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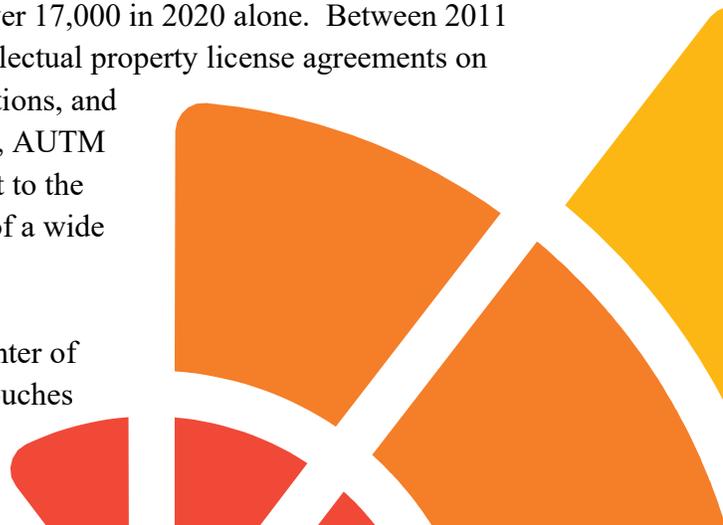
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AUTM's Input on the Request for Information to the Update of the National Artificial Intelligence Research and Development Strategic Plan

AUTM is the non-profit leader in efforts to educate, promote and inspire professionals to support the further development of academic research that drives innovation and changes the world. Our community is comprised of more than 3,000 members who work in more than 800 universities, research centers, hospitals, businesses and government organizations around the globe. AUTM's members are primarily from academic settings (67%), 15% are practicing attorneys and 5% are from industry. Some 22% of our members are international. AUTM appreciates the opportunity to provide input on the above-referenced update to the 2019 version of the National Artificial Intelligence Research and Development Strategic Plan (the "2019 Plan").

AUTM members in academic settings are focused on advancing early-stage inventions and other technologies to the marketplace primarily through licensing to partners (i.e., implementers). Between 2011 and 2020 (the most recent decade for which we have data), our skilled professionals filed over 150,000 patents for academic inventors and over 17,000 in 2020 alone. Between 2011 and 2020 our U.S. members negotiated over 60,000 intellectual property license agreements on behalf of U.S. universities and academic research institutions, and in 2020 alone over 8,000 such license agreements. Thus, AUTM has valuable insights and an important voice with respect to the protection, further development and commercialization of a wide range of new technologies.

Today, Artificial Intelligence (AI) is frequently at the center of what we do because it is becoming ubiquitous. It now touches



nearly every technology sector including, transportation, telecommunications, military, consumer electronics, therapeutics, diagnostics and even agriculture and finance. More importantly, AI is present from the origin of the technology. It is now integral to the inventions themselves, not some after-thought layered in at some later stage of development. For these reasons, we at AUTM know firsthand of the tremendous potential of AI and, given the current geopolitical climate, we recognize there is no margin for error in urgently tapping into that potential. As such, we applaud the Office of Science and Technology Policy, on behalf of the National Science and Technology Council's (NSTC) Select Committee on Artificial Intelligence (Select Committee), the NSTC Machine Learning and AI Subcommittee (MLAI-SC), the National AI Initiative Office (NAIIO), and the Networking and Information Technology Research and Development (NITRD) National Coordination Office (NCO) (collectively, the “Coalition”) for its effort to update the National Artificial Intelligence Research and Development Strategic Plan in order that we maximize the output of the National AI Initiative at a breakneck pace while being effective stewards of the precious taxpayer dollars involved.

Preliminary Matters to Establish the Context for AUTM’s Input

Upon review of the eight (8) strategies comprising the 2019 Plan, we can’t help but be drawn to strategies 1 and 8. We are drawn there because we live there. Day in and day out, AUTM members review the new technologies that are the fruits of investments in research. Then, after a thorough, collaborative assessment and arranging for the appropriate protection (e.g., filing a provisional patent application) of those new technologies, AUTM members immediately turn to the difficult task of finding a partner to further develop (i.e., advance) those new technologies toward the marketplace.

The most important step in above process is the protection step, particularly for new inventions. The reason being that the partner AUTM members endeavor to find will ultimately be a private sector entity. Among the many resources said private sector partner will be required to provide is investment dollars (e.g., venture capital), often in the millions or tens of millions of dollars. Any partner seeking to further develop the new technologies AUTM members manage is, without question, a sophisticated investor. No sophisticated investor will provide such substantial sums of investment dollars without having first made detailed estimates of the expected return on that investment. Accurate revenue projections from the sale of the eventual product or service are essential to those estimates, and one cannot make accurate revenue projections faced with the prospect of unlimited sellers of the same product or service. Thankfully, patents provide the ability to enforce the exclusive right to sell the product or service covered by the patent thereby providing valuable limits of the number of potential sellers. Thus, patents allow the investors to make more accurate revenue projections and confidently estimate the return on their investment. For these reasons, patents are essential tools investors depend on when deciding whether to enter into a partnership (i.e., taking a license) to further develop a new invention. Consequently, the patent status is among the first questions asked of AUTM members when partnership discussions commence.

AUTM's Input

With the above as context, we were quite surprised and more than a little dismayed to note that none of the strategies in the 2019 Plan mentions the patent system or intellectual property of any type. This to us is a glaring omission and a harmful one to boot.

To the members of the Coalition who may not be as familiar with the current state of the U.S. patent system as we at AUTM are, it is not good. It has undergone a radical transformation in the last 15 years. The enemies of the U.S. patent system have been waging a multi-front war against it since the mid-2000's resulting in a significant weakening of U.S. patent rights manifesting as uncertainty and unreliability. There is grave concern among AUTM and other like-minded groups that this weakening is resulting in fewer and/or less effective U.S. patents in vital technology sectors mentioned above, all of which nowadays incorporate AI. As we have illustrated, weaker or non-existent patents lead to less investment and thus fewer cutting-edge products and services being developed and introduced in the U.S. in these vital technology sectors. This outcome risks the loss of our technological preeminence with great harm to our economy and national security.

Thus, in order that the Coalition's valuable time the taxpayers' money is not squandered, AUTM recommends that a threshold strategy be put in place, Strategy 0, if you will. Strategy 0 will be to work with Congress to immediately strengthen U.S. patent rights by eliminating the current uncertainty and unreliability. The uncertainty can be eliminated by reforming Section 101 of the patent statute to clarify that (i) a claimed invention is entitled to a patent unless it exists in nature independently of and prior to any human activity or exists solely in the human mind and that (ii) subject-matter eligibility determinations must be made without regard for the requirements of Sections 102, 103, and 112 of the patent statute, or the claimed invention's "inventive concept." The unreliability can be eliminated by (i) restoring the ability of the patentee to routinely obtain injunctive relief after a finding of infringement at trial and (ii) reforming the post-issue review procedures at the PTAB to shift the balance in favor of the patentee instead of the challenger as it is at present.

We fear that, without implementing this Strategy 0, the result of the National AI Initiative will resemble what we experienced in the pre-Bayh-Dole years; namely, significant taxpayer dollars, squandered because they were invested in research that resulted in great technologies that never made it into the marketplace. These technologies remained on laboratory shelves and eventually became obsolete. The federal government owned them, was unwilling or unable to seek patent protection for them and, thus, were unable to find the partners necessary to continue their development. The past 40-plus years of Bayh-Dole has taught us that accessing the patent system, even a weak one, and strong private-sector partnerships pay tremendous dividends for the economy and the standard of living for everyday Americans by bringing many cutting-edge products to the marketplace. See here for more information of the success of the Bayh-Dole Act (<https://autm.net/about-tech-transfer/advocacy/legislation/bayh-dole-act/bayh-dole-innovations>). A well-functioning system of strong patent rights is at the core of Bayh-Dole.

Conclusion

AUTM again wishes to thank the Coalition for its efforts to to update the National Artificial Intelligence Research and Development Strategic Plan in order to quickly and efficiently maximize the output of the National AI Initiative. AI is ubiquitous in 21st century technologies and in order for our country to remain the world's technological superpower, we must realize AI's full potential and in ways that no other country can even fathom. For this Coalition to be successful in bringing about this important result, its plan must include the threshold strategy to strengthen U.S. patent rights by eliminating the current uncertainty and unreliability. If we do so, and only if we do so, will we realize the full potential of AI so that America will continue to enjoy robust national security and lead the world in sustained increases in economic growth, standard of living, and high-paying jobs for its citizens.

Sincerely,

A handwritten signature in black ink that reads "Stephen J. Susalka". The signature is written in a cursive, flowing style.

Stephen J. Susalka, Ph.D.
Chief Executive Officer