

STATEMENT OF
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ON
ACCESS TO FEDERALLY FUNDED SCIENCE AND TECHNOLOGY
BEFORE THE
SUBCOMMITTEE ON SCIENCE, RESEARCH AND TECHNOLOGY
COMMITTEE ON SCIENCE, SPACE AND TECHNOLOGY
UNITED STATES HOUSE OF REPRESENTATIVES
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Mr. Chairman, on behalf of Secretary Baldrige and Deputy Secretary Brown, I want to thank you for inviting the Department of Commerce Department to participate in this very important series of hearings on competitiveness. This is an issue that Secretary Baldrige and Deputy Secretary Brown care about very deeply and I know they both regret their inability to be here.

We are particularly pleased that you asked us to discuss the impact of the President's recent Executive order on access to federally funded research and development. Its impact on American competitiveness can be summed up very succinctly: it will be direct and substantial.

The President's order should be viewed as a critical part of a comprehensive series of proposals and actions to enhance productivity, to foster innovation, and to improve our standard of living. The President's Competitiveness Initiative includes proposals designed to:

- o obtain excellence in education,
- o generate new knowledge in advanced technologies,
- o expand the nation's talent base in science and technology,
- o protect business from unfair foreign competition, and
- o increase the protection we give to those who create and those who take risks in bringing those creations to the marketplace.

It is the last aspect that is particularly relevant this morning. While the President's intellectual property proposals are very much concerned with strengthening the protection afforded to intellectual property - that is, the incentives to invent - and the talent base of scientists and engineers - that is, the ability to invent - attention must also be paid to how well we manage what we invent.

Our intellectual property system is one of the finest in the world and clearly provides incentives. The talents of the American people are unmatched and they clearly have the ability. Unfortunately, the management record - in the private as well as the public sector - has not always been as good as it could have been.

For example, the record shows clearly that many firms in the private sector, in their effort to do business on a global scale, were not always as careful as they could have been in structuring their joint ventures, licensing agreements, and marketing, manufacturing or supply arrangements. As a result foreign firms in such fields as consumer electronics often emerged as the principal beneficiaries in technology financed and developed by American companies. We are starting to see signs that American firms are being a lot more careful about protecting their interests.

The public sector is also starting to manage what it produces better. Here the main problem has been that too much of what we do develop as the result of our \$55 billion annual federal investment in research and development stays on the shelf and never gets commercialized.

Why should this be? It is not an oversimplification to say that line managers - that is, those who do the work - of the federal scientific establishment have just not had the direction and incentives to do what needs to be done. The President's Executive Order addresses these problems head on. Its various provisions, some of which I will discuss in detail in a moment, all point in this direction: Keep the lines of international scientific communication open but never forget that (1) the federal investment in R&D can lead to new products, new jobs, and new industries, and (2) that the first to stake a claim to these benefits should be American industry.

Let me, then, turn to the order itself. Three of its themes are: incentives, decentralization, and effective international cooperation. Let me turn to each of these.

First, the President reaffirmed the fundamental principle that if you expect people to invent something, figure out whether it has any commercial applications, and, if so, get it to the market-

place, you had better let them profit from it. Several aspects of the President's order demonstrate this.

- o First, the President elevated his 1983 memorandum to agency heads to executive order status. What this means is that the order, together with Public Laws 96-517 and 98-620, gives universities, small businesses, and, to the extent permitted by law, all other contractors the first right of ownership to inventions made with federal funds. This profit motive gives these contractors incentives to report new inventions - thus adding to the store of scientific and technical knowledge - and to develop and exploit their commercial potential.

- o Second, it called for the immediate implementation of the Technology Transfer Act of 1986 which permits Government-owned, Government-operated (GOGO) labs to enter into cooperative R&D arrangements and allows the federally-employed inventor at these labs and the lab itself to share in the royalty stream from resulting inventions. In fact, the President's order called for prompt implementation of the Act's provisions concerning royalty sharing and cash awards.

The second basic theme is decentralization - that is, keep the ownership of the technology in the hands of the federal contrac-

tors who created it, for they are the ones who understand it the most and are best able to appreciate its commercial potential. Placing control in the hands of universities, small businesses, and other contractors ensured that complex decisions as to whether a new technology should be published, patented, copyrighted, trademarked or held in abeyance would be made by persons with the proper background to judge its value.

The President's order extended this principle to the government-owned, government-operated labs as well. His order directed agency heads to delegate to the lab directors themselves the authority to enter into cooperative R&D agreements as well as the authority to license resulting inventions. This will give the laboratory director the ability to give ownership or control to those in the private sector who are best able to commercialize it.

In other words, the President's order reflects the principle established by the earlier statutes and his 1983 memorandum: the people who create technology are the ones best able to manage it.

A third major feature of the order relates to international cooperation. Our openness as a society contributes greatly to international scientific progress, but, as the President's order clearly reflects, other nations have obligations of their own and we have the right to expect them to live up to them. According-

ly, we were very pleased that the President directed agencies entering into arrangements with foreign governments to consider whether they protect intellectual property and are willing to include our citizens and public agencies in cooperative research and licensing arrangements.

Between the President's express instructions and the fact that we now have in place a comprehensive series of statutes and orders that give labs strong financial incentives to control the technology they produce, we are confident that the goal of transferring federally financed technology to the marketplace, where it can generate new businesses and new jobs, will be achieved.

Commerce will do all it can to make it so. We have a number of responsibilities under the Technology Transfer Act. These include providing technical assistance to other federal agencies, helping them evaluate the commercial potential of inventions, developing a model cooperative agreement on R&D, and keeping the President and the Congress informed as to the progress the Government is making in transferring technology to the private sector. We take these duties very seriously and we are moving swiftly to execute them.

Secretary Baldrige has formally vested his authority under the Act in our Under Secretary for Economic Affairs, Dr. Robert

Ortner, and Bob has already established an Intradepartmental Committee to assist him. This will enable him to take full advantage of the Department's scientific, technical and management experience. Our Assistant Secretary for Productivity, Technology and Innovation will be represented as will NBS, NOAA, NTIA, and my own shop, the General Counsel's Office.

To ensure we get valuable input from elsewhere in the Government, Secretary Baldrige is establishing an Interagency Committee. It will give us valuable insight as to how we can best make our expertise available for evaluating the commercial potential of inventions and the various commercialization options available to labs.

As provided by the Act, our National Bureau of Standards has agreed to house the new Federal Laboratory Consortium on a reimbursable basis and the Secretary has written to other agency heads asking them for appropriate funding.

In addition, I am pleased to note that last month OMB approved our Final Rule on Patent Rights to Inventions made by Non-Profit Organizations and Small Business Firms. It was published in the Federal Register on March 18.

There are a number of other important features in the order. I will mention them only briefly because it is too soon to know

precisely what direction they will take and because there is another element of the President's Competitiveness Initiative I want to discuss which has a very direct and important bearing on how we transfer technology from the inventor to the marketplace.

These other features of the order include:

- o an instruction to agencies to try to develop a policy for allowing contractors to retain ownership of federally funded technical data which parallels the current policy regarding ownership of patent rights;
- o an instruction to specified agencies to cooperate in developing a Technology Share Program with U.S. industries and universities;
- o a direction to agency heads to consider the potential for establishing basic science and technology centers at universities.

As noted a moment ago, I would like to conclude by mentioning one other aspect of the President's proposals that I believe will have great impact on how technology gets transferred. The various bills I mentioned all recognize a basic truth: the inventor is not always the one who has the skill, interest, or resources to commercialize an invention. That often depends on

his or her ability to assign or license the patent to those can fully develop its commercial potential. Whether we are talking about federal labs or private ones, a favorable climate for licensing is essential if inventions are to be commercialized.

Unfortunately, many courts see patents as "monopolies" that conflict with the antitrust laws and have severely limited the patentee's ability to work out satisfactory licensing arrangements. Many courts will automatically condemn certain arrangements as per se violations of the antitrust laws without considering their procompetitive potential.

The President suggested a number of proposals to improve the climate for patent licensing. The Judiciary Committee will hold hearings on some of these tomorrow. I believe this Committee has a very real stake in the outcome of those deliberations.

In sum, Mr. Chairman, we believe the President has devised a comprehensive and workable plan for converting taxpayer financed research into new products, new jobs, and an improved living standard. His plan is fiscally responsible and relies in large part, and appropriately so, on the profit motive and on letting the right people manage the technology.

Thank you, Mr. Chairman. I will be pleased to answer any questions you may have.