

SUBMISSION OF COMMENTS REGARDING THE JULY 2015 UPDATE
TO THE INTERIM GUIDANCE ON PATENT SUBJECT MATTER ELIGIBILITY

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The following comments are submitted in response to the Federal Register notice dated July 30, 2015, entitled “July 2015 Update on Subject Matter Eligibility” (Document Citation: 80 FR 45429; Agency/Docket Number PTO-P-2015-0034).

These comments are solely personal to the author, and do not necessarily reflect the views of any law firm, organization, or client with which the author is affiliated.

I. INTRODUCTION

The determination of patent-eligibility of claimed subject matter has been in confusion at least since the *Gottschalk v. Benson* decision of 1972, but has become even more perplexing since the issuance of the *Alice* decision. Despite 16 months of decisions at all levels of review that apply the reinterpretation of § 101 under *Alice* to claimed inventions, the patent community continues to grapple with the meaning, scope, and process of this decision, and its application to pending and issued patents.

The U.S. Patent & Trademark Office bears the brunt of this task. First, courts have the luxury of selectively applying *Alice* to case law (such as choosing not to grant certiorari or institute an *inter partes* review; designating an opinion as non-precedential or unpublished; or even choosing not to issue an opinion at all, as the Federal Circuit has recently done in many instances), but examiners are compelled to make a § 101 determination in every application. Second, examiners’ decisions are subject to an extensive review process – including the examiner’s supervisor; the art unit and technology center directors; the Office of Patent Quality Assurance (OPQA); the PTAB; various district courts; the Federal Circuit; and potentially even the Supreme Court – and such review is often *de novo* and rarely differential to the examiner’s findings.

By extension, the USPTO Office of Patent Legal Administration faces a formidable challenge in issuing legal memoranda to guide examiners in reaching § 101 determinations that are both broadly applicable to the USPTO's case load, and likely to withstand multiple rounds of administrative and judicial review. This challenge is exacerbated by the large volume of court decisions finding patent claims *ineligible* under 35 U.S.C. § 101, and comparatively few cases finding *eligible* patent claims.

The OPLA has risen to the challenge by issuing a set of updates to the initial version of the *Interim Guidance* that attempt to provide a coherent summary of the law, to reconcile inconsistencies, and to provide material that examiners may cite in support of various § 101 determinations. In response to a previous round of public comments, the OPLA issued a July 2015 Update to the *Interim Guidance* that includes “new examples that are illustrative of major themes from the comments; a comprehensive index of examples; and a discussion of selected eligibility cases from the Supreme Court and the U.S. Court of Appeals for the Federal Circuit.”

These objectives might have been limited by the discouraging fact that in the preceding 14 months since *Alice*, the Supreme Court and Federal Circuit have together identified exactly *one* patent presenting patent-eligible claims (*DDR Holdings, LLC v. Hotels.com*), while invalidating claims in a host of patents reviewed in 14 other cases. To its credit, the OPLA did not restrict the *Interim Guidance* to a compilation of such court opinions, but included material regarding unaddressed areas of § 101, such as examples of patent-eligible subject matter, and a “streamlined” analysis of patent-eligibility for subject matter that clears the § 101 hurdle by a significant margin.

The following submission is responsive to the USPTO's solicitation of public comments regarding the current state of the *Interim Guidance*, and in particular the July 2015 Update. This submission begins with observations of trends in the application of § 101 to pending and issued patents. These observations form the basis for a set of recommendations for further refinement of the *Interim Guidance* that may foster additional progress in the application of 35 U.S.C. § 101 to the case load and patent-eligibility decisions of the examining corps.

II. OBSERVATIONS ABOUT THE CURRENT APPLICATION OF 35 U.S.C. § 101

Observation #1: 35 U.S.C. § 101 challenges of issued patents are pervasive in patent review and assertion.

Patent-eligibility has become an endemic issue in patent disputes – to the extent that during the oral arguments for *Amdocs v. Openet*, Judge Plager characterized § 101 challenges as “a plague on the patent system nowadays... almost every other case comes in on a 101 basis.”

Given these conditions, it can be expected that virtually every issued patent that a patentee seeks to assert will face a § 101 challenge. Even patents that are not asserted under § 101 may be spontaneously challenged via post-grant review, *inter-partes* review, or covered business method (CBM) review. The resolution of these challenges will often include a review of the examiner’s § 101 analysis – thus placing every examiner’s decision to allow a patent in the harsh spotlight of § 101 review.

It is therefore unsurprising that § 101 rejections are similarly common at the USPTO, with some art units in Technology Center 3600 issuing § 101 rejections in over 90% of pending patent applications.

Observation #2: § 101 rejections are being over-applied for a variety of reasons.

During the mid-2000's, USPTO administration sought to promote "patent quality" by encouraging the examining corps to reduce allowance rates.¹ This policy catastrophically impacted the operation of the USPTO, as examiners were compelled (or permitted) to issue many rejections without a sufficient legal basis. In addition to incurring a heavy toll upon the backlog of the examining corps² and the PTAB³, these policies reduced USPTO employee morale, unreasonably withheld patent rights, and inflating prosecution costs. This crisis reached such an imbalance that even examiners bemoaned the public appearance of the USPTO as the "Patent Rejection Office."⁴

Director Kappos considered this crisis such a high priority that three weeks after his appointment, he issued the following statement to the examining corps (emphasis in original)⁵:

On the subject of quality, there has been speculation in the IP community that examiners are being encouraged to reject applications because a lower allowance rate equals higher quality. Let's be clear: **patent quality does not equal rejection**. In some cases this requires us to reject all the claims when no patentable subject matter has been presented. It is our duty to be candid with the applicant and protect the interests of the public. In other cases this means granting broad claims when they present allowable subject matter. In all cases it means engaging with the applicant to get to the real issues efficiently—what we all know as compact prosecution.

¹ http://www.patenthawk.com/blog/2008/03/the_quality_patent.html

² <http://patentlyo.com/patent/2014/11/uspto-backlog.html>

³ <http://www.usptotalk.com/why-does-the-ptab-still-have-a-backlog/>

⁴ <http://www.ipwatchdog.com/2009/03/16/perspective-of-an-anonymous-patent-examiner/id=2190/>

⁵ <http://patentlyo.com/jobs/2009/08/director-kappos-patent-quality-equals-granting-those-claims-the-applicant-is-entitled-to-under-our-laws.html>

Today, the USPTO faces a similar crisis in the over-application of § 101 rejections. Such over-application is apparent from recent metrics of rejection rates for various technology areas:⁶

Section 101 Rejection Rates per Month

Technology Area	Jan-15	Feb-15	Mar-15	Apr-15	May-15	Jun-15	Jul-15	Aug-15	Sep-15
Biotech									
Animals, Animal Cloning	12.6%	11.9%	0.0%	9.1%	20.5%	18.2%	14.7%	14.5%	15.3%
Antibody Engineering and Cancer Immunology	26.0%	28.4%	40.0%	22.9%	7.3%	24.3%	22.7%	28.7%	21.3%
Bacterial & Parasitic Immunology and Specific Binding Assays	18.4%	19.4%	28.6%	15.3%	9.5%	19.5%	18.9%	11.4%	17.2%
Bioinformatics	77.8%	75.0%	77.8%	80.6%	72.4%	76.5%	82.8%	77.4%	86.1%
Cellular Immunology	11.8%	14.3%	16.7%	11.6%	15.4%	15.9%	9.0%	11.1%	7.5%
Gene Expression & Combinatorial/Computational Chemistry	32.4%	32.3%	0.0%	21.5%	38.5%	31.5%	32.8%	25.3%	28.1%
Immunology, Antibodies, Neurobio	18.6%	19.3%	6.9%	12.7%	12.2%	22.4%	16.4%	14.5%	15.4%
Mol. Bio., BioInfo. Recom. Genetics.	32.3%	28.3%	37.5%	29.5%	34.5%	34.0%	32.4%	32.9%	31.8%
Ecommerce									
Business Crypto	64.4%	63.3%	69.2%	68.8%	52.1%	63.2%	77.5%	70.8%	76.1%
Business Processing	92.6%	91.3%	100.0%	95.3%	96.0%	94.9%	95.8%	92.6%	94.1%
Cost/Price, Reservations	82.2%	88.6%	80.0%	88.7%	54.5%	82.9%	93.2%	89.2%	87.6%
E-Shopping	87.4%	85.2%	62.5%	85.2%	81.0%	86.6%	92.7%	87.8%	86.9%
Finance & Banking	94.5%	93.3%	88.0%	93.1%	87.5%	95.7%	94.0%	96.5%	94.9%
Health Care	88.7%	88.0%	94.7%	85.1%	81.7%	94.2%	89.3%	93.6%	93.9%
Incentive Programs	93.8%	89.8%	88.0%	92.1%	91.2%	91.9%	91.0%	90.3%	93.2%
Operations Research	94.4%	97.3%	90.5%	93.7%	87.9%	94.5%	94.8%	93.0%	93.7%
POS, Inventory, Accounting	67.3%	73.8%	80.0%	67.3%	69.8%	69.2%	67.5%	70.5%	67.0%
Other	7.3%	6.8%	4.5%	6.8%	5.8%	13.1%	7.5%	7.1%	6.9%

While it is unsurprising that the heightened § 101 requirement of *Alice* applies more heavily to some technologies than others, it strains credulity that such large proportions of applications – nearly, and in one instance literally, reaching 100% – present “abstract ideas” and patent-ineligible subject matter. The sheer volume of such rejections contrasts with an observation from one commentator that “most useful inventions are patent-eligible, and the abstract idea and other judicial exceptions are just what the name implies, *exceptions*.”⁷

⁶ <http://www.bilskiblog.com/blog/2015/10/update-on-uspto-e-commerce-patent-applications.html>

⁷ <http://www.ipintelligencereport.com/2015/03/23/uspto-urged-to-revise-interim-%C2%A7101-guidance-to-require-examiners-to-present-a-proper-prima-facie-case-supported-by-factual-evidence/> (emphasis in original)

Three distinct factors may promote the over-application of § 101:

1) As a discretionary mechanism to reject patent applications.

Some examiners seem uninterested in fairly considering *any* argument or approach to satisfying the § 101 requirement. These examiners are using § 101 as a discretionary tactic to flush undesirable applications, and assert their confidence that such rejections will be granted ample deference and little review – a position which is supported by the previously noted PTAB statistics.⁸

2) To defer § 101 analysis until the end of examination.

Many examiners are issuing *pro-forma* § 101 rejections without much effort, strictly to preserve the basis of rejection throughout examination while the examiner and applicant dutifully work through the other issues, such as novelty, non-obviousness, indefiniteness, restriction requirements and statutory class issues. Even at the conclusion of these issues, such examiners may be reluctant to express a positive opinion under § 101, and may encourage the applicant to negotiate the issue either with the examiner's supervisor or with the PTAB.

On the one hand, this approach is rational in the short term given the volatility of § 101, with new decisions issuing from the courts each week that add new wrinkles to the issue of patent-eligibility. It is inefficient for the examiner and applicant to work through the issue early in examination, thereby creating prosecution history estoppel, only to have to revisit the issue every time the standard changes. Moreover, Director Kappos has observed that such arguments are frequently moot:⁹

I have found that when claims are refined to distinguish over the prior art, recite definite boundaries, and be fully enabled based on a complete written description, they do not usually encounter issues of eligibility based on reciting mere abstract ideas or broad fundamental concept.

⁸ <http://www.ipwatchdog.com/2015/09/27/ptab-wonderland-statistics-alice-ptab-interpretation/id=61902/>

⁹ http://www.uspto.gov/blog/director/entry/some_thoughts_on_patentability

On the other hand, this approach presents a long-term inefficiency, in the form of cases receiving a non-traversable rejection under § 101 only after the examiner and applicant have diligently worked to resolve all other issues. The doctrine of compact prosecution is centrally aimed at reducing this long-term inefficiency, and examiners' deferral of the patent-eligibility determination is a violation of this doctrine. Such cases are often relegated to the PTAB docket, incurring considerable delay and expense.

3) Complete avoidance of the § 101 determination.

Some examiners are responding to arguments for traversing § 101 with: "I just don't know, or I just can't allow these claims; you will have to take it up with my supervisor or the PTAB." These examiners appear either unwilling or prohibited from issuing a positive *Alice* analysis. They hesitate to express opinions that claimed subject matter is patent-eligible, and to incur the consequences if higher-level reviewers disagree. Accordingly, examiners choose to stand firm on an *Alice* rejection without hazarding an analysis or statement, and to urge the applicant to file an appeal to push the responsibility of the § 101 determination to the examiner's supervisor or the PTAB.

Examiners' reluctance to assert positive patent-eligibility decisions further manifests in the manner that examiners address cases with allowable subject matter. Where a § 101 rejection is successfully traversed, or when an application is allowed that does not present a significant § 101 issue, an affirmative statement of the patent-eligibility of the subject matter and claims may provide a clear and detailed record of the examiner's opinion. Instead, some examiners withdraw the former rejection without further explanation, and do not address the issue in the Notice of Allowance.

These three circumstances contribute to the over-application of § 101 rejections throughout the examining corps, as demonstrated by the metrics above. Such over-application inflicts various forms of damage upon the patent system: inefficiency, inflated prosecution costs, and the unfair delay or withholding of patent rights for otherwise worthwhile inventions.

Observation #3: § 101 rejection boilerplate templates have unreasonably proliferated.

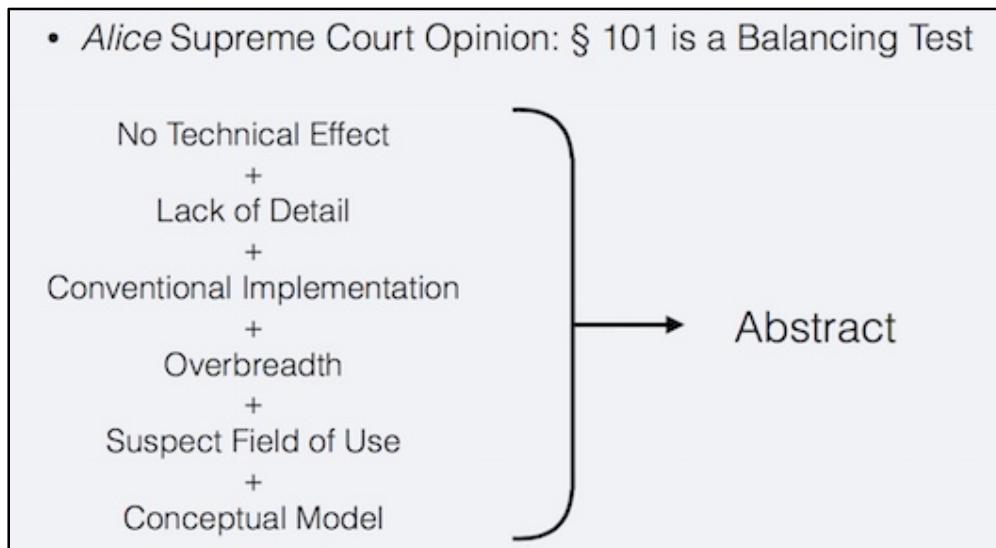
A typical § 103 obviousness rejection follows a consistent pattern: it sets forth the standard of law; it identifies the combination of references; it correlates specific claim elements with specific prior art passages; and it sets forth a *KSR*-style statement about why the references can be combined. This pattern has been developed to use boilerplate as only a framework for the substantive analysis, which can be easily parsed and evaluated.

By contrast, every *Alice* rejection looks different from every other *Alice* rejection – even though all of these rejections present the same argument. **Appendix A** of this document provides a survey of ten recent office actions, which reveals *ten different variants* of the language used by examiners to articulate a § 101 rejection.

There is no possible purpose served by having dozens of different restatements of the same basic argument. In addition to the inefficiency of redundant development, this proliferation of *Alice* rejection templates results in inaccuracies; *e.g.*, some § 101 templates misstate the principles of the cited cases, or assert outdated legal standards (“machine-or-transformation,” as per *Bilski* circa 2007; or even “insignificant post-solution activity,” as per *Freeman-Walter-Abele*). This variance unnecessarily complicates the applicant’s analysis of the basis of rejection, and unnecessarily expands the number of issues that both the examiner and applicant must address.

Observation #4: § 101 rejections are entirely boilerplate, lacking case-specific analysis.

In the *Alice* decision, the Supreme Court looked at the invention and claims from a variety of perspectives, reached a conclusion based upon the totality of many such observations, and presented *eleven pages* of case-specific technical explanation as to why the invention and claims under review were patent-ineligible:



By contrast, the examples of *Alice* rejection templates provided in **Appendix A** reveal that many such rejections are *almost entirely* boilerplate that is neither written for, nor specific to, the invention or claims under review. The typical *Alice* rejection template reiterates the framework provided in the *Interim Guidance*, cites selected excerpts of *Alice* in a generic and acontextual manner, inserts a copy or summary of the claims into a template slot, and states an end conclusion, in the following manner:

The claims are rejected under 35 U.S.C. § 101 because they are drawn to an abstract idea.

The claim(s) recite ___**claim language**___. These idea(s) is/are not patent-eligible because such claim(s) recite a law of nature, natural phenomenon, and/or an abstract idea.

The remaining claim elements, ___**claim language**___, are purely conventional and do not add “significantly more” to the abstract idea.

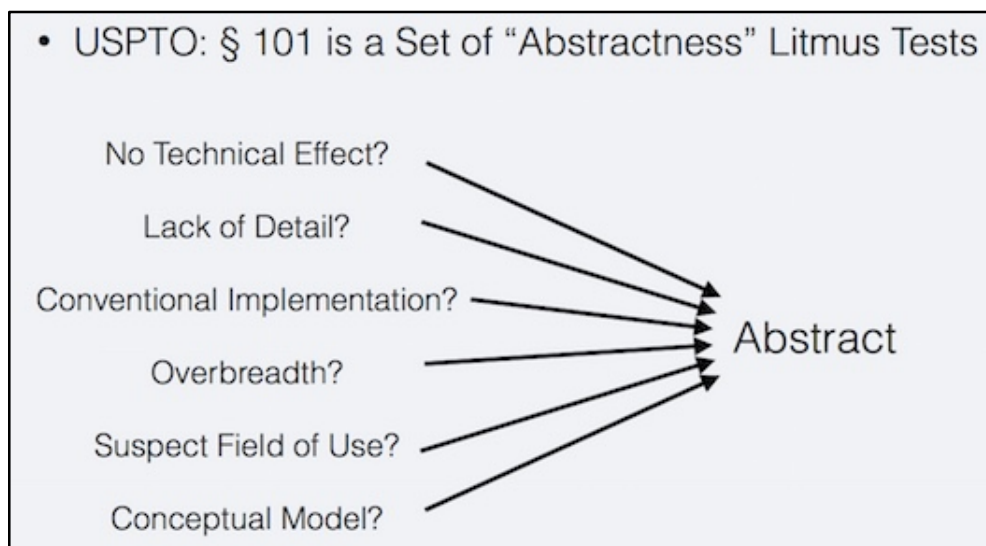
For these reasons, the claims are rejected under 35 U.S.C. § 101.

These examples reduce the extensive review that the Supreme Court conducted in *Alice* to a copy-and-paste exercise – the functional equivalent of a single checkbox:

The claims are:

- patent-eligible under § 101, or
- patent-ineligible under § 101 (*see Alice Corp. v. CLS Bank*).

Moreover, the examiners' citation of *Alice* constitutes a misuse of such material. Rather than conducting a thorough review in the manner of a balancing-test, examiners are using selected excerpts in the manner of a "litmus test":



The failure of examiners to articulate any meaningful or case-specific analysis of the critical question of patent-eligibility cannot be the intent of the Supreme Court's *Alice* opinion. The Court sought to promote a deep reflection over the claimed subject matter and the principles of patent-eligibility, not the pasting of claim language into a boilerplate template with no specific relationship to the subject matter.

Observation #5: Generic § 101 rejections apply to two distinct scenarios: ineligible subject matter and inadequate claiming.

Behind the generic *Alice* rejection, the examiner may have one of two distinct rationales in mind:

1. The disclosed invention is abstract. The subject matter is entirely within a non-technical field (e.g.: financial transactions, risk hedging, or methods of playing games); or, the invention has no “technical effect” (e.g.: *Planet Bingo, LLC v. VKGS, LLC*, and *DietGoal Innovations, LLC v. Bravo Media LLC*). Nothing can be done to salvage the disclosed invention from a 101 rejection.
2. The claim language is insufficient to satisfy 101. The claim language is either too superficial, or too mathematical, or not adequately focused on the technical functionality and “technical effect.” New claims or claim amendments may call out the invention in a manner that satisfies 101.

Despite these two distinct positions, it is difficult to discern which position the examiner is adopting in a typical, boilerplate-only § 101 rejection. In many cases, this determination is only possible through an examiner interview.

This lack of relevant information is a recurring problem with the current format of office actions.¹⁰ While interviews are generally effective for clarifying the examiner’s actual rationale, it would be more efficient for examiners to state such rationale in the text of the office action. Addressing this deficiency in the context of § 101 rejections may enable further progress in addressing similar issues in other areas of patent examination.

¹⁰ <http://www.usptotalk.com/rejection-behind-office-action/>

Observation #6: Many examiners are advising applicants to model their claims and arguments upon the patent-eligible examples presented in the *Interim Guidance*.

Of all the material provided in the *Interim Guidance* to date – indices of relevant court cases and dicta; detailed explanations of legal theory; and numerous lists of relevant factors for each step of the flowchart – the most accessible, determinative, and reliable material for examiners appears to be the examples of patent-eligible and patent-ineligible subject matter and claims. Examiners seem more comfortable stating: “the claimed invention resembles example (X) of the *Interim Guidance*, and therefore meets with the same determination under § 101” than “my detailed analysis of § 101 for this application leads me to the following conclusion.”

Accordingly, examiners are routinely advising applicants to select one of the “approved” examples from the *Interim Guidance*; to draft claims that resemble the approved hypothetical claims; and to present “technical effect” arguments that echo the USPTO’s analysis of the example.

Before the July 2015 Update to the *Interim Guidance*, such examples of patent-eligible subject matter were limited in number. The original *Interim Guidance* listed six such cases¹¹ - many limited to specialized circumstances or unusual types of inventions, and only one of which followed, and therefore applied, the *Alice* decision. A January 2015 Update to the *Interim Guidance* discussed these cases in more detail, but only modestly extended the material on which examiners and applicants could rely.

By contrast, the July 2015 Update provided a significant expansion of the examples of patent-eligible subject matter, with Appendix A providing four new examples of patent-eligible subject matter and claims. Moreover, the examples were more fundamental and less specialized than those previously cited, and the analysis provided with each example asserted an expansive scope. Examiners have responded accordingly, and routinely recommend that applicants utilize this material as a model for claims and arguments for patent-eligible subject matter.

¹¹ *Diamond v. Diehr*; *Diamond v. Chakrabarty*; *AMP v. Myriad*; *SiRF Tech v. ITC*; *Research Corp. Tech. v. Microsoft Corp.*; and *DDR Holdings v. Hotels.com*.

Observation #7: The Patent Trial and Appeal Board is exacerbating § 101 issues, and is systematically failing to contribute to the stabilization of § 101 application.

A recent IP Watchdog article demonstrated that of 140 recent decisions, the PTAB had found patent-eligible claims in only 8 decisions (6% of cases under review), and had upheld a § 101 rejection – or introduced a new § 101 rejection *sua sponte* – in 61 cases (44% of cases under review).¹² Also, in 69 cases (50% of cases under review), the examiner had not issued a § 101 rejection, and the PTAB instructed the examiner to consider and issue a § 101 determination. These metrics demonstrate that the PTAB is *creating* more § 101 issues than it is *resolving*: applications are more likely to face a new § 101 issue following the PTAB decision than to have an existing § 101 issue resolved.

Moreover, the PTAB has demonstrated a systemic failure to produce *any* reliable determinations. A recent IP Watchdog article¹³ notes that out of 20,631 PTAB decisions on *ex-parte* appeals issued in 2013-2014, only 7 decisions – approximately 0.04% of the work product of the PTAB – were designated either “precedential” or “informative.”

The magnitude of the lost opportunity of the PTAB to contribute to the USPTO’s efforts to stabilize § 101 analysis is reflected in the following observation. According to the PTAB’s annual production reports, in the nine months following *Alice*, the PTAB disposed of 8,116 *ex-parte* appeals¹⁴ – yet, the *Interim Guidance* references not even one PTAB decision in its identification of patent-eligible subject matter examples.

This pattern reflects the attitudes of the Supreme Court and the Federal Circuit – which, to date, have identified only one patent featuring patent-eligible claims.¹⁵ The refusal of the high courts to lead on this issue has infected the USPTO, and particularly the PTAB, with this culture of invalidity – conveying the impression that the patent-eligibility of any claimed subject matter is at best speculative, and at worst a mirage.

¹² <http://www.ipwatchdog.com/2015/09/27/ptab-wonderland-statistics-alice-ptab-interpretation/id=61902/>

¹³ <http://www.ipwatchdog.com/2015/09/27/only-1-in-20631-ex-parte-appeals-designated-precedential-by-ptab/id=61999/>

¹⁴ <http://www.uspto.gov/patents-application-process/appealing-patent-decisions/statistics/ptabpai-statistics-archive-page>

¹⁵ *DDR Holdings, LLC v. Hotels.com*.

III. PROPOSALS FOR FURTHER REFINEMENT OF THE *INTERIM GUIDANCE ON PATENT SUBJECT MATTER ELIGIBILITY*

The following suggestions for further refinement of the *Interim Guidance* are respectfully submitted in view of the observations noted above.

Recommendation #1: Require a § 101 analysis on the record in every application.

As noted above, § 101 challenges are routine and expected in patent enforcement. Because every issued patent faces the prospect of a patent-eligibility challenge, it is advisable that every application and patent should feature an explicit patent-eligibility determination and analysis.

This determination should be both case-specific (utilizing boilerplate language only as a framework for the analysis of the particular case under review) and detailed (a consideration of the claimed invention from a variety of angles, in the manner of the Supreme Court *Alice* decision).

Furthermore, examiners should acknowledge the successful traversal of a § 101 rejection with an affirmative statement of patent-eligibility. Cases that clear the § 101 determination by a wide margin should also include a positive statement of the examiner's patent-eligibility conclusion, and may utilize the "streamlined" analysis provided in the *Interim Guidance*.

This requirement will provide the following benefits:

- Patentees who face a patent-eligibility challenge during an infringement trial or *inter-partes* review can cite the explicit and detailed statement of the examiner that supports and informs the conclusion of patent-eligibility.
- Applicants facing a § 101 rejection will have a clear statement from the examiner that can be reviewed for technical accuracy, legal sufficiency, and persuasiveness.
- The collective output of patent-eligibility determinations by the USPTO examining corps will be amenable to analysis to identify patterns and trends in the application of § 101.

Recommendation #2: Require examiners to express opinions about patent-eligibility, and to work proactively with the applicant to resolve § 101 issues.

As previously noted, § 101 rejections are being over-applied for various reasons: as a discretionary rejection mechanism; to defer patent-eligibility determinations until other issues are resolved; or to push the § 101 issue up to the supervisor and/or PTAB.

USPTO administration must act to reverse the cultural skew that favors § 101 rejections and discourages positive statements of patent-eligibility. This message should be conveyed through both the *Interim Guidance* and the administration's general cultivation of examining corps culture, as follows:

- 1) Examiners should be encouraged to express opinions and honest conclusions about § 101. Supervisors should not set goals or quotas for allowance or rejection rates, but should instead review examiners' rationale on a case-by-case basis.
- 2) Abuses of § 101 examination practice should be discouraged, and eventually identified and penalized as an examination error. Such abuses include: rejections that are completely generic and lacking in analysis; rejections that mischaracterize the technology; and the routine over-application (such as a near-100% rejection rate) or under-application (such as a near-0% rejection rate in a technology area that may frequently raise § 101 issues).
- 3) In the interest of compact prosecution, examiners should be encouraged to work proactively with the applicant to identify options for amendments that may put the claims into a form that satisfies § 101. For example, where claims present a technique only as an abstract concept but the specification provides further details about specific implementations and/or uses that satisfy § 101, the examiner should identify such subject matter as moving the application in a positive direction if amended into the claims.

Recommendation #3: Provide an abundance of examples of inventions and claims, with a detailed analysis and explanation of the outcome.

As previously noted, the most accessible and relatable material in the *Interim Guidance*, for both examiners and applicants, is the set of examples of subject matter, claims, and an accompanying § 101 analysis. The examples provided in the July 2015 Update to the *Interim Guidance* significantly widened the base of subject matter upon which examiners and applicants rely as “safe harbors” of patent-eligibility.

It is therefore advisable that, of all the subject matter that might be added to the *Interim Guidance*, the USPTO should prioritize expanding this set of examples, drawn from both case law and hypotheticals, that have general applicability to a wide range of pending applications. Ideally, the *Interim Guidance* may evolve into a significant library of examples of both patent-eligible and patent-ineligible subject matter.

It is further submitted that the USPTO should prioritize the identification of patent-eligible subject matter, claims, and analyses, as a reflection of three realities:

- (1) The courts, including the PTAB, are already providing numerous examples of determinations of patent-ineligibility, and very few examples of patent-eligibility.¹⁶ While these opinions should be dutifully reported in the *Interim Guidance*, the USPTO should allocate its efforts in the opposite proportion in the interest of balance.
- (2) Examiners face a comparatively low threshold in asserting patent-ineligibility. Such determinations are primarily based upon the examiner’s conceptual review of the claimed invention, and rarely rely upon an example of patent-ineligible subject matter. On the other hand, both examiners and applicants closely follow the provided examples of patent-eligible subject matter.
- (3) In general, it is easier to draft patent claims and specifications *toward* a patent-eligible example, than to draft such claims and specifications in a manner that *avoids* a minefield littered with patent-ineligibility examples.

¹⁶ <http://www.fenwick.com/pages/post-alice.aspx>

Recommendation #4: Organize examples into two sets of contrasting examples: subject-matter examples and claim examples.

As previously noted, examiners' rejections of claims under *Alice* typically reflect one of two determinations: either the disclosed invention is irreconcilably "abstract"; or the invention *as claimed* fails to satisfy § 101, but the disclosure provides further subject matter providing "significantly more" than the "abstract idea," such that claim amendments are available that may recover the claims from patent-ineligibility. However, the typical § 101 rejection that generically cites portions of *Alice* fails to indicate which conclusion the examiner has reached.

It is recommended that the *Interim Guidance* articulate these distinct steps as an element of the Step 2B / "Significantly More" analysis. For claims reciting an "abstract idea" without elements that provide "significantly more," the *Interim Guidance* should urge examiners to consider whether any portion of the specification that is not reflected in the independent claims may provide "significantly more" than the "abstract idea."

To reinforce this distinction, the *Interim Guidance* could organize its examples into two distinct types:

- (1) Subject matter that is "abstract" *per se*; and
- (2) Subject matter that is *not* "abstract" *per se*, but that is claimed in a manner that fails to provide patent-eligible subject matter.

It is further advisable that, as with several examples in the July 2015 Update, these examples may be presented as contrasting pairs that respectively fail and satisfy § 101, with an analysis that emphasizes a critical distinction.

Finally, the *Interim Guidance* should encourage examiners to include a clear statement in the § 101 analysis that identifies one of these two scenarios as the examiner's conclusion. Consistent with the proactive assistance advised above in the interest of compact prosecution, the latter conclusion should include an identification of particular portions of the specification, and/or dependent claims, that the examiner believes to be valid options for claim amendments that enable the independent claims to achieve patent-eligibility under § 101.

Recommendation #5: Classify technologies according to “technical effect” probability.

The July 2015 Update to the *Interim Guidance* provides an interesting option to assist with examiners’ § 101 analyses. Example 15 demonstrates the application of the “streamlined analysis” to bypass the complexity of § 101 analysis for claimed technologies that present “self-evident” patent-eligibility. This approach contrasts with areas of innovation that have been identified as problematic for § 101, such as “method of organizing human behavior” and “fundamental economic practices long prevalent in our system of commerce.”

This contrast raises an interesting and valuable opportunity to classify general areas of technology that prompt varying levels of § 101 analysis. For example:

- Some technologies may be identified as *unlikely* to raise a § 101 issue. Such technologies may include: hardware device drivers and control systems; encryption; data compression; error detection and correction; media encoding; process isolation; search techniques; and query processing.
- Some technologies may be identified as *possibly* raising a § 101 issue. Such technologies include: social interaction; targeted advertising; web services that do not pertain to technology; and product recommendations.
- Some technologies may be identified as *likely* to raise a § 101 issue. Such technologies include: financial transactions; risk hedging; contractual relationships; methods of playing games; and diagnostic techniques.

Notably, these categories are not dispositive – technologies with self-evident application may nevertheless require a § 101 rejection if claimed in a conceptual and preemptive manner; and techniques in problematic areas may nevertheless present patent-eligible technology (as demonstrated by *DDR Holdings, LLC v. Hotels.com*). Rather, these categories indicate the likely “self-evident” technical character of a technical field, and the depth of § 101 analysis that such technologies likely require.

These categories may be expanded and adjusted over time as further examples are provided by case law, and may eventually be presented as a spectrum of the “self-evident” technical character for different fields of technology.

Recommendation #6: Provide examples of boilerplate that examiners can use to provide a framework for various types of § 101 conclusions.

As previously noted, examiners' development and use of boilerplate templates to articulate § 101 rejections have given rise to a host of problems. The number and variety of such templates have inexplicably proliferated, resulting in inefficiency and unnecessary complexity with no cognizable benefit. Moreover, the reduction of § 101 analysis to a "fill-in-the-blanks"-style template enables the substitution of decontextualized court statements and subjective conclusions for case-specific analysis.

The *Interim Guidance* can address these issues by encouraging examiners to use one of a small number of boilerplate templates to express various § 101 determinations.

First, each boilerplate may articulate a specific conclusion under § 101, such as:

- The claims are patent-eligible under a streamlined analysis.
- The claims are patent-eligible because they do not present an abstract idea.
- The claims are patent-eligible because they present an abstract idea, but also provide "significantly more" than the abstract idea.
- The claims are patent-ineligible because the subject matter is *per se* abstract.
- The claims are patent-ineligible for failing to provide "significantly more" than an abstract idea, but the inclusion of additional detail (specifically identified in the office action) is likely to satisfy the requirements of § 101.

Second, each type of boilerplate must include more than a slot to paste in claim language, but rather provides a framework for the examiner's case-specific discussion of the issue – such as the "abstract idea" that the examiner believes the claims recite; the basis for characterizing additional limitations as "conventional"; and, for subject matter that is claimed in a conceptual manner and raises preemption issues, some examples of scenarios that the claims unreasonably cover that are within the claims but outside the applicant's intended field of use.

The provision of such boilerplate options in the *Interim Guidance* may both foster and compel examiners to provide extensive, case-specific commentary and analysis as the basis for their § 101 determinations.

Recommendation #7: Encourage the PTAB to identify examples of patent-eligible subject matter, and to designate such opinions as precedential or informative.

As previously noted, the Patent Trial and Appeal Board exhibits both a statistical tilt toward creating rather than resolving § 101 issues, and a refusal to identify precedential opinions. As the USPTO's most authoritative and detailed source of § 101 determinations – with an annual production of 10,000 opinions, of which 50% include a determination of § 101 patent-eligibility – the PTAB's absence from the *Interim Guidance* reflects a lost opportunity to contribute to the stabilization of § 101 law.

It is recommended that the Office of Patent Legal Administration work with the Patent Trial and Appeal Board to identify a significant number of *ex-parte* appeals that present prototypical examples of patent-eligible and patent-ineligible technologies and claim styles. The citation in the *Interim Guidance* of examples that are founded upon real applications and claims, resulting in a full legal determination, provides inherently more reliable material than hypotheticals devised solely by USPTO administration.

Going forward, the PTAB should be urged to identify select cases – such as five decisions per month – that clarify the patent-eligibility of various technology areas and claim styles, which can be periodically published in the *Federal Register* and incorporated into the *Interim Guidance*. Furthermore, the Office of Patent Legal Administration may request the PTAB to identify, and designate as precedential, *ex-parte* appeals involving issues in particular need of clarification – such as those involving technologies in the patent-eligibility “gray zone” like social networking technologies.

It is possible that the PTAB's reluctance to designate precedential decisions derives from a reluctance to expose its assertions for reversal by higher courts. However, this area of law is widely recognized as dynamic, and reversals of the PTAB can be described in the *Federal Register* as the correction of previous § 101 decisions. Moreover, by exacerbating rather than reducing the prevalence and uncertainty of § 101 issues, the PTAB fails to reduce the rate of *ex parte* appeal, and by extension the PTAB's unresolvable backlog and pendency. Participating in the stabilization of § 101 is therefore in the PTAB's best interests.

IV. CONCLUSION

This concludes my observations about the July 2015 Update to the *Interim Guidance on Patent Subject Matter Eligibility* and recommendations for further improvement in the *Interim Guidance*.

Further discussion of this topic is available at the following address:

<http://www.usptotalk.com>

Respectfully submitted,
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Appendix A:

Variance in § 101 Rejection Boilerplate Templates

This Appendix provides samples of § 101 rejections to demonstrate this variety. These examples were determined by choosing ten recent cases involving the title term “Advertising” – which yielded ten distinct formulations of this rejection.

All ten examples reach the same conclusion based upon the same general rationale. Nevertheless, each decision presents a distinct expression of these conclusions featuring a different amalgamation of excerpts from such sources as the *Alice* and *Mayo* Supreme Court opinions. Moreover, the language in each example is not specific to the invention or claims under review; other than the inclusion of claim language, the rejection provides generalized statements, such as “the invention is drawn to a fundamental business practice” and “the remaining claim elements are conventional and do not add significantly more to the abstract idea.”

Example 1 - U.S. Patent Application No. 13/891,034

The claimed invention is directed to non-statutory subject matter because the claims as a whole, considering all elements both individually and in combination, do not amount to significantly more than an abstract idea. The claims are directed to the abstract idea of advertising which is considered a fundamental economic practice. The additional elements or combination of elements in the claims other than the abstract idea per se amounts 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 previously known to the pertinent industry. Viewed as a whole, these additional claim elements do not provide meaningful limitations to transform the abstract idea into a patent eligible application of the abstract idea such that the claims amount to significantly more than the abstract idea by itself. Therefore, the claims are rejected under 35 U.S.C. § 101 as being directed to non-statutory subject matter.

Example 2 - U.S. Patent Application No. 13/938,991

Claims 1-19 are rejected under 35 U.S.C. § 101 because the claimed invention is directed to a judicial exception (i.e., a law of nature, a natural phenomenon, or an abstract idea) without significantly more. Claims 1-19 are directed to (invention) which is a fundamental economic practice used to increase sales and therefore an abstract idea. The claims do not include additional elements that are sufficient to amount to significantly more than the judicial exception because the generically recited computer elements (location engine, database, and processor) do not add a meaningful limitation to the abstract idea because they would be routine in any computer implementation.

Example 3 - U.S Patent Application No. 13/949,555

Claims 1-20 are rejected under 35 U.S.C. 101 because based upon consideration of the claims as a whole, the claims held [sic] to claim an abstract idea and there are no meaningful limitations in the claims that transform the exception into a patent eligible application such that the claims amount to significantly more than the exception itself. Therefore, the claims are rejected as ineligible subject matter under 35 U.S.C. 101. The rationale for this finding is explained below:

(insert two-page explanation of *Alice* and *Mayo*)

Under Part I, the claims are directed to the abstract idea of (invention).

Under Part II, the abstract idea has not been applied in an eligible manner and fails to provide any technical improvements. Here, the additional element(s) or combination of elements in the claims other than the abstract idea per se amount to no more than: (i) mere instructions to implement the idea on a computer, and (ii) recitation of generic computer structure that serves to perform generic computer functions that are well-understood, routine, and conventional activities previously known to the pertinent industry. Viewed as a whole, these additional claim element(s) do not provide meaningful limitation(s) to transform the abstract idea into a patent eligible application of the abstract idea such that the claim(s) amount to significantly more than the abstract idea itself. Therefore, the claim(s) are rejected under 35 U.S.C. 101 as being directed to non-statutory subject matter.

Example 4 - U.S. Patent Application No. 13/572,370

The claims are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. In the instant invention, the claims are directed towards the concept of (claim language). However, (claim language) is considered a fundamental economic practice and requiring no more than a generic computer to perform generic computer functions that are well-understood, routine and conventional activities previously known to the industry.

Therefore, the claims are drawn to comparing new and stored information and using rules to identify options that the courts have found to be abstract idea (Smart Gene v. Advanced Biological Labs) as delineated by the Interim Eligibility Guidance, and does not go significantly beyond generally linking the use of an abstract idea to a particular technological environment such as a computer implemented method of the claimed features. Thus, the claims are drawn to a patent ineligible abstract idea.

The claims do not recite limitations that are “significantly more” than the abstract idea because the claims do not recite an improvement to another technology or technical field, an improvement to the functioning of the computer itself, or meaningful limitations beyond generally linking the use of an abstract idea to a particular technological environment. it should be noted the limitations of the current claims are performed by the generically recited processor. The limitations are merely instructions to implement the abstract idea on a computer and require no more than a generic computer to perform generic computer functions that are well-understood, routine and conventional activities previously known to the industry. Therefore, the claims are directed to non-statutory subject matter.

Example 5 - U.S. Patent Application No. 14/006,076

The claims are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter because the claim(s) as a whole, considering all claim elements both individually and in combination, do not amount to significantly more than an abstract idea. The claim(s) is/are directed to the abstract idea of (invention). The additional element(s) or combination of elements in the claim(s) other than the abstract idea per se amount(s) to no more than mere instructions to implement the idea on a computer, and/or recitation of generic computer structure that serves to perform generic computer functions that are well-understood, routine, and conventional activities previously known to the pertinent industry. Viewed as a whole, these additional claim element(s) do not provide meaningful limitation(s) to transform the abstract idea into a patent eligible application of the abstract idea such that the claim(s) amounts to significantly more than the abstract idea itself. Therefore, the claim(s) are rejected under 35 U.S.C. 101 as being directed to non-statutory subject matter.

Example 6 - U.S. Patent Application No. 13/814,440

The claims are rejected under 35 U.S.C. § 101 because the claimed invention is directed to a judicial exception (i.e., a law of nature, a natural phenomenon, or an abstract idea) without significantly more.

The claims are directed towards (invention) which is considered to be an abstract idea inasmuch as such activity is considered both a method of organizing human activity a [sic] fundamental economic practice. The claims do not include additional elements that are sufficient to amount to significantly more than the judicial exception because the claims merely amount to the application or instructions to apply the abstract idea.

The elements of the process are: (claim language)

The elements of the instant process, when taken alone, each execute in a manner routinely and conventionally expected of these elements. That is, (claim language).

The elements of the instant process, when taken in combination, together do not offer substantially more than the sum of the functions of the elements when each is taken alone. That is, the elements involved in the recited process undertake their roles in performance of their activities according to their generic functionalities which are well-understood, routine and conventional. The elements together execute in routinely and conventionally accepted coordinated manners and interact with their partner elements to achieve an overall outcome which, similarly, is merely the combined and coordinated execution of generic computer functionalities which are well-understood, routine and conventional activities previously known to the industry.

The claims as a whole, do not amount to significantly more than the abstract idea itself. This is because the claims do not effect an improvement to another technology or technical field; the claims do not amount to an improvement to the functioning of the computer itself; and the claims do not move beyond a general link of the use of an abstract idea to a particular technological environment.

The claims merely amounts [sic] to the application or instructions to apply the abstract idea on a user device, and is considered to amount to nothing more than

requiring a generic computer system to merely carry out the abstract idea itself. As such, the claims, when considered as a whole, are nothing more than the instruction to implement the abstract idea in a particular, albeit well-understood, routine and conventional technological environment. Accordingly, the Examiner concludes that there are no meaningful limitations in the claims that transform the judicial exception into a patent eligible application such that the claims amount to significantly more than the judicial exception itself.

Example 7 - U.S. Patent Application No. 14/063,546

The claims are rejected under 35 U.S.C. 101 because the claimed invention is directed to a judicial exception (i.e., a law of nature, a natural phenomenon, or an abstract idea) without significantly more. The Claims are directed to an abstract idea without significantly more. Note the illustrative and not limiting examples of abstract ideas within the “Federal Register Notice: 2014 Interim Guidance on Patent Subject Matter Eligibility” (link provided below): “Mitigating settlement risk; heading; creating a contractual relationship; using advertising as an exchange or currency; processing information through a clearinghouse; comparing new and stored information and using rules to identify options; using categories to organize, store and transmit information; organizing information through mathematical correlations; managing a game of bingo; the Arrhenius equation for calculating the cure time of rubber; a formula for updating alarm limits; a mathematical formula relating to standing wave phenomena; and a mathematical procedure for converting one form of numerical representation to another”.

These claims are directed to the abstract idea of (invention). This is similar to the abstract idea example of: using advertising as an exchange or currency; processing information through a clearinghouse; comparing new and stored information and using rules to identify options; using categories to organize, store and transmit information. The claim(s) does/do not include additional elements that are sufficient to amount to significantly more than the judicial exception because the additional elements are: (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 previously known to the pertinent industry. Viewed as a whole, these additional claim element(s) do not provide meaningful limitation(s) to transform the abstract idea into a patent eligible application of the abstract idea such that the claim(s) amounts to significantly more than the abstract idea itself. Thus, the claim(s) are rejected under 35 U.S.C. 101 as being directed to non-statutory subject matter.

Please see the 35 U.S.C. 101 section at the Examination Guidance and Training Materials page on the USPTO.gov website. Particularly note the Federal Register Notice: 2014 Interim Guidance on Patent Subject Matter Eligibility, the Abstract Idea Examples, and the Training Slides (February 2015). The information is available at this webpage: (url).

Example 8 - U.S. Patent Application No. 14/129,344

Claim 1 is directed to the abstract idea of (claim language). The courts have noted that “comparing new and stored information and using rules to identify options” (*SmartGene*) is an example of a judicial exception. The claims disclose [sic] a comparable judicial exception such as (claim language). The steps of (claim language) are all steps that describe the abstract idea.

The claims do not include additional elements that are sufficient to amount to significantly more than the judicial exception because the abstract idea has not been applied in an eligible manner. There is no improvement to another technology or technical field, no improvements to the functioning of the computer itself, and no meaningful limitations beyond generally linking the use of an abstract idea to a particular technical environment. Furthermore, the steps or acts performed (claim language) in independent method claim 1 are not enough to qualify as “significantly more” than the abstract idea itself. The claims are a method of gathering, analyzing, and selecting data and require no more than a general purpose computer or computer system to perform generic computer functions that are well-understood, routine and conventional. Therefore, based on the two-part *Mayo* analysis, there are no meaningful limitations in the claims that transform the exception into a patent eligible application such that the claims amount to significantly more than the exception itself. Thus the claims are rejected as ineligible subject matter under 35 U.S.C. 101.

Alice Corp. also establishes that the same analysis should be used for all categories of claims (e.g., product and process claims). Therefore, independent product claims 1 and 15 are also rejected as ineligible subject matter under 35 U.S.C. 101 for substantially the same reasons as the method claims. The components (i.e. memory, modules, etc.) described in the independent product claims add nothing of substance to the underlying abstract idea. At best, the systems recited in the claims are merely providing an environment in which to carry out the abstract idea.

The dependent claims are also rejected as ineligible subject matter under 35 U.S.C. 101 based on a rationale similar to the claims from which they depend.

Example 9 - U.S. Patent Application No. 13/844,982

The claimed invention is not directed to patent eligible subject matter. Based upon consideration of all of the relevant factors with respect to the claim as a whole, claim(s) 1-20 are determined to be directed to an abstract idea. The rationale for this determination is explained below:

In the instant case, the claims are directed towards (claim language), which is an abstract idea. In addition, (claim language) is considered targeted advertising. Targeted advertising is a fundamental economic practice, which is an abstract idea. Further, (claim language) involves determining a sum. A sum is a mathematical procedure and the disclosed process is a mathematical procedure for converting one form of numerical representation to another. This has also been classified as an abstract idea. Similar claims directed to using categories to organize, store and transmit information in *Cyberfone v. CNN* have all been found by the courts to be abstract ideas. Further several additional court decisions have identified fundamental economic practices as ideas as well (*Alice, Bilski, BuySAFE and Ultramercial*).

The claims do not include additional elements that are sufficient to amount to “significantly more” than the abstract idea because the only additional features in the claims include generic recitations of the hardware component ‘a processor’ that is used to send, receive and manipulate data which are well-understood, routine and conventional activities previously known to the industry and are not disclosed as a separate technology improved by the invention, but rather technology that facilitates the claimed judicial exceptions. The generically recited hardware element does not add meaningful limitations beyond generally linking the use of an abstract idea to a particular technological environment. Because the claims are directed to judicial exceptions and nothing significantly more, the claims are directed to subject matter that is ineligible for patent protection.

Example 10 - U.S. Patent Application No. 13/693,470

The claims is/are rejected under 35 U.S.C. 101 because the claimed invention is directed to a judicial exception (i.e., a law of nature, a natural phenomenon, or an abstract idea) without significantly more. Examples of abstract ideas are fundamental economic practices, certain methods of organizing human activities, an idea itself, and mathematical relationships/formulations. The claims is/are directed to the abstract idea of (claim language). Such as in *Digitech* which employs mathematical algorithms to manipulate existing information to generate additional information, the claimed concept is directed towards (claim language). The courts have found the concept of comparing information regarding a sample or test subject to a control or target data abstract (see page 5 of the *July 2015 Update: Subject Matter Eligibility*). The claim(s) does/do not include additional elements that are sufficient to amount to significantly more than the judicial exception because the steps require no more than a generic computer. The functions of the computer are no more than that which the courts have rejected as well-understood, routine and conventional such as “receiving, processing, and storing data” and “receiving or transmitting data over a network”. The claim’s use of “mobile device” and wireless access point device” adds no inventive concept. These devices are being used to create a computer network environment to perform a well-known practice from the pre-internet world. This concept is not “necessarily rooted in computer technology in order to overcome a problem specifically arising in the realm of computer networks” (see *DDR Holdings, LLC vs. Hotels.com et al.* (Fed. Cir. 214)). A computer that “receives and sends information over a network – with no further specification – is not even arguably inventive” (see *Buysafe Inc. vs Google Inc.* (Fed. Cir. 2014)). Additionally, the claimed functions of the generic computer represent insignificant data-gathering steps and thus add nothing of practical significance to the abstract idea (see *Ultramercial Inc. vs. Hulu LLC* (Fed. Cir. 2014)). The additional element(s) or combination of elements in the claim(s) other than the abstract idea per se amount(s) to no more than mere instructions to implement the idea on a computer, and/or recitation of generic computer structure that serves to perform generic

computer functions that are well-understood, routine, and conventional activities previously known to the pertinent industry. Viewed as a whole, these additional claim element(s) do not provide meaningful limitation(s) to transform the abstract idea into a patent eligible application of the abstract idea such that the claim(s) amount to significantly more than the abstract idea itself. Therefore, the claims are rejected under 35 U.S.C. 101 as being directed to non-statutory subject matter.