

**UNITED STATES  
PATENT AND TRADEMARK OFFICE**



# Artificial intelligence (AI) policy

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Director, Office of Petitions

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UNITED STATES  
PATENT AND TRADEMARK OFFICE



# The USPTO issued a request for comments (RFC)

- August 27, 2019 RFC on AI/patents
  - Twelve questions touching on topics such as inventorship, eligibility, disclosure, enablement, inventive step, etc.
  - Over 90 comments were received from industry, academia, foreign stakeholders, and individuals

 **Federal Register** / Vol. 84, No. 166 / Tuesday, August 27, 2019 / Notices **44889**

Dated: August 22, 2019.  
**Tracey L. Thompson,**  
Acting Deputy Director, Office of Sustainable Fisheries, National Marine Fisheries Service.  
[FR Doc. 2019-18466 Filed 8-26-19; 8:45 am]  
BILLING CODE 3510-22-P

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**DEPARTMENT OF COMMERCE**  
**Patent and Trademark Office**  
[Docket No. PTO-C-2019-0029]  
**Request for Comments on Patenting Artificial Intelligence Inventions**

**AGENCY:** United States Patent and Trademark Office, Department of Commerce.  
**ACTION:** Request for comments.

**SUMMARY:** The United States Patent and Trademark Office (USPTO) is interested in gathering information on patent-related issues regarding artificial intelligence inventions for purposes of evaluating whether further examination guidance is needed to promote the reliability and predictability of patenting artificial intelligence inventions. To assist in gathering this information, the USPTO is publishing questions on artificial intelligence inventions to obtain written comments from the public. The questions are designed to cover a variety of topics from patent examination policy to whether new forms of intellectual

patentability issues relating to computer-implemented inventions (e.g., software) are germane to discussions of AI inventions.<sup>1</sup> AI methods and systems vary in their technical implementation, but rely on a substantial level of development and training by inventors, developers, and system users.

The USPTO has been examining AI inventions for decades and has issued guidance in many areas that necessarily relate to AI inventions. Going forward, the USPTO would like to engage with the innovation community and experts in AI to determine whether further guidance is needed to promote the predictability and reliability of patenting such inventions and to ensure that appropriate patent protection incentives are in place to encourage further innovation in and around this critical area.

*Issues for Comment:* The USPTO seeks comments on patenting artificial intelligence inventions. The questions enumerated below are a preliminary guide to aid the USPTO in collecting relevant information to evaluate whether further guidance is needed and assist in the development of any such guidance with respect to patenting artificial intelligence inventions. The questions should not be taken as an indication that the USPTO has taken a position or is predisposed to any particular views. USPTO welcomes comments from the public on any issues

running the AI algorithm on the data and obtaining the results.

3. Do current patent laws and regulations regarding inventorship need to be revised to take into account inventions where an entity or entities other than a natural person contributed to the conception of an invention?

4. Should an entity or entities other than a natural person, or company to which a natural person assigns an invention, be able to own a patent on the AI invention? For example: Should a company who trains the artificial intelligence process that creates the invention be able to be an owner?

5. Are there any patent eligibility considerations unique to AI inventions?

6. Are there any disclosure-related considerations unique to AI inventions? For example, under current practice, written description support for computer-implemented inventions generally require sufficient disclosure of an algorithm to perform a claimed function, such that a person of ordinary skill in the art can reasonably conclude that the inventor had possession of the claimed invention. Does there need to be a change in the level of detail an applicant must provide in order to comply with the written description requirement, particularly for deep-learning systems that may have a large number of hidden layers with weights that evolve during the learning/training process without human intervention or knowledge?

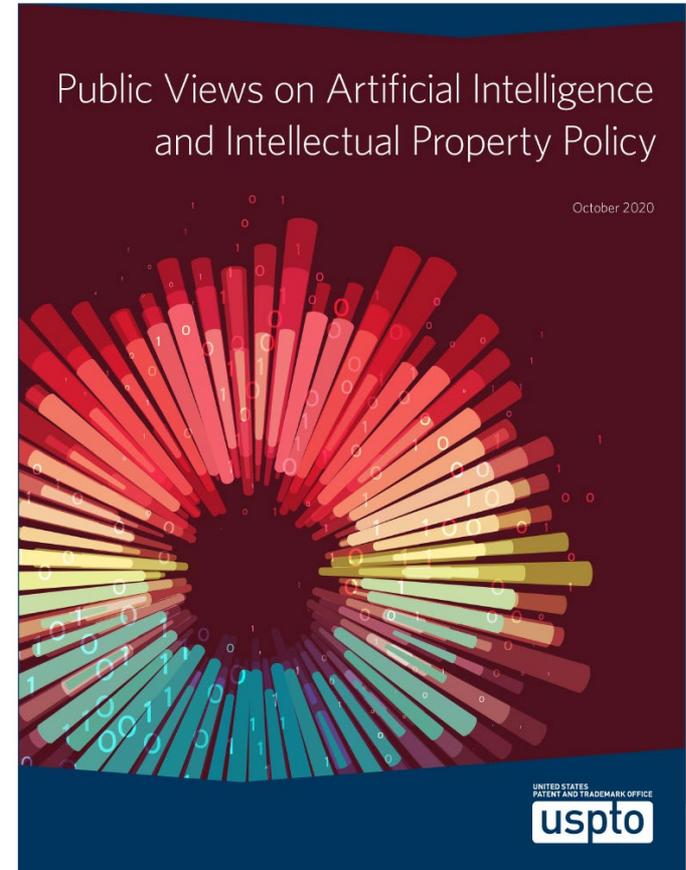
# The USPTO issued an RFC

- October 30, 2019 RFC on AI on other intellectual property (IP) issues
  - Thirteen questions touching on topics related to copyright, trademark, trade secret, and data rights
  - Nearly 100 comments were received from industry, academia, foreign stakeholders, and individuals

Federal Register / Vol. 84, No. 210 / Wednesday, October 30, 2019 / Notices		58141
 <p>Atmospheric Administration (NOAA), Commerce. <b>ACTION:</b> Notice of public meeting.</p> <p><b>SUMMARY:</b> The Mid-Atlantic Fishery Management Council (Council) will hold a webinar-based meeting with the public to provide information on options available to commercial fishing operators for electronically submitting required Vessel Trip Reports (VTRs) in the Greater Atlantic Region. This is in support of the Council's joint action with the New England Fishery Management Council that could require electronic reporting of VTRs by operators holding commercial fishing permits for species managed by either council that require the submission of VTRs.</p> <p><b>DATES:</b> The meeting will be held Wednesday, November 20, 2019, from 5:30 p.m. to 7:30 p.m., EST.</p> <p><b>ADDRESSES:</b> The meeting will be held via webinar (<a href="http://mafmc.adobeconnect.com/evtr_publicmtg/">http://mafmc.adobeconnect.com/evtr_publicmtg/</a>) with a telephone audio connection (provided when connecting). Audio only access via conference phone number: 1-800-832-0736; Room Number: 5765379. Council address: Mid-Atlantic Fishery Management Council, 800 N State St., Suite 201, Dover, DE 19901; telephone: (302) 674-2331.</p> <p><b>FOR FURTHER INFORMATION CONTACT:</b> Christopher M. Moore, Ph.D., Executive Director, Mid-Atlantic Fishery</p>	<p><b>Special Accommodations</b></p> <p>The meeting is physically accessible to people with disabilities. Requests for sign language interpretation or other auxiliary aid should be directed to M. Jan Saunders, (302) 526-5251, at least 5 days prior to the meeting date.</p> <p><b>Authority:</b> 16 U.S.C. 1801 <i>et seq.</i> Dated: October 24, 2019.</p> <p><b>Tracey L. Thompson,</b> <i>Acting Deputy Director, Office of Sustainable Fisheries, National Marine Fisheries Service.</i> [FR Doc. 2019-23609 Filed 10-29-19; 8:45 am]</p> <p><b>BILLING CODE 3510-22-P</b></p>	<p><b>FOR FURTHER INFORMATION CONTACT:</b> Coke Stewart, Office of the Under Secretary and Director of the USPTO, (571) 272-8600.</p> <p><b>SUPPLEMENTARY INFORMATION:</b> Artificial Intelligence (AI) technologies are increasingly becoming important across a diverse spectrum of technologies and businesses. AI poses unique challenges in the sphere of intellectual property law. At a January 31, 2019 conference on "Artificial Intelligence: Intellectual Property Policy Considerations," USPTO explored a number of those challenges.<sup>1</sup> On August 27, 2019, the USPTO published a request for comment regarding AI's impacts on patent law and policy. As a continuation of this work, the USPTO is also considering the impact of AI on other intellectual property rights.</p> <p><b>Issues for Comment:</b> The USPTO seeks comments on the copyright, trademark, and other intellectual property rights issues that may be impacted by AI. The questions enumerated below are a preliminary guide to aid the USPTO in collecting relevant information to evaluate whether further guidance is needed and to assist in the development of any such guidance with respect to intellectual property policy and its relationship with AI. The questions should not be taken as an indication that the USPTO has taken a position, or is predisposed to any particular views. The USPTO welcomes comments from the public on any issues that they believe are relevant</p>
<p><b>DEPARTMENT OF COMMERCE</b></p> <p><b>Patent and Trademark Office</b> [Docket No. PTO-C-2019-0038]</p> <p><b>Request for Comments on Intellectual Property Protection for Artificial Intelligence Innovation</b></p> <p><b>AGENCY:</b> United States Patent and Trademark Office, Department of Commerce.</p> <p><b>ACTION:</b> Request for comments.</p> <p><b>SUMMARY:</b> The United States Patent and Trademark Office ("USPTO") is gathering information about the impact of artificial intelligence ("AI") technologies on intellectual property law and policy. To assist in gathering this information, on August 27, 2019, the USPTO published questions related to the impact of artificial intelligence</p>		

# USPTO report on AI IP policy

- October 6, 2020 report titled “Public Views on Artificial Intelligence and Intellectual Property Policy”
- Some general themes:
  - AI has no universally recognized definition
  - Existing U.S. IP laws are calibrated correctly to address the evolution of AI
  - Encouraged to keep a close eye on legal and scientific developments in AI to ensure the United States maintains its leadership in this critical technology



# USPTO report on inventing AI

- October 20, 2020 report titled “Inventing AI”
- Some key findings:
  - AI is increasingly important for invention, diffusing broadly across technologies, inventor-patentees, organizations, and geography
  - Number of AI patent applications received annually by the USPTO more than doubled from 30,000 to 60,000 from 2002 to 2018; share of all patent applications that contain AI grew from 9% to nearly 16%



# USPTO AI webpage

## Artificial Intelligence



"One of the agency's top priorities is to ensure that the United States maintains its leadership in innovation, especially in emerging technologies such as artificial intelligence (AI). To that end, the USPTO has been actively engaging with the innovation community and experts in AI to determine whether further guidance is needed to promote the predictability and reliability of intellectual property rights relating to AI technology and to encourage further innovation in and around this critical area." —USPTO Director Andrei Iancu



### Engagement

Browse USPTO leadership's speeches, blogs, and events about AI and learn more about our approach.

> [View past engagements](#)



### Reports

Find our reports, Federal Register Notices (FRNs), and other important USPTO actions concerning AI policy.

> [View reports and notices](#)



### Resources

Discover other resources for AI and learn about cross-government goals shared by other federal entities.

> [AI resources and goals](#)



#### DIRECTOR'S BLOG

USPTO issues second Federal Register Notice on artificial intelligence and innovation



#### REPORT FROM THE CHIEF ECONOMIST

USPTO report on the diffusion of AI across technologies, organizations, inventor-patentees, and U.S. regions



#### SPOTLIGHT

Public Views on Artificial Intelligence and Intellectual Property Policy



# Thank you!

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www.uspto.gov

<https://www.uspto.gov/initiatives/artificial-intelligence>