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Welcome

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Day 1 recap – November 23, 2021

Presenter(s)	Topic	Description
Panagiota Dafniotis	Welcome	
Panagiota Dafniotis	**Innovate on a strong IP foundation**	A discussion of the core issues essential to your business regarding patents, trademarks, trade secrets, copyright, data and open source.
Bob Tarantino	**"I recognize that song!"**	A practical guide to licensing music for use in commercials.
Jennifer McKay	**"A stitch in time saves nine"**	The importance of preemptive trademark registration.
Matthew Diskin Meredith Bacal	**Fair dealing in Copyright Law**	Fair dealing in Canadian copyright law – is there an increasing role for parody?

Depreciation of Goodwill under the *Trademarks Act*

Toys "R" Us v. Herbs "R" Us

Subway v. Budway

Sam Gabor

Depreciation of Goodwill

1) The claimant's registered trademark was <u>used</u> by the defendant in connection with goods or services, whether or not such goods or services are competitive with those of the claimant.

2) The claimant's registered trademark is <u>sufficiently well known to have significant goodwill</u> attached to it.

3) The claimant's registered trademark was used in a manner *likely* to have an effect on its goodwill (i.e. <u>linkage</u>)

4) The *likely* effect would be to depreciate the value of the claimant's goodwill (i.e. <u>damage</u>)

Depreciation of Goodwill

v.

v.

Takeaways

- 1) Apply for trademark protection – You cannot claim depreciation of goodwill without a registered trademark

- 2) Maintain files of sales data, advertising costs, revenues, customer recognition, etc. to prove goodwill and reputation

- 3) Monitor your trademarks

- 4) Police marks and enforce rights if there exists depreciation of goodwill, even if there is no confusion between marks

Issue spotting in machine learning/AI service contracts

Tom Sides

Big Data ➡ ML ➡ AI

Getting grounded in basic terminology

Big Data

- "…high-volume, high velocity and high-variety information assets that demand cost-effective, innovative forms of information processing for enhanced insight and decision making". - Gartner IT glossary 'Big data' (http://www.gartner.com/it-glossary/big-data)

Machine Learning ("ML")

- set of computational techniques that use data to **create models that make predictions about future data**. These models **independently learn** and can be made to continuously adapt to changing environments without being explicitly programmed for the data they encounter.
- ML is a crucial component in many AI systems.

Artificial Intelligence ("AI")

- Computer software that uses algorithms to perform tasks normally requiring human intelligence/cognition … think visual perception, speech recognition and decision-making

AI Evolution ...
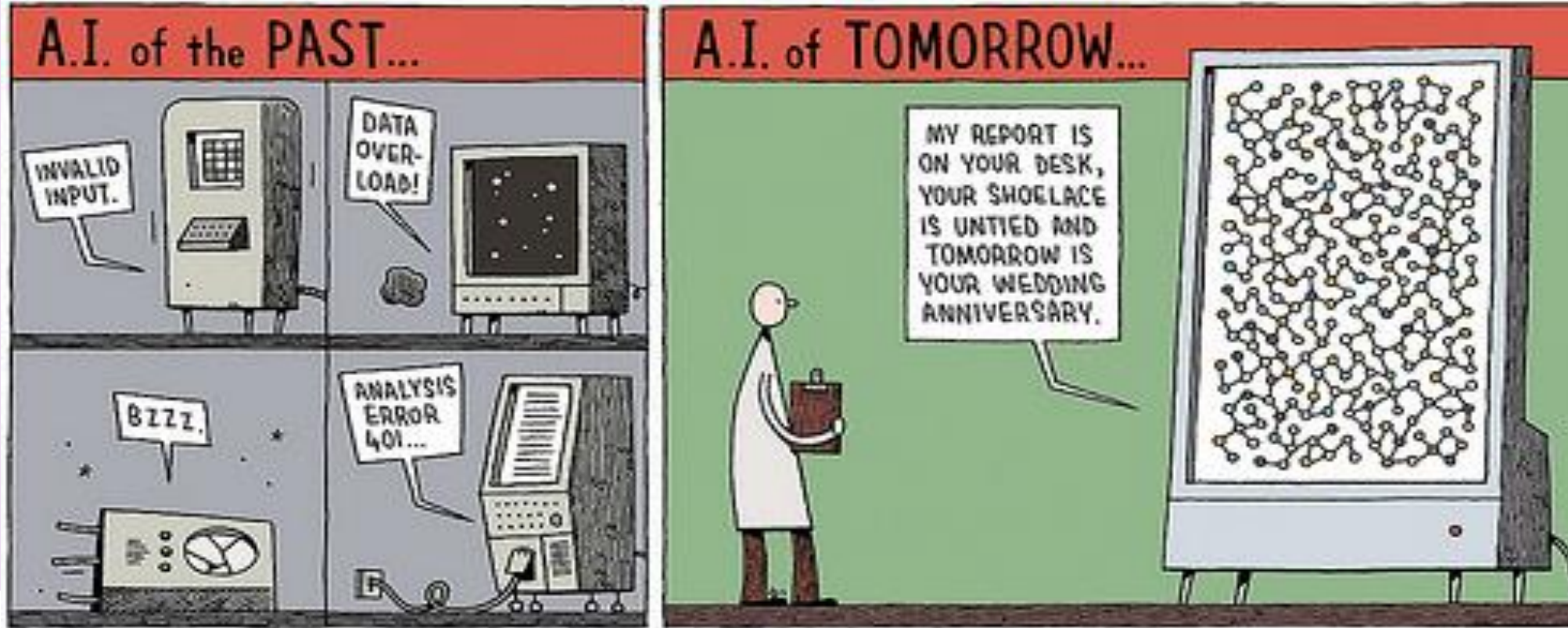
https://c2.staticflickr.com/6/5256/5392200475_c71f2d2569.jpg

ML/AI Service Provider
Business Proposition

- "We help business leaders understand how applied artificial intelligence can redefine competitive advantage and develop powerful software applications that create efficiencies, mitigate risk and drive revenue."

(AtlaML Inc. website)

Common Agreement Types
Depends on client's expected outcome

- Evaluative Services
  - Proof-of-concept – short term agreement
  - User/licensee tests and AI service provider proves value of proposed ML or AI product or service
  - Evaluation of user's data
  - User often owns IP; no warranty or indemnity
- Development Services
  - Graduation from Evaluative Services Engagement
  - Development of ML or AI solution
  - Limited warranty – usually only software, and limited duration
  - Ownership of AI solution
    - Provider's perspective
    - User's perspective

IP Ownership
What Components?

- User often approaches as negotiation of a software/technology development or licensing agreement
  - Using user's MSA or … construction-style agreement, etc.
  - Similarities, but important to recognize differences
    - Key components of AI

To inform ownership/use, the following questions need to be answered for each AI component:

- Who provides the component?
- Who uses the component?
- How will the components be used?
- Who owns the component?

IP Ownership
Common user perspectives

- Users often lack understanding where and when IP is created as it relates to AI work
  - Specifically, when is IP actually created at which stage in model development or software development

- Users desire to own IP
  - But without knowledge of above it makes this more complex
    - … and then users lean on traditional software or vendor management agreements

IP Ownership
Common law or statutory protection?

- IP created by non-humans – who owns the IP rights?

- Authors and Inventors create IP

- Copyright Act does not define "author" but cases suggest the term means "creator".

- Patent Act does not define "inventor"

- Presumption that authors and inventors must be natural persons

- Uncertainty underlines importance of determining IP right ownership by contract

IP Ownership and Use
Data

- Customer data

- Training data

- Meta data

- Personal information
  - Privacy law: EU's GDPR and Canada's proposed Consumer Privacy Protection Act (CPPA)
    - GDPR: prohibition to protect individuals against carrying out solely automated decision making that has legal or similarly significant effects on them (i.e. profiling)
    - CPPA and Quebec Privacy Act adopting similar measures of transparency and consent

- Aggregated data
  - Anonymized/pseudonomized

Warranty
Consider component

- Difficult for service provider to warrant an AI model as it is built on the data itself
  - If code transferred to user, it's hard to warranty code if user did not build any software around it
  - AI solution is usually dynamic
    - How to then tie its performance to static specifications?
    - Consider instead warranty of desired outcomes from use of AI solution

- Difficult for service provider to warrant an AI model since it is built on the data itself

IP Infringement
… and indemnities

- Consider traditional exceptions to IP infringement indemnity:
  - Modifications to software/technology
  - Combination claims, not authorized
  - Use beyond authorized scope

- Modifications and combinations *will occur* with AI solutions

- Provider will indemnify only for that part of the solution it can <u>control</u>

Protecting software-implemented inventions from copycats

An overview of patent-eligibility of software-implemented inventions in Canada and the United States.

Paul den Boef

Protection for Software-Implemented Inventions

- Software-implemented inventions can be protected by Trade Secret if there is no detectability, but there are risks involved.

- Software-implemented inventions can be protected by Copyright, but that protection is *extremely* limited.

- Patents provide much broader and stronger protection than Copyright.

- Are software-implemented inventions patent-eligible?
  - Short Answer – Yes! A majority of patents granted last year in the United States were software related!
  - Long Answer – It can depend on the invention…

Patentability in Canada

- Canadian statutory law (i.e. Sections 2 & 27(8) of the *Patent Act*) is vague.

- Current practice is *roughly* based on existing jurisprudence.

- Under current practice, patent eligibility of a software invention often hinges on whether a tangible feature (e.g. computer, sensor, actuator, etc.) is deemed part of the "actual invention". Practice Notice was released after Choueifaty FC decision from 2020.

  - If the "actual invention" does not include any tangible feature (i.e. mere calculations that do not solve a computer problem), it is not patent-eligible. Example: *Schlumberger* FCA decision from 1981 [a computer-implemented method of combining and analyzing borehole measurements for oil and gas exploration.]

  - If the "actual invention" includes any tangible feature (i.e. beyond mere calculations), it is patent-eligible. Example: *Amazon* FCA decision from 2011 [a computer-implemented method of enabling "one-click" purchasing online.]

Patentability in Canada

1. A computer-implemented method of analyzing data from seismic measurements comprising:

- Performing seismic measurements; [Does not need to be new/inventive!]
- Receiving the data from the seismic measurements;
- Processing the data on a computer using algorithm X; and
- Displaying the results of the analysis.

5. A computer-implemented method of drilling for oil comprising:

- Receiving the data from the seismic measurements;
- Processing the data on a computer using algorithm X; and
- Drilling for oil based on the results of the processing. [Does not need to be new/inventive!]

Patentability in Canada

7. A computer-implemented method of digitally coding a video signal comprising:

- Receiving digital video data;

- Encoding, using a digital signal processor, the digital video data using algorithm Y; and

- Providing the encoded video data.

Patentable because the new algorithm Y solves a computer problem (i.e. compresses video data with the same signal to noise ratio and level of compression as existing methods while using fewer processing steps).

Patentability in Canada

- Opportunities are vast for software-implemented inventions that (i) have physicality going beyond mere calculations and/or (ii) solve a computer problem!

- Many Blockchain patents. Examples:
  - Cross-asset Trading Within Blockchain Networks (CA 3061789 issued January 26, 2021)
  - Regulating Blockchain Confidential Transactions (CA 3041168 issued March 10, 2020)

- Many Artificial Intelligence patents. Examples:
  - Automated Artificial Intelligence Vehicle Appraisals (CA 3116789 issued September 7, 2021)
  - System and Method for Determining Timing of Response in a Group Communication Using Artificial Intelligence (CA 3048413 issued September 14, 2021)
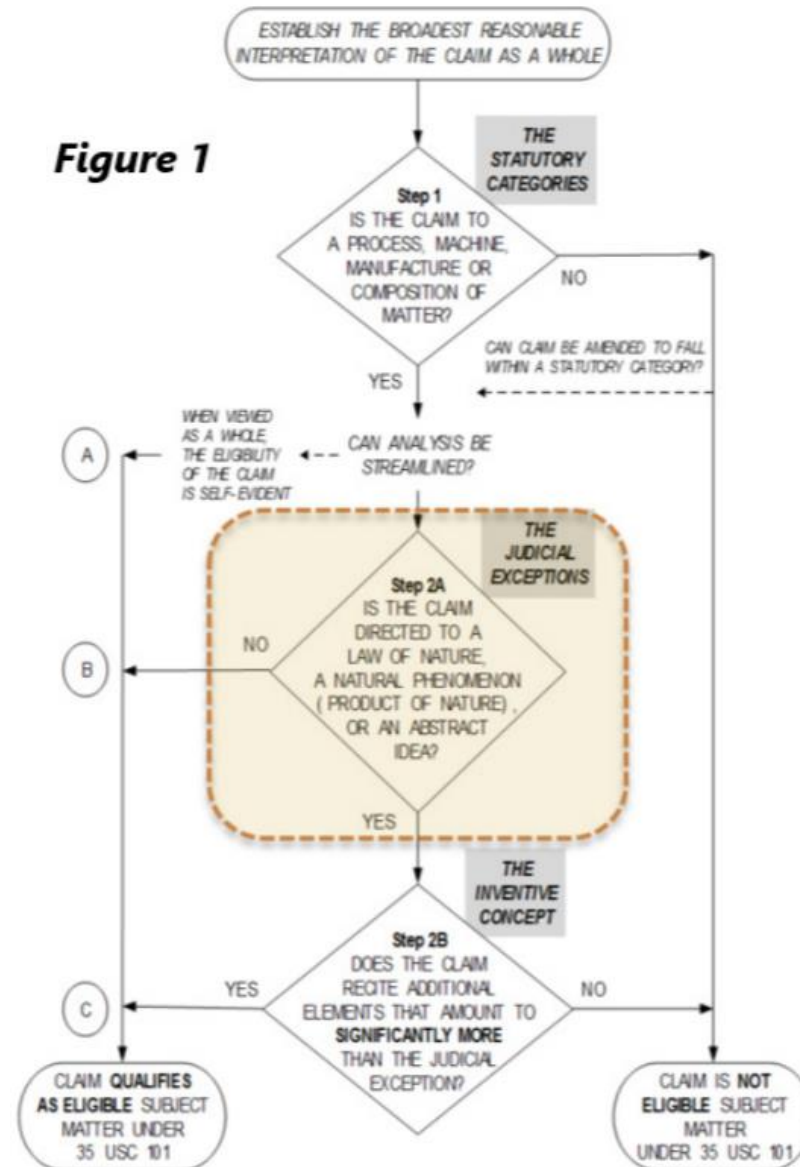
Patentability in the United States

- American statutory law (i.e. 35 USC 101) is vague.
- Current practice is largely based on existing jurisprudence.
- Under current practice, patent eligibility of a software invention often hinges on whether the invention is directed to an "abstract idea" which is a judicial exception.
  - If it is directed to an "abstract idea", the invention is patent-eligible only if it includes "significantly more than the judicial exception".
  - If it is not directed to an "abstract idea", the invention is patent-eligible.
- So what is an "abstract idea"? Examples:
  - *Bilski* SCOTUS decision from 2010 [hedging losses in one segment of the energy industry by making investments in other segments of that industry]
  - *Alice* SCOTUS decision from 2014 [mitigating "settlement risk" by using a third-party intermediary]

Patentability in the United States

- According to *Alice*, we must use the framework from *Mayo v. Prometheus* SCOTUS decision from 2012.

- Favorable CAFC decisions since *Alice* shine light on "abstract idea"

- Subject matter eligibility guidance updated in 2019 to be much more "patent-friendly".

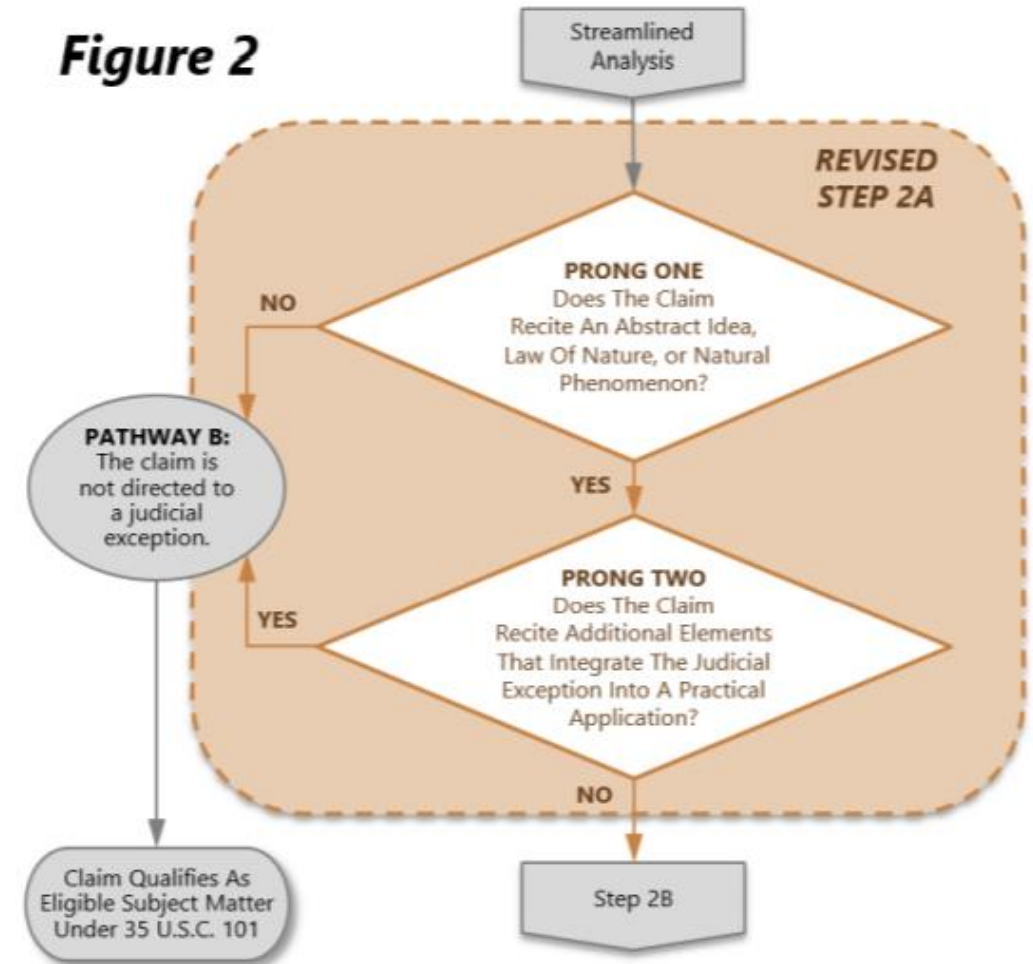- A practical application is not abstract!

Figure 1

Patentability in the United States

- "Step 2A specifically excludes consideration of whether the additional elements represent well-understood, routine, conventional activity. Accordingly, in Step 2A Prong Two, examiners should ensure that they give weight to all additional elements, <u>whether or not they are conventional</u>, when evaluating whether a judicial exception has been integrated into a practical application. Additional elements that represent <u>well-understood, routine, conventional activity</u> may integrate a recited judicial exception into a practical application."

- Practical application: "An improvement in the functioning of a computer, or <u>an improvement to other technology or technical field</u>".

Figure 2

Patentability in the United States

- Opportunities are vast for software-implemented inventions that provide for a practical application and/or include "significantly more"!

- Thousands of Blockchain patents. Examples:
  - Blockchain based authentication (US 11,177,964 issued November 16, 2021)
  - Smart contract admission check and fault tolerance in a blockchain (US 11,176,519 issued November 16, 2021)

- Thousands of Artificial Intelligence patents. Examples:
  - Advanced artificial intelligence agent for modeling physical interactions (US 11,176,632 issued November 16, 2021)
  - Artificial intelligence system for modeling emotions elicited by videos (US 11,176,484 issued November 16, 2021)

Conclusion

- Software-implemented inventions are patent-eligible!

Canada	United States
physicality going beyond mere calculations	practical application
solve a computer problem	include "significantly more"

- Patent protection can provide broad and strong protection.
- Consider filing for patent protection early and before any disclosure!

Thank you

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