

**PRESENTED AT**

**24<sup>th</sup> Annual Advanced Patent Law Institute**

November 7-8, 2019

Austin, TX

## **Navigating Patent Eligible Subject Matter for Computer Implemented Inventions under the USPTO Guidance: A Practical Discussion**

**Michael W. Piper**

Author Contact Information:

Michael W. Piper

Conley Rose, P.C.

Plano, TX

[mpiper@dfw.conleyrose.com](mailto:mpiper@dfw.conleyrose.com)

## Contents

<b>I.</b>	<b><i>Introduction.....</i></b>	<b>2</b>
<b>II.</b>	<b><i>A Quick Overview of Recent Developments.....</i></b>	<b>3</b>
	<b>A. A Tale of Two Directors.....</b>	<b>3</b>
	<b>B. The Impact of the Guidance: Immediate Improvement but Uncertain Future .....</b>	<b>4</b>
<b>III.</b>	<b><i>Overview of USPTO Official Guidance.....</i></b>	<b>5</b>
	<b>A. A Framework for Assessing Eligibility .....</b>	<b>5</b>
	<b>B. The Examples of Eligible and Ineligible Claims.....</b>	<b>10</b>
	1. The Old Supreme Court Case Examples .....	11
	2. The Pre 2019 Revised SME Guidance Positive Examples .....	14
	3. The Pre 2019 Revised SME Guidance Negative Examples.....	17
	4. The More Recent Federal Circuit Cases.....	20
	5. The New Examples Applying the 2019 Revised SME Guidance .....	23
	<b>C. Echoes from the Past: A Particular Machine .....</b>	<b>30</b>
	<b>D. Sliding Scale between 35 U.S.C. § 101 and 35 U.S.C § 112.....</b>	<b>31</b>
<b>IV.</b>	<b><i>Drafting Recommendations – How Do I Develop my Disclosure and Draft My Application to Best Prepare for (or Avoid) a 35 U.S.C § 101 rejection? .....</i></b>	<b>32</b>
	<b>A. Introduction .....</b>	<b>32</b>
	<b>B. The Invention within the Invention .....</b>	<b>33</b>
	<b>C. The Disclosure Meeting.....</b>	<b>35</b>
	1. Overview .....	35
	2. The Hard Inputs .....	36
	3. The Hard Outputs.....	36
	4. The Improvements to the Computer .....	37
	5. A Final Option.....	39
	6. Try to Avoid Difficult Art Units .....	40
<b>V.</b>	<b><i>Prosecution Recommendations – What Options Do I have with a 101 Rejection Where My Disclosure is Already Fixed.....</i></b>	<b>41</b>
	<b>A. Prosecuting Applications in Art Unit 3600 .....</b>	<b>41</b>
	<b>B. Prosecuting Applications in an Art Unit Outside of 3600 .....</b>	<b>43</b>
	<b>C. Interview the Case Regardless of the Art Unit.....</b>	<b>43</b>
	<b>D. Final Prosecution Thoughts and a Warning about the Board-of Appeals.....</b>	<b>44</b>
<b>VI.</b>	<b><i>Conclusion .....</i></b>	<b>45</b>

## ***I. Introduction***

To help understand the perspective of this discussion let me start with the fact that I am a patent prosecutor who works on patents for computer implemented inventions in the USPTO (and more specifically frequently in Art Unit 3600). While I spent time earlier in my career working on litigation matters in the district court and at the appellate level, the bulk of my career has been invested in developing disclosures, working with the inventors to build the stories that will become patent applications, and sharing the stories with Examiners in working to creatively define and protect the intellectual property developed by my clients. While my background starts with a mechanical engineering degree, time and circumstance (and some misspent youth writing basic programs on a Commodore 64) led to a large portion of my practice dealing with software and IT related inventions. As such, I watched that area of my practice develop significantly after State Street Bank and I have watched the Supreme Court and parts of the USPTO slowly bring it under increasing levels of scrutiny over the last five years. I could say I have been on the front lines in prosecution in the USPTO as this particular pendulum has been swinging, but to set a metaphor it may be appropriate to suggest I was out at sea watching the storm roll up and have worked my way through the rough seas to what appears to be calmer (although still somewhat choppy) waters.

My goal with this discussion is to consider the best views I and my co-authors have at this particular moment in time responding to some of the fundamental questions of a patent prosecutor trying to gather their bearings in the calmer waters on the backside of this storm. Knowing the future still remains uncertain, how do I develop my disclosures to best prepare for what might be in store for me? What approaches can I take to try and protect my ability to draft claims as broadly as the state of the law will allow without implicating only abstract ideas? Or worse – what do I do with this case drafted 5 years ago and now trapped in Art Unit 3600 being assessed under a set of standards I did not perfectly anticipate when I drafted it?

This discussion is not an effort to divine the latest case law from every district court to determine every angle to attack or defend an issued patent at trial or on appeal. Rather it is a patent prosecutor's observations on how to most effectively work in the Office where the Examiners are much more likely to use the internal USPTO guidance than to interpret obscure case law. For this reason, and to address the questions about approach to disclosures and prosecution, we are trying to provide a practical discussion of the USPTO guidance and their examples to help navigate a sound path from disclosure development through application drafting to launch into choppy and potentially changeable seas. The discussion also adds in current experiences through regular interviews in the Office to the USPTO's most recent guidance to provide suggestions for prosecution for those

applications already at sea in boats that were hopefully constructed well enough to hold up against the wind and waves of this lengthy storm.

## ***II. A Quick Overview of Recent Developments***

### ***A. A Tale of Two Directors***

In 2017 Tariq Hafiz became Director of Technology Center 3600 Business Methods coming from the 2600's. In 2018 Andrei Iancu was confirmed as Director of the PTO. Their arrival has been followed by positive movement in the trenches and at the policy level.

Since the arrival of Tariq Hafiz there has been a marked shift in tone in 3600. In a technology center that has long had a culture of fear that allowed patents will end up being the next how to swing a swing, and a comfort that rejections do not make the blogs, there was at the grass roots more sense that there might be some value in the inventive contributions being brought to them for examination and a growing frustration with an oversight structure that seemed to allow no pathway through. With changes at the highest levels, there were Examiners who seemed to pick up that they had more freedom to find solutions for applicants to reach allowable subject matter and a sense from the Examiners that this was a positive development. It has taken time, but the field was ripe for at least some of the Examiner corps to be ready to take advantage of the openings that have since been created by the new memo's and guidance being provided from the top.

From Director Iancu's initial hearings he highlighted the subject matter eligibility challenge as one that needed to be confronted and dealt with at the PTO. In an early hearing at the Senate Judiciary Committee, Director Iancu had this specific set of statements on patentability of algorithms.

"This is one place where I believe courts have gone off the initial intent. There are human-made algorithms, human-made algorithms that are the result of human ingenuity that are not set from time immemorial and that are not absolutes, they depend on human choices. Those are very different from  $E=mc^2$  and they are very different from the Pythagorean theorem, for example." ...

"As a general proposition, human-made algorithms that are cooked up, invented as a result of human ingenuity are different from discoveries and mathematical representations of those discoveries."

These quotes presaged his effort to work on Guidance which addressed and synthesized existing caselaw to try and open up some more distinct pathways for eligibility as well as trying to

Find the full text of this and thousands of other resources from leading experts in dozens of legal practice areas in the [UT Law CLE eLibrary \(utcle.org/elibrary\)](http://utcle.org/elibrary)

## Title search: Navigating Patent Eligible Subject Matter for Computer Implemented Inventions under the USPTO Guidance: A Practical Discussion

Also available as part of the eCourse

[Section 101 Update and Practical Guidance: Bio/Pharma and Software/Business Methods](#)

First appeared as part of the conference materials for the  
24<sup>th</sup> Annual Advanced Patent Law Institute session

"Section 101 in Two Realms: Where We Are and Where We Might Be Going in Life Sciences and in Software"