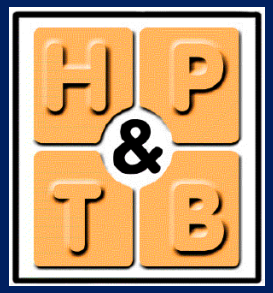
Recent Ex Parte Decisions on Patent Eligibility

Ex Parte Linden, Ex Parte Fanaru, Ex Parte Rockwell

Presented by Malgorzata (Gosia) Kulczycka

Partner

Hickman Palermo Becker Bingham LLP



Patent Eligible Subject Matter

Alice/Mayo Analysis:

- Step 1 - a process, machine, manufacture, or a composition of matter?
- Step 2A - a judicial exception? (an abstract idea, natural phenomena, law of nature)
- Step 2B - the claim as a whole amounts to significantly more than the judicial exception?

Patent Eligible Subject Matter

2019 Revised Guidance on Patent Eligibility:

- Step 1 - a process, machine, manufacture, or a composition of matter?

- Step 2A - a judicial exception?
  - Prong One – the type of an abstract idea?
  - Prong Two – integrates to a practical application?

- Step 2B - the claim as a whole amounts to significantly more than the judicial exception?

Patent Eligible Subject Matter

Groupings of abstract ideas

Mathematical concepts

- Mathematical relationships
- Mathematical formulas or equations
- Mathematical calculations

Mental processes

- Concepts performed in the human mind (including an observation, evaluation, judgment, opinion)

Certain methods of organizing human activity

- Fundamental economic principles or practices (including hedging, insurance, mitigating risk)
- Commercial or legal interactions (including agreements in the form of contracts; legal obligations; advertising, marketing or sales activities or behaviors; business relations)
- Managing personal behavior or relationships or interactions between people (including social activities, teaching, and following rules or instructions)

NOTE: The recitation of generic computer components in a claim does not necessarily preclude that claim from reciting an abstract idea.

Patent Eligible Subject Matter

Prong Two considerations: Details

Limitations that are indicative of integration into a practical application:

- Improvements to the functioning of a computer, or to any other technology or technical field - see MPEP 2106.05(a)
- Applying or using a judicial exception to effect a particular treatment or prophylaxis for a disease or medical condition – see Vanda Memo
- Applying the judicial exception with, or by use of, a particular machine - see MPEP 2106.05(b)
- Effecting a transformation or reduction of a particular article to a different state or thing - see MPEP 2106.05(c)
- Applying or using the judicial exception in some other meaningful way beyond generally linking the use of the judicial exception to a particular technological environment, such that the claim as a whole is more than a drafting effort designed to monopolize the exception - see MPEP 2106.05(e) and Vanda Memo

Limitations that are not indicative of integration into a practical application:

- Adding the words "apply it" (or an equivalent) with the judicial exception, or mere instructions to implement an abstract idea on a computer, or merely uses a computer as a tool to perform an abstract idea - see MPEP 2106.05(f)
- Adding insignificant extra-solution activity to the judicial exception - see MPEP 2106.05(g)
- Generally linking the use of the judicial exception to a particular technological environment or field of use – see MPEP 2106.05(h)

Whether claim elements represent only well-understood, routine, conventional activity is considered at Step 2B and is not a consideration at Step 2A.

Question of Law?

The Supreme Court has previously identified patent eligibility as a question of law.

However, in *Berkheimer*, the Federal Circuit recognized that the ultimate legal conclusion may be factually based. For example, the level of skill in the art is a classic factual question that may be relevant to the analysis in the Guidance Step 2. *Berkheimer v. HP, Inc*, 881 F.3d 1360, 1368 (Fed. Cir. 2018)

The fact-law divide is important for a number of issues, including a motion to dismiss, a summary judgment, evidentiary standards, who decides, Appellate burden, etc.

After the *Berkheimer* decision, HP petitioned the Supreme Court for certiorari on the question: whether patent eligibility is a question of law for the court based on the scope of the claims or a question of fact for the jury based on the state of the art. *HP Inc. v. Steven E. Berkheimer* (Supreme Court 2019)

Ex Parte Linden

In *Linden*, the BAIDU patent application claims a method for using a trained neural network to transcribe speech. The method involves several data processing steps:

- normalizing the input (to the training data);
- generating a "jitter set" of audio files (time-distorted versions of the original audio data);
- generating a spectrogram for each time-jittered audio file;
- predicting character probabilities with the neural network; and
- transcribing the audio based upon character probabilities and a language model.

Ex Parte Linden, 2018-003323 (Apr. 1, 2019) (designated informative on Dec. 11, 2019) (reversing examiner rejection based upon 2019 Examination Guideline for Eligibility)

Ex Parte Linden

The Examiner rejected the claims as directed to an abstract idea of manipulating data, creating information sets (based upon prior information sets), and decoding data.

On appeal, the PTAB reversed — finding that the claims should not be classified as directed to an abstract idea under the 2019 Revised PEG.

- Not mental processes or human activities because, although transcription is a human/mental activity, the specific process here (jittering, etc.) cannot be "practically performed mentally."
- Not organizing human activity because the claims here are not about using fundamental economic principles, commercial and legal interactions, and managing relationships.

Ex Parte Linden, 2018-003323 (Apr. 1, 2019) (designated informative on Dec. 11, 2019) (reversing examiner rejection based upon 2019 Examination Guideline for Eligibility)

Ex Parte Linden

The claims required performing several mathematical operations such as jittering, creating spectrogram, predicting probabilities, etc. The Examiner stated that the Specification disclosed, for example, an algorithm to obtain the predicted character probabilities.

However, the Board held that the mathematical algorithm or formula was not recited in the claims. Relying on the USPTO Example 38, the Board held that the claims did not recite a mathematical concept.

Is the Board here saying that the claim would be problematic **only if the claim** actually and expressly recited the algorithm that it uses? If the claim is drafted more broadly (higher level of abstraction), it cannot be abstract?

Ex Parte Linden, 2018-003323 (Apr. 1, 2019) (designated informative on Dec. 11, 2019) (reversing examiner rejection based upon 2019 Examination Guideline for Eligibility)

Ex Parte Linden

Regarding Alice Step 2B, the Examiner concluded that the claims did not include "any additional elements that amounted to significantly more than a judicial exception." However, the Examiner failed to provide sufficient factual support.

The Board faulted the Examiner for failing to provide evidence that the claims do not include an inventive concept. *Berkheimer*.

Ex Parte Linden, 2018-003323 (Apr. 1, 2019) (designated informative on Dec. 11, 2019) (reversing examiner rejection based upon 2019 Examination Guideline for Eligibility)

Ex Parte Fanaru

The claims were directed to analytics data systems used to analyze data and produce reports for a user to view.

Under Prong One of Step 2A of the 2019 Guidelines, the PTAB reversed the Examiner's Section § 101 rejection "because collecting usage information is not a mathematical concept, an identified method of organizing human activity, or a mental process."

Ex Parte Fanaru, No. 2017-002898, 8 (PTAB. Jan. 22, 2019) (describing the Board's § 101 analysis under the 2019 Guidance).

Ex Parte Fanaru

Under Prong Two of Step 2A, the PTAB evaluated whether the claim included any practical applications.

Was there a conclusion?

Ex Parte Fanaru, No. 2017-002898, 8 (PTAB. Jan. 22, 2019) (describing the Board's § 101 analysis under the 2019 Guidance).

Ex Parte Rockwell

The claims were directed to a module interface for facilitating software updates to modules implemented in vehicles. The Specification disclosed a processor configured to communicate the updates wirelessly from a server to a vehicle.

Under Prong One of Step 2A of the 2019 Guidelines – "updating software" might a type of organizing human activities.

Ex Parte Rockwell, No. 2018-004973, 8 (PTAB. Jan. 16, 2019). (Claims not directed to an abstract idea under the 2019 Guidance).

Ex Parte Rockwell

Under Prong Two of Step 2A, the PTAB reversed the Examiner's Section § 101 rejection "because the claims as a whole integrate the asserted abstract ideas into specific practical applications."

The PTAB determined that the applicant's claims were directed to a practical application of updating software for a vehicle module because, when a user failed to consent to the software update, the lack of user consent was communicated to the user and that provided the user with **useful and helpful feedback**.

Ex Parte Rockwell, No. 2018-004973, 8 (PTAB. Jan. 16, 2019). (Claims not directed to an abstract idea under the 2019 Guidance).

Ex Parte Rockwell

The PTAB stated that the applicant's claims contained the additional practical application by providing an indication of the software update's availability as well as allowing the user to consent to the software update in the display unit in the vehicle.

Ex Parte Rockwell, No. 2018-004973, 8 (PTAB. Jan. 16, 2019). (Claims not directed to an abstract idea under the 2019 Guidance).

Takeaway

The 2019 Guidance provides some clarity for determining patent eligible subject matter under 35 U.S.C. § 101. It clarifies, for example, that to be patent eligible, a claim needs to state a new and practical application of an idea.

As the USPTO continues to apply the 2019 Revised Guidance, the number of rejections under § 101 issued in patent applications should continue to decline.

However, many practitioners share the view that even with the 2019 Revised Guidance, the patent eligibility analysis remains somewhat complex and unpredictable.

Takeaway
Technical Problem – Technical Solution

Background

Data measurements representing yields of crops harvested from agricultural fields are usually collected using stochastic approaches which are typically prone to errors and generalizations. Errors may be introduced at various steps of the data collection process. […]

Detail Description

In an embodiment, a technical solution to a technical problem is provided. The technical problem includes the inability to effectively predict crop yield. The technical solution presented herein allows more accurately predict crop yield using a modified singular value decomposition. The modified singular value decomposition uses at least one factor that is time-independent and represents spatial dependencies between the fields. […]

Takeaway

Hopefully, the upcoming PTAB decisions addressing the § 101 rejections continue to be favorable to patent applicants.

As the PTAB applies Step 2A and Step 2B of the patent eligibility analysis, the PTAB might find more claims to be patent-eligible claims than in the past.

Takeaway

Impact of the Federal Circuit decision in *Arthrex* on *Ex Parte* Examination

According to the Court in *Arthrex (*an *inter party* review), PTAB Judges (i.e., Administrative Patent Judges) are "principal officers" and thus must be appointed by the President of the US (rather than by the Secretary of the Commerce). *Arthrex, Inc. v. Smith & Nephew, Inc. Arthrocare Corp., United States Court of Appeals for the Federal Circuit,* October 31, 2019.

According to the Court, the PTAB Judges need to be reclassified as **inferior** officers that do not need presidential appointment.

Impact on *Ex Parte* Examination: In the *Boloro* case, the Federal Circuit has ordered the USPTO to explain the impact of *Arthrex* on *Ex Parte* patent examination cases. *In re: Boloro Global Limited*, Appeal No. 19-2349 (Fed. Cir. 2020).

Malgorzata ("Gosia") Kulczycka

Partner

408-414-1228

mkulczycka@hptb-law.com

Gosia Kulczycka is a partner at Hickman Palermo Becker and Bingham LLP. Her practice focuses on client counseling and patent prosecution with special expertise in computer networks, Internet-related technologies, telecommunications, computer graphics, virtual machines, communications servers and routers, load balancing, high availability network mechanisms, VPN, dynamic DNS-based security systems, real-time distributed data, compliance brokers, cloud-based storage systems, VoIP, wireless communications and data communications protocols.