**Claim Rejections under 35 U.S.C. § 101**

In paragraph XXXXX of the present Office Action, **Claims YYYY** are rejected under 35 U.S.C. § 101 for claiming the abstract idea of “ZZZZZZZZ.” The alleged rejections are based on *Alice Corporation Pty. LTD. v. CLS Bank International, et al.*(Slip opinion 13-298, June 19, 2014) – “*Alice”*, reported as *Alice Corporation Pty. LTD. v. CLS Bank International*, 134 S.Ct. 2347 (2014). Applicants respectfully traverse these rejections.

**February 2018 Quick Reference Sheet**

In February 2018, the USPTO issued the “February 2018: Eligibility Quick Reference Sheet, *“Identifying Abstract Ideas*” (“*February 2018 Update”).*

The *February 2018 Update* discusses various CAFC cases that have been held to be statutory under 35 U.S.C. § 101 in light of *Alice*.  *Alice*embraces the two-step test for patent eligibility presented in *Mayo v. Prometheus*, 132 S. Ct. 1289 (2012) – “*Mayo*”.

Step 1 of the *Mayo*test is to determine if the invention is a “process, machine, manufacture or composition of matter”.  If not, then it cannot be patented under 35 U.S.C. § 101.  If it is, then Step 2A of the *Mayo*test is applied.

Step 2A of the *Mayo* test (also referred to as “Step 1 of *Alice*”)asks if the claim is directed to a law of nature, a natural phenomenon, or an abstract idea (judicially recognized exceptions).  If not, then the invention is statutory under 35 U.S.C. § 101.  If it is, then Step 2B of the *Mayo*test is applied.

Step 2B of the *Mayo*test (also referred to as “Step 2 of *Alice*”) asks if the claim recites additional elements that amount to significantly more than the judicial exception.  If it does not, then the claimed invention is not statutory under 35 U.S.C. § 101.  If it does, then the claimed invention is statutory under 35 U.S.C. § 101.

**Step 1 of the *Mayo* test**

As stated on page 2 of the present Office Action, the present invention (as claimed in Claim 1) claims a process (method), and thus passes Step 1 of *Mayo*.

 **Step 2A of the *Mayo* test**

The following cases cited in the *February 2018 USPTO Guidelines*were held to be statutory under 35 U.S.C. § 101 according to Step 2A of *Mayo*, and are relevant to the present invention.

***Core Wireless Licensing S.A.R.I. v. LG Electronics, Inc., LG Electronics Mobilecomm U.S.S., Inc.,* \_\_F.3d\_\_(Fed. Cir. 2018) – “*Core Wireless*”**

The invention in *Core Wireless* presented a summary window on a GUI. The summary window showed data/functions that can be provided/performed by applications from a list of applications shown on the GUI. By clicking a particular data/function, the associated application is launched, in order to show the data or perform the function shown in the summary window.

As discussed on page 9 of the slip opinion, claims that “are directed to a particular manner of summarizing and presenting information in electronic devices” (see page 9 of the slip opinion), particularly in a manner that is more than just labels (e.g., using a unique way to access the information) is statutory under Step 2A of *Mayo.*

The present invention likewise

This provides a novel solution to the problem of

Thus, the present invention is statutory under 35 U.S.C. § 101 according to the *Core Wireless*court’s decision based on Step 2A of *Mayo*.

***DDR Holdings, LLC v. Hotels.com L.P.*, 773 F.3d 1245 (Fed. Cir. 2014) – “*DDR*”**

*DDR* held that creating a composite web page that has a same “look and feel” as an original web page plus information from a user-activated link in the original web page is statutory under 35 U.S.C. § 101.  More specifically, “the claimed solution is necessarily rooted in computer technology in order to overcome a problem specifically arising in the realm of computer networks” (see page 20 of the *DDR*slip opinion).

The present invention likewise

This provides a novel solution to the problem of

Thus, the present invention is statutory under 35 U.S.C. § 101 according to the *DDR*court’s decision based on Step 2A of *Mayo*.

***Enfish, LLC v. Microsoft Corporation*, 822 F.3d 1327 (Fed. Cir. 2016) – “*Enfish*”**

 *Enfish* stores data in a single self-referential table, which is more flexible than a traditional relational database, and thus allows for faster retrieval of information (see page 7 of the *Enfish* slip opinion). Thus, the operation of the computer is improved.

The present invention likewise

This provides a novel solution to the problem of

Thus, the present invention is statutory under 35 U.S.C. § 101 according to the *Enfish*court’s decision based on Step 2A of *Mayo*.

***Finjan, Inc. v. Blue Coat Systems, Inc.*, \_\_F.3d\_\_(Fed. Cir. 2018) – “*Finjan*”**

 *Finjan* presented a “security profile”, which identifies suspicious code in a downloaded file, is attached to the downloadable file. The suspicious code is identified according to what it does (e.g., renaming files, deleting files) rather than what it is (i.e., a known virus). This is different from *Intellectual Ventures I LLC v. Symantec Corp.*, 838 F.3d 1307, 1319 (Fed. Cir. 2016), which was held to be non-statutory under 35 U.S.C. § 101 since it simply performed virus screening by matching code to known viruses.

 Thus, the invention in *Finjan* 1) identifies suspicious code in a new manner, and 2) lets the end user decide, after reviewing the “security profile” whether to download the file (see page 6 of the slip opinion).

As stated on page 8 of the *Finjan* slip opinion, “The fact that the security profile ‘identifies suspicious code’ allows the system to accumulate and utilize newly available, behavior-based information about potential threats. The asserted claims are therefore directed to a non-abstract improvement in computer functionality.”

The present invention likewise

This provides a novel solution to the problem of

Thus, the present invention is statutory under 35 U.S.C. § 101 according to the *Finjan*court’s decision based on Step 2A of *Mayo*.

***McRO, Inc. v. Bandai Namco Games America Inc.*, \_\_F.3d\_\_(Fed. Cir. 2016) – “*McRO*”**

 *McRO* uses an algorithm to synchronize cartoon lip movement to speech sounds. *McRO* does not perform this synchronization the way an artist would do manually, and thus the invention is statutory under 35 U.S.C. § 101.

The present invention likewise

This provides a novel solution to the problem of

Thus, the present invention is statutory under 35 U.S.C. § 101 according to the *McRO*court’s decision based on Step 2A of *Mayo*.

***Thales Visionix Inc. v. United States et al.*\_\_F.3d\_\_(Fed. Cir 2017) – “*Thales*”**

*Thales* uses sensors to identify real-time locations of boxes in the back of a truck, thus reducing errors in an inertial system that tracks an object on a moving platform.

The *Thales* court found the invention to be “nearly indistinguishable from the claims” at issue in (rubber molding patent) *Diehr* - even though *Diehr* produced a product and *Thales* just “reduces errors in an inertial system that tracks an object on a moving platform” - see pages 8-9 of *Thales* slip opinion.

Furthermore, “That a mathematical equation is required to complete the claimed method and system does not doom the claims to abstraction” – see page 10 of the *Thales* slip opinion

The present invention likewise

This provides a novel solution to the problem of

Thus, the present invention is statutory under 35 U.S.C. § 101 according to the *Thales*court’s decision based on Step 2A of *Mayo*.

***Trading Technologies International, Inc. v. CQG, Inc. et al.*\_\_F.3d\_\_(Fed. Cir. 2017) – “*TTI*”**

 *TTI* creates a graphical user interface (GUI) that ensures that a seller of a commodity gets paid by the buyer, thus improving the accuracy of trader transactions (see page 9 of the *TTI* slip opinion).

The present invention likewise

This provides a novel solution to the problem of

Thus, the present invention is statutory under 35 U.S.C. § 101 according to the *TTI*court’s decision based on Step 2A of *Mayo*.

***Visual Memory LLC, v. Nvidia Corp.*\_\_F.3d\_\_(Fed. Cir. 2017) – “*Visual Memory*”**

 *Visual Memory* teaches adjustable cache memory that is restricted to storing just data, just instructions, or both data and instructions based on the type of processor that it supports, thus making a more efficient memory system.

The present invention likewise

This provides a novel solution to the problem of

Thus, the present invention is statutory under 35 U.S.C. § 101 according to the *Visual Memory*court’s decision based on Step 2A of *Mayo*.

***Association for Molecular Pathology v. Myriad Genetics, Inc.* 569 U.S.\_\_(2013) – “*Myriad SCOTUS”***

*Myriad SCOTUS* holds that creating genetic material that is not found in nature is statutory.

The present invention likewise

This provides a novel solution to the problem of

Thus, the present invention is statutory under 35 U.S.C. § 101 according to the *Myriad SCOTUS*court’s decision based on Step 2A of *Mayo*.

**Step 2B of the *Mayo* test**

Even if the present invention were not to pass Step 2A of the *Mayo*test, which Applicants dispute, it would still pass Step 2B of the *Mayo*test.

The following cases cited in the *February 2018 USPTO Guidelines*were held to be statutory under 35 U.S.C. § 101 according to Step 2B of *Mayo*, and are relevant to the present invention.

***In re Abele*, 684 F.2d 902 (CCPA 1982) – “*Abele*”**

 *Abele* uses data from a computer tomography (CT) scanner to produce and display grey scale images on a display.

 Even though the *Abele* decision was released over 20 years before *Alice*, it has not been overturned.

The present invention likewise

This provides a novel solution to the problem of

Thus, the present invention is statutory under 35 U.S.C. § 101 according to the *Abele*court’s decision based on Step 2B of *Mayo*.

***Amdocs (Israel) Ltd. V. Openet Telecom, Inc.*, \_\_ F. 3d \_\_ (Fed. Cir. 2016) – “*Amdocs*”**

*Amdocs*processes network usage records close to their sources before being transmitted to a centralized manager, thus preventing bottlenecks and reducing network bandwidth consumption.

The present invention likewise

This provides a novel solution to the problem of

Thus, the present invention is statutory under 35 U.S.C. § 101 according to the *Amdocs*court’s decision based on Step 2B of *Mayo*.

***BASCOM Global Internet Services, Inc. v. AT&T Mobility LLC,* 827 F.3d 1341 (Fed. Cir 2016) – “*BASCOM*”**

*BASCOM* lets a client tell an ISP server which filters to use when retrieving data, such that only data that the user wants will be returned.  Because this distributed system preserves network bandwidth, it is statutory.

The present invention likewise

This provides a novel solution to the problem of

Thus, the present invention is statutory under 35 U.S.C. § 101 according to the *BASCOM*court’s decision based on Step 2B of *Mayo*.

***Classen Immunotherapies Inc. v. Biogen IDEC*, 659 F.3d 1057 (Fed. Cir 2011) – “*Classen*”**

 *Classen* teaches a system for evaluating the efficacy of a certain immunization protocol, and then implements that protocol. The implementation step raises the invention from an abstract idea (evaluating the protocol) to a statutory invention under 35 U.S.C. § 101.

The present invention likewise

This provides a novel solution to the problem of

Thus, the present invention is statutory under 35 U.S.C. § 101 according to the *Classen*court’s decision based on Step 2B of *Mayo*.

***Diamond, Commissioner of Patents and Trademarks v. Diehr et al.* 450 U.S. 175 (1981) – “*Diehr*”**

*Diehr* uses an algorithm to determine when to open and close a rubber mold press. There is no requirement in the *Diehr* patent that opening the rubber mold press is to be performed by a machine, or that a product results from the process. Rather, the method of opening the rubber mold press at the appropriate time in *Diehr* may be automatic or manual (see pages 179-180 of the *Diehr* decision).

The present invention likewise

This provides a novel solution to the problem of

Thus, the present invention is statutory under 35 U.S.C. § 101 according to the *Diehr*court’s decision based on Step 2B of *Mayo*.

***The Association for Molecular Pathology et al. v. United States Patent and Trademark Office, Myriad Genetics, Inc., et al.*,\_\_F.3d \_\_ (Fed. Cir. 2012) – “*Myriad CAFC”***

 *Myriad CAFC* uses unnatural BRCA genes (DNA that only has exons capable of creating mRNA that builds proteins) to test the efficacy of therapeutic drugs.

The present invention likewise

This provides a novel solution to the problem of

Thus, the present invention is statutory under 35 U.S.C. § 101 according to the *Myraid CAFC*court’s decision based on Step 2B of *Mayo*.

Therefore, according to the guidelines of the *February 2018 Guidelines*, the presently-claimed invention described in exemplary **Claim XXXX** is statutory under 35 U.S.C. § 101.

**April 19, 2018 USPTO Memorandum**

On April 19, 2018, the USPTO issued a memorandum on the subject of “Changes in Examination Procedure Pertaining to Subject Matter Eligibility, Recent Subject Matter Eligibility Decision (*Berkheimer v. HP, Inc.*) – the “*April 2018 USPTO Memo*”.

The *April 2018 USPTO Memo* was issued in response to the February 8, 2018 CAFC decision in *Berkheimer v. HP*, 881 F.3d 1360 (Fed. Cir. 2018) – “*Berkheimer*”. The *Berkheimer* decision addressed what constitutes “significantly more than the judicial exception” in Step 2B of the *Mayo*test (also referred to as “Step 2 of *Alice*”). The *Berkheimer* decision held that this question is a question of fact, and that “Whether a particular technology is well-understood, routine, and conventional goes beyond what was simply known in the prior art” (see page 14 of the *Berkheimer* slip opinion. More specifically, if a claimed feature (e.g., Claims 4-7 in *Berkheimer*) “improves system operating efficiency” in a manner that is unique enough to differentiate it from processes in the prior art, then it is not “well-understood, routine, and conventional” (see pages 16-17 of the *Berkheimer* slip opinion). As such, the invention is an improvement to computer functionality, rather than an abstract idea, and is statutory under 35 U.S.C. § 101 (see page 11 of the *Berkheimer* slip opinion, as well as *Enfish, LLC v. Microsoft Corp.,* 822, F.3d 1327, 1335-36 (Fed. Cir. 2016)).

The *April 2018 USPTO Memo*, taking *Berkheimer* as guidance, articulates four ways that an Examiner can show that the additional elements in the claim are “well-understood, routine or conventional”.

In the first scenario described in the *April 2018 USPTO Memo*, if the specification of the claim being examined expressly states that the elements in the claim are well-understood, routine, and conventional, then they are. This is not the case in the present patent application.

In the third scenario described in the *April 2018 USPTO Memo*, if the Office Action cites an authoritative document (e.g., a textbook) that expressly states that the elements in the claim are well-understood, routine, and conventional, then they are. This is not the case in the present patent application.

In the fourth scenario described in the *April 2018 USPTO Memo*, if the Office Action takes Official Notice that the elements in the claim are well-understood, routine, and conventional, then the Examiner must be willing to respond to a challenge to such a holding with an affidavit, etc. The present Office Action does not take Official Notice, and thus this is not the case in the present patent application.

In the second scenario described in the *April 2018 USPTO Memo*, the Office Action may cite a court decision from Section 2106.05(d)(II) of the MPEP that describes the element(s) of the present patent application as being well-understood, routine, conventional in order to meet the requirement of Step 2B of *Mayo*.

The present Office Action cites *Electric Power Group v. Alstom, et al.*, 830 F.3d 1350, 119 U.S.P.Q.2d 1739 (Fed. Cir. 2016) – “*Electric Power”* and *In re Schrader*, 22 F.3d 290, 30 U.S.P.Q. 2d 1455 (Fed. Cir. 1994) – “*Schrader*”. Neither case describes elements that are similar in concept to the present invention.

*Electric Power* monitors data from a power system grid, and displays the results on a conventional computer display. The present invention is directed to…which is unrelated to the elements/concepts taught in *Electric Power*. Therefore, the present invention is not rendered invalid (non-statutory) under the elements/concepts taught in *Electric Power*.

*Schrader* is directed to a method of taking multiple bids for a product, and then identifying the bids. The present invention is directed to…which is unrelated to the elements/concepts taught in *Schrade*. Therefore, the present invention is not rendered invalid (non-statutory) under the elements/concepts taught in *Schrade*.

For reasons so stated, Applicants respectfully request that the 35 U.S.C. § 101 rejections be withdrawn.