Patent Breakout IIB: "Patenting Tomorrow's Data Security Technology: Navigating the PTO in a Post-Alice Environment"

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Overview

- Cursory Alice Summary

- Subject Matter Eligibility Examination (Dec 2014 PTO Interim Guidance)

- Post-Alice Prosecution Strategies (Examiner Tips via in-person Interviews)

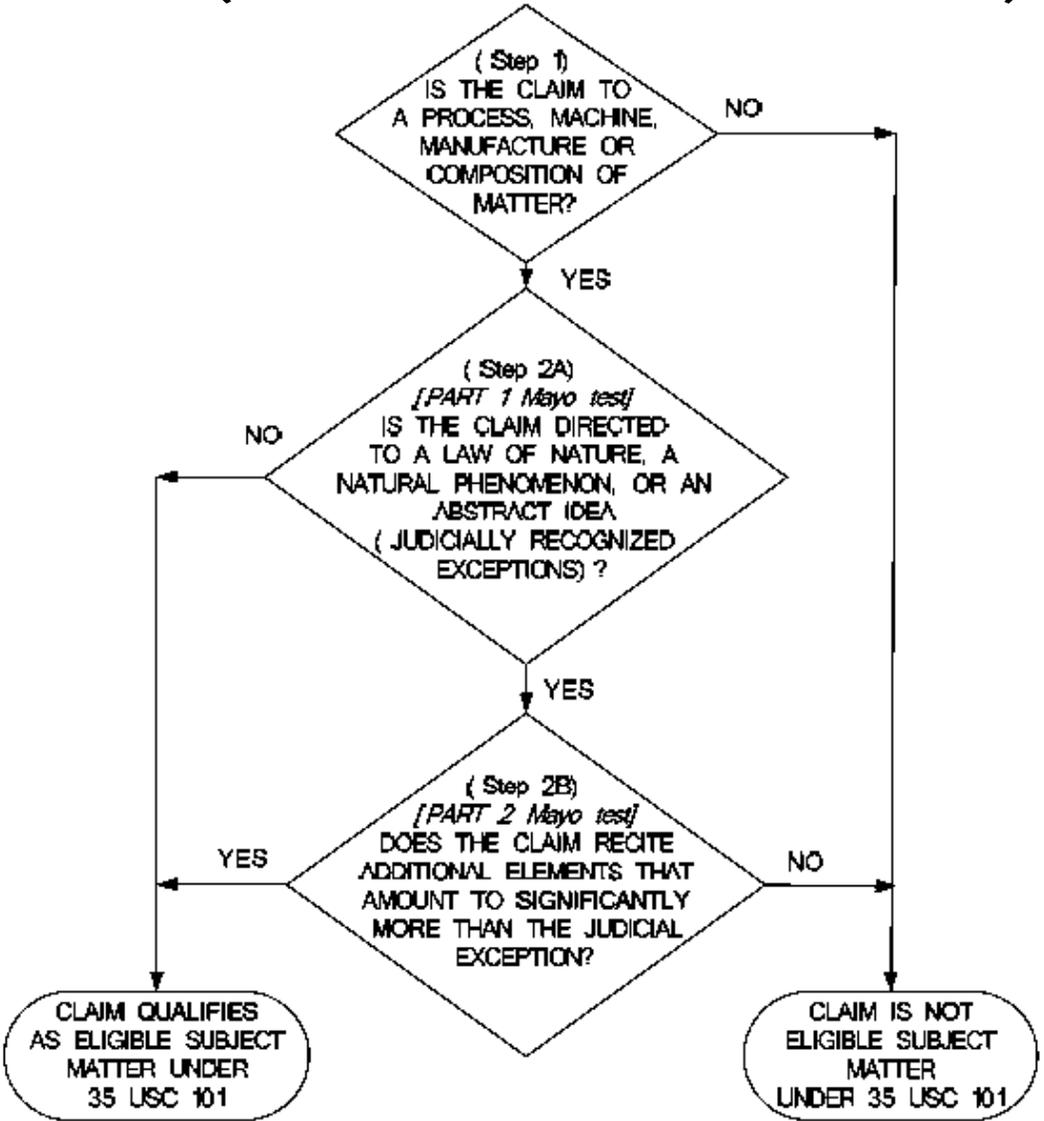- Post-Alice Application Drafting Strategies

- Conclusion

35 U.S.C. § 101

"Whoever invents or discovers any new and useful **process**, **machine**, **manufacture, or composition of matter, or any new and useful improvement thereof**, may obtain a patent therefor, subject to the conditions and requirements of this title."

Alice v. CLS Bank Summary

- **Holding**: Claims were drawn to a **patent-ineligible abstract idea** and not eligible for patent protection under 35 U.S.C. 101

- **Implications**

  - Alice extends beyond software-related or business method cases

  - Mere implementation of a conventional method on a computer is not patent eligible

Subject Matter Eligibility Examination Guidelines
(Dec 2014 Interim Guidance)

- **STEP 1**: Is the claim directed to a patent-eligible concept? i.e. is the claim directed to one of a process, machine, manufacture, or composition of matter, or any new and useful improvement thereof… (if YES)

<p style="color:red; text-align:center">2-step process under the Mayo framework:</p>

- **STEP 2A:** Is the claim directed to a **judicially recognized exception**? (If YES go to 2B)

- **STEP 2B:** Does the claim recite **significantly more** than the judicially recognized exception? (if YES, claim is eligible)

Judicially Recognized Exceptions

1) Law of Nature

2) Natural Phenomenon

3) Abstract Idea

     a) mathematical formula

     b) hedging

     c) organizing information through mathematical correlations

     d) creating a contractual relationship

     e) organizing human activities

     f) fundamental economic practice

Post-Alice Prosecution Strategies
(Examiner Tips)

Step 1: Identify (alleged) abstract idea

Step 2A: Argue without amendment **claim not directed to judicially recognized exception.** Must show that what Examiner alleges is abstract idea is not an idea "in and of itself" and hence not an abstract idea

Step 2B: Argue with or without amendment claim adds *significantly more* to <u>alleged</u> abstract idea

Post-Alice Prosecution Strategies (cont.)

- Conduct Examiner interview (more important than ever)

- Add structural features to claims,

    - Incorporate novelty of structural features into claims

- Add steps that recite "transformation" of data, instead of mere receiving and sending data

Post-Alice Prosecution Strategies (cont.)

- Limit use of words like "the invention can be implemented on a **computer**, a **PDA**, a **cell phone or the like**"

- If there's only a 101 rejection, step 2A can be argued by submitting that the idea is not abstract (in case of a fundamental economic practice) since it was found by the Office to be non-obvious and novel. But…

"Significantly More"

- Significantly more is **not** simply "more"

- The claims must provide some degree of improvement to the current technology in order to pass the "significantly more" bar!

- Applying judicial exception by use of a particular machine

- Effecting transformation of particular article to a different state

- Others

Significantly More (cont.)
(Sample Rejected Claim)

1. A method, executed by a computer comprising a processor, the method comprising:

   receiving, by the processor, an image;

   applying a filter on the image to generate a filtered image; and

   sending the filtered image to a server.

The abstract idea: "*processing / modifying an image on a computer.*"

Significantly More (cont.)
(Sample Amended Claim)

1. (Amended) A method, executed by a computer comprising a processor, the method comprising:

receiving, by the processor, an image;

~~applying a filter on the image to generate a filtered image; and~~

<u>generating a filtered image, the generating including applying a filter on the image by equalizing an RGB histogram of the image; and</u>

sending the filtered image to a server.

**Caution**: Amendment should amplify core **inventive concept**

Sample Argument

- "Even assuming, *arguendo*, that the claim recites an abstract idea as alleged in the Office Action, the claims includes **significantly more** than the alleged abstract idea. Namely, the claim recites 'applying a filter on the image using an RGB histogram of the image.' As such, the claim is eligible under 35 U.S.C. 101."
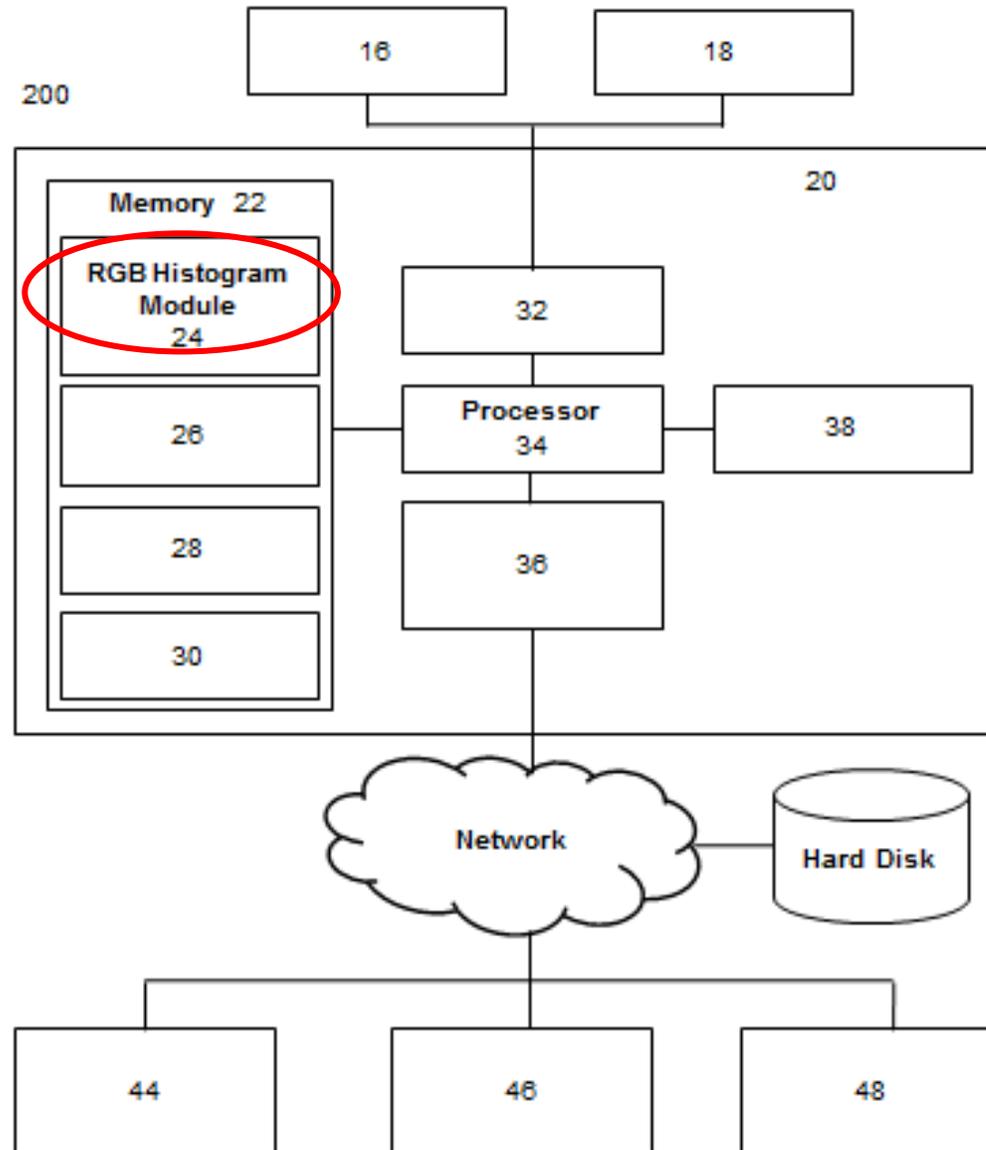
Drafting Alice-"resistant" Specifications

- Clearly and repeatedly highlight core inventive concept

- Transform general purpose computer system into special purpose computer

- Identify parts of the invention that *cannot* be performed without a computer or the disclosed apparatus

Generic Computer System
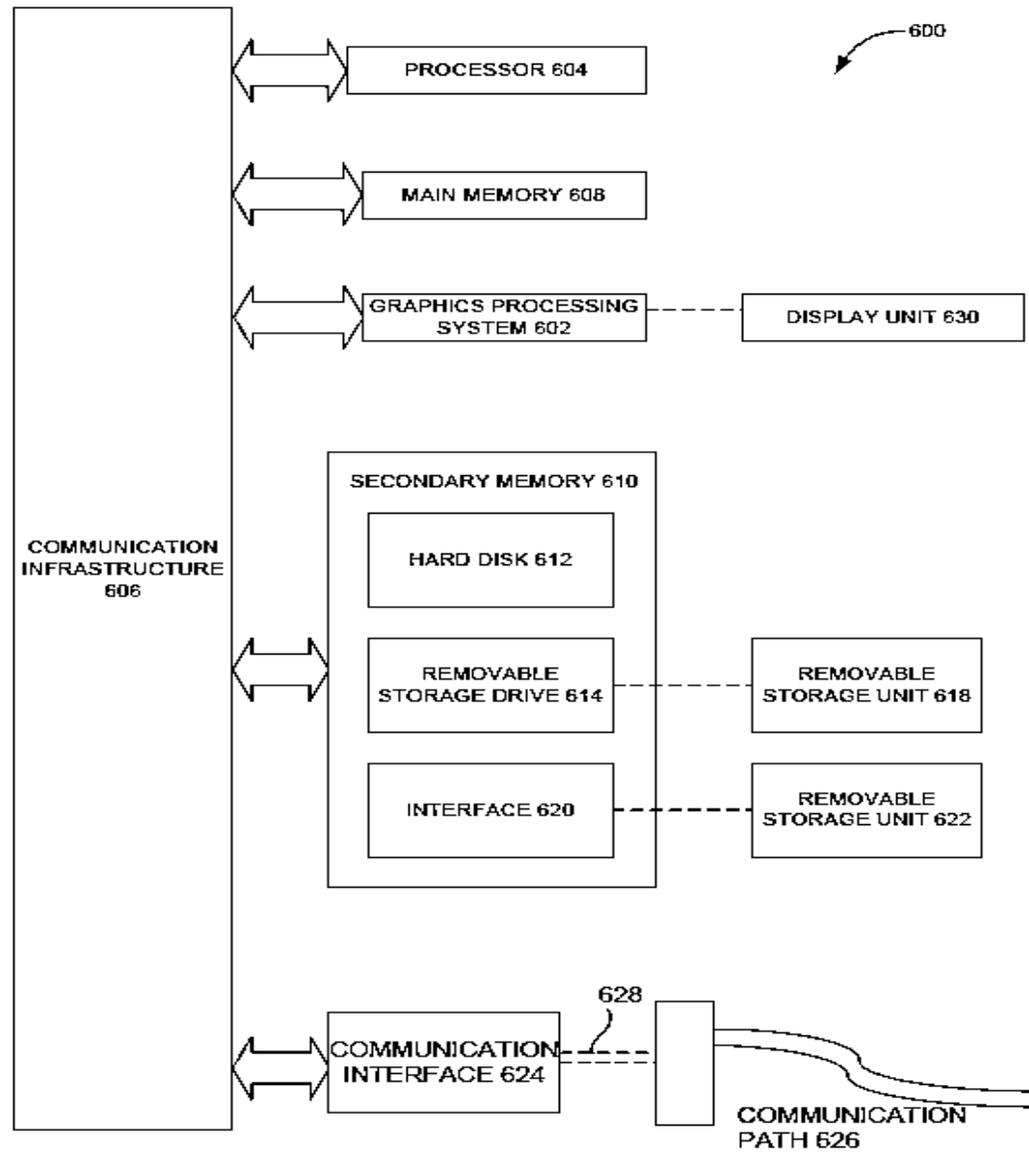
Non-generic Computer System

A method for an organization having multiple existing systems with web interfaces for accepting card numbers to comply with the PCI data security standard, the method comprising:

a) embedding, in the web interfaces of each of the existing systems, secure redirector code for sending card numbers to a new site;

b) when a user submits a card number to an existing system, the secure redirector code sending the card number to the new site and receiving a string of random numbers in return;

c) the existing system proceeding with a transaction using the string of random numbers as a replacement for the card number; and

d) at the end of the transaction, processing payment by using the string of random numbers as an index into a table containing the card number.

Application of Subject Matter Eligibility Analysis to "Draft Compliance" Claim

- **STEP 1**: Is the claim directed to a patent-eligible concept? i.e. is the claim directed to one of a process, machine, … (**YES**)

2-step process under the *Mayo* framework:

- **STEP 2A:** Is the claim directed to a judicially recognized exception?
  - **Yes.** Abstract idea.

- **STEP 2B:** Does claim recite **significantly more** than the judicially recognized exception?
  - **No** (similar to *Ultramercial* case – cited in Dec 2014 PTO Interim Guidance)

"Draft Compliance" Sample Claim Amendment

A method, for use in a system including ~~for an organization having~~ multiple ~~existing systems with~~ web interfaces configured to accept ~~for accepting~~ card numbers ~~to comply~~ in compliance with the PCI data security standard, the method comprising:

a) ~~embedding, in each of the web interfaces of each of the existing systems, secure redirector code for sending card numbers to a new site;~~

b) receiving, by the system, a card number in at least one web interface;

c) sending, by the system, using a secure redirector module embedded in the at least one web interface, the card number to a new site;

d) receiving, by the system, in response to the sending, a string of random numbers; ~~when a user submits a card number to an existing system, the secure redirector code sending the card number to the new site and receiving a string of random numbers in return;~~

e) generating, by the system, a data structure including (i) the card number as a field value and (ii) the string of random numbers as an index corresponding to the field value;

f) ~~the existing system proceeding with a transaction using the string of random numbers as a replacement for the card number; and~~

g) extracting, by the system, the index from the data structure to process a payment for a transaction.

h) ~~at the end of the transaction, processing payment by using the string of random numbers as an index into a table containing the card number.~~

"Draft Compliance" Sample Claim Amendment (cont.)

A method, for use in a system including multiple web interfaces configured to accept card numbers in compliance with the PCI data security standard, the method comprising:

a). receiving, by the system, a card number in at least one web interface;

b). sending, by the system, using a secure redirector module embedded in the at least one web interface, the card number to a new site;

c). receiving, by the system, in response to the sending, a string of random numbers;

d). generating, by the system, a data structure including (i) the card number as a field value and (ii) the string of random numbers as an index corresponding to the field value;

e). extracting, by the system, the index from the data structure to process a payment for a transaction.

Conclusion

- Alice Implications

- Subject Matter Eligibility Examination (2014 PTO Interim Guidelines)

- Post-Alice Prosecution Strategies (via Examiner interviews)

- Post-Alice Application Drafting Strategies

Questions?

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