



February 22, 2021

United States Patent and Trademark Office  
600 Dulany Street  
Alexandria, VA 22314  
Submitted through the Federal eRulemaking Portal

**AUTM's Comments on the National Strategy for Expanding American Innovation  
(Docket #PTO-P-2020-0057)**

AUTM appreciates the opportunity to comment on the USPTO's national strategy for expanding American innovation. We have responded to each of the elements and corresponding questions that can be addressed by our profession. However, we also want to state our support for all of the elements – Creating Innovators, Practicing Innovation, and Realizing Innovation. These components must be considered together and supported equally for the changes we and others recommend to become the standard of practice for innovation in the United States.

**I. General**

**1. Investors and entrepreneurs come from all walks of life and are not always employed by a large corporate or educational institution. How can people and organizations in the innovation ecosystem better support them?**

While it is true that educational institutions cannot directly provide support for citizen innovators, they are uniquely set up to provide a central location for knowledge in a community. As educational institutions, there is a responsibility to provide basic knowledge, including repositories and equipment (e.g. computers, books) for all who seek information to spur innovations forward. However, the cost of this can be high and partnering opportunities between academic centers, industry, and government could help to provide the resources while minimizing the burden on the home center. In addition, expanding Patent and Trademark Resource Center locations through university partnerships will help support all innovators.

**2. Women and some minorities have not participated proportionally in the patenting of inventions. What barriers to innovation inclusion are specific to underrepresented groups? What supporting role should government organizations play in helping underrepresented groups overcome these barriers?**

We must be careful to separate “have not participated” with systemic barriers to participation, whether intentional or unintentional. These barriers persist in the form of biases, whether external or implicit, as well as systems and structures that exacerbate inequities, such as funding to HBCUs, faculty tenure track review processes, or academic culture. In order to reduce these barriers, we recommend:

- a. Providing bootcamps and other educational opportunities specifically geared towards underrepresented populations (individual targeting of each population), with these events including education, mentoring, and assistance along the innovation pathway.
- b. Matching innovators with a USPTO “program manager” who can help them with questions and provide feedback and resource support
- c. Provide funding and social capital resources to underrepresented populations to encourage them to engage from a young age in innovation, including reduce patent fees, reduced or pro bono law support, and other assistance as needed. While some of this has been completed, education and outreach must be funded and continue to be a prominent component of the USPTO and other government organizations.
- d. Ensure that populations are not discriminated against at all stages. Prominently display notices that the USPTO will not discriminate or base decisions on race, gender, socioeconomic status, disability status, and other demographic descriptors. We would encourage notice on the USPTO site or on the portal prior to formally submitting a patent.

**3. Mentoring and networking have been shown to be effective tools in supporting and encouraging underrepresented inventors and entrepreneurs. How can organizations and intellectual property practitioners in the innovation ecosystem better connect underrepresented innovators to each other and to mentors, both internally and across organizations?**

Provide a mentor matching network on USPTO to connect innovators. When a new Inventor Card is created, ask if they are willing to serve as a mentor and make that information available. Further suggestions are enumerated in the answer to question 2.

**4. Developing organization metrics to document the effectiveness of diversity and inclusion initiatives is necessary to track outcomes of action plans and initiatives. What are best practices that organizations can internally employ to measure their own progress, particularly in the area of intellectual property protection?**

Deidentifying patent applications and separating D&I information is key to participation. By engaging with other government entities, law firms, universities, and other client services, metrics can be collected, while maintaining neutrality in patent examination. AUTM works with individual membership organizations to collect gender information related to inventorship, but by collating that information it does not reveal individuals, maintaining privacy and neutrality.

5. **Measuring national progress in realizing greater inclusion and diversity in invention, entrepreneurship, and intellectual property may take years, and it will be critical to identify complementary short- and long-term metrics that are precursors to and indicators of expanding innovation. What are some specific, meaningful, and relevant measures that can be used to:**
- a. **Support year-over-year performance of action plans and initiatives in the short term?**
  - b. **Demonstrate the long-term creation of diversity and inclusion in the innovation ecosystem while complementing short-term performance metrics?**
- a) Number of inventors from unrepresented populations can be tracked and data analyzed to determine if participation is trending upwards. Consider collecting more expansive options (voluntary) to capture diversity in demographic information ensuring this is not visible/deidentified during application review.
- b) We will see that the changes are working when we see more representation across all fields and populations – students, innovators, entrepreneurs, patent holders, and all the other areas currently in need of more diversity.
6. **Invention, entrepreneurship, and intellectual property protection have been shown to be concentrated in certain areas of the country and among individuals from higher socioeconomic groups. What new or existing channels could be created or utilized to more effectively deliver information and resources to prospective innovators from all demographic, geographic, and economic backgrounds?**

Utilizing existing infrastructure of libraries, universities, schools, and community centers to reach all innovators is key. Providing education and opportunities for them to understand the process and participate regardless of monetary means and familiarity with innovation will help engage innovators from under-represented populations. Widely disseminate information on free and pro-bono options to support independent innovators. Showing innovators inventions that are not expensive to create (unlike pharmaceuticals and medical devices) and providing mentors that “look like me” will help engage and enhance interest from a wider variety of populations.

## II. **Creating Innovators**

7. **Research has shown that “invention education”-the infusion of transdisciplinary education in problem identification and problem solving-is critical to developing innovation skills in learners. How can educational institutions at all levels (pre-kindergarten through post-graduate) successfully infuse concepts of invention, entrepreneurship, and intellectual property education into curricula?**

By creating courses in development with educators from each level, invention education will become more accepted. Bringing these courses into required competency education (core curricula) will help teachers find the time to bring the subjects to their students and provide resources needed for educators and systems that may not otherwise have competency in the area of invention education.

- 8. To supplement formal education, how can community institutions, particularly in rural and economically disadvantaged areas, build awareness of, and skills and interests in, invention, entrepreneurship, and intellectual property among students of all ages?**

Within the community institutions, providing bootcamps, courses, “ask a patent agent”, and other ways to engage will enhance the prevalence of innovators. Making the topics approachable through games, camps, activities, and social engagement, people will feel less intimidated and more interested in learning and becoming innovators. Partner with larger, experienced institutions in the broader region for support and additional expertise. Potentially utilize Cooperative Extension as the distribution path for information from each state’s land-grant universities as Extension offices are generally staffed on a county-basis.

- 9. More can be done to help teachers, even those with a formal science, technology, engineering, or mathematics (STEM) background, incorporate concepts or innovation into their teaching methods. What new or existing professional development opportunities, resources, and programs could train teachers to incorporate invention education concepts into their instruction? How could these efforts be leveraged and scaled so that similar resources and opportunities are accessible to all teachers?**

USPTO outreach and education, bootcamps, resources for university TTOs, short courses that do not require a large time or money investment. Providing incentives and supplementary resources (parking, transportation, child-care) to teachers can help make the educational components more accessible to all. Specifically expand the definition of innovation to include the arts and humanities.

### **III. Practicing Innovation**

- 10. Recent progress in developing STEM graduates from underrepresented groups has been documented. How can similar rates of invention and entrepreneurship be attained? How can organizations best recruit and retain innovators from diverse backgrounds?**

Providing mentorship and social engagement in innovation and entrepreneurship will increase participation by underrepresented populations. Mentorship is critical. Resources and support are critical. Providing a safe place for people to create without judgement or bias will help recruit and retain innovators from all backgrounds. Reinforce that innovation is not the exclusive purview of STEM disciplines so that all individuals/creators see innovation, and how they can contribute, in their own area of expertise.

- 11. Inventors thrive when cultural and institutional barriers within workplaces are minimized or removed. What are examples of these barriers, and how can organizations remove them to create an inclusive, innovative workplace culture?**

Barriers can include lack of access, lack of support, implicit biases from institutional administration and instructors. Providing mentorship, support groups, blinded judgement on innovations to fund, and training to all involved to minimize biases will help innovators thrive.

- 12. Access to information and resources is pivotal for the development of individual inventors and small businesses. How can the nation better support individual inventors and small businesses with resources so they can successfully translate their skills and creativity into the acts of invention, intellectual property protection, and entrepreneurship?**

AUTM is willing to engage in conversation with the USPTO's outreach and education division about how AUTM and USPTO could develop an individual innovator toolkit that would be made available upon request to our member technology transfer offices. This toolkit would include information such as websites for USPTO, basic information on patenting, public disclosure, templates, local law firms, and other information to help innovators in their journey. Engage more directly with state SBDCs and MEPs that already exist in each state to increase impact on Main Street businesses.

- 13. Another important objective is increasing diversity in the entire intellectual property field. What are ways of promoting diversity in the corps of intellectual property attorneys and agents who represent innovators?**

AUTM will encourage their membership and other similar organizations to be aware of the diversity of their legal representation and focus on firms that have expanded considerations of all groups, through signing onto Mansfield 3.0/4.0 rules or other such examples of active diversity and inclusion practices. In addition, as our membership organizations work with legal interns, we will encourage membership to reflect a more diverse pool of these interns, as well as offer them the opportunity to interact with a more diverse pool of intellectual property attorneys during the course of the internship.

#### **IV. Realizing Innovation**

- 14. Financial support is a critical element in translating an innovation into commercial success. What organizations, programs, or other efforts help promote access to capital to an expanded group of inventors and entrepreneurs – demographically, geographically, and economically?**

No Comments.

- 15. Successfully commercializing an inventive product or concept requires in-depth knowledge about production processes, market forces, and other pertinent information. What types of mentoring initiatives could be implemented or expanded to help entrepreneurs impart this specialized knowledge to diverse and novice inventors?**

Entrepreneurship-in-residence and mentor-in-residence programs provide these types of mentoring help and we support their formation and access to them. Centralized, national training for EIR and MIR programs specific to underrepresented populations, possibly in partnership with Minority-Serving Institutions (MSIs) and other MSI-adjacent support organizations (e.g. UNCF). Additionally, many AUTM membership institutions are I-CORPS Sites or Nodes and we support the expansion of this marketing program to help disseminate knowledge to diverse and novice inventors.

**16. Formalized partnerships like tech transfer offices/conferences, accelerators, and incubators can help streamline commercialization objectives such as product development, licensing, and distribution. What can be done to make these partnerships more accessible and effective at supporting all inventors and entrepreneurs?**

Resource support. Most partnership organizations struggle to provide support to their primary cohorts. Expanding their support to other innovators or entrepreneurs is challenging to balance their mission with this additional support. Removing barriers of bureaucracy, providing government access and funding to bring technologies through the “valley of death” will help these partnerships thrive. Work directly with larger state institutions with experienced TTOs on formal programming to support emerging institutions’ commercialization plans.

Sincerely,

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

Stephen J. Susalka, PhD, CLP, RTTP

AUTM CEO

**About AUTM**

AUTM is the non-profit leader in efforts to educate, promote and inspire professionals to support the development of academic research that changes the world and drives innovation forward. 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.