



July 31, 2014

Sent via Electronic Mail (alice_2014@uspto.gov)

Attn: Margaret A. Focarino (Commissioner for Patents)
Mail Stop Comments – Patents
United States Patent and Trademark Office
P.O. Box 1450
Alexandra, VA 22313–1450

Re: Comments on Preliminary Examination Instructions in view of the Supreme Court Decision in *Alice Corporation Pty. Ltd. v. CLS Bank International, et al.*

Dear Ms. Focarino,

Thank you for the opportunity to submit comments on the USPTO's *Preliminary Instructions for Analyzing Claims with Abstract Ideas* ("the Preliminary Instructions").

Trading Technologies International, Inc. (hereafter, "TT") is a software company headquartered in Chicago. Since opening in the mid-90's, TT now employs over 400 employees throughout the world, the majority in the U.S. TT develops high-performance trading software for derivatives professionals, including the world's premier investment banks, proprietary traders, brokers, Futures Commission Merchants (FCMs), hedge funds and other trading institutions.

TT spends millions of dollars each year on research and development of new products and services and relies on its patent portfolio to protect those investments. Accordingly, TT has a strong interest in ensuring that the rules of the U.S. Patent & Trademark Office ("PTO") are interpreted correctly.

The following comments include three main sections:

- I. Suggested Clarifications for the Proposed Guidelines;
 - a. Clarify the term "directed to" in Part 1 of the Analysis
 - b. Clarify the list of examples in Part 1 of the Analysis
 - c. Require Factual Evidence of the Abstract Idea
 - d. Explain what is "significantly more" for purposes of Part 2
- II. Consideration of Multiple Examples

I. Suggested Clarifications for the Preliminary Instructions

a) Clarify the Term “directed to” in Part 1 of the Analysis

While we recognize that the Supreme Court in *Alice* used the term “directed to” in describing the analysis under the *Mayo* framework, and that the Preliminary Instructions similarly incorporate this term, we strongly recommend that further guidance be provided for what is meant by “directed to.” Without such guidance, there will be inconsistent application of the framework and contradictory results. For instance, some examiners may interpret this as merely “related to” or “involving”, which would have an over-encompassing reach and be contrary to the Court’s intent. This would have devastating results for software patents in general because, as the Supreme Court and the PTO have acknowledged, all claims are related to or include an abstract idea at some level. By way of example, a claim that is “related to” hedging risk is significantly different than a claim that is attempting to foreclose or claim all uses of hedging risk as was the case in *Bilski*. Likewise, a claim that is “related to” intermediated risk settlement is significantly different than a claim that is attempting to foreclose or claim all uses of intermediated risk settlement as was the case in *Alice*.

We note that the Court in *Alice* also used other terms such as “drawn to”¹ and “claimed”² in describing the first part of the inquiry under the *Mayo* framework. These terms clarify that “directed to”, as used by the Court, has a narrow interpretation and this should be reflected in the analysis.

i) *The Preliminary Instructions Fail to Address the Court’s Core “Concern” of Pre-emption*

In the opening section of the Court’s analysis in *Alice*, Justice Thomas “described the concern that drives this exclusionary principle as one of **pre-emption**.” (emphasis added).³ Part and parcel with this, the Court stated that “[t]he abstract ideas category embodies the longstanding rule that ‘[a]n idea of itself is not patentable’” (citing *Benson*) and noted that the claim at issue in *Benson* “was in practical effect ... a patent on the algorithm itself.”⁴ The Court stated that “[l]aws of nature, natural phenomena, and abstract ideas are ‘the basic tools of scientific and technological work’” (internal quotations reduced) and that the Court has “repeatedly emphasized this . . . concern that patent law not inhibit further discovery by improperly tying up the future use of” these building blocks of human ingenuity.⁵ In clarifying further, the Court then stated that “in applying the §101 exception, we must distinguish between patents that **claim** the “‘buildin[g] block[s]’” of human ingenuity and those that integrate the building blocks into something more ..., thereby “transform[ing]” them into a patent-eligible invention.”⁶ (emphasis added, internal citations omitted). According to the Court, the former “risk disproportionately tying up the use of the underling ideas” and are ineligible while the latter “pose no comparable risk of pre-emption” and therefore remain eligible.⁷

¹ See, e.g., *Alice Corp. Pty. Ltd. v. CLS Bank Int’l et al.*, 573 U.S. ____ (2014) (slip op. at 1 & 7-9).

² See, e.g., *id.* (slip op., at 8 & 11).

³ *Id.* (slip op., at 5); *Bilski v. Kappos*, 130 S. Ct. 3223, 3231 (2010) (upholding the patent “would pre-empt use of this approach in all fields, and would effectively grant a monopoly over an abstract idea.”).

⁴ *Alice, supra*, at ____ (slip op. at 7-8).

⁵ *Alice, supra*, at ____ (slip op. at 6).

⁶ *Id.*

⁷ *Id.*

The Preliminary Instructions are devoid of any discussion of the central, motivational role that pre-emption analysis plays in the *Mayo* framework or even an indication that such analysis should be given weight.

ii) Modifications to Part 1 to Address the Court’s Core “Concern” of Pre-emption

Part 1 of the two-part analysis in the Preliminary Instructions should specifically mention pre-emption and its central role in the analysis. Namely, Part 1 should be modified as follows:

Part 1: Determine whether the claim is directed to no more than (that is, pre-empts or claims) an abstract idea of itself.

As emphasized in *Alice Corp.*, abstract ideas are excluded from eligibility based on a concern that monopolization of the basic tools of scientific and technological work might impede innovation more than it would promote it. At the same time, the courts have tread carefully in construing this exclusion because, at some level, all inventions embody, use, reflect, rest upon or apply abstract ideas and the other exceptions. The concern that drives this exclusionary principle is one of pre-emption. Thus, when analyzing whether a claim is directed to no more than an abstract idea, the main question is whether the claim on its face recites, in practical effect, no more than an abstract idea (and thereby in practical effect pre-empts the abstract idea). The words “in practical effect” permit an Examiner to acknowledge that elements that merely implement the abstract idea in a known way do not preclude preemption. Accordingly, Part 1 requires (a) first identifying the abstract idea and (b) then determining if the claim, as a whole, appears to in practical effect pre-empt (that is, forecloses or nearly forecloses) the abstract idea. Thus, an invention is not rendered ineligible simply because it involves an abstract concept. In fact, inventions that integrate the building blocks of human ingenuity into something more by applying the abstract idea in a meaningful way are eligible. It is not enough that the claim merely relates to or includes an abstract idea. In accordance with Supreme Court guidance, the analysis in Part 1 must show that the claim is reciting no more than the abstract idea itself.

It is also very important to note that both technical and what some may argue to be non-technical claim elements are sufficient to cause a claim to claim more than an abstract idea, and therefore pass muster under Part 1. For example, the presence of a non-generic, non-conventional computing element would cause a claim to not fail under Part 1. But, equally important, so would an element that provides an additional step in an economic practice so as to make the claim recite more than a fundamental economic practice. An example is provided below under “Matching,” with an additional step of matching pursuant to a pro-rata algorithm. Some would argue such steps are not technical. We acknowledge that some entities may argue for a test that would diminish if not ignore the import of such claim elements. We submit that such a test is clearly contrary to controlling Supreme Court and Federal Circuit precedent. In *Bilski* and *Alice*, the Supreme Court, consistent with the Federal Circuit, has made very clear that there is not “business method” exclusion – this was a position adopted by only a

minority of the Supreme Court. Those who propose tests that do not require the Examiner to look at what could be characterized as non-technical or business method steps in determining whether a claim recites no more than an abstract idea, are in reality proposing a tests that will improperly exclude “business method” patents.

A fundamental requirement of this approach is a clear and supported articulation of what, specifically, the relevant abstract idea is. Until the abstract idea at issue has been identified, no meaningful analysis can occur. These modifications will align Part 1 of the two-part analysis with the Supreme Court’s intention. We recognize that, under this clarified form of Part 1, most claims will pass muster and not need to be considered further under Part 2, correctly identifying them as eligible subject matter under Section 101. We submit that this result makes clear that the two-part analysis should be narrowly drawn to only a small number of cases – as was the intent of the Court – consistent with sound policy and congressional intent.

Providing a broad test in which Part 1 could be satisfied merely by claims that “involve,” “relate to,” or “include” an abstract idea would conflict with Supreme Court precedent, cause Part 1 to ensnare far too many patents and possibly make Part 1 a nullity. As acknowledged by the *Alice* court:

At the same time, we tread carefully in construing this exclusionary principle lest it swallow all of patent law. *Mayo*, 566 U. S., at ___ (slip op., at 2). At some level, “all inventions . . . embody, use, reflect, rest upon, or apply laws of nature, natural phenomena, or abstract ideas.” *Id.*, at ___ (slip op., at 2). Thus, an invention is not rendered ineligible for patent simply because it involves an abstract concept. *See Diamond v. Diehr*, 450 U. S. 175, 187 (1981).⁸

We believe the approach that we suggest and outline above is clearly supported by and the most in line with the policy considerations given weight at the Supreme Court.

iii) Policy Considerations Supporting Suggested Modifications

Section 101, by its plain language, reflects a consistent congressional policy to define patent-eligible subject matter in an expansive and permissive manner, not only to encourage innovations in traditional and established industries, but also to foster the creation and development of technologies and fields of endeavor that can scarcely be imagined today. Given that the legislative branch has chosen, in the faithful exercise of its constitutionally assigned authority, to broadly define eligible subject matter, it is critical that any effort by the judicial branch to place limits on such subject matter be carefully circumscribed, to ensure that Congress’s legislative power is not encroached upon and its legislative purposes are not frustrated. The historically recognized judicial exceptions to patent eligibility, therefore, must be narrowly construed and should be applied only in the clearest of cases.

⁸ *Id.*

The Supreme Court has repeatedly observed that Section 101 represents a “broad”⁹ and “expansive”¹⁰ definition of patent-eligible subject matter. Thus, in *Bilski*, the Court reaffirmed that “[i]n choosing such expansive terms . . . modified by the comprehensive ‘any,’ Congress plainly contemplated that the patent laws would be given wide scope.”¹¹ (emphasis added).

The relevant statutory history confirms that Congress has consistently legislated to the boundaries of its constitutional authority to “promote the Progress of Science and useful Arts.” The precursor to the current version of Section 101 was enacted as part of the Patent Act of 1793, which broadly defined patent-eligible subject matter to include “any new and useful art, machine, manufacture, or composition of matter, or any new and useful improvement [thereof].”¹² That statute “embodied [Thomas] Jefferson’s philosophy that ingenuity should receive a liberal encouragement.”¹³ *Id.* (citation and quotation marks omitted).

As the Supreme Court has emphasized, “[t]he subject matter provisions of the patent law have been cast in broad terms to fulfill the constitutional and statutory goal of promoting ‘the Progress of Science and the useful Arts,’ with all that means for the social and economic benefits envisioned by Jefferson.”¹⁴ Section 101 is thus “a dynamic provision designed to encompass new and unforeseen inventions.”¹⁵ (“Congress employed broad general language in drafting § 101 precisely because such inventions are often unforeseeable.”).

If that constitutional line is to be respected, it is essential that the judicial exceptions to Section 101’s intentionally expansive language be construed narrowly and applied only in the clearest cases. In both *Bilski* and *Alice*, the Court has made clear that the main concern is pre-emption of a fundamental economic practice. The Instructions should make this analysis clear.

b) Clarify the List of Examples in Part 1 of the Analysis

The Preliminary Instructions list four examples of abstract ideas. However, based on the Court’s analysis in *Bilski* and *Alice*, two of these are misplaced and should be removed and the other two should be further clarified. We suggest the following modifications, each of which will be explained in more detail below. As a preliminary matter, we note that the Supreme Court has only ever identified two kinds of abstract ideas (i.e., fundamental economic practices and mathematical relationships/formulas) and we caution the Office from expanding an exception that is to be narrowly construed beyond these specific examples. In applying the §101 exception, this Court must distinguish patents that claim the basic

⁹ See *Bilski*, at 3225; *J.E.M. AG Supply, Inc. v. Pioneer Hi-Bred Int’l, Inc.*, 534 U.S. 124, 131 (2001); *Diamond v. Chakrabarty*, 447 U.S. 303, 308 (1980).

¹⁰ *Chakrabarty*, at 308.

¹¹ *Bilski*, at 3225 (citations omitted)

¹² See *Chakrabarty*, at 308.

¹³ *Id.*

¹⁴ *Id.* at 315.

¹⁵ *J.E.M.*, at 135; see also *Chakrabarty*, at 316.

“building blocks of human ingenuity”, which are ineligible for patent protection, from those that integrate the building blocks into something more.¹⁶

The Preliminary Instructions listed four examples. We suggest the following clarifications and modifications to that list:

Examples of abstract ideas referenced in *Alice Corp.* include:

- Fundamental economic practices; and
- ~~Certain methods of organizing human activities;~~
- “[A]n idea of itself;” and
- ~~Mathematical relationships/formulas~~ Mathematical expressions of truths or Pure Mathematical Laws or Axioms.

i) Clarify the Term “Fundamental economic practices”

The fundamental economic practices recognized by the Court are those that are on par with a “truth” – a fundamental economic concept, theory, principle, or axiom. Fundamental economic practices include only the types of things that have been established for a very long time and would be, for example, a bullet point at the beginning of a chapter of an economics text book. This is a high bar and it should be made clear that very few concepts qualify – only those things which are capable of instant, unquestionable demonstration as being fundamental economic practices.

The fundamental economic practices that have been identified are “hedging” and “intermediated risk settlement.” It would be against the Court’s guidance to unnecessarily expand “fundamental economic practices” to all economic practices or to other activity that attorneys could characterize as fundamental practices. For example, the Court did not intend for “fundamental economic practices” to extend to things such as “providing healthcare,” “playing a game,” or “processing data,” for example. As set forth above, the exclusion is not intended to extend to “business method” claims.

ii) Strike the Term “Certain methods of organizing human activity”

The Preliminary Instructions list “Certain methods of organizing human activity” as an example and cite to *Alice*, slip op. at 10. However, this example and citation are incorrectly stated. Immediately following the statement on “human activity,” the Court provides the finding:

[T]he [*Bilski*] Court grounded its conclusion that all of the claims at issue were abstract ideas in the understating that risk hedging was a “fundamental economic practice.”¹⁷

¹⁶ *Alice*, supra, at ___ (slip op. at 6). To the extent that the Office is considering expanding the examples of abstract ideas, we submit that such examples should be limited only to similar “fundamental building blocks of human ingenuity” that are capable of instant, unquestionable demonstration as being a fundamental building block of human ingenuity. However, we emphasize our belief that such an expansion is not advisable and risks going well beyond the intent of the Supreme Court.

¹⁷ *Alice*, supra, at ___ (slip op. at 10)..

Thus, the Court was merely rejecting the Petitioner’s assertion that “abstract ideas” are confined to “preexisting, fundamental truth[s]’ that ‘exis[t] in principle apart from any human action.’”¹⁸ (some internal quotations omitted). The Court was not saying that “organizing human activity” is an abstract idea, but rather noting that the abstract idea identified in *Bilski* did not fit the Petitioner’s proposed definition of an “abstract idea.” Furthermore, including such an example risks Examiner’s rejecting “business method” claims as ineligible, which would be contrary to controlling precedent.

iii) Strike the Term “An idea of itself”

In view of the Court’s explanation of the central concern for the abstract idea exception (i.e., pre-emption), there is no substantive difference between “an idea of itself” and an “abstract idea.” Stated differently, the phrase “[a]n idea of itself” is not a separate category of abstract ideas. This phrase was used by the Court to explain its concern with pre-emption. This language makes clear that Part 1 of the test should not extend to claims that “relate to” an abstract idea. Including this phrase as an example would cause confusion, because it is not clear what types of claims it would encompass and could be used to improperly preclude “business method” claims as ineligible or cause Examiners to not consider what could be argued as non-technical additional steps of a practice that cause the claim to recite more than a fundamental economic practice or a pure mathematical formula. As such, an “idea of itself” should not be listed as an example because it is potentially confusing restatement of the test.

iv) Clarify the Term “Mathematical relationships/formulas”

While the example itself is accurate, it needs to be clear that this is referring to only mathematical expressions of truths and pure mathematical laws or axioms. (e.g., $e=mc^2$) themselves and not to claims that utilize a formula. The Guidelines should also make clear that not every invention involving mathematical calculations is implicated and that, indeed, most claims are not because applying mathematics should not be considered an abstract idea because it is more than a mathematical expression of a truth or a pure mathematical law or axiom.

c) Require Factual Evidence of the Abstract Idea

The Preliminary Instructions do not require evidence that the stated “abstract idea” is actually a fundamental economic practice or a pure mathematical law or axiom. Instead, recent Office Actions have merely stated that the claim is directed to a broadly stated abstract idea and rejected the claim. Without factual evidence that the claim is indeed directed to an abstract idea, the burden is placed on the patent owner to prove a negative. A rejection under 101 should be accompanied with factual evidence of the abstract idea.

d) Explain What is “significantly more” for Purposes of Part 2

Once you have determined that the claim appears to be, in practical effect, directed to no more than (i.e., pre-empts) an abstract idea (Part 1), then the claim needs to be analyzed to determine whether the claim provides significantly more than the abstract idea.

¹⁸ *Id.*

The Court in both *Mayo* and *Alice* made abundantly clear that what is meant by “significantly more” is that the claim does more than “apply [the abstract idea]” or simply implement it in a conventional way. General computing elements are not enough to save an otherwise abstract idea. Stated differently, applying an abstract idea on a generic computer is not enough. Instead, the focus should be on whether there are additional components, elements, features, or functionality that take the claim past the point of merely performing the abstract idea itself on a general computer.

The Guidelines in *Mayo* used a weighting analysis. This is dangerous because it will likely lead to inconsistent results across different art units and potentially expands the scope of what was intended to be covered.

At the risk of invalidating all software patents, the Guidelines for *Alice* need to make clear that this is not a piecemeal approach. In other words, the approach should not be to remove the generic computer components and “see what is left.” This was argued before the Court and was not adopted. Rather, as discussed above, once the relevant abstract idea has been identified as part of Part 1, the other elements of the claim can be considered. It is important to note that additional components, elements, features, or functionality (whether they are viewed to be technical or not), that extend beyond the mere application of the identified abstract idea, must be fully weighed in determining subject matter eligibility. In Part 2, the Examiner may realize there are elements that cause the claim to recite more than the abstract idea itself. Of course, if the Examiner would have appreciated such elements when doing Part 1, the analysis would have stopped there – but Part 2 could serve as a safety check.

The Instructions need to make clear the meaning of: “Meaningful limitations beyond generally linking the use of an abstract idea to a particular technological environment.” In software or computer-implemented claims, this may be specific functionality (technical or not) that guides the claim away from pre-empting the abstract idea. For example, elements that provides specific functionality – where there are other ways to practice the abstract idea – is clear indication that the claim is not pre-empting the abstract idea.

As a final note, the majority of the analysis should be completed in Part 1; not Part 2. Determining whether a claim provides “significantly more” is meant to be a reality check that is used when the abstract claim is the core of the claim but there is additional technology that saves it. The majority of the claims should never advances to Part 2.

II. Consideration of Multiple Examples

a) Matching Buyers and Sellers

Claim 1. A method for matching buyers and sellers comprising: receiving orders and matching orders of buyers with sellers.

Claim 2. A method for matching buyers and sellers comprising: using a computing device to receive orders and match orders of buyers with sellers.

Claim 3. A method for matching buyers and sellers comprising: receiving orders, time-stamping the orders, and matching orders of buyers and sellers using a pro-rata matching algorithm.

Claim 4. A method for matching buyers and sellers comprising: receiving orders, time-stamping the orders, and matching orders that were received during a 1 minute window of time according to the time-stamps.

Analysis: In each of these claims, the “abstract idea” – i.e., the fundamental economic practice – is matching buyers and sellers. The concept of matching buyers and sellers is recognized as a “fundamental economic practice.”

Under the analysis suggested above, Claim 1 is, on its face, attempting to pre-empt or claim the identified fundamental economic practice. Therefore, Part 1 is satisfied. Under the analysis of Part 2, Claim 1 is not providing any additional functionality or technology that goes beyond the basic concept of matching buyers and sellers. Accordingly, Claim 1 would not be patent eligible.

The analysis for Part 1 of Claim 2 is similar to the analysis for Claim 1. However, in Claim 2, the fundamental economic practice is applied on a computer. Under the suggested analysis above (and *Alice* and *Mayo*), this is not enough satisfy Part 2. Accordingly, Claim 2 would not be patent eligible.

Claim 3 is patent eligible. Claim 3 does not pass Part 1 of the analysis. It is clearly not attempting to pre-empt matching buyers and sellers. For instance, since the orders are matched using a pro-rata algorithm, the claim recites more than the fundamental economic practice of matching. The claim requires a particular way of doing that economic practice and does not preempt all ways, such as using a First-in/First-out approach.

Claim 4 is also patent eligible. Claim 4 is only matching orders that are received during a specified period of time. This would not pre-empt all matching of orders.

b) Electronic Trading Tool

Claim 1. A system comprising: a computing device configured to buy a financial instrument and sell that same financial instrument at a higher price than it was purchased.

Claim 2. A system comprising: a computing device, wherein the computing device is configured to determine a price for an order, wherein the computing device is configured to place the order at an electronic exchange at the determined price.

Claim 3. A system comprising: a computing device, wherein the computing device is configured to receive first price from a user, wherein the computing device is configured to determine a second price for an order for a first tradeable object based on market data for a second tradeable object and the received first price, wherein the computing device is configured to place the order at an electronic exchange at the determined second price.

Analysis: In each of the claims, the abstract idea – i.e., the fundamental economic practice, is “buying and selling.” Claim 1 appears, on its face, to attempt to pre-empt or claim the fundamental economic practice, satisfying Part 1. Under Part 2, Claim 1 is not providing any additional functionality or technology that goes beyond the basic concept of buying and selling, and is therefore not eligible. Claim 2 appears that it may claim only the abstract idea, but determination of the price may raise a question. Upon proceeding to Part 2, the claim fails Part 2. The mere “determination” of a price, without more, is merely an act needed to place the order. Claim 3 – passes Part 1; passes Part 2 – determination of the price based on the market data for a different tradeable object and a price received from a user recite something more than the abstract idea (the fundamental economic practice of buying and selling) and does not foreclose (or nearly foreclose) all ways of practicing the abstract idea; claim is eligible under 101.

c) Bilski¹⁹

Claim 1. (Actual Claim) A method for managing the consumption risk costs of a commodity sold by a commodity provider at a fixed price comprising the steps of:

- (a) initiating a series of transactions between said commodity provider and consumers of said commodity wherein said consumers purchase said commodity at a fixed rate based upon historical averages, said fixed rate corresponding to a risk position of said consumers;
- (b) identifying market participants for said commodity having a counter-risk position to said consumers; and
- (c) initiating a series of transactions between said commodity provider and said market participants at a second fixed rate such that said series of market participant transactions balances the risk position of said series of consumer transactions.

Claim 2. (Hypothetical) A method for managing the consumption risk costs of a commodity sold by a commodity provider at a fixed price comprising the steps of:

- (a) initiating a series of transactions between said commodity provider and consumers of said commodity wherein said consumers purchase said commodity at a fixed rate based upon historical averages, said fixed rate corresponding to a risk position of said consumers;
- (b) identifying market participants for said commodity having a counter-risk position to said consumers; and
- (c) determining a second fixed rate based on an average of daily rainfall in a preceding month;**
- ~~(d)~~ **(d)** initiating a series of transactions between said commodity provider and said market participants at **[[a]] said** second fixed rate such that said series of market participant transactions balances the risk position of said series of consumer transactions.

Background: The Supreme Court affirmed that the Claim 1 was unpatentable because it described the concept of hedging, an unpatentable abstract idea – i.e., a fundamental economic practice. The

¹⁹ *Bilski v. Kappos*, 561 U.S. 593 (2010).

Supreme Court stated in *Bilski* that “[a]llowing petitioners to patent risk hedging would pre-empt use of this approach in all fields, and would effectively grant a monopoly over an abstract idea.”

It should also be noted that the authors of hypothetical Claim 2 are not experts in the field of hedging. The point was to provide specific functionality that does pre-empt the usage of hedging.

Analysis: Claim 1, as stated by the Supreme Court, is attempting to claim the concept of “hedging.” Thus, under Part 1, it is directed to (that is, pre-empts) the abstract idea of hedging, as such. Under Part 2, the features of the claim do not recite “significantly more” than the features necessary to perform the abstract idea of “hedging.”

In hypothetical Claim 2, at least the newly recited determining step incorporates a new factor to be considered in a method for hedging. Consequently, under Part 1, the claim no longer is directed to no more (that is, it does not pre-empt) the abstract idea of hedging, as such. Rather, the new step restricts the scope of the claim with respect to the abstract idea of hedging, providing an improvement on the well-known concept. This is not inconsistent with the dependent claims of *Bilski*, because those claims were understood by the Court to be either mere limitations to a field of use or already known techniques used in hedging.

d) Alice²⁰

Claim 1. (Actual Claim) A method of exchanging obligations as between parties, each party holding a credit record and a debit record with an exchange institution, the credit records and debit records for exchange of predetermined obligations, the method comprising the steps of:

- (a) creating a shadow credit record and a shadow debit record for each stakeholder party to be held independently by a supervisory institution from the exchange institutions;
- (b) obtaining from each exchange institution a start-of-day balance for each shadow credit record and shadow debit record;
- (c) for every transaction resulting in an exchange obligation, the supervisory institution adjusting each respective party's shadow credit record or shadow debit record, allowing only these transactions that do not result in the value of the shadow debit record being less than the value of the shadow credit record at any time, each said adjustment taking place in chronological order, and
- (d) at the end-of-day, the supervisory institution instructing on[e] of the exchange institutions to exchange credits or debits to the credit record and debit record of the respective parties in accordance with the adjustments of the said permitted transactions, the credits and debits being irrevocable, time invariant obligations placed on the exchange institutions.

²⁰ *Alice Corp. Pty. Ltd. v. CLS Bank Int'l et al.*, 573 U. S. ____ (2014).

Claim 2. (Hypothetical Claim) A method of exchanging obligations as between parties, each party holding a credit record and a debit record with an exchange institution, the credit records and debit records for exchange of predetermined obligations, the method comprising the steps of:

- (a) creating a shadow credit record and a shadow debit record for each stakeholder party to be held independently by a supervisory institution from the exchange institutions;
- (b) obtaining from each exchange institution a start-of-day balance for each shadow credit record and shadow debit record;
- (c) for every transaction resulting in an exchange obligation, the supervisory institution adjusting each respective party's shadow credit record or shadow debit record, allowing only these transactions that do not result in the value of the shadow debit record being less than the value of the shadow credit record at any time, each said adjustment taking place in chronological order,
- (d) checking whether each respective party is a preferred party that has been pre-approved to transact,
- (e) at the end-of-day, in the event that each respective party is a preferred party, the supervisory institution instructing on[e] of the exchange institutions to exchange credits or debits to the credit record and debit record of the respective parties in accordance with the adjustments of the said permitted transactions, the credits and debits being irrevocable, time invariant obligations placed on the exchange institutions, and
- (f) at the end-of-day, in the event that either party is not a preferred party, proceeding through normal course of action for risk settlement.

Background: The Supreme Court affirmed that the Claim 1 was unpatentable because it described the concept of intermediated settlement, an unpatentable abstract idea.

Again, it is noted that the authors of hypothetical Claim 2 are not experts in the field of intermediated settlement. The point was to provide specific functionality, assumed here to not be standard practice in connection with intermediated settlement, that does pre-empt the usage of intermediated settlement.

Analysis: Claim 1, as stated by the Supreme Court, is attempting to claim the concept of “intermediated settlement.” Thus, under Part 1, it is directed to (that is, pre-empts) the abstract idea of intermediated settlement, as such. Under Part 2, the claims amount to nothing “significantly more” than an instruction to apply the abstract idea of “intermediated settlement” using a generic computer. In contrast, Claim 2 recites features beyond the identified abstract idea and consequently is patent eligible.

e) Comcast²¹

Claim 1. (Real Claim) A telephony network optimization method, comprising:

- receiving a request from an application to provide to the application service on a telephony network; and

²¹ *Comcast IP Holdings I, LLC, v. Sprint Commc'ns Co. L.P. et al.*, C.A. No. 12-205-RGA (Del. 2014).

determining whether a telephony parameter associated with the request requires acceptance of a user prompt to provide to the application access to the telephony network.

Claim 2. (Hypothetical Claim) A telephony network optimization method, comprising:
receiving a request from an application to provide to the application service on a telephony network; ~~and~~
determining ~~whether that~~ a telephony parameter associated with the request requires acceptance of a user prompt to provide to the application access to the telephony network; and providing the application access to the telephony network after acceptance of the user prompt.

Background: This example is based on claim 21 of the '694 patent, that was asserted in *Comcast*. The district court found the claim to be unpatentable as being directed to the concept of a decision.

It is noted that the authors of hypothetical Claim 2 are not experts in the field of telephony. The point was to provide specific functionality as an example.

Analysis. We submit that the court was wrong in *Comcast* at least because the identified abstract idea (“a decision”) is not a fundamental economic practice or pure mathematical relationship/formulate. Therefore, the analysis for patent eligibility should stop at Part 1. However, assuming that the Court was correct in identifying the abstract idea to be “a decision” (or, perhaps, “making a decision”), Claim 1 is not directed to no more than (that is, it does not pre-empt) the concept of a decision. Rather, Claim 1 provides for a very specific determination (one based on a telephony parameter associated with a received request that indicates a requirement for acceptance of a user prompt before access can be granted). These features of the claims on provide for a very limited scope with respect to the identified abstract idea. Alternatively, if the abstract idea is considered instead to be “conditional action”, this reasoning is equally applicable.

f) Game of Monopoly

Claim 1. A method comprising: a plurality of players taking turns moving pieces around a game board in accordance with the outcome of a roll of one or more dice.

Claim 2. A method comprising: a plurality of players taking turns: (a) rolling one or more dice; (b) moving a game piece associated with the player based on the result of the roll; (c) providing the player the opportunity to acquire the space where the game piece lands if not already owned by another player, otherwise paying by the player to the owner of the space.

Analysis: Under the suggested analysis above, neither Claim 1 or Claim 2 are directed to a “fundamental economic practice.” Likewise, neither Claim 1 or Claim 2 is directed to a pure mathematical formula.

Therefore, neither Claim 1 nor Claim 2 would be attempting to pre-empt an abstract idea. Both would be patent eligible.

g) Health Care

Claim 1. A method for providing health care.

Claim 2. A method for scheduling medical surgery, comprising: receiving surgery information for a plurality of patients, receiving patient information for a plurality of patients, receiving surgeon information, and computing a surgery time for a patient.

Analysis: Neither Claim 1 or Claim 2 attempt to pre-empt or claim (a) a fundamental economic practice or (2) a mathematical equation. Therefore, neither satisfy Part 1 of the analysis.

Sincerely,

Adam Faier (Patent Counsel)

Jay Knobloch (Patent Counsel)

Trading Technologies International, Inc.