

MAY 31 1978

May 22, 1978

The Honorable Senator Gaylord Nelson
Chairman, Select Committee on Small Business
Room 424 Russell Building
Washington, D.C. 20510

Dear Senator Nelson:

As patent manager for Oregon State University I wish to submit this letter for your consideration in connection with the May 22 and 23 hearings of the Select Committee on Small Business regarding patent policy of the executive department on research grants and contracts. I should state at the outset that although I have had 23 years of administrative experience at universities, I have only been involved in the Oregon State University technology transfer program the past five years. Further, my experience has dealt with domestically significant inventions rather than those of primary interest to the military.

I understand you have requested that the Office of Management and Budget delay implementation of federal procurement regulations that would permit universities to retain possession and control of their discoveries that are financed in part or wholly by federal funds and hence be encouraged to license these discoveries to private industry. Upon query of Senator Packwood's office, I understand your concerns about the proposed changes lie in a) the possibility of increasing economic concentration among a few industries, b) the withholding of new knowledge from society and c) the establishment of an excessive give-away government activity.

We are supportive of the proposed changes in federal procurement regulations. In apposition to your stated concerns, we would place those concerns of the many people who over many years developed the proposed changes in the federal regulations. From my own experiences and from comments and writings of others^{1,2} these might be stated as follows:

- a) the patent system makes important essential contributions to our economic well-being, and most inventions arise from research and development activities which the American people have gradually chosen to support largely through tax-supported federal programs (federal share 55%; industry share 42%, other 3%),
- b) present restrictions in extended rights policy in federal grants and contracts present unbearable risks in the costly development and marketing of many new technologies so that both regional and national companies avoid the majority of promising new technologies because of insufficient prospective returns and
- c) present policies restrict the flow of new technologies into commerce from successful university technology transfer programs that cooperatively develop new technologies with newly formed small businesses, small regional companies as well as large corporations.

A few examples will be cited as evidence that even our small Oregon State University technology transfer program has been effective. We have recently negotiated three license agreements with small Oregon companies (one a new local microbiological laboratory) involving 1) a special digital readout device for use in teaching, 2) a new ornamental pear variety and 3) a totally new biological material for the control of Crown Gall disease of nursery plants. The Crown Gall disease caused over \$1 million in losses to Oregon nurseries in 1968-1969 so the importance of this new technology to the state and region is self-evident. All of these new technologies arose from state-supported research so we were able to provide exclusive licenses for periods of time appropriate to the development needs of each technology.

We have had one important new technology that was killed by federal bureaucratic apathy in patent counsel staffs of two departments (U.S. Department of Commerce and the U.S. Department of the Interior) that had participated in support of the research over several years in cooperation with the State of Oregon. Even though the combined federal support of the research was less than that contributed by the State of Oregon, the federal policies were invoked and the new technology was not developed and marketed. The new technology was an attenuated strain of the Infectious Hematopoietic Necrosis Virus (IHVN) that causes devastating losses to hatchery fingerlings of salmonid fishes. As you know, salmon growing in hatcheries for release into Pacific Northwest streams and for use in aquaculture is big business. Vaccination of young fish in the hatchery can be readily accomplished before release. As in the case of poliomyelitis in humans, a killed virus vaccine (Salk type of

May 22, 1978

polio vaccine) is effective but less so than an attenuated virus vaccine (Sabin type of polio vaccine). In case of IHNV of salmon the killed virus protects 75-80% of the fishes but attenuated IHNV gives 95-100% protection. A relatively new veterinary biological company was willing to produce the attenuated virus and place it on the market. However, they would have to invest an estimated \$700,000 to produce the live vaccine. They estimated they would have to have an exclusive license for six years after first sales of vaccine to recover costs. At the same time we had a new technology which improved the method of delivering the live attenuated virus that arose in the same cooperative federal-state supported research program. The new method would have reduced the hazard of introducing the live attenuated virus into natural streams. Extended rights on both technologies were necessary to the development of the attenuated IHNV for market. Our requests for extended rights, though adequately argued and documented, were both denied by the two departments even though they knew we had a reputable company poised with a suitable license agreements to assure development. As a consequence, the attenuated form of this virus is not being developed; they are using the killed virus which is much less costly to produce, and the emerging field of fish health has received a major setback at a time of increased interest in salmon fishes for human food.

We are having difficulty generating interest of companies in new technologies that have developed in research supported by federal sources. Recently, a major Pacific Northwest corporation refused to consider an improvement in firing method of furnaces using wood fuels because of the restrictive policies of the U.S. Department of Energy, the source of support for the research in which the new method arose.

As a cumulative result of these experiences we are strongly supportive of the proposed changes in federal procurement regulations that would ease the transfer of new technologies from federally supported research. In our program we can find no evidence to support your concerns that the proposed changes would restrict flow of information to the public or provide a "give-away" to large corporations. In our experience, the exact opposite is true; namely, that present policies significantly restrict technology flow to small as well as large companies of primarily state or regional significance as well as large corporations with international activities. Because of the magnitude and diversity of government research support present policies have a dampening effect on operation of the patent system in the U.S. which has long been recognized by some of our wisest of men¹ as important to the strength of the American economy.

Yours sincerely,

J. Ralph Shay
Assistant Dean of Research

JRS:SLN

References:

1. Lincoln, Abraham. 1859.. Second Lecture on Inventions and Discoveries. Speech delivered before the Phi Alpha Society of Illinois College at Jacksonville, Ill., Feb. 11. In: Basler, Roy P. 1953. The Collected Works of Abraham Lincoln. III: 356-363. Rutgers University Press, New Brunswick, New Jersey.
2. Testimony of Norman J. Latker, Betsy Ancher-Johnson, and others in "Government Patent Policy" hearings before the Subcommittee on Domestic and International Scientific Planning and Analysis of the Committee on Science and Technology, U.S. House of Representatives, 94th Congress, Sept. 27-October. 1, 1976.