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Patents and artificial intelligence

25th Annual Advanced Patent Law Institute (live webcast)
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Robert Bahr
Deputy Commissioner, USPTO

UNITED STATES
PATENT AND TRADEMARK OFFICE
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Agenda

- Artificial intelligence (AI)–an overview
- USPTO engagement on artificial intelligence
- USPTO and artificial intelligence IP policy
- Patents: AI-related issues

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AI overview

- No universally recognized definition
  - Generally understood as computer functionality that mimics cognitive functions associated with the human mind (e.g., the ability to reason, generalize, discover meaning, and learn from past experience)
- AI is increasingly becoming an important tool across a diverse spectrum of technologies and businesses
- AI uses
  - Voice-powered personal assistants like Siri and Alexa
  - Autonomous vehicles
  - Forecasting models predicting weather patterns
  - Precision agriculture that detects disease, pests, and poor plant nutrition on farms
  - Fraud detection in banking
  - Cybersecurity

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USPTO activities on AI policy

- Stakeholder engagement
  - January 2019   AI IP Policy conference
  - August 2019   Request for comments (RFC) on AI patent issues
  - October 2019   RFC on other IP rights impacted by AI (e.g., copyright)
- Collaboration with international IP offices
  - October 2018   IP5   Expert roundtable on artificial intelligence
  - November 2019   JPO   AI symposium
- Requests for information (RFIs)
  - October 2018   USPTO's challenge to improve patent search with AI
  - September 2020   AI for design patent applications
- Reports
  - October 2020   Public views on AI and IP policy (AI report)

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AI tools in USPTO operations

- Auto-classification of patents
  - Leverages machine learning to automatically classify patent documents in CPC, replacing current practice of manual classification by contractors
  - Currently assessing results and maturing prototype functionality with input from classification experts
  - Expectations: operational efficiency and quality improvement
- Patent AI prototype for search
  - Cloud-based solution; identifies documents and suggests search areas
  - Beta test in March 2020 to ~500 users
  - Expectations:
    - Search effectiveness, broader search across technology areas
    - AI learning improves search models over time

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USPTO and artificial intelligence IP policy

Title search: Patents and artificial intelligence

Also available as part of the eCourse
[2020 Advanced Patent Law (Austin) eConference](#)

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25th Annual Advanced Patent Law Institute session
"AI Claims"