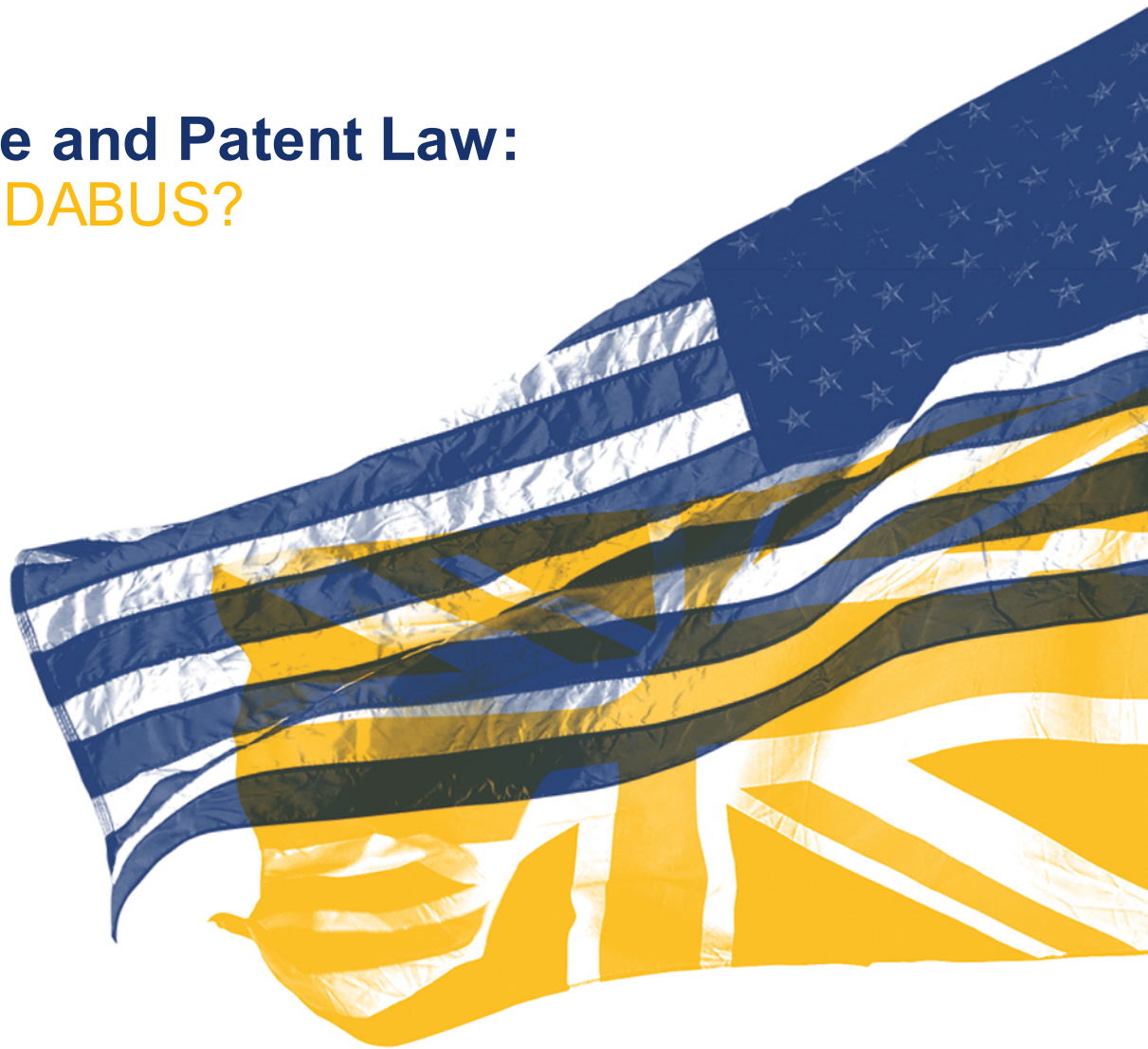


Artificial Intelligence and Patent Law: What Happens After DABUS?

July 22, 2020



Introductions – Our Panelists



Yeen Tham
IP Policy Counsel – IBM



Brent Babcock
Partner – Womble Bond
Dickinson



Bill Jacobs
Associate – Womble Bond
Dickinson



Dr. Chris Mammen
Partner – Womble Bond
Dickinson

Common AI Inventions



Core AI

Machine learning techniques, including neural networks



Applications

Computer vision (image analysis), natural language processing, speech recognition



Fields

- Telecom
- Transportation (self driving vehicles)
- Life and medical sciences

AI-Assisted and AI-Generated Inventions

AI-Assisted Inventions

- Made with significant human intervention
- Made with aid of AI, e.g., using AI software to develop new drugs
- Generally can be protected as patents under existing laws

AI-Generated Inventions

- Made with insignificant human intervention
- Made by AI, e.g., DABUS inventions
- Not protectable under existing laws
 - DABUS applications currently refused by the USPTO, UKIPO and the EPO
 - Decisions to be appealed by applicants

Novel Artificial Intelligence Technologies

Novelty and non-obviousness are primarily (or entirely) contributed by foundational improvements to artificial intelligence *methodology* itself, e.g.,

- Novel layering structures within neural networks
- Novel weighting of variables
- Novel methods of combining AI models

Novel Applications of Artificial Intelligence Technologies

Novelty and non-obviousness are mainly (or entirely) contributed by the *application* of artificial intelligence, e.g.,

- Novel types of input data
- Novel training data
- Novel pre or post processing of data sets

*May include possibly tweaking core AI features that do not meaningfully contribute to patentability standard

AI “Assisted” Inventions

- Where AI contributes to conception
- Similar to other research tools?
- Similar to lab assistants?
- Multiple inventors – inventive contribution
 - What if none of the humans involved qualify as inventors?
 - Hypothetical

What would it take for AI to be deemed an “inventor”?

- An inventor is traditionally viewed as a human making new things, driven by personal or society needs or financial incentives
- Currently no test, technical or legal, to establish AI as an inventor
- Inventor status for AI raises many questions:
 - At what point is the machine exclusively inventing, without the direction of a human? How does a machine satisfy the duty of disclosure?
 - Inventorship is tied to ownership; who owns the invention absent contractual obligations? If left to the legal owner of the AI, who owns the AI?
 - If a machine can enjoy the legal status of an inventor, can it then be liable for infringement?

AI Tools In Connection With Patent Practice

Prior Art Searching	<ul style="list-style-type: none">• Google Patent – Uses claim terms to locate relevant prior art• NLPatent – Analyzes claims to locate relevant prior art
Legal Research	<ul style="list-style-type: none">• CARA or “Case Analysis Research Assistant” – upload a brief or memo, and AI tool analyzes the citations and returns a list of “suggested cases” that are relevant to, but not cited in, document
Time Entry	<ul style="list-style-type: none">• ZERO – uses iPhone activity to automatically capture, analyze, and prepare reports on time spent on client-related work; also applies AI to sort and file emails
Document Preparation	<ul style="list-style-type: none">• Docubot - chatbot uses a Q & A interface to interact with the user (a client) to prepare a legal document that can then be reviewed by a human attorney• ANAQUA Studio – automates patent drafting• TrademarkNow – automates trademark searching across multiple databases

AI Tools In Connection With Patent Practice

Litigation Predictive Analysis	<ul style="list-style-type: none">• Docket Alarm – analyzes aggregate case data to give lawyers insights on how judges have ruled on similar matters, which parties settle most, and at what stage, and other helpful strategic case data• Lex Machina – uses AI to predict an estimated time when a case goes to trial before a specific judge
Discovery	<ul style="list-style-type: none">• Everlaw – uses predictive coding feature to create prediction models based on at least 300 documents that were classified before as relevant or irrelevant by the user• DISCO - employs prediction technology to suggest which documents are most likely to be relevant or irrelevant to the user
Legal Analytics	<ul style="list-style-type: none">• Lex Machina – generates summaries of data for collected IP cases (district courts and PTAB) (parties, judges, patents, etc.)
Due Diligence	<ul style="list-style-type: none">• Kira Systems – conducts contract review by searching, highlighting, and extracting relevant content for analysis.
Electronic Billing	

Q: If an AI algorithm generates a novel solution and no human meets the traditional test as an “inventor,” can there be a patent?



Questions?



WOMBLE
BOND
DICKINSON

Thanks for attending!

"Womble Bond Dickinson," the "law firm" or the "firm" refers to the network of member firms of Womble Bond Dickinson (International) Limited, consisting of Womble Bond Dickinson (UK) LLP and Womble Bond Dickinson (US) LLP. Each of Womble Bond Dickinson (UK) LLP and Womble Bond Dickinson (US) LLP is a separate legal entity operating as an independent law firm. Womble Bond Dickinson (International) Limited does not practice law. Please see www.womblebonddickinson.com/us/legal-notice for further details.

Information contained in this document is intended to provide general information about significant legal developments and should not be construed as legal advice on any specific facts and circumstances, nor should they be construed as advertisements for legal services.

©2019 Womble Bond Dickinson (US) LLP

