Additional Actions Needed to Improve Licensing of Patented Laboratory Inventions

What GAO Found

Federal agency and laboratory (lab) officials identified challenges in licensing patents across the federal government, and agencies have taken some steps to address and report them. Patent licensing is a technology transfer activity that allows, for example, federal inventions to be legally transferred to the private sector for commercial use. Specifically, officials at the Departments of Defense (DOD) and Energy (DOE), National Aeronautics and Space Administration (NASA), and National Institutes of Health (NIH), as well as external stakeholders, noted challenges in having researchers identify potentially patentable inventions. DOD, DOE, and NIH officials also cited having inadequate internal systems to keep track of inventions developed in the labs. In addition, several stakeholders stated that licensing patented inventions can be lengthy and bureaucratic, which may deter companies from licensing. The agencies reported taking steps to address these challenges, such as implementing model license agreements across labs to expedite the process.

Selected Challenges in Licensing Federal Inventions and Steps Taken to Address Them

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<td>Training and incentivizing researchers to effectively identify potentially patentable inventions</td>
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The Department of Commerce has delegated to its National Institute of Standards and Technology (NIST) to annually report agencies’ technology transfer activities, including patent licensing. Although NIST has reported some challenges, it has not fully reported the range of challenges identified by agency and lab officials and stakeholders. NIST officials stated that they were generally aware of the challenges but had not considered including them to a greater degree in their annual reports to Congress. By fully reporting the range of challenges in federal patent licensing, NIST has the opportunity to further ensure that Congress is more aware of challenges that limit agencies’ efforts and ways for potentially addressing those challenges.

Federal agencies and labs have limited information to guide officials when establishing the financial terms of patent licenses. For example, while federal labs can use comparable licenses to help establish financial terms, their access to information on comparable licenses from other labs varies, and such information is not formally shared among the agencies. Based on its established interagency role, NIST is best positioned to assist agencies in sharing information on comparable licenses, in accordance with leading practices for interagency collaboration. By doing so, NIST would provide federal agencies and labs with useful information that can help them better establish financial terms and successfully license inventions.

Why GAO Did This Study

The federal government spends approximately $137 billion annually on research and development—mostly at DOD, DOE, NASA, and NIH—to further agencies’ missions, including at federal labs. Multiple laws have directed agencies and labs to encourage commercial use of their inventions, in part by licensing patents, to private sector companies and others that aim to further develop and bring the inventions to market.

GAO was asked to review agency practices for managing inventions developed at federal labs, with a particular focus on patent licensing. This report examines (1) challenges in licensing patents and steps taken to address and report them and (2) information to guide establishing financial terms in patent licenses at DOD, DOE, NASA, and NIH. GAO reviewed relevant literature, laws, and agency documents, including patent licenses from 2014, to match the most recent NIST summary report when the licenses were requested, and GAO interviewed agency officials and knowledgeable stakeholders, including organizations that assist federal labs in licensing patents.

What GAO Recommends

GAO is making seven recommendations, including that Commerce instruct NIST to fully report the range of challenges in federal patent licensing in its annual reports to Congress and facilitate information sharing among agencies. Commerce, DOD, DOE, NASA, and NIH generally agreed with GAO’s recommendations and are taking steps to implement them.

View GAO-18-327. For more information, contact John Neumann at (202) 512-3841 or neumannj@gao.gov.

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