

From: narb_avedissian

Sent: Tuesday, March 5, 2019 11:45 AM

To: Eligibility2019

Subject: 2019 Revised Patent Subject Matter Eligibility Guidance

Director Iancu:

I would like to thank you for your initiative to resolve the 101 mayhem. Your subject matter eligibility guidance will help with most of the 101 problems if interpreted and implemented properly by the examiners and PTAB judges. Therefore, the highest risk to your subject matter eligibility guidance is the interpretation and implementation by the examiners and PTAB judges. The following are suggestions on how to further improve the guidance and how to ensure its correct interpretation and implementation.

1. In the article <https://www.ipwatchdog.com/2019/01/28/director-iancu-training-101-guidance/id=105649/>, an “examiner wrongly thought that the new guidance created a new ‘practical application’ burden that needed to be met by an applicant to overcome an existing Section 101 rejection. This is contrary to the guidance actually identifying an alternative path to establishing that a claim is patentable under Section 101 ‘if the judicial exception is integrated into a practical application of the judicial exception.’” This shows how easily confused some examiners can be. Hence, it is critically important to include in the guidance or its training material the purpose of the guidance. For example: “In addition to predictability, the purpose of the guidance is to provide alternative paths to patent eligibility, thereby substantially reducing the number of 101 rejections”.

This high-level clarification right in the general purpose of the guidance will set a clear tone for the guidance and avoid confusion such as described in the referenced article.

2. The guidance states that a claim is patent eligible if it does not recite an abstract idea (i.e. mathematical concept, etc.) “on its own or per se”. For computer implemented inventions, it is a real possibility, and even likelihood, that some examiners will ignore the “on its own or per se” requirement and will interpret this as a claim being patent ineligible if it recites an element that uses a mathematical concept. All computer implemented inventions include elements that use mathematical concepts at some level. Therefore, some examiners will wrongly continue issuing 101 rejections for computer implemented inventions, whereas, this is clearly not the intent of the guidance.

It is critically important that the guidance or its training material provides at least one example of a claim for a computer implemented invention that recites only a mathematical concept that is not patent eligible (i.e. a method comprising adding A and B to result in C). It is further critically important that the guidance or its training material provides at least one example of a claim for a computer implemented invention that recites elements that use mathematical concepts, but do not recite mathematical concepts “on their own or per se”, that is patent eligible (i.e. a method comprising: receiving or generating a, b, and c using some process or analysis; generating data structure A including a, b, and c; accessing data structure B in a memory of a computer; evaluating data structure A and data structure B

to determine at least partial match; causing the computer or a device controlled by the computer to perform some operation based on the determination).

3. The guidance mentions that:

“a judicial exception has not been integrated into a practical application: ... [if it] merely includes instructions to implement an abstract idea on a computer, or merely uses a computer as a tool to perform an abstract idea”.

This language is clearly directed to fundamental business practices, organizing human activities, and other well-established human practices that use a computer merely as a tool (see the Supreme Court opinion in *Alice v. CLS Bank International*, 134 S. Ct. 2347 (2014)). This language is clearly not directed to computer implemented inventions (i.e. artificial intelligence, robotics, autonomous vehicles and devices, image processing, databases, computer/video games, computer simulations, content processing, and many more) that arise out of or are inherently implemented on a computer. It is unimaginably irrational to attempt to make computer implemented inventions that arise out of or are inherently implemented on a computer patent ineligible simply because they are implemented on a computer.

Therefore, it is critically important to include in the new guidance or its training material an explanation that the language stating that “a judicial exception has not been integrated into a practical application: ... [if it] merely includes instructions to implement an abstract idea on a computer, or merely uses a computer as a tool to perform an abstract idea” applies only to fundamental business practices, organizing human activities, and other well-established human practices that use a computer merely as a tool and that computer implemented inventions (i.e. artificial intelligence, robotics, autonomous vehicles and devices, image processing, databases, computer/video games, computer simulations, content processing, and many more) that arise out of or are inherently implemented on a computer are patent eligible as the patent law explicitly states.

4. It has been a long trend that many examiners routinely label all non-hardware elements of a computer implemented invention as abstract ideas with no, marginal, or incomplete analysis and label all hardware elements as “additional elements”. The examiners then merely state that the “additional elements” are well-known and do not add anything to the abstract ideas. This initial misclassification of abstract ideas and “additional elements” then prevents examiners from ever analyzing whether non-hardware elements are well understood, routine, or conventional as required in step 2B of the *Alice/Mayo* framework, since the analysis of whether an element is well understood, routine, or conventional applies only to the “additional elements”. This is an irresponsible practice and examiners who practice this should be identified and educated to correct their practice. It is critically important to clearly state in the guidance or its training material that only non-hardware elements that recite an abstract idea “on its own or per se” are abstract ideas and all other non-hardware elements are “additional elements”.

5. It is often the case in computer implemented inventions that a data structure, combination of data structures, element including a data structure, process that operates on a data structure, process that uses a data structure, or other element related to a data structure provides crucial novelty and enables a

novel system. It has been a long trend that many examiners routinely label data structures or anything related to data structures as abstract ideas with no, marginal, or incomplete analysis. Since many computer implemented inventions use data structures, these inventions were unjustly doomed to patent ineligibility right from the start.

In the guidance's groupings of abstract ideas, the only one that has any relation to data structures is "Mathematical concepts—mathematical relationships, mathematical formulas or equations, mathematical calculations". Since a data structure IS an arrangement—often very complex —of data stored in memory, a data structure IS NOT a mathematical relationship, mathematical formula or equation, or mathematical calculation. Hence, a data structure is not an abstract idea. Further, many data structures – especially complex ones such as trees, graphs, neural networks, variously linked nodes, variously linked data structures, etc.—are embodiments of a practical application described under prong 2 of the guidance as patent eligible. Therefore, it is critically important to clearly state in the guidance or its training material that data structures are not abstract ideas and that inventions reciting data structures are patent eligible.

6. It has been a recent trend to issue blanket 101 rejections with no, marginal, or incomplete analysis in art units dealing with artificial intelligence inventions. This is an irresponsible practice and examiners who practice this should be identified and educated to correct their practice. It is beyond belief that the United States would cripple itself by limiting innovation in a crucial field such as AI, especially in view of the heated global race for dominance in this field. It is critically important to clearly state in the guidance or its training material that artificial intelligence inventions are patent eligible.

Sincerely,

Narb Avedissian

CEO | HaulStars

a Comcast Partner

From: bao

Sent: Wednesday, March 6, 2019 10:12 AM

To: Eligibility2019

Subject: Support for recent changes to 101 rejection by examiners

Sirs

USPTO Director Andrei Iancu's 2019 Revised Patent Subject Matter Eligibility Guidance promises to virtually eliminate the greatest patent problem of our time. If implemented properly by the examiners and Patent Trial and Appeal Board (PTAB) judges, the guidance could solve the 101 mayhem and the incredible harm that it has done to inventors of computer implemented inventions. The guidance will also increase the value of patents, since strategic infringers will not be able to use the PTAB as the killing ground for patents using subject matter eligibility. Director Iancu needs us to support him with positive public comments as justification for his guidance and, very importantly, to suggest improvements to his guidance for its final/future version(s) and its implementation. I fully support the new changes made at the PTO

Bao Tran

From: Rod Beatson

Sent: Wednesday, March 6, 2019 10:28 AM

To: Eligibility2019

Subject: 101 MAYHEM

Director Iancu:

As a small inventor I have authored a number of issued patents in the biometrics and encryption space applied to, for the most part, mobile device user authentication for trusted access, trusted transactions carried out on the devices and secure cloud access. These patents have issued between 2000 and 2018 and new applications are still in progress. I have tried, unsuccessfully, to interest large tech. companies, who, I believe could be infringing these patents in taking out licenses or acquiring the patents. However, in the era of "efficient infringement" where the PTAB is used (or more likely, abused) to deny patent eligibility to issued patents, it is almost impossible to obtain licensing revenue from large tech without having substantial financial resources.

I would like to thank you for your initiative to resolve the 101 mayhem. Your subject matter eligibility guidance will help with most of the 101 problems if interpreted and implemented properly by the examiners and PTAB judges. Therefore, the highest risk to your subject matter eligibility guidance is the interpretation and implementation by the examiners and PTAB judges. The following are suggestions on how to further improve the guidance and how to ensure its correct interpretation and implementation.

1. In the article <https://www.ipwatchdog.com/2019/01/28/director-iancu-training-101-guidance/id=105649/>, an "examiner wrongly thought that the new guidance created a new 'practical application' burden that needed to be met by an applicant to overcome an existing Section 101 rejection. This is contrary to the guidance actually identifying an alternative path to establishing that a claim is patentable under Section 101 'if the judicial exception is integrated into a practical application of the judicial exception.'" This shows how easily confused some examiners can be. Hence, it is critically important to include in the guidance or its training material the purpose of the guidance. For example: "In addition to predictability, the purpose of the guidance is to provide alternative paths to patent eligibility, thereby substantially reducing the number of 101 rejections".

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was taught that mathematics is the Queen and Servant of the Sciences. As a Queen it can be used to establish new hitherto unknown relationships and algorithms, which should be patentable in applications. As a Servant it can be used to describe the complex relationships necessary to understand the Science. I would maintain, that when it is acting in the Queen capacity, the material it generates should be patent eligible and that distinction should be clarified

It is critically important that the guidance or its training material provides at least one example of a claim for a computer implemented invention that recites only a mathematical concept that is not patent eligible (i.e. a method comprising adding A and B to result in C). It is further critically important that the guidance or its training material provides at least one example of a claim for a computer implemented invention that recites elements that use mathematical concepts, but do not recite mathematical concepts “on their own or per se”, that is patent eligible (i.e. a method comprising: receiving or generating a, b, and c using some process or analysis; generating data structure A including a, b, and c; accessing data structure B in a memory of a computer; evaluating data structure A and data structure B to determine at least partial match; causing the computer or a device controlled by the computer to perform some operation based on the determination).

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Therefore, it is critically important to include in the new guidance or its training material an explanation that the language stating that “a judicial exception has not been integrated into a practical application: ... [if it] merely includes instructions to implement an abstract idea on a computer, or merely uses a computer as a tool to perform an abstract idea” applies only to fundamental business practices, organizing human activities, and other well-established human practices that use a computer merely as a tool and that computer implemented inventions (i.e. artificial intelligence, robotics, autonomous vehicles and devices, image processing, databases, computer/video games, computer simulations, content processing, and many more) that arise out of or are inherently implemented on a computer are patent eligible as the patent law explicitly states.

4. It has been a long trend that many examiners routinely label all non-hardware elements of a computer implemented invention as abstract ideas with no, marginal, or incomplete analysis and label

all hardware elements as “additional elements”. The examiners then merely state that the “additional elements” are well-known and do not add anything to the abstract ideas. This initial misclassification of abstract ideas and “additional elements” then prevents examiners from ever analyzing whether non-hardware elements are well understood, routine, or conventional as required in step 2B of the Alice/Mayo framework, since the analysis of whether an element is well understood, routine, or conventional applies only to the “additional elements”. This is an irresponsible practice and examiners who practice this should be identified and educated to correct their practice. It is critically important to clearly state in the guidance or its training material that only non-hardware elements that recite an abstract idea “on its own or per se” are abstract ideas and all other non-hardware elements are “additional elements”.

5. It is often the case in computer implemented inventions that a data structure, combination of data structures, element including a data structure, process that operates on a data structure, process that uses a data structure, or other element related to a data structure provides crucial novelty and enables a novel system. It has been a long trend that many examiners routinely label data structures or anything related to data structures as abstract ideas with no, marginal, or incomplete analysis. Since many computer implemented inventions use data structures, these inventions were unjustly doomed to patent ineligibility right from the start.

In the guidance’s groupings of abstract ideas, the only one that has any relation to data structures is “Mathematical concepts—mathematical relationships, mathematical formulas or equations, mathematical calculations”. Since a data structure IS an arrangement—often very complex—of data stored in memory, a data structure IS NOT a mathematical relationship, mathematical formula or equation, or mathematical calculation. Hence, a data structure is not an abstract idea. Further, many data structures – especially complex ones such as trees, graphs, neural networks, variously linked nodes, variously linked data structures, etc.—are embodiments of a practical application described under prong 2 of the guidance as patent eligible. Therefore, it is critically important to clearly state in the guidance or its training material that data structures are not abstract ideas and that inventions reciting data structures are patent eligible. 6. It has been a recent trend to issue blanket 101 rejections with no, marginal, or incomplete analysis in art units dealing with artificial intelligence inventions. This is an irresponsible practice and examiners who practice this should be identified and educated to correct their practice. It is beyond belief that the United States would cripple itself by limiting innovation in a crucial field such as AI, especially in view of the heated global race for dominance in this field. It is critically important to clearly state in the guidance or its training material that artificial intelligence inventions are patent eligible.

Sincerely,

Rod Beatson

President Transaction Security, Inc

[phone numbers redacted]

From: Doug Burum

Sent: Wednesday, March 6, 2019 9:44 AM

To: Eligibility2019

Subject: Support and suggestions regarding the 2019 Revised Patent Subject Matter Eligibility Guidance

Dear Director Iancu:

I would like to thank you for your initiative to resolve the 101 mayhem. Your subject matter eligibility guidance will help with most of the 101 problems if interpreted and implemented properly by the examiners and PTAB judges. Therefore, the highest risk to your subject matter eligibility guidance is its interpretation and implementation by the examiners and PTAB judges, and/or any lack thereof. The following are suggestions on how to further improve the guidance and how to ensure its correct and consistent interpretation and implementation.

1. In the article <https://www.ipwatchdog.com/2019/01/28/director-iancu-training-101-guidance/id=105649/>, an “examiner wrongly thought that the new guidance created a new ‘practical application’ burden that needed to be met by an applicant to overcome an existing Section 101 rejection. This is contrary to the guidance actually identifying an alternative path to establishing that a claim is patentable under Section 101 ‘if the judicial exception is integrated into a practical application of the judicial exception.’” This shows how easily confused some examiners can be. Hence, it is critically important to include in the guidance or its training material the purpose of the guidance. For example: “In addition to predictability, the purpose of the guidance is to provide alternative paths to patent eligibility, thereby substantially reducing the number of 101 rejections”.

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Therefore, it is critically important to include in the new guidance or its training material an explanation that the language stating that “a judicial exception has not been integrated into a practical application: ... [if it] merely includes instructions to implement an abstract idea on a computer, or merely uses a computer as a tool to perform an abstract idea” applies only to fundamental business practices, organizing human activities, and other well-established human practices that use a computer merely as a tool and that computer implemented inventions (i.e. artificial intelligence, robotics, autonomous vehicles and devices, image processing, databases, computer/video games, computer simulations, content processing, and many more) that arise out of or are inherently implemented on a computer are patent eligible as the patent law explicitly states.

4. It has been a long trend that many examiners routinely label all non-hardware elements of a computer implemented invention as abstract ideas with no, marginal, or incomplete analysis and label all hardware elements as “additional elements”. The examiners then merely state that the “additional elements” are well-known and do not add anything to the abstract ideas. This initial misclassification of abstract ideas and “additional elements” then prevents examiners from ever analyzing whether non-hardware elements are well understood, routine, or conventional as required in step 2B of the *Alice/Mayo* framework, since the analysis of whether an element is well understood, routine, or conventional applies only to the “additional elements”. This is an irresponsible practice and examiners who practice this should be identified and educated to correct their practice. It is critically important to clearly state in the guidance or its training material that only non-hardware elements that recite an abstract idea “on its own or per se” are abstract ideas and all other non-hardware elements are “additional elements”.

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7. I note the recent case *Ex parte Alder* (Appeal No. 2017-4809) (PTAB 2019), in which the PTAB found the claimed "snoring detection device" ineligible as directed to the abstract idea of "detecting snoring." This case is typical of other recent PTAB decisions, in that the decision recites elements of the new guidelines but then makes no real effort to actually apply the guidelines to the case-at-hand. Rather, the decision follows the previously established approach of drawing analogies to various appellate and Supreme Court cases in an attempt to find the closest thread. I urge you to vigorously strive for full implementation of the new guidelines throughout the examiner corps, including the PTAB. Uniform implementation is essential to increasing confidence and certainty within the IP community, and to reducing the number of low quality patents that are issued, as well as reducing the number of high quality patents that are challenged in IPR and similar proceedings.

Thank you and Best Regards,

Douglas P. Burum, PhD

Patent Agent, Reg. No. 65,019

From: Kerry Caperell

Sent: Tuesday, March 5, 2019 10:17 PM

To: Eligibility2019

Subject: 2019 Revised guidance

Director Iancu:

I would like to thank you for your initiative to resolve the 101 mayhem. Your subject matter eligibility guidance will help with most of the 101 problems if interpreted and implemented properly by the examiners and PTAB judges. Therefore, the highest risk to your subject matter eligibility guidance is the interpretation and implementation by the examiners and PTAB judges. The following are suggestions on how to further improve the guidance and how to ensure its correct interpretation and implementation.

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Thank you.

Kerry Caperell

From: Clapp, Marie L

Sent: Wednesday, March 6, 2019 11:49 AM

To: Eligibility2019

Subject: Thank you for the 2019 Revised Guidance

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“a judicial exception has not been integrated into a practical application: ... [if it] merely includes instructions to implement an abstract idea on a computer, or merely uses a computer as a tool to perform an abstract idea”.

This language is clearly directed to fundamental business practices, organizing human activities, and other well-established human practices that use a computer merely as a tool (see the Supreme Court opinion in *Alice v. CLS Bank International*, 134 S. Ct. 2347 (2014)). This language is clearly not directed to computer implemented inventions (i.e. artificial intelligence, robotics, autonomous vehicles and devices, image processing, databases, computer/video games, computer simulations, content processing, and many more) that arise out of or are inherently implemented on a computer. It is unimaginably irrational to attempt to make computer implemented inventions that arise out of or are inherently implemented on a computer patent ineligible simply because they are implemented on a computer.

Therefore, it is critically important to include in the new guidance or its training material an explanation that the language stating that “a judicial exception has not been integrated into a practical application: ... [if it] merely includes instructions to implement an abstract idea on a computer, or merely uses a computer as a tool to perform an abstract idea” applies only to fundamental business practices, organizing human activities, and other well-established human practices that use a computer merely as a tool and that computer implemented inventions (i.e. artificial intelligence, robotics, autonomous vehicles and devices, image processing, databases, computer/video games, computer simulations, content processing, and many more) that arise out of or are inherently implemented on a computer are patent eligible as the patent law explicitly states.

4. It has been a long trend that many examiners routinely label all non-hardware elements of a computer implemented invention as abstract ideas with no, marginal, or incomplete analysis and label all hardware elements as “additional elements”. The examiners then merely state that the “additional elements” are well-known and do not add anything to the abstract ideas. This initial misclassification of abstract ideas and “additional elements” then prevents examiners from ever analyzing whether non-hardware elements are well understood, routine, or conventional as required in step 2B of the *Alice/Mayo* framework, since the analysis of whether an element is well understood, routine, or conventional applies only to the “additional elements”. This is an irresponsible practice and examiners who practice this should be identified and educated to correct their practice. It is critically important to clearly state in the guidance or its training material that only non-hardware elements that recite an abstract idea “on its own or per se” are abstract ideas and all other non-hardware elements are “additional elements”.

5. It is often the case in computer implemented inventions that a data structure, combination of data structures, element including a data structure, process that operates on a data structure, process that uses a data structure, or other element related to a data structure provides crucial novelty and enables a

novel system. It has been a long trend that many examiners routinely label data structures or anything related to data structures as abstract ideas with no, marginal, or incomplete analysis. Since many computer implemented inventions use data structures, these inventions were unjustly doomed to patent ineligibility right from the start.

In the guidance's groupings of abstract ideas, the only one that has any relation to data structures is "Mathematical concepts—mathematical relationships, mathematical formulas or equations, mathematical calculations". Since a data structure IS an arrangement—often very complex —of data stored in memory, a data structure IS NOT a mathematical relationship, mathematical formula or equation, or mathematical calculation. Hence, a data structure is not an abstract idea. Further, many data structures – especially complex ones such as trees, graphs, neural networks, variously linked nodes, variously linked data structures, etc.—are embodiments of a practical application described under prong 2 of the guidance as patent eligible. Therefore, it is critically important to clearly state in the guidance or its training material that data structures are not abstract ideas and that inventions reciting data structures are patent eligible.

6. It has been a recent trend to issue blanket 101 rejections with no, marginal, or incomplete analysis in art units dealing with artificial intelligence inventions. This is an irresponsible practice and examiners who practice this should be identified and educated to correct their practice. It is beyond belief that the United States would cripple itself by limiting innovation in a crucial field such as AI, especially in view of the heated global race for dominance in this field. It is critically important to clearly state in the guidance or its training material that artificial intelligence inventions are patent eligible.

Again, thank you for the 2019 Revised Guidance.

Best regards,

Marie Clapp

Patent Agent/Geophysicist

Chevron

From: cpapc _

Sent: Saturday, March 2, 2019 10:17 PM

To: Eligibility2019

Subject: thank you for your initiative to resolve the 101 mayhem

Director Iancu:

I would like to thank you for your initiative to resolve the 101 mayhem. Your subject matter eligibility guidance will help with most of the 101 problems if interpreted and implemented properly by the examiners and PTAB judges. Therefore, the highest risk to your subject matter eligibility guidance is the interpretation and implementation by the examiners and PTAB judges. The following are suggestions on how to further improve the guidance and how to ensure its correct interpretation and implementation.

1. In the article <https://www.ipwatchdog.com/2019/01/28/director-iancu-training-101-guidance/id=105649/>, an “examiner wrongly thought that the new guidance created a new ‘practical application’ burden that needed to be met by an applicant to overcome an existing Section 101 rejection. This is contrary to the guidance actually identifying an alternative path to establishing that a claim is patentable under Section 101 ‘if the judicial exception is integrated into a practical application of the judicial exception.’” This shows how easily confused some examiners can be. Hence, it is critically important to include in the guidance or its training material the purpose of the guidance. For example:

In addition to predictability, the purpose of the guidance is to provide alternative paths to patent eligibility, thereby substantially reducing the number of 101 rejections.

This high-level clarification right in the general purpose of the guidance will set a clear tone for the guidance and avoid confusion such as described in the referenced article.

2. The guidance states that a claim is patent eligible if it does not recite an abstract idea (i.e. mathematical concept, etc.) “on its own or per se”. For computer implemented inventions, it is a real possibility, and even likelihood, that some examiners will ignore the “on its own or per se” requirement and will interpret this as a claim being patent ineligible if it recites an element that uses a mathematical concept. All computer implemented inventions include elements that use mathematical concepts at some level. Therefore, some examiners will wrongly continue issuing 101 rejections for computer implemented inventions, whereas, this is clearly not the intent of the guidance.

It is critically important that the guidance or its training material provides at least one example of a claim for a computer implemented invention that recites only a mathematical concept that is not patent eligible (i.e. a method comprising adding A and B to result in C). It is further critically important that the guidance or its training material provides at least one example of a claim for a computer implemented invention that recites elements that use mathematical concepts, but do not recite mathematical concepts “on their own or per se”, that is patent eligible (i.e. a method comprising: receiving or generating a, b, and c using some process or analysis; generating data structure A including a, b, and c;

accessing data structure B in a memory of a computer; evaluating data structure A and data structure B to determine at least partial match; causing the computer or a device controlled by the computer to perform some operation based on the determination).

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Therefore, it is critically important to include in the new guidance or its training material an explanation that the "a judicial exception has not been integrated into a practical application: ... [if it] merely includes instructions to implement an abstract idea on a computer, or merely uses a computer as a tool to perform an abstract idea" language applies only to fundamental business practices, organizing human activities, and other well-established human practices that use a computer merely as a tool and that computer implemented inventions (i.e. artificial intelligence, robotics, autonomous vehicles and devices, image processing, databases, computer/video games, computer simulations, content processing, and many more) that arise out of or are inherently implemented on a computer are patent eligible as the patent law explicitly states.

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Sincerely,

Jay K

From: DEVELOPMENT OFFICE

Sent: Saturday, March 2, 2019 9:13 PM

To: Eligibility2019

Subject: 2019 Revised Patent Subject Matter Eligibility Guidance

I write in support of the 2019 Revised Patent Subject Matter Eligibility Guidance. This guidance should improve the clarity, consistency, and predictability of examination and post issuance review of patents by the USPTO. Recent rulings by the courts and the USPTO have been ambiguous and contradictory and have damaged America's reputation as an innovation center. Even experienced attorneys are not able advise inventors as to whether their inventions are patentable. In cases where a patent has already been issued, there is no certainty as to whether it will be upheld, this totally eliminates domestic inventors motivation to invent. The new guidelines should provide a thorough, consistent, and logical application of the current law on subject matter eligibility.

This guidance does not expand on the Supreme Court holdings in Alice. This guidance does not expand on recent lower court rulings that certain inventions are patent eligible under the Alice test. It does not ignore other decisions nor distort the law, but rather acknowledges and solves the conundrum of confusing and apparently contradictory holdings. Adoption of this guidance will provide order, clarity, uniformity, and reduce disputes over section 101 in the courts and the USPTO. Thank you for yours effort to position the United States to retake the lead in the next wave of technological innovation in areas like quantum computing, artificial intelligence, and medical diagnostics. Protection for discoveries in these fields is the absolute best way to promote progress in science and useful arts in our modern day.

When a father of eight invents the "Toy of The Year" He hopes his invention will bring financial security to his family. But, his genius idea is stolen!

Thrust into a battle to save his invention he uncovers the shocking truth that intellectual property rights are at risk and American innovation is dying.

Patent Reform Issues For USPTO Director Andrei Iancu And The Voters To Address -

The modern issue of inventor patent rights is NOT about issues involving two different inventors who happen to have thought of the same kind of thing at the same time. This is NOT about that!

This is about Google, Facebook, Sony Pictures, Netflix, Hulu, Amazon, YouTube and the Silicon Valley tech oligarchs sending their venture capital firms Draper-Fisher, Kleiner Perkins, Andreessen, Greylock and other Palo Alto Sandhill Road tech-mobster spies, around to spy on start-ups and defraud them by pretending to be "considering an investment".

The NVCA VC's pretend to be interested, get your technology data in their pretend "due diligence reviews", copy everything you have, pass it over to their "on staff entrepreneur, change the name and then launch it as their start-up or roll it out as a facade company under the Alphabet or other Google

sham operations. Every VC on Sandhill Road appears to be scum! They will smile at you and shake your hand while they rob you blind with the other hand. At the same time they steal your idea they will have the media companies and tabloids that they own run a smear job campaign against the inventor in order to damage the inventor's credibility to testify against the oligarchs. The oligarchs hire Google/YouTube, Gawker, Gizmodo, Jalopnik and Fusion GPS to character assassinate the inventor globally to reduce the ability of the inventor to fight back.

Sandhill Road VC's are the spoiled frat boy rich family kids that lived together in fraternity houses down the road at Stanford University. You have heard about all the date rapes at Stanford, right? These Silicon Valley VC's are those same frat boys that went "up-the-hill" after they left the Stanford campus. They raped co-eds in college and then they just moved a few blocks up the street to rape American inventors in their NVCA Cartel.

These tech-mobsters bribe U.S. Senators and run technology monopolies with impunity. These Cartel operators spy, steal and cover-up. They then blockade you from ever getting to court and use their monopoly control of most law firms and K-Street lobbyists to use your technology without ever paying for it. If you don't know what a Washington, DC "K-Street Lobbyist" does then watch the feature film called: "Miss Sloane" starring Jessica Chastain. K-Street Lobbyists will stoop to any crime to get their big paychecks from Google, Facebook and Sony Pictures.

In Silicon Valley there is a Cartel of "Venture Capitalists" who like to call entrepreneurs in, examine their technologies in 'fishing expeditions', say "we can't see any use for it", copy the technology and launch it themselves; after black-listing the entrepreneur. That is their "playbook." The New York Times released an article (<http://www.nytimes.com/2016/01/24/technology/larry-page-google-founder-is-still-innovator-in-chief.html>) describing how Google's bosses covertly skulk around at tech parties in order to snatch technologies from unsuspecting entrepreneurs. The new start-up hopeful in Silicon Valley must watch for these technology raiders with a cautious eye. Google, in fact, put their lawyer in charge of the U.S. Patent Office and spent nearly a hundred million dollars lobbying to try to "outlaw" small American inventors because Google is so afraid of eventually having to pay for all of the tech it poached. Kleiner Perkins, Greylock Capital, Draper Fisher Jurvetson, and 90% of the Silicon Valley 'VC's' on Palo Alto's Sandhill Road have engaged in this 'idea rape' intellectual property theft and clone effort. Facebook, Google, YouTube, and other big name companies, were poached from small start-ups that had the original versions up and running when Silicon Valley VC's just came by and copied them without ever paying the inventors.

The public is concerned about federal reports of large Silicon Valley corporations stealing inventions and lack of access to the legal system for garage inventors and small businesses. Does your Senator intend to co-sponsor the Inventor Rights Act in this Congress?

We understand the United States Patent and Trademark Office is now being pushed into the business of revoking the patent rights of inventors by Silicon Valley Oligarchs. The Patent Trial and Appeal Board is canceling portions of 80-90% of the patents they review. This is disheartening and discouraging to inventors and startups in our community. Please ask your elected officials to support giving inventors

the right to have their patent rights decided by a real judge and jury instead of this rogue tribunal? Tell your elected officials to co-sponsor the Inventor Rights Act?

If a big Silicon Valley corporation decides to invalidate my patent it will cost me at least half a million dollars to fight them in the Patent Trial and Appeal Board. Ask your Senator to pass a law that will protect domestic citizen invention from this threat? Tell your elected officials to co-sponsor the Inventor Rights Act?

Josh Malone, the inventor, has said that his court case against Telebrands has cost over \$20M. Where is an inventor supposed to get that kind of money? Tell your elected officials to co-sponsor the Inventor Rights Act to restore sanity to our patent system?

Dan Phillips, inventor of the Bionic Wrench, has been fighting Sears in court since 2012. A judge recently tossed out the jury verdict that held Sears liable. I understand his appeal process will take several more years. How can a small business survive if it takes a decade and millions of dollars in legal expense to sort out our intellectual property rights? Tell your elected officials to co-sponsor the Inventor Rights Act

The news says that "China is stealing technology" but in reality it is Google, Facebook, Sony and U.S.-based corporations that are stealing technology from inventors right and left. Google, Apple, Amazon, Telebrands and other big corporations are constantly getting away with profiting from pirated products. Tell your elected officials to co-sponsor the Inventor Rights Act to put an end to this and reinvigorate the famous American innovation system?

There is no such thing as a "Patent Troll". This is a term created by Silicon Valley's K-Street lobbyists FOR Google, Facebook and the Palo Alto Mafia. Again referring to the feature film: "Miss Sloane", the term "Patent Troll: was created by people like "Miss Sloane" in order to remove all the rights from people like Thomas Edison and Nikola Tesla. It is part of a mass political behavior modification effort to make the public think that dark evil forces are helping inventors. Inventors hire, or partner with, patent monetization firms to help them fight against Google, Facebooks and other oligarchs massive IP thefts.

The American Dream is based on small inventors building the future in their garages but if the Silicon Valley Oligarchs and their K-Street lobbyists are spending over 100 billion dollars to kill that dream; then America's core asset, the nation's individual inventors, are being erased from our society?

If you would like to learn more about these issues so you can educate public officials and drive the patent office to reform, see these links:

- Invalidated: The Shredding of The U.S. Patent System (Amazon Documentary)
- \$17 million: The real and staggering cost to patent in the US in the PTAB (Article by Josh Malone)
- U.S. Startup Company Formation and Venture Capital Funding Trend 2004-2017 (White Paper by USIJ)
- Inventor Rights Resolution (PLEASE SIGN The Resolution at The link below if you have not already done so)

SEE:

<http://www.usinventor.org>

<http://www.nytimes.com/2016/01/24/technology/larry-page-google-founder-is-still-innovator-in-chief.html>

http://www.cracked.com/article_20286_6-inventors-who-changed-world-got-screwed-in-return.html

<https://youtu.be/puDRxSwCDeY>

https://www.theregister.co.uk/2018/11/30/google_stole_my_patent/

<https://www.ipwatchdog.com/2018/02/26/intellectual-property-plays-big-role-silicon-valley-deals/id=94010/>

<https://www.youtube.com/watch?v=XKHUc2ouMXA>

<https://www.entrepreneur.com/article/300301>

<https://www.tomsguide.com/us/google-huddlechat-campfire,news-977.html>

<https://www.pinterest.com/pin/337840409537222740/>

<https://www.amazon.com/Invalidated-Josh-Malone/dp/B07G2WGTK6>

<https://docs.house.gov/meetings/SM/SM00/20180711/108559/HHRG-115-SM00-Wstate-IsraelC-20180711-SD003.pdf>

https://www.reddit.com/r/SiliconValleyHBO/comments/36br3z/is_brain_raping_a_real_thing/

<https://www.vocativ.com/money/startups/stole-idea-meet-silicon-valleys-bitterest-entrepreneurs/index.html>

<https://www.zdnet.com/article/silicon-valleys-lack-of-diversity-most-vcs-come-from-just-two-private-universities/>

From: Gene Dolgoff

Sent: Wednesday, March 6, 2019 6:48 PM

To: Eligibility2019

Subject: Re: 101 Guidance

Director Iancu:

I would like to thank you for your initiative to resolve the 101 mayhem. Your subject matter eligibility guidance will help with most of the 101 problems if interpreted and implemented properly by the examiners and PTAB judges. Therefore, the highest risk to your subject matter eligibility guidance is the interpretation and implementation by the examiners and PTAB judges. The following are suggestions on how to further improve the guidance and how to ensure its correct interpretation and implementation.

1. In the article <https://www.ipwatchdog.com/2019/01/28/director-iancu-training-101-guidance/id=105649/>, an “examiner wrongly thought that the new guidance created a new ‘practical application’ burden that needed to be met by an applicant to overcome an existing Section 101 rejection. This is contrary to the guidance actually identifying an alternative path to establishing that a claim is patentable under Section 101 ‘if the judicial exception is integrated into a practical application of the judicial exception.’” This shows how easily confused some examiners can be. Hence, it is critically important to include in the guidance or its training material the purpose of the guidance. For example: “In addition to predictability, the purpose of the guidance is to provide alternative paths to patent eligibility, thereby substantially reducing the number of 101 rejections”.

This high-level clarification right in the general purpose of the guidance will set a clear tone for the guidance and avoid confusion such as described in the referenced article.

2. The guidance states that a claim is patent eligible if it does not recite an abstract idea (i.e. mathematical concept, etc.) “on its own or per se”. For computer implemented inventions, it is a real possibility, and even likelihood, that some examiners will ignore the “on its own or per se” requirement and will interpret this as a claim being patent ineligible if it recites an element that uses a mathematical concept. All computer implemented inventions include elements that use mathematical concepts at some level. Therefore, some examiners will wrongly continue issuing 101 rejections for computer implemented inventions, whereas, this is clearly not the intent of the guidance.

It is critically important that the guidance or its training material provides at least one example of a claim for a computer implemented invention that recites only a mathematical concept that is not patent eligible (i.e. a method comprising adding A and B to result in C). It is further critically important that the guidance or its training material provides at least one example of a claim for a computer implemented invention that recites elements that use mathematical concepts, but do not recite mathematical concepts “on their own or per se”, that is patent eligible (i.e. a method comprising: receiving or generating a, b, and c using some process or analysis; generating data structure A including a, b, and c; accessing data structure B in a memory of a computer; evaluating data structure A and data structure B

to determine at least partial match; causing the computer or a device controlled by the computer to perform some operation based on the determination).

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Therefore, it is critically important to include in the new guidance or its training material an explanation that the language stating that “a judicial exception has not been integrated into a practical application: ... [if it] merely includes instructions to implement an abstract idea on a computer, or merely uses a computer as a tool to perform an abstract idea” applies only to fundamental business practices, organizing human activities, and other well-established human practices that use a computer merely as a tool and that computer implemented inventions (i.e. artificial intelligence, robotics, autonomous vehicles and devices, image processing, databases, computer/video games, computer simulations, content processing, and many more) that arise out of or are inherently implemented on a computer are patent eligible as the patent law explicitly states.

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From: Bob Fisk <bfisk@pbcadvisors.com>

Sent: Tuesday, March 5, 2019 4:51 PM

To: Eligibility2019

Subject: 101 mayhem

Director Iancu:

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Therefore, it is critically important to include in the new guidance or its training material an explanation that the language stating that “a judicial exception has not been integrated into a practical application: ... [if it] merely includes instructions to implement an abstract idea on a computer, or merely uses a computer as a tool to perform an abstract idea” applies only to fundamental business practices, organizing human activities, and other well-established human practices that use a computer merely as a tool and that computer implemented inventions (i.e. artificial intelligence, robotics, autonomous vehicles and devices, image processing, databases, computer/video games, computer simulations, content processing, and many more) that arise out of or are inherently implemented on a computer are patent eligible as the patent law explicitly states.

4. It has been a long trend that many examiners routinely label all non-hardware elements of a computer implemented invention as abstract ideas with no, marginal, or incomplete analysis and label all hardware elements as “additional elements”. The examiners then merely state that the “additional elements” are well-known and do not add anything to the abstract ideas. This initial misclassification of abstract ideas and “additional elements” then prevents examiners from ever analyzing whether non-hardware elements are well understood, routine, or conventional as required in step 2B of the *Alice/Mayo* framework, since the analysis of whether an element is well understood, routine, or conventional applies only to the “additional elements”. This is an irresponsible practice and examiners who practice this should be identified and educated to correct their practice. It is critically important to clearly state in the guidance or its training material that only non-hardware elements that recite an abstract idea “on its own or per se” are abstract ideas and all other non-hardware elements are “additional elements”.

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novel system. It has been a long trend that many examiners routinely label data structures or anything related to data structures as abstract ideas with no, marginal, or incomplete analysis. Since many computer implemented inventions use data structures, these inventions were unjustly doomed to patent ineligibility right from the start.

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Robert A. Fisk

Partner

PBC Advisors LLC

From: John Fraser

Sent: Wednesday, March 6, 2019 1:15 PM

To: Eligibility2019

Subject: Your subject matter eligibility guidance

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I would like to thank you for your initiative to resolve the 101 mayhem. Your subject matter eligibility guidance will help with most of the 101 problems if interpreted and implemented properly by the examiners and PTAB judges. Therefore, the highest risk to your subject matter eligibility guidance is the interpretation and implementation by the examiners and PTAB judges. The following are suggestions on how to further improve the guidance and how to ensure its correct interpretation and implementation.

1. In the article <https://www.ipwatchdog.com/2019/01/28/director-iancu-training-101-guidance/id=105649/>, an “examiner wrongly thought that the new guidance created a new ‘practical application’ burden that needed to be met by an applicant to overcome an existing Section 101 rejection. This is contrary to the guidance actually identifying an alternative path to establishing that a claim is patentable under Section 101 ‘if the judicial exception is integrated into a practical application of the judicial exception.’” This shows how easily confused some examiners can be. Hence, it is critically important to include in the guidance or its training material the purpose of the guidance. For example: “In addition to predictability, the purpose of the guidance is to provide alternative paths to patent eligibility, thereby substantially reducing the number of 101 rejections”.

This high-level clarification right in the general purpose of the guidance will set a clear tone for the guidance and avoid confusion such as described in the referenced article.

2. The guidance states that a claim is patent eligible if it does not recite an abstract idea (i.e. mathematical concept, etc.) “on its own or per se”. For computer implemented inventions, it is a real possibility, and even likelihood, that some examiners will ignore the “on its own or per se” requirement and will interpret this as a claim being patent ineligible if it recites an element that uses a mathematical concept. All computer implemented inventions include elements that use mathematical concepts at some level. Therefore, some examiners will wrongly continue issuing 101 rejections for computer implemented inventions, whereas, this is clearly not the intent of the guidance.

It is critically important that the guidance or its training material provides at least one example of a claim for a computer implemented invention that recites only a mathematical concept that is not patent eligible (i.e. a method comprising adding A and B to result in C). It is further critically important that the guidance or its training material provides at least one example of a claim for a computer implemented invention that recites elements that use mathematical concepts, but do not recite mathematical concepts “on their own or per se”, that is patent eligible (i.e. a method comprising: receiving or generating a, b, and c using some process or analysis; generating data structure A including a, b, and c; accessing data structure B in a memory of a computer; evaluating data structure A and data structure B

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regards

John A. Fraser, RTTP, CLP

President

Burnside Development and Associates

[contact info redacted]

From: Hake _

Sent: Friday, March 1, 2019 6:47 PM

To: Eligibility2019

Subject: comment

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Therefore, it is critically important to include in the new guidance or its training material an explanation that the "a judicial exception has not been integrated into a practical application: ... [if it] merely includes instructions to implement an abstract idea on a computer, or merely uses a computer as a tool to perform an abstract idea" language applies only to fundamental business practices, organizing human activities, and other well-established human practices that use a computer merely as a tool and that computer implemented inventions (i.e. artificial intelligence, robotics, autonomous vehicles and devices, image processing, databases, computer/video games, computer simulations content processing, and many more) that arise out of or are inherently implemented on a computer are patent eligible as the patent law explicitly states.

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Sincerely,

From: Mei Hong

Sent: Wednesday, March 6, 2019 4:57 PM

To: Eligibility2019

Subject: Support Director Iancu's Efforts to Restore the Value of U.S. Patents

Dear Director Iancu:

I would like to thank you for your initiative to resolve the 101 mayhem. Your subject matter eligibility guidance will help with most of the 101 problems if interpreted and implemented properly by the examiners and PTAB judges. Therefore, the highest risk to your subject matter eligibility guidance is the interpretation and implementation by the examiners and PTAB judges. The following are suggestions on how to further improve the guidance and how to ensure its correct interpretation and implementation.

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2. The guidance states that a claim is patent eligible if it does not recite an abstract idea (i.e. mathematical concept, etc.) "on its own or per se". For computer implemented inventions, it is a real possibility, and even likelihood, that some examiners will ignore the "on its own or per se" requirement and will interpret this as a claim being patent ineligible if it recites an element that uses a mathematical concept. All computer implemented inventions include elements that use mathematical concepts at some level. Therefore, some examiners will wrongly continue issuing 101 rejections for computer implemented inventions, whereas, this is clearly not the intent of the guidance.

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Best regards,

Mei

Mei Hong, PhD

Director, Intellectual Property • Eureka Therapeutics, Inc.

[contact info redacted]

From: alex langer design

Sent: Wednesday, March 6, 2019 5:44 PM

To: Eligibility2019

Subject: 101 Guidance Suggestions

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Thank you for your time.

Alex Langer

[address redacted]

From: Luke Livingston

Sent: Tuesday, March 5, 2019 8:40 AM

To: Eligibility2019

Subject: Section 101

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2. The guidance states that a claim is patent eligible if it does not recite an abstract idea (i.e. mathematical concept, etc.) “on its own or per se”. For computer implemented inventions, it is a real possibility, and even likelihood, that some examiners will ignore the “on its own or per se” requirement and will interpret this as a claim being patent ineligible if it recites an element that uses a mathematical concept. All computer implemented inventions include elements that use mathematical concepts at some level. Therefore, some examiners will wrongly continue issuing 101 rejections for computer implemented inventions, whereas, this is clearly not the intent of the guidance.

It is critically important that the guidance or its training material provides at least one example of a claim for a computer implemented invention that recites only a mathematical concept that is not patent eligible (i.e. a method comprising adding A and B to result in C). It is further critically important that the guidance or its training material provides at least one example of a claim for a computer implemented invention that recites elements that use mathematical concepts, but do not recite mathematical concepts “on their own or per se”, that is patent eligible (i.e. a method comprising: receiving or generating a, b, and c using some process or analysis; generating data structure A including a, b, and c; accessing data structure B in a memory of a computer; evaluating data structure A and data structure B

to determine at least partial match; causing the computer or a device controlled by the computer to perform some operation based on the determination).

3. The guidance mentions that:

“a judicial exception has not been integrated into a practical application: ... [if it] merely includes instructions to implement an abstract idea on a computer, or merely uses a computer as a tool to perform an abstract idea”.

This language is clearly directed to fundamental business practices, organizing human activities, and other well-established human practices that use a computer merely as a tool (see the Supreme Court opinion in *Alice v. CLS Bank International*, 134 S. Ct. 2347 (2014)). This language is clearly not directed to computer implemented inventions (i.e. artificial intelligence, robotics, autonomous vehicles and devices, image processing, databases, computer/video games, computer simulations, content processing, and many more) that arise out of or are inherently implemented on a computer. It is unimaginably irrational to attempt to make computer implemented inventions that arise out of or are inherently implemented on a computer patent ineligible simply because they are implemented on a computer.

Therefore, it is critically important to include in the new guidance or its training material an explanation that the language stating that “a judicial exception has not been integrated into a practical application: ... [if it] merely includes instructions to implement an abstract idea on a computer, or merely uses a computer as a tool to perform an abstract idea” applies only to fundamental business practices, organizing human activities, and other well-established human practices that use a computer merely as a tool and that computer implemented inventions (i.e. artificial intelligence, robotics, autonomous vehicles and devices, image processing, databases, computer/video games, computer simulations, content processing, and many more) that arise out of or are inherently implemented on a computer are patent eligible as the patent law explicitly states.

4. It has been a long trend that many examiners routinely label all non-hardware elements of a computer implemented invention as abstract ideas with no, marginal, or incomplete analysis and label all hardware elements as “additional elements”. The examiners then merely state that the “additional elements” are well-known and do not add anything to the abstract ideas. This initial misclassification of abstract ideas and “additional elements” then prevents examiners from ever analyzing whether non-hardware elements are well understood, routine, or conventional as required in step 2B of the *Alice/Mayo* framework, since the analysis of whether an element is well understood, routine, or conventional applies only to the “additional elements”. This is an irresponsible practice and examiners who practice this should be identified and educated to correct their practice. It is critically important to clearly state in the guidance or its training material that only non-hardware elements that recite an abstract idea “on its own or per se” are abstract ideas and all other non-hardware elements are “additional elements”.

5. It is often the case in computer implemented inventions that a data structure, combination of data structures, element including a data structure, process that operates on a data structure, process that uses a data structure, or other element related to a data structure provides crucial novelty and enables a

novel system. It has been a long trend that many examiners routinely label data structures or anything related to data structures as abstract ideas with no, marginal, or incomplete analysis. Since many computer implemented inventions use data structures, these inventions were unjustly doomed to patent ineligibility right from the start.

In the guidance's groupings of abstract ideas, the only one that has any relation to data structures is "Mathematical concepts—mathematical relationships, mathematical formulas or equations, mathematical calculations". Since a data structure IS an arrangement—often very complex —of data stored in memory, a data structure IS NOT a mathematical relationship, mathematical formula or equation, or mathematical calculation. Hence, a data structure is not an abstract idea. Further, many data structures – especially complex ones such as trees, graphs, neural networks, variously linked nodes, variously linked data structures, etc.—are embodiments of a practical application described under prong 2 of the guidance as patent eligible. Therefore, it is critically important to clearly state in the guidance or its training material that data structures are not abstract ideas and that inventions reciting data structures are patent eligible.

6. It has been a recent trend to issue blanket 101 rejections with no, marginal, or incomplete analysis in art units dealing with artificial intelligence inventions. This is an irresponsible practice and examiners who practice this should be identified and educated to correct their practice. It is beyond belief that the United States would cripple itself by limiting innovation in a crucial field such as AI, especially in view of the heated global race for dominance in this field. It is critically important to clearly state in the guidance or its training material that artificial intelligence inventions are patent eligible.

Best Regards,

Luke Livingston

Ground Floor Video

From: Prem Makeig

Sent: Tuesday, March 5, 2019 9:38 PM

To: Eligibility2019

Subject: 101 guidance

Director Iancu:

I would like to thank you for your initiative to resolve the 101 problems. Your subject matter eligibility guidance will help with most of the 101 problems if interpreted and implemented properly by the examiners and PTAB judges. Therefore, the highest risk to your subject matter eligibility guidance is the interpretation and implementation by the examiners and PTAB judges. The following are suggestions on how to further improve the guidance and how to ensure its correct interpretation and implementation.

1. In the article <https://www.ipwatchdog.com/2019/01/28/director-iancu-training-101-guidance/id=105649/>, an “examiner wrongly thought that the new guidance created a new ‘practical application’ burden that needed to be met by an applicant to overcome an existing Section 101 rejection. This is contrary to the guidance actually identifying an alternative path to establishing that a claim is patentable under Section 101 ‘if the judicial exception is integrated into a practical application of the judicial exception.’” This shows how easily confused some examiners can be. Hence, it is critically important to include in the guidance or its training material the purpose of the guidance. For example: “In addition to predictability, the purpose of the guidance is to provide alternative paths to patent eligibility, thereby substantially reducing the number of 101 rejections”.

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Best,

Prem Makeig

Brooklyn, NY

From: Office Center

Sent: Saturday, March 2, 2019 9:10 PM

To: Eligibility2019

Subject: 2019 Revised Patent Subject Matter Eligibility Guidance - For The Record

I write in support of the 2019 Revised Patent Subject Matter Eligibility Guidance. This guidance should improve the clarity, consistency, and predictability of examination and post issuance review of patents by the USPTO. Recent rulings by the courts and the USPTO have been ambiguous and contradictory and have damaged America's reputation as an innovation center. Even experienced attorneys are not able advise inventors as to whether their inventions are patentable. In cases where a patent has already been issued, there is no certainty as to whether it will be upheld, this totally eliminates domestic inventors motivation to invent. The new guidelines should provide a thorough, consistent, and logical application of the current law on subject matter eligibility.

This guidance does not expand on the Supreme Court holdings in Alice. This guidance does not expand on recent lower court rulings that certain inventions are patent eligible under the Alice test. It does not ignore other decisions nor distort the law, but rather acknowledges and solves the conundrum of confusing and apparently contradictory holdings. Adoption of this guidance will provide order, clarity, uniformity, and reduce disputes over section 101 in the courts and the USPTO. Thank you for yours effort to position the United States to retake the lead in the next wave of technological innovation in areas like quantum computing, artificial intelligence, and medical diagnostics. Protection for discoveries in these fields is the absolute best way to promote progress in science and useful arts in our modern day.

When a father of eight invents the "Toy of The Year" He hopes his invention will bring financial security to his family. But, his genius idea is stolen!

Thrust into a battle to save his invention he uncovers the shocking truth that intellectual property rights are at risk and American innovation is dying.

Patent Reform Issues For USPTO Director Andrei Iancu And The Voters To Address -

The modern issue of inventor patent rights is NOT about issues involving two different inventors who happen to have thought of the same kind of thing at the same time. This is NOT about that!

This is about Google, Facebook, Sony Pictures, Netflix, Hulu, Amazon, YouTube and the Silicon Valley tech oligarchs sending their venture capital firms Draper-Fisher, Kleiner Perkins, Andreessen, Greylock and other Palo Alto Sandhill Road tech-mobster spies, around to spy on start-ups and defraud them by pretending to be "considering an investment".

The NVCA VC's pretend to be interested, get your technology data in their pretend "due diligence reviews", copy everything you have, pass it over to their "on staff entrepreneur, change the name and then launch it as their start-up or roll it out as a facade company under the Alphabet or other Google

sham operations. Every VC on Sandhill Road appears to be scum! They will smile at you and shake your hand while they rob you blind with the other hand. At the same time they steal your idea they will have the media companies and tabloids that they own run a smear job campaign against the inventor in order to damage the inventors credibility to testify against the oligarchs. The oligarchs hire Google/Youtube, Gawker, Gizmodo, Jalopnik and Fusion GPS to character assassinate the inventor globally to reduce the ability of the inventor to fight back.

Sandhill Road VC's are the spoiled frat boy rich family kids that lived together in fraternity houses down the road at Stanford University. You have heard about all the date rapes at Stanford, right? These Silicon Valley VC's are those same frat boys that went "up-the-hill" after they left the Stanford campus. They raped co-eds in college and then they just moved a few blocks up the street to rape American inventors in their NVCA Cartel.

These tech-mobsters bribe U.S. Senators and run technology monopolies with impunity. These Cartel operators spy, steal and cover-up. They then blockade you from ever getting to court and use their monopoly control of most law firms and K-Street lobbyists to use your technology without ever paying for it. If you don't know what a Washington, DC "K-Street Lobbyist" does then watch the feature film called: "Miss Sloane" starring Jessica Chastain. K-Street Lobbyists will stoop to any crime to get their big paychecks from Google, Facebook and Sony Pictures.

In Silicon Valley there is a Cartel of "Venture Capitalists" who like to call entrepreneurs in, examine their technologies in 'fishing expeditions', say "we can't see any use for it", copy the technology and launch it themselves; after black-listing the entrepreneur. That is their "playbook." The New York Times released an article (<http://www.nytimes.com/2016/01/24/technology/larry-page-google-founder-is-still-innovator-in-chief.html>) describing how Google's bosses covertly skulk around at tech parties in order to snatch technologies from unsuspecting entrepreneurs. The new start-up hopeful in Silicon Valley must watch for these technology raiders with a cautious eye. Google, in fact, put their lawyer in charge of the U.S. Patent Office and spent nearly a hundred million dollars lobbying to try to "outlaw" small American inventors because Google is so afraid of eventually having to pay for all of the tech it poor all of the tech it poached. Kleiner Perkins, Greylock Capital, Draper Fisher Jurvetson, and 90% of the Silicon Valley 'VC's' on Palo Alto's Sandhill Road have engaged in this 'idea rape' intellectual property theft and clone effort. Facebook, Google, YouTube, and other big name companies, were poached from small start-ups that had the original versions up and running when Silicon Valley VC's just came by and copied them without ever paying the inventors.

The public is concerned about federal reports of large Silicon Valley corporations stealing inventions and lack of access to the legal system for garage inventors and small businesses. Does your Senator intend to co-sponsor the Inventor Rights Act in this Congress?

We understand the United States Patent and Trademark Office is now being pushed into the business of revoking the patent rights of inventors by Silicon Valley Oligarchs. The Patent Trial and Appeal Board is canceling portions of 80-90% of the patents they review. This is disheartening and discouraging to inventors and startups in our community. Please ask your elected officials to support giving inventors

the right to have their patent rights decided by a real judge and jury instead of this rogue tribunal? Tell your elected officials to co-sponsor the Inventor Rights Act?

If a big Silicon Valley corporation decides to invalidate my patent it will cost me at least half a million dollars to fight them in the Patent Trial and Appeal Board. Ask your Senator to pass a law that will protect domestic citizen invention from this threat? Tell your elected officials to co-sponsor the Inventor Rights Act?

Josh Malone, the inventor, has said that his court case against Telebrands has cost over \$20M. Where is an inventor supposed to get that kind of money? Tell your elected officials to co-sponsor the Inventor Rights Act to restore sanity to our patent system?

Dan Phillips, inventor of the Bionic Wrench, has been fighting Sears in court since 2012. A judge recently tossed out the jury verdict that held Sears liable. I understand his appeal process will take several more years. How can a small business survive if it takes a decade and millions of dollars in legal expense to sort out our intellectual property rights? Tell your elected officials to co-sponsor the Inventor Rights Act

The news says that "China is stealing technology" but in reality it is Google, Facebook, Sony and U.S.-based corporations that are stealing technology from inventors right and left. Google, Apple, Amazon, Telebrands and other big corporations are constantly getting away with profiting from pirated products. Tell your elected officials to co-sponsor the Inventor Rights Act to put an end to this and reinvigorate the famous American innovation system?

There is no such thing as a "Patent Troll". This is a term created by Silicon Valley's K-Street lobbyists FOR Google, Facebook and the Palo Alto Mafia. Again referring to the feature film: "Miss Sloane", the term "Patent Troll: was created by people like "Miss Sloane" in order to remove all the rights from people like Thomas Edison and Nikola Tesla. It is part of a mass political behavior modification effort to make the public think that dark evil forces are helping inventors. Inventors hire, or partner with, patent monetization firms to help them fight against Google, Facebooks and other oligarchs massive IP thefts.

The American Dream is based on small inventors building the future in their garages but if the Silicon Valley Oligarchs and their K-Street lobbyists are spending over 100 billion dollars to kill that dream; then America's core asset, the nation's individual inventors, are being erased from our society?

If you would like to learn more about these issues so you can educate public officials and drive the patent office to reform, see these links:

- Invalidated: The Shredding of The U.S. Patent System (Amazon Documentary)
- \$17 million: The real and staggering cost to patent in the US in the PTAB (Article by Josh Malone)
- U.S. Startup Company Formation and Venture Capital Funding Trend 2004-2017 (White Paper by USIJ)
- Inventor Rights Resolution (PLEASE SIGN The Resolution at The link below if you have not already done so)

SEE:

<http://www.usinventor.org>

<http://www.nytimes.com/2016/01/24/technology/larry-page-google-founder-is-still-innovator-in-chief.html>

http://www.cracked.com/article_20286_6-inventors-who-changed-world-got-screwed-in-return.html

<https://youtu.be/puDRxSwCDeY>

https://www.theregister.co.uk/2018/11/30/google_stole_my_patent/

<https://www.ipwatchdog.com/2018/02/26/intellectual-property-plays-big-role-silicon-valley-deals/id=94010/>

<https://www.youtube.com/watch?v=XKHUc2ouMXA>

<https://www.entrepreneur.com/article/300301>

<https://www.tomsguide.com/us/google-huddlechat-campfire,news-977.html>

<https://www.pinterest.com/pin/337840409537222740/>

<https://www.amazon.com/Invalidated-Josh-Malone/dp/B07G2WGTK6>

<https://docs.house.gov/meetings/SM/SM00/20180711/108559/HHRG-115-SM00-Wstate-IsraelC-20180711-SD003.pdf>

https://www.reddit.com/r/SiliconValleyHBO/comments/36br3z/is_brain_raping_a_real_thing/

<https://www.vocativ.com/money/startups/stole-idea-meet-silicon-valleys-bitterest-entrepreneurs/index.html>

<https://www.zdnet.com/article/silicon-valleys-lack-of-diversity-most-vcs-come-from-just-two-private-universities/>

From: John Ogilvie

Sent: Wednesday, March 6, 2019 10:23 AM

To: Eligibility2019

Subject: 2019 Revised Patent Subject Matter Eligibility Guidance - comment

Director Iancu:

I would like to thank you for your initiative to resolve the 101 mayhem. Your subject matter eligibility guidance will help with many of the 101 problems if interpreted and implemented properly by the examiners and PTAB judges. Therefore, the highest risk to your subject matter eligibility guidance is the interpretation and implementation by the examiners and PTAB judges. The following are suggestions on how to further improve the guidance and how to ensure its correct interpretation and implementation.

1. Examiners sometimes write what may be called “bulk” or “mass” or “group” rejections with claims bundled together instead of examining each claim individually on its own merits, and expressly considering each claim limitation both individually and as part of the combination defined by the claim that contains it. Examiners should be instructed that language such as “Claims 1-20 are rejected under 35 USC 101 because the claimed invention is directed to an abstract idea without significantly more” is not permitted in a rejection unless it is followed up by the express and complete abstract idea analysis of each claim individually, including the impact of each limitation of each claim alone and as part of a combination of limitations defined by the claim as a whole. Anything less does not make even a prima facie case for rejection under Section 101.

2. In the article <https://www.ipwatchdog.com/2019/01/28/director-iancu-training-101-guidance/id=105649/>, an “examiner wrongly thought that the new guidance created a new ‘practical application’ burden that needed to be met by an applicant to overcome an existing Section 101 rejection. This is contrary to the guidance actually identifying an alternative path to establishing that a claim is patentable under Section 101 ‘if the judicial exception is integrated into a practical application of the judicial exception.’” This shows how easily confused some examiners can be. Hence, it is critically important to include in the guidance or its training material the purpose of the guidance. For example: “In addition to predictability, the purpose of the guidance is to provide alternative paths to patent eligibility, thereby substantially reducing the number of 101 rejections”.

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Therefore, it is critically important to include in the new guidance or its training material an explanation that the language stating that “a judicial exception has not been integrated into a practical application: ... [if it] merely includes instructions to implement an abstract idea on a computer, or merely uses a computer as a tool to perform an abstract idea” applies only to fundamental business practices, organizing human activities, and other well-established human practices that use a computer merely as a tool and that computer implemented inventions (i.e. artificial intelligence, robotics, autonomous vehicles and devices, image processing, databases, computer/video games, computer simulations, content processing, and many more) that arise out of or are inherently implemented on a computer are patent eligible as the patent law explicitly states.

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Respectfully submitted,

John W. Ogilvie

Registered Patent Attorney

Ogilvie Law Firm

From: chad phillips

Sent: Wednesday, March 6, 2019 9:28 AM

To: Eligibility2019

Subject: 101 Mayhem

Director Iancu:

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2. The guidance states that a claim is patent eligible if it does not recite an abstract idea (i.e. mathematical concept, etc.) “on its own or per se”. For computer implemented inventions, it is a real possibility, and even likelihood, that some examiners will ignore the “on its own or per se” requirement and will interpret this as a claim being patent ineligible if it recites an element that uses a mathematical concept. All computer implemented inventions include elements that use mathematical concepts at some level. Therefore, some examiners will wrongly continue issuing 101 rejections for computer implemented inventions, whereas, this is clearly not the intent of the guidance.

It is critically important that the guidance or its training material provides at least one example of a claim for a computer implemented invention that recites only a mathematical concept that is not patent eligible (i.e. a method comprising adding A and B to result in C). It is further critically important that the guidance or its training material provides at least one example of a claim for a computer implemented invention that recites elements that use mathematical concepts, but do not recite mathematical concepts “on their own or per se”, that is patent eligible (i.e. a method comprising: receiving or generating a, b, and c using some process or analysis; generating data structure A including a, b, and c; accessing data structure B in a memory of a computer; evaluating data structure A and data structure B

to determine at least partial match; causing the computer or a device controlled by the computer to perform some operation based on the determination).

3. The guidance mentions that:

“a judicial exception has not been integrated into a practical application: ... [if it] merely includes instructions to implement an abstract idea on a computer, or merely uses a computer as a tool to perform an abstract idea”.

This language is clearly directed to fundamental business practices, organizing human activities, and other well-established human practices that use a computer merely as a tool (see the Supreme Court opinion in *Alice v. CLS Bank International*, 134 S. Ct. 2347 (2014)). This language is clearly not directed to computer implemented inventions (i.e. artificial intelligence, robotics, autonomous vehicles and devices, image processing, databases, computer/video games, computer simulations, content processing, and many more) that arise out of or are inherently implemented on a computer. It is unimaginably irrational to attempt to make computer implemented inventions that arise out of or are inherently implemented on a computer patent ineligible simply because they are implemented on a computer.

Therefore, it is critically important to include in the new guidance or its training material an explanation that the language stating that “a judicial exception has not been integrated into a practical application: ... [if it] merely includes instructions to implement an abstract idea on a computer, or merely uses a computer as a tool to perform an abstract idea” applies only to fundamental business practices, organizing human activities, and other well-established human practices that use a computer merely as a tool and that computer implemented inventions (i.e. artificial intelligence, robotics, autonomous vehicles and devices, image processing, databases, computer/video games, computer simulations, content processing, and many more) that arise out of or are inherently implemented on a computer are patent eligible as the patent law explicitly states.

4. It has been a long trend that many examiners routinely label all non-hardware elements of a computer implemented invention as abstract ideas with no, marginal, or incomplete analysis and label all hardware elements as “additional elements”. The examiners then merely state that the “additional elements” are well-known and do not add anything to the abstract ideas. This initial misclassification of abstract ideas and “additional elements” then prevents examiners from ever analyzing whether non-hardware elements are well understood, routine, or conventional as required in step 2B of the *Alice/Mayo* framework, since the analysis of whether an element is well understood, routine, or conventional applies only to the “additional elements”. This is an irresponsible practice and examiners who practice this should be identified and educated to correct their practice. It is critically important to clearly state in the guidance or its training material that only non-hardware elements that recite an abstract idea “on its own or per se” are abstract ideas and all other non-hardware elements are “additional elements”.

5. It is often the case in computer implemented inventions that a data structure, combination of data structures, element including a data structure, process that operates on a data structure, process that uses a data structure, or other element related to a data structure provides crucial novelty and enables a

novel system. It has been a long trend that many examiners routinely label data structures or anything related to data structures as abstract ideas with no, marginal, or incomplete analysis. Since many computer implemented inventions use data structures, these inventions were unjustly doomed to patent ineligibility right from the start.

In the guidance's groupings of abstract ideas, the only one that has any relation to data structures is "Mathematical concepts—mathematical relationships, mathematical formulas or equations, mathematical calculations". Since a data structure IS an arrangement—often very complex —of data stored in memory, a data structure IS NOT a mathematical relationship, mathematical formula or equation, or mathematical calculation. Hence, a data structure is not an abstract idea. Further, many data structures – especially complex ones such as trees, graphs, neural networks, variously linked nodes, variously linked data structures, etc.—are embodiments of a practical application described under prong 2 of the guidance as patent eligible. Therefore, it is critically important to clearly state in the guidance or its training material that data structures are not abstract ideas and that inventions reciting data structures are patent eligible.

6. It has been a recent trend to issue blanket 101 rejections with no, marginal, or incomplete analysis in art units dealing with artificial intelligence inventions. This is an irresponsible practice and examiners who practice this should be identified and educated to correct their practice. It is beyond belief that the United States would cripple itself by limiting innovation in a crucial field such as AI, especially in view of the heated global race for dominance in this field. It is critically important to clearly state in the guidance or its training material that artificial intelligence inventions are patent eligible.

I Chadwick Phillips agree with this letter written by Mark Marelo

From: Janice Pringle

Sent: Wednesday, March 6, 2019 1:53 PM

To: Eligibility2019

Subject: Director Iancu's initiative

Director Iancu:

I would like to thank you for your initiative to resolve the 101 mayhem. Your subject matter eligibility guidance will help with most of the 101 problems if interpreted and implemented properly by the examiners and PTAB judges. Therefore, the highest risk to your subject matter eligibility guidance is the interpretation and implementation by the examiners and PTAB judges. The following are suggestions on how to further improve the guidance and how to ensure its correct interpretation and implementation.

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Reality is merely an illusion, albeit a very persistent one..

Albert Einstein

Janice Pringle

Intellectual Property Consultant

[contact info redacted]

From: Yoni Shtiebel

Sent: Wednesday, March 6, 2019 7:02 PM

To: Eligibility2019; Yoni Shtiebel

Subject: Director Iancu needs us to support him - Excellent Section 101 guidance

Director Iancu:

I am a researcher at MIT in applications of Deep Learning to Computational Linguistics and would like to thank you for your initiative to resolve the 101 mayhem. Your subject matter eligibility guidance will help with many of the 101 problems if interpreted and implemented properly by the examiners and PTAB judges. Therefore, the highest risk to your subject matter eligibility guidance is the interpretation and implementation by the examiners and PTAB judges.

The following are suggestions on how to further improve the guidance and how to ensure its correct interpretation and implementation.

The core issues in the substantive patenting system from my perspective are as follows:

- Stability - Patent that has issued will survive the Inter Partes Review and Court. Reducing cost of patent litigation and increasing enforcement by patentees.
- Clear path to patent that depends only on the nonobvious nature of the invention disclosed.
- Considering the practicing start up company in the software space (especially in the Artificial Intelligence and/or Deep Learning and/or Machine Learning and/or Neural Networks) as an essential stakeholder who needs (a) certainty, (b) simplicity, (c) speed, and (d) reasonable cost.

Many patent attorneys in recent years will state that patent eligibility is a dark art, and therefore a startup must spend generously to tap that expertise. Your guidelines will greatly level the playing field, which is a huge step in the right direction.

Upon review of your guidance, it is fantastic. It clears up much of the uncertainty.

As an MIT department head just mentioned, "What else do you have if not patents?" (3/5/19, noon)

Thank you and wishing you great success,

Yoni Shtiebel

Researcher

MIT

From: Maria Stoye

Sent: Friday, March 1, 2019 6:52 PM

To: Eligibility2019

Subject: Subject Matter Eligibility Guidance

Director Iancu:

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1. In the article <https://www.ipwatchdog.com/2019/01/28/director-iancu-training-101-guidance/id=105649/>, an “examiner wrongly thought that the new guidance created a new ‘practical application’ burden that needed to be met by an applicant to overcome an existing Section 101 rejection. This is contrary to the guidance actually identifying an alternative path to establishing that a claim is patentable under Section 101 ‘if the judicial exception is integrated into a practical application of the judicial exception.’” This shows how easily confused some examiners can be. Hence, it is critically important to include in the guidance or its training material the purpose of the guidance. For example:

In addition to predictability, the purpose of the guidance is to provide alternative paths to patent eligibility, thereby substantially reducing the number of 101 rejections.

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It is critically important that the guidance or its training material provides at least one example of a claim for a computer implemented invention that recites only a mathematical concept that is not patent eligible (i.e. a method comprising adding A and B to result in C). It is further critically important that the guidance or its training material provides at least one example of a claim for a computer implemented invention that recites elements that use mathematical concepts, but do not recite mathematical concepts “on their own or per se”, that is patent eligible (i.e. a method comprising: receiving or generating a, b, and c using some process or analysis; generating data structure A including a, b, and c;

accessing data structure B in a memory of a computer; evaluating data structure A and data structure B to determine at least partial match; causing the computer or a device controlled by the computer to perform some operation based on the determination).

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Therefore, it is critically important to include in the new guidance or its training material an explanation that the "a judicial exception has not been integrated into a practical application: ... [if it] merely includes instructions to implement an abstract idea on a computer, or merely uses a computer as a tool to perform an abstract idea" language applies only to fundamental business practices, organizing human activities, and other well-established human practices that use a computer merely as a tool and that computer implemented inventions (i.e. artificial intelligence, robotics, autonomous vehicles and devices, image processing, databases, computer/video games, computer simulations content processing, and many more) that arise out of or are inherently implemented on a computer are patent eligible as the patent law explicitly states.

4. It has been a long trend that many examiners routinely label all non-hardware elements of a computer implemented invention as abstract ideas with no, marginal, or incomplete analysis and label all hardware elements as "additional elements". The examiners then merely state that the "additional elements" are well-known and do not add anything to the abstract ideas. This initial misclassification of abstract ideas and "additional elements" then prevents examiners from ever analyzing whether non-hardware elements are well understood, routine, or conventional as required in step 2B of the *Alice/Mayo* framework, since the analysis of whether an element is well understood, routine, or conventional applies only to the "additional elements". This is a shameful practice and examiners who practice this should be identified and disciplined. It is critically important to clearly state in the guidance or its training material that only non-hardware elements that recite an abstract idea "on its own or per se" are abstract ideas and all other non-hardware elements are "additional elements".

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Regards,

Maria Stoye

From: NeilThomas

Sent: Wednesday, March 6, 2019 10:52 AM

To: Eligibility2019

Subject: Comment on USPTO Director Andrei Iancu's 2019 Revised Patent Subject Matter Eligibility Guidance

6-Mar-19

Director Iancu:

I would like to thank you for your initiative to resolve the 101 mayhem. Your subject matter eligibility guidance will help with most of the 101 problems if interpreted and implemented properly by the examiners and PTAB judges. Therefore, the highest risk to your subject matter eligibility guidance is the interpretation and implementation by the examiners and PTAB judges. The following are suggestions on how to further improve the guidance and how to ensure its correct interpretation and implementation.

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concepts “on their own or per se”, that is patent eligible (i.e. a method comprising: receiving or generating a, b, and c using some process or analysis; generating data structure A including a, b, and c; accessing data structure B in a memory of a computer; evaluating data structure A and data structure B to determine at least partial match; causing the computer or a device controlled by the computer to perform some operation based on the determination).

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Thank you for your consideration of these comments.

Neil Thomas

Silver Spring, MD

From: Marsha Turner

Sent: Wednesday, March 6, 2019 11:28 AM

To: Eligibility2019

Cc: rochowmarti@aol.com

Subject: Thank you for your initiative to resolve the 101 mayhem.

6-Mar-19

TO: USPTO

Director Iancu:

I would like to thank you for your initiative to resolve the 101 mayhem. Your subject matter eligibility guidance will help with most of the 101 problems if interpreted and implemented properly by the examiners and PTAB judges. Therefore, the highest risk to your subject matter eligibility guidance is the interpretation and implementation by the examiners and PTAB judges. With all respect, I am taking the liberty to include the suggestions below on what I believe will further improve this guidance and how to ensure its correct interpretation and implementation. However, before I continue with these suggestions, I would like to add the following information about what my interest is in this matter.

I wholeheartedly support your effort to resolve the 101 ambiguity and mayhem that currently exists within our courts. I am currently following a patent infringement case between Strikeforce Technologies vs Secure Authority, in which the appeal decision handed down by the Federal Court of appeals was made in support of Secure Authority, declaring "Affirmed", under Rule 36. The judges apparently could not even be bothered to provide an explanation to their decision, and instead applied the court's "bypass" Rule 36, allowing them to simply move it out of their court, in complete disregard to precedence set by SCOTUS and USPTO rulings!

I personally feel that the 3 judge panel failed to completely understand the patented technology, and legal precedence in the underlying issues within the infringement lawsuit, and therefore sought to escape such embarrassment by simply using the Rule 36 available to them! We must seek complete and undeniable clarification within the powers of SCOTUS and USPTO, to correct this issue, and prevent such in the future! We totally support your effort!

As promised, below are suggestions which I believe will help with most of the 101 problems if interpreted and implemented properly by the examiners and PTAB judges.

1. In the article <https://www.ipwatchdog.com/2019/01/28/director-iancu-training-101-guidance/id=105649/>, an "examiner wrongly thought that the new guidance created a new 'practical application' burden that needed to be met by an applicant to overcome an existing Section 101 rejection. This is contrary to the guidance actually identifying an alternative path to establishing that a claim is patentable under Section 101 'if the judicial exception is integrated into a practical application

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3. The guidance mentions that:

“a judicial exception has not been integrated into a practical application: ... [if it] merely includes instructions to implement an abstract idea on a computer, or merely uses a computer as a tool to perform an abstract idea”.

This language is clearly directed to fundamental business practices, organizing human activities, and other well-established human practices that use a computer merely as a tool (see the Supreme Court opinion in *Alice v. CLS Bank International*, 134 S. Ct. 2347 (2014)). This language is clearly not directed to computer implemented inventions (i.e. artificial intelligence, robotics, autonomous vehicles and devices, image processing, databases, computer/video games, computer simulations, content processing, and many more) that arise out of or are inherently implemented on a computer. It is unimaginably irrational to attempt to make computer implemented inventions that arise out of or are inherently implemented on a computer patent ineligible simply because they are implemented on a computer.

Therefore, it is critically important to include in the new guidance or its training material an explanation that the language stating that “a judicial exception has not been integrated into a practical application:

... [if it] merely includes instructions to implement an abstract idea on a computer, or merely uses a computer as a tool to perform an abstract idea”applies only to fundamental business practices, organizing human activities, and other well-established human practices that use a computer merely as a tool and that computer implemented inventions (i.e. artificial intelligence, robotics, autonomous vehicles and devices, image processing, databases, computer/video games, computer simulations, content processing, and many more) that arise out of or are inherently implemented on a computer are patent eligible as the patent law explicitly states.

4. It has been a long trend that many examiners routinely label all non-hardware elements of a computer implemented invention as abstract ideas with no, marginal, or incomplete analysis and label all hardware elements as “additional elements”. The examiners then merely state that the “additional elements” are well-known and do not add anything to the abstract ideas. This initial misclassification of abstract ideas and “additional elements” then prevents examiners from ever analyzing whether non-hardware elements are well understood, routine, or conventional as required in step 2B of the Alice/Mayo framework, since the analysis of whether an element is well understood, routine, or conventional applies only to the “additional elements”. This is an irresponsible practice and examiners who practice this should be identified and educated to correct their practice. It is critically important to clearly state in the guidance or its training material that only non-hardware elements that recite an abstract idea “on its own or per se” are abstract ideas and all other non-hardware elements are “additional elements”.

5. It is often the case in computer implemented inventions that a data structure, combination of data structures, element including a data structure, process that operates on a data structure, process that uses a data structure, or other element related to a data structure provides crucial novelty and enables a novel system. It has been a long trend that many examiners routinely label data structures or anything related to data structures as abstract ideas with no, marginal, or incomplete analysis. Since many computer implemented inventions use data structures, these inventions were unjustly doomed to patent ineligibility right from the start.

In the guidance’s groupings of abstract ideas, the only one that has any relation to data structures is “Mathematical concepts—mathematical relationships, mathematical formulas or equations, mathematical calculations”. Since a data structure IS an arrangement—often very complex —of data stored in memory, a data structure IS NOT a mathematical relationship, mathematical formula or equation, or mathematical calculation. Hence, a data structure is not an abstract idea. Further, many data structures – especially complex ones such as trees, graphs, neural networks, variously linked nodes, variously linked data structures, etc.—are embodiments of a practical application described under prong 2 of the guidance as patent eligible. Therefore, it is critically important to clearly state in the guidance or its training material that data structures are not abstract ideas and that inventions reciting data structures are patent eligible.

6. It has been a recent trend to issue blanket 101 rejections with no, marginal, or incomplete analysis in art units dealing with artificial intelligence inventions. This is an irresponsible practice and examiners who practice this should be identified and educated to correct their practice. It is beyond belief that the

United States would cripple itself by limiting innovation in a crucial field such as AI, especially in view of the heated global race for dominance in this field. It is critically important to clearly state in the guidance or its training material that artificial intelligence inventions are patent eligible.

Thank you again for your initiative to resolve this 101 mayhem with your consideration of the above suggestions on how to further improve your eligibility guidance with correct interpretation and implementation.

Sincerely,

Marsha Turner Rochow

[address redacted]

From: David Vance

Sent: Wednesday, March 6, 2019 9:57 AM

To: Eligibility2019

Subject: 2019 Revised Patent Subject Matter Eligibility Guidance

Director Iancu:

I would like to thank you for your initiative to resolve the 101 mayhem. Your subject matter eligibility guidance will help with most of the 101 problems if interpreted and implemented properly by the examiners and PTAB judges. Therefore, the highest risk to your subject matter eligibility guidance is the interpretation and implementation by the examiners and PTAB judges. The following are suggestions on how to further improve the guidance and how to ensure its correct interpretation and implementation.

1. In the article <https://www.ipwatchdog.com/2019/01/28/director-iancu-training-101-guidance/id=105649/>, an “examiner wrongly thought that the new guidance created a new ‘practical application’ burden that needed to be met by an applicant to overcome an existing Section 101 rejection. This is contrary to the guidance actually identifying an alternative path to establishing that a claim is patentable under Section 101 ‘if the judicial exception is integrated into a practical application of the judicial exception.’” This shows how easily confused some examiners can be. Hence, it is critically important to include in the guidance or its training material the purpose of the guidance. For example: “In addition to predictability, the purpose of the guidance is to provide alternative paths to patent eligibility, thereby substantially reducing the number of 101 rejections”.

This high-level clarification right in the general purpose of the guidance will set a clear tone for the guidance and avoid confusion such as described in the referenced article.

2. The guidance states that a claim is patent eligible if it does not recite an abstract idea (i.e. mathematical concept, etc.) “on its own or per se”. For computer implemented inventions, it is a real possibility, and even likelihood, that some examiners will ignore the “on its own or per se” requirement and will interpret this as a claim being patent ineligible if it recites an element that uses a mathematical concept. All computer implemented inventions include elements that use mathematical concepts at some level. Therefore, some examiners will wrongly continue issuing 101 rejections for computer implemented inventions, whereas, this is clearly not the intent of the guidance.

It is critically important that the guidance or its training material provides at least one example of a claim for a computer implemented invention that recites only a mathematical concept that is not patent eligible (i.e. a method comprising adding A and B to result in C). It is further critically important that the guidance or its training material provides at least one example of a claim for a computer implemented invention that recites elements that use mathematical concepts, but do not recite mathematical concepts “on their own or per se”, that is patent eligible (i.e. a method comprising: receiving or generating a, b, and c using some process or analysis; generating data structure A including a, b, and c; accessing data structure B in a memory of a computer; evaluating data structure A and data structure B

to determine at least partial match; causing the computer or a device controlled by the computer to perform some operation based on the determination).

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Therefore, it is critically important to include in the new guidance or its training material an explanation that the language stating that “a judicial exception has not been integrated into a practical application: ... [if it] merely includes instructions to implement an abstract idea on a computer, or merely uses a computer as a tool to perform an abstract idea” applies only to fundamental business practices, organizing human activities, and other well-established human practices that use a computer merely as a tool and that computer implemented inventions (i.e. artificial intelligence, robotics, autonomous vehicles and devices, image processing, databases, computer/video games, computer simulations, content processing, and many more) that arise out of or are inherently implemented on a computer are patent eligible as the patent law explicitly states.

4. It has been a long trend that many examiners routinely label all non-hardware elements of a computer implemented invention as abstract ideas with no, marginal, or incomplete analysis and label all hardware elements as “additional elements”. The examiners then merely state that the “additional elements” are well-known and do not add anything to the abstract ideas. This initial misclassification of abstract ideas and “additional elements” then prevents examiners from ever analyzing whether non-hardware elements are well understood, routine, or conventional as required in step 2B of the *Alice/Mayo* framework, since the analysis of whether an element is well understood, routine, or conventional applies only to the “additional elements”. This is an irresponsible practice and examiners who practice this should be identified and educated to correct their practice. It is critically important to clearly state in the guidance or its training material that only non-hardware elements that recite an abstract idea “on its own or per se” are abstract ideas and all other non-hardware elements are “additional elements”.

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Warm regards,

David

David H Vance, Ph.D., J.D.

Vance Intellectual Property, PC