Patenting A.I. Innovations in the U.S.

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A.I. Filings in the U.S. are Dramatically Increasing
Proportional Increase in A.I. Filings Most Pronounced for Non-U.S. Applicants
But A.I. Filing Trends Depend on Application Area
Perhaps Because Prospects of Patenting A.I. Innovation Depends on Application Area
U.S. Eligibility Requirement has been Affecting Patenting Prospects

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- Recent effort (2014):
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- More recent effort (2019):
  - Abstract idea must be: mathematical concept, certain method of organizing human activity or mental process or other exception approved by TC Director
  - AND, if abstract idea is integrated into practical idea = eligible
  - Examiner not to issue eligibility rejection unless more likely than not that claim is ineligible
Patenting Prospects of Software/A.I. Innovations has been Volatile in the U.S.


In the U.S., Inventors must be Human

- U.S. patent statutes do not specifically require that inventors be human. However:
- Legislative history and filing requirements (e.g., provision of “family name”) are consistent with this requirement
- U.S. case law requires that inventors be individuals (e.g., not corporations)
- I.P. is a personal property right in the U.S.

- Consider: purpose of U.S. patent system is to promote innovation and disclosure
Conclusions

• A high degree of uncertainty remains regarding which types of artificial-intelligence innovations can be patented in the U.S.

• As of yet, no separate rules/laws distinguish patentability of A.I. innovations from other software innovations.

• So as the U.S. struggles to determine which software inventions are sufficiently non-abstract to be patent eligible, patenting A.I. inventions is being affected.

• The fact that A.I. patent applications are assigned to many parts of the U.S. patent office further complicates achieving consistent training and applicant predictability.