 13, 2019.

SUMMARY OF THE DECISION

We AFFIRM.

¹

²Final Office Action, dated June 24, 2015 (hereinafter "Final Act.")

THE INVENTION

The Appellants' claimed invention is directed to a method for causing changes in control of [REDACTED] (Spec. 6).

Claim 9, reproduced below with italics added, is representative of the subject matter on appeal.

[REDACTED]

THE REJECTIONS

The following references are used in the cited rejections before us for review³:

Caffrey et al	US 2009/0063323 A1	Mar. 5, 2009
Kemper et al.	US 2005/0102229 A1	May 12, 2005
O'Malley et al.	US 2006/0015733 A1	Jan. 19, 2006
Winterhalder	US 2006/0190396 A1	Aug. 24, 2006
Wu	US 2007/0219817 A1	Sept. 20, 2007

1. Claims 9, 11, and 15-20 are rejected under 35 U.S.C. § 101 as being directed to non-statutory subject matter.

[REDACTED]

FINDINGS OF FACT

We have determined that the findings of fact in the Analysis section below are supported at least by a preponderance of the evidence.⁴

³ The Examiners Answer at page 1 indicates that the rejection of independent claim 9 under 35 U.S.C. § 112, second paragraph is withdrawn. The rejection of dependent claims 11 and 15-20 under this rejection is considered withdrawn as well as the Final Rejection (Final Act. 5), cited no specific language for the rejection of these claims beyond merely depending from claim 9.

⁴ See *Ethicon, Inc. v. Quigg*, 849 F.2d 1422, 1427 (Fed. Cir. 1988) (explaining the general evidentiary standard for proceedings before the Patent Office).

ANALYSIS

Rejection under 35 USC § 101

The Appellants argue that the rejection of claim 9 is improper because the claim is not directed to an abstract idea (App. Br. 3-8; Reply Br. 3-5).

The Appellants argue further that the claim is "significantly more" than the alleged abstract idea (Reply Br. 5).

In contrast, the Examiner has determined that the rejection of record is proper (Final Act. 5, 6; Ans. 2---6).

We agree with the Examiner. An invention is patent eligible if it claims a "new and useful process, machine, manufacture, or composition of matter." 35 U.S.C. § 101. However, the Supreme Court has long interpreted 35 U.S.C. § 101 to include implicit exceptions: "[l]aws of nature, natural phenomena, and abstract ideas" are not patentable. *E.g., Alice Corp. v. CLS Bank Int'l*, 573 U.S. 208,216 (2014) (citation omitted).

In determining whether a claim falls within an excluded category, we are guided by the Supreme Court's two-step framework, described in *Mayo* and *Alice Id.* at 217-18 (citing *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 566 U.S. 66, 75-77 (2012)). In accordance with that framework, we first determine what concept the claim is "directed to." *See Alice*,

573 U.S. at 219 ("On their face, the claims before us are drawn to the concept of intermediated settlement, *i.e.*, the use of a third party to mitigate settlement risk."); *see also Bilski v. Kappas*, 561 U.S. 593, 611 (2010) ("Claims 1 and 4 in petitioners' application explain the basic concept of hedging, or protecting against risk").

Concepts determined to be abstract ideas, and thus patent ineligible, include certain methods of organizing human activity, such as fundamental

economic practices (*Alice*, 573 U.S. at 219-20; *Bilski*, 561 U.S. at 611); mathematical formulas (*Parker v. Flook*, 437 U.S. 584, 594-95 (1978)); and mental processes (*Gottschalk v. Benson*, 409 U.S. 63, 69 (1972)). Concepts determined to be patent eligible include physical and chemical processes, such as "molding rubber products" (*Diamond v. Diehr*, 450 U.S. 175, 191 (1981)); "tanning, dyeing, making water-proof cloth, vulcanizing India rubber, smelting ores" (*id.* at 182 n.7 (quoting *Coming v. Burden*, 56 U.S. 252, 267-68 (1854))); and manufacturing flour (*Benson*, 409 U.S. at 69 (citing *Cochrane v. Deener*, 94 U.S. 780, 785 (1876))).

In *Diehr*, the claim at issue recited a mathematical formula, but the Supreme Court held that "[a] claim drawn to subject matter otherwise statutory does not become nonstatutory simply because it uses a mathematical formula." *Diehr*, 450 U.S. at 176; *see also id.* at 191 ("We view respondents' claims as nothing more than a process for molding rubber products and not as an attempt to patent a mathematical formula."). Having said that, the Supreme Court also indicated that a claim "seeking patent protection for that formula in the abstract ... is not accorded the protection of our patent laws, ... and this principle cannot be circumvented by attempting to limit the use of the formula to a particular technological environment." *Id.* (citations omitted) (citing *Benson* and *Flook*); *see, e.g., id.* at 187 ("It is now commonplace that an application of a law of nature or mathematical formula to a known structure or process may well be deserving of patent protection.").

If the claim is "directed to" an abstract idea, we turn to the second step of the *Alice* and *Mayo* framework, where "we must examine the elements of the claim to determine whether it contains an 'inventive

concept'" sufficient to 'transform' the claimed abstract idea into a patent• eligible application." *Alice*, 573 U.S. at 221 (citation omitted). "A claim that recites an abstract idea must include 'additional features' to ensure that the [claim] is more than a drafting effort designed to monopolize the [abstract idea].'" *Id.* (quoting *Mayo*, 566 U.S. at 77). "[M]erely requir[ing] generic computer implementation[] fail[s] to transform that abstract idea into a patent-eligible invention." *Id.*

The PTO recently published revised guidance on the application of § IOI. 2019 Revised Patent Subject Matter Eligibility Guidance, 84 Fed. Reg. 50 (Jan. 7, 2019) ("Guidance"). Under the Guidance, we first look to whether the claim recites:

- (1) any judicial exceptions, including certain groupings of abstract ideas (i.e., mathematical concepts, certain methods of organizing human activity such as a fundamental economic practice, or mental processes); and
- (2) additional elements that integrate the judicial exception into a practical application (*see* MPEP § 2106.05(a)-(c),(e)-(h)).

Only if a claim (1) recites a judicial exception and (2) does not integrate that exception into a practical application, do we then look to whether the claim:

- (3) adds a specific limitation beyond the judicial exception that is not "well-understood, routine, conventional" in the field (*see* MPEP § 2106.05(d)); or
- (4) simply appends well-understood, routine, conventional activities previously known to the industry, specified at a high level of generality, to the judicial exception.

See Guidance.

Here, the Examiner has determined that the claim is directed to "simultaneously executing change of control of an

" which is a concept of creating a contractual relationship and a transfer of funds which is a fundamental economic practice and therefore an abstract idea (Final Act. 5, 6).

████████████████████

████████████████████

We substantially agree with the Examiner in this regard and determine that the claim is directed to the abstract concept highlighted in italics in the claim above. For example, the steps in the claim for: "receiving ... transfer information", "confirming ... that said seller controls ... said ...
... "confirming ... funds are sufficient to cover said transfer amount;" and simultaneously "transfer[ing] control of said ... [and] funds" are steps used in changing control of a
... Here, the claim is directed to the steps of creating a contractual relationship for t
... which is directed to a method of organizing human activities and a fundamental economic practice and an abstract idea. The Specification at paragraph 15 states that the invention "cause[s] changes in control of

" In *buySAFE, Inc. v. Google, Inc.*, 765 F.3d 1350, 1355 (...)
... creating a contractual relationship are directed to an abstract idea. In *Inventor Holdings, LLC v. Bed Bath & Beyond Inc.*, 876 F.3d 1372, 1378 claims directed to the local processing of payments for remotely purchased goods were held to be directed to an abstract idea. The Appellants in the Reply Brief at page 4 have also cited to *Enfzsh, LLC v. Microsoft Corp.*, 822 F.3d 1327 (Fed. Cir. 2016), to show that the claim is not abstract but the claims in that case were not similar in scope to those here in contrast and were in contrast directed to a self-referential data table. Thus, we consider the claim to be directed to an abstract idea as identified above.

Turning to the second step of the *Alice* and *Mayo* framework, we determine that the claim does not contain an inventive concept sufficient to "transform" the abstract nature of the claim into a patent-eligible application.

The claims do not improve computer functionality, improve another field or technology, utilize a particular machine, or effect a physical transformation. Rather, we determine that nothing in the claims imposes a meaningful limit on the judicial exception, such that the claims are more than a drafting effort to monopolize the judicial exception. For example, in claim 9 the steps of

[1] "receiving" by the computer; [2] "confirming" using the computer; and
[3] "simultaneously" transmitting the recited instructions by the computer are merely conventional steps performed by a generic computer that do not improve computer functionality. That is, these recited steps [1]-[3] "do not purport to improve the functioning of the computer itself but are merely generic functions performed by a conventional processor. Likewise, these same steps [1]-[3] listed above do not improve the technology of the technical field and merely use generic computer components and functions to perform the steps. Also, the recited method steps [1]-[3] above do not require a "particular machine" and can be utilized with a general purpose computer, and the steps performed are purely conventional. In this case the general purpose computer is merely an object on which the method operates in a conventional manner and does not provide "significantly more" to the claim beyond a nominal or insignificant execution of the method. Further, the claim as a whole fails to effect any particular transformation of an article to a different state in a manner that would render the claim "significantly more" than the abstract idea. The recited steps [1]-[3] fail to provide meaningful limitations to limit the judicial exception and rather are mere instructions to apply the method to a generic computer. Considering the elements of the claim both individually and as "an ordered combination" the functions performed by the computer system at each step of the process are

purely conventional. Each step of the claimed method does no more than require a generic computer to perform a generic computer function.

Further the claim fails to add a specific limitation beyond the judicial exception that is not well-understood, routine, and conventional in the field. Rather the claim uses well-understood, routine, and conventional activities previously known in the art at a high level of generality to the judicial exception. The Specification at paragraph 22 for example describes using conventional computer components such as microprocessors, a network, and the Internet in a conventional manner. The claim specifically includes recitations for a "computer", "communications network", and " to implement the method but these computer components are all used in a manner that is well-understood, routine, and conventional in the field. The Appellant has not shown these claimed generic computer components which are used to implement the claimed method are not well understood, routine, or conventional in the field. The Appellants have not demonstrated that the microprocessor described in the Specification at page 22 or the claimed "computer" for instance are not a general purpose computer components beyond those known to be routine and conventional known to perform similar functions in a well-understood manner.

For these reasons the rejection of claim 9 is sustained. The remaining claims are directed to similar subject matter and the rejection of these claims is sustained as well.

AFFIRMED