

Workplace ISSUES

Effects resulting from the USPTO's use of AI in patent examinations

There are unlimited examples of how businesses, organizations, and other entities are incentivized to use artificial intelligence (AI) technology to improve operations and performance. Thus, it is expected that, like any other entity, the United States Patent and Trademark Office (USPTO) would also be interested in using AI to improve its operations and performance. Each year, the USPTO receives hundreds of thousands of patent applications and hundreds of thousands of trademark applications that need to be examined and reviewed. In order to improve this examination and review process, the Director of the USPTO, Andrei Iancu, is driving an effort to incorporate AI technology into various processes performed by the agency.

With these changes to the USPTO's review process, the underlying question is: What effect will these changes have on patent applicants and patent holders?

On Oct. 29, 2019 at the European Patent Information Conference, Director Iancu stated that patent offices are "utilizing the advances in AI to help our examiners as they review the applications coming in" and that the USPTO is "integrating AI to augment classification and search." Further, Director Iancu stated that with respect to trademarks, the USPTO has "been exploring using AI for image search to help find prior similar images" and has been developing AI tools "to detect a pattern of manipulation of images typical of doctored specimens of use." Director Iancu indicated that the USPTO employs a task force that uses AI "to detect the level of similarity between images to identify when the same or similar image has been submitted in multiple ap-



By LLOYD J. WILSON
Daily Record
Columnist

lications by multiple applicants to substantiate use of the mark in U.S. commerce."

On Oct. 30, 2019 in a statement delivered before the United States Senate Committee on the Judiciary's Subcommittee on Intellectual Property, the Commissioner for Patents, Andrew Hirschfeld, also highlighted the importance being given to AI over the past year by the USPTO. Commissioner Hirschfeld indicated that examiners currently are allocated 22.5 hours, on average, to review and examine each patent application. In particular, Commissioner Hirschfeld indicated that a USPTO task force has been created to determine how AI can be leveraged by patent examiners to locate and retrieve relevant prior art for examiners. This process can help patent examiners better allocate their time (e.g., the 22.5 hours) during the patent examination process.

It is likely that as the USPTO continues to incorporate AI into various aspects of the examination process, examiners will become more efficient at reviewing and examining each patent application to determine whether a patent should be granted.

Now to the underlying question: What effect does the USPTO's usage of AI have on patent applicants and patent holders?

The initial burden of proof is on the patent examiner to find the existing prior art, e.g., publications, patents, public uses, sales, or other public disclosures, that is

closest to the technology being disclosed in the patent application being examined in order to prove an invention is not novel or is obvious. Patent examiners are typically limited on how much time is allotted to them to find and review this prior art. Thus, it can be difficult to thoroughly vet and examine, within the allotted time period, patent claims of patent applications for technologies that are cross-disciplinary, very complex, densely worded, or protracted. This can result in patents being awarded for inventions that were not thoroughly vetted by the patent examiners.

Many of these inadequately vetted patents that are awarded to applicants may later be invalidated during a patent infringement lawsuit, for example. The risk that a patent becomes invalidated can result in some uncertainty of patent rights in the marketplace. This uncertainty can result in conflicting patent rights, difficulties in ascertaining the boundaries of these patent rights, and increased litigation. Hundreds of millions of dollars are spent each year by companies to litigate patent validity, which can be very burdensome to these companies. This uncertainty can also play a role in technology licensing, investment, and commercialization of the technology.

Implementation of AI by the USPTO can make the examination process more efficient by reducing the amount of time patent examiners have to spend in searching for relevant prior art. This reduction in time can allow patent examiners to provide a more thorough examination process of new patent applications and decrease the likelihood that issued patents would later be determined to be invalid. Further, a

more thorough vetting process can provide less uncertainty of patent rights, increase the value of the patents, and potentially lead to more valuable technology licensing agreements, as well as additional technological investment and commercialization.

Some may view the implementation of AI by the USPTO as an effort to make obtaining a patent more prohibitive. Naturally, if patent examiners have more time to understand the improvement and vet the technology, then some patent applications for which patent examiners had insufficient time to thoroughly vet prior to the implementation of AI will now be more closely scrutinized. This close

scrutiny may lead to fewer patents being granted than otherwise would be without increased efficiency provided by AI. While this additional scrutiny may make patent procurement more difficult for patent practitioners (e.g., patent attorneys and patent agents) designated by applicants to obtain a patent, applicants can have greater confidence that the patents they are granted are less likely to be invalidated.

Overall, the changes being implemented by the USPTO to incorporate AI into the examination process provide benefits that outweigh possible negative side effects. Although it may become more difficult to ob-

tain a patent, applicants, companies, investors, and many others can have increased confidence in the validity of the patents that are granted. This increased confidence can make the patents more valuable and provide less marketplace uncertainty.

Lloyd J. Wilson is an associate with the law firm of Heslin Rothenberg Farley & Mesiti P.C. specializing in patent preparation and prosecution. He has experience in developing and managing patent portfolios for businesses ranging in size from solo inventors to large corporations. Lloyd can be reached at (518) 452-5600 or at lloyd.wilson@hrfmlaw.com.