

**WEBINAR SERIES
LIFECYCLE OF A SMART IDEA**

COMMERCIALIZING ARTIFICIAL INTELLIGENCE: STRATEGIES FOR THE NEXT ERA OF INVENTION

Moderator: **Gordon Harris**, **Partner** – London

Panellists:

Shahrzad Esmaili, **Partner** – Toronto

Matt Hervey, **Partner & Head of AI** – London

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Jason Yang, **Principal Associate** – Beijing



MARCH 24, 2021

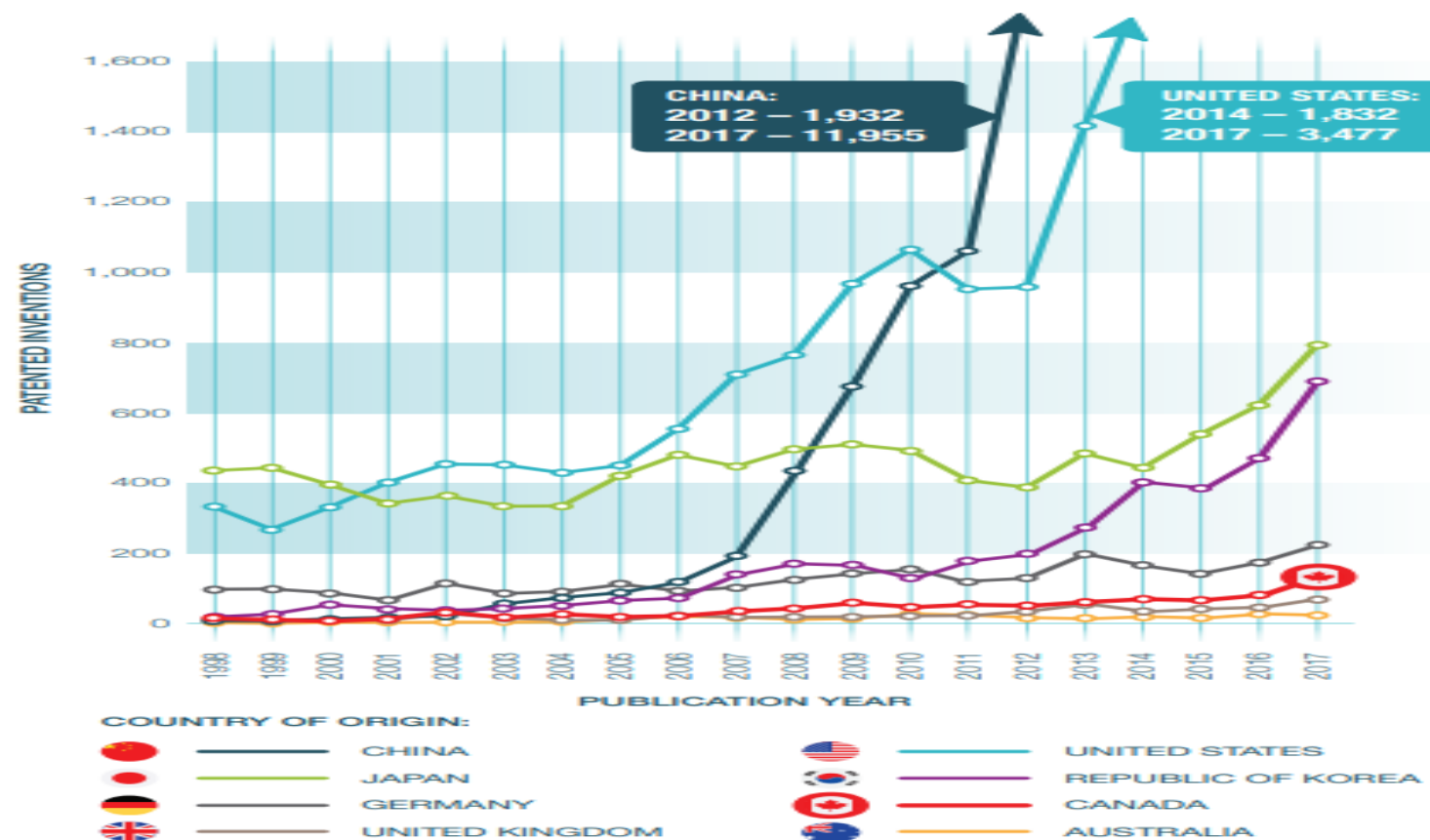
Gowling WLG's Global IP Group



TRENDS IN CANADIAN AI PATENTING

CURRENT TRENDS IN AI PATENTING

- Canada is one of the top countries in the world in terms of both AI patents and scientific publications related to AI
- Ontario, BC and Quebec are the top AI-patenting provinces
- Canadian researchers specialize in: Natural Language Processing, Knowledge Representation and Reasoning, and Computer Vision.



Source: Minister of Industry, 2020 (“Processing Artificial Intelligence: Highlighting the Canadian Patent Landscape”)

TRENDS IN CANADIAN AI PATENTING

IMPROVEMENTS NEEDED

Gender distribution in the AI field for patents:

1 female for every 6 males in Canada versus 1 female for every 3 males internationally

INTERNATIONAL



VS

CANADA



TRENDS IN CANADIAN AI PATENTING

FUTURE TRENDS IN AI PATENTING

- ***Pan-Canadian Artificial Intelligence Strategy***
 - In 2017 the Government of Canada appointed CIFAR (Canadian Institute for Advanced Research) to develop and lead the world's first national AI strategy
 - \$125 million initiative in partnership with the Alberta Machine Intelligence Institute (Amii), the Montreal Institute for Learning Algorithms (Mila), and the Vector Institute.

AI LAWS IN CANADA PRE-*CHOUEIFATY*

TROUBLES WITH PATENTING AI



1. Problem Solution Approach

- Issue of Examiner characterizing the problem in such a way that computer elements are non-essential.

2. Patentable Subject Matter

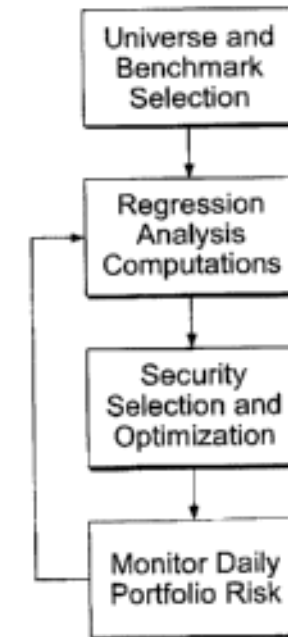
- If the computer elements are non-essential then the AI related claims may be considered abstract and not patent-eligible.

AI LAWS IN CANADA POST-*CHOUEIFATY*

CHOUEIFATY IN BRIEF

- **Facts:** Patent for computer-implemented method determined to be directed to be a scheme or rules that amount to mere calculations.
- **Issues:** Did the Commissioner err in applying the problem-solution approach when identifying the essential elements of the claims?
- **Decision:** Federal Court rejects CIPO's problem/solution approach to claims construction in favour of the two-step purposive construction approach from *Free World Trust*.

Embodiment of Back Test Methodology Summary



AI LAWS IN CANADA POST-*CHOUEIFATY*

- **Before *Choueifaty***
 - Problem-Solution Approach
- **After *Choueifaty***
 - New CIPO Guidance, and
 - *Free World Trust* Purposive Construction
 - An improvement in computer operations?
 - ✓ Does the computer form part of the actual invention? Does it have physical existence or manifest physical effects related to manual/productive arts?
 - ✓ E.g. do the AI computerized operations optimize computer processes – improve processing and speed – improve functioning of a computer? Then patent eligible.



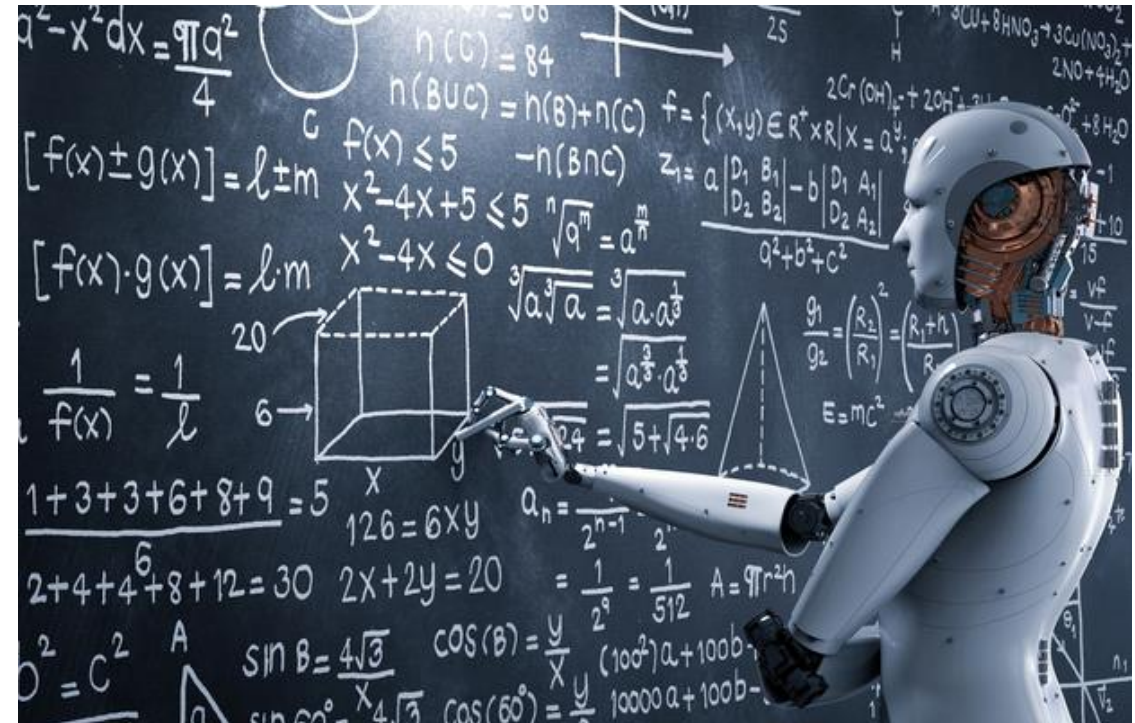
CHECKLIST FOR AI BUSINESSES AND IP

- 1. Patent or Trade Secret Protection? Both?**
 - A. Global considerations and budget
- 2. Draft the patent application in-house or hire a patent agent?**
- 3. Patent Eligibility - Does your patent application maximize your chances of your invention being found to be directed to patentable subject matter?**
- 4. Competitive Landscape?**



CANADA AND ARTIFICIAL INVENTORSHIP LEGISLATION

- **S. 27 (1)** *The Commissioner shall grant a patent for an invention to the **inventor** or the inventor's **legal representative** if an application for the patent in Canada is filed in accordance with this Act and all other requirements for the issuance of a patent under this Act are met.*



CANADA AND ARTIFICIAL INVENTORSHIP

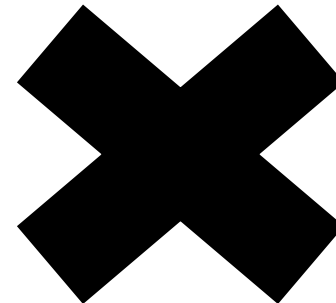
JURISPRUDENCE

- “The inventor is the person or persons who conceived of the “new and useful” art, process, machine, manufacture or composition of matter, or any “new and useful” improvement thereto. The ultimate question must therefore be: who is responsible for the inventive concept?” – SCC in *Apotex Inc. v Wellcome Foundation Ltd*, 2002 SCC 77

Legislation



Jurisprudence



THANK YOU FOR ATTENDING!

