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OFFICE OF THE PRESIDENT 1111 Franklin Street, 11th Floor Oakland, California 94607-5200

Submitted through: www.regulations.gov

OFFICE OF THE VICE PRESIDENT - RESEARCH AND INNOVATION

February 23, 2021

U.S. Patent and Trademark Office Mail Stop OPIA, P.O. Box 1450 Alexandria, Virginia 22314

RE: UC Comments in Response to <u>PTO-P-2020-0057</u>, "Request for Comments on the National Strategy for Expanding American Innovation"

Dear Sir or Madam:

I write on behalf of the University of California (UC) system with regard to the Request for Comment on the National Strategy for Expanding American Innovation issued on December 23, 2020. We appreciate the opportunity to provide input on this strategy.

The UC system – comprised of ten campuses, five medical centers, and three affiliated U.S. Department of Energy national laboratories – stands at the forefront of cutting-edge research and technology development. As a system, UC receives more than \$6 billion annually of extramural awards to support research conducted throughout all UC locations. UC is a leader in the technology transfer world, and has had the most U.S. utility patents issued annually for at least the last five years.

UC recognizes that greater diversity among inventors and entrepreneurs can speed progress in addressing society's most serious problems. However, women and many communities of color remain underrepresented within the innovation ecosystem in the United States. UC strongly supports finding ways to increase the participation of underrepresented populations in inventions and innovation. While UC strives to promote diversity within our own activities, efforts by the USPTO to implement additional approaches would accelerate outreach to underrepresented communities and to benchmark outcomes.

While we recognize that the USPTO seeks comments on 17 specific questions, UC respectfully submits the comments provided below generally pertaining to the topics posed in the Request for Comment.

1. Funding for Educational Curricula

Institutions, like UC, are working to encourage underrepresented inventors and entrepreneurs to take part in the innovation ecosystem. For example, technology transfer offices (TTOs) within

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universities reach out to disproportionately underrepresented researchers to help identify potentially valuable nascent intellectual property (IP) and support disclosure, patenting and licensing of that IP.

However, as a public university, UC is limited by its resources and can only do so much on its own. Expanding innovation and entrepreneurship educational outreach takes resources that many institutions lack. The USPTO could create funding programs that support internal innovation and entrepreneurship curricula so that educational institutions can deploy programs broadly across their institution and into the local community, especially those designed for underrepresented minorities, women, and veterans. Such curricula can teach entrepreneurship at the high school, community college, and university levels. Of particular importance would be to create IP and entrepreneurship topics within STEM programs at the high school level.

2. Research-Based Educational Programs

With increased financial support, the country could use a nationwide curriculum on innovation and entrepreneurship, including possible summer workshops for K-12 educators to raise awareness at the earliest stages of creativity. Input from education scholars on how best to communicate innovation and entrepreneurship concepts into educational curricula will be essential for the success of these programs. Simply having innovation and entrepreneurship professionals talk to educators or students would likely be less successful than a more research-based solution. Therefore, the USPTO, in collaboration with subject matter experts, should establish programs aimed at incorporating innovation and entrepreneurship concepts into educational curricula at all levels.

3. <u>Support to Attract and Retain Underrepresented Inventors and Entrepreneurs through</u> <u>Partnership with Local Organizations</u>

The recognition of an invention and the subsequent years of work to protect and develop it can seem daunting from both a time and knowledge perspective. Most first-time inventors need assistance navigating the process, and this is especially true for underrepresented inventors for whom peers and available role models from their same underrepresented group tend to be limited.

The USPTO can promote diversity through building networks and branch points among underrepresented communities (both urban and rural) who can support efforts to patent, license or start a company, possibly through the Small Business Development Centers or organizations such as the National Latina Businesswomen Association or Hispanic Chambers of Commerce. Partnerships with local and regional organizations that have long-term relationships with communities of color and diverse organizations can help cross-promote services, workshops, and resources to inventors and entrepreneurs in those communities.

Similarly, universities can engage with student organizations that promote diversity and inclusion on campus by sharing with them opportunities and resources that both help increase awareness about IP and also explain the benefits to innovators and entrepreneurs of securing IP protection.

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Fellowships or incentives to institutions to provide opportunities for entrepreneurship to underrepresented student or faculty communities would also encourage greater participation. Specific funding to establish and maintain networks of individuals with such expertise to support and mentor nascent and emerging businesses within underrepresented groups would be crucial for accelerating diversity and retaining mentors.

4. Access to Financial Support to Pursue Entrepreneurship

Initial capital to support a new business endeavor is often difficult to obtain, particularly for underrepresented groups who do not have access to such resources. Encouraging regional innovation funds specific to underrepresented groups could help to overcome this barrier to entry. **The USPTO, in coordination with other federal agencies, could sponsor events and networking opportunities around the country for underrepresented entrepreneurs to gain access to potential sources of investment.**

5. Track Standardized Data

The research community lacks substantive data to efficiently benchmark outcomes. The Association of University Technology Managers (AUTM) has been working closely with universities to bring awareness to this issue. However, it is unclear how many universities are tracking ethnicity, race, and veteran data as it relates to patenting and commercialization statistics.

The USPTO could collect and share standardized data through a display tool, on participation and success in commercialization activities by using inventors' self-reported data on ethnicity, race, and gender on patent applications.

Maintaining this data repository would allow better benchmarking of performance among a diversity of applicants, as well as make a clear statement that diversity of inventors is important. While certain data around individuals may be sensitive, requesting this data on a voluntary basis, under the assurance that individual data would be kept confidential in the USPTO system, would encourage inventors to provide this sensitive information and consequently enable the collection of a robust dataset for benchmarking against progress.

6. <u>Maintaining and Strengthening the Bayh-Dole Act</u>

The U.S. university technology transfer industry owes its success to the Bayh-Dole Act of 1980, which allowed government contractors, including academic institutions such as UC, to patent and license inventions funded by federal awards. The result was an expansion of innovation at research institutions of every type and in every region nationwide. While much work still needs to be done to ensure that this expansion continues into underrepresented communities and the institutions that serve them, the track record of the Bayh-Dole system shows it to be the best model for expanding innovation. Therefore, UC urges the federal government to continue to support and maintain Bayh-Dole in essentially its current form. This includes finding ways to expand its reach to minority serving-institutions to ensure they are able to fulfill the potential of their research.

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Lastly, we note the important value that a strong and predictable patent system adds to innovation that allows companies to justify the investment of personnel and resources to pursue bring a product to market.

Thank you for the opportunity to comment. We look forward to continued engagement on this important issue.

Sincerely,

Theresa a Maldonado

Theresa A. Maldonado, Ph.D., P.E. Vice President, Research & Innovation