Public Money and Private Gain

By Arlen J. Large

WASHINGTON — Any discussion of what's wrong with government patent policy could well start with the saga of sick salmon.

Oregon State University researchers have developed a way of making salmon fingerlings immune from a virus disease that ravages hatcheries. The technology involves ways of weakening the live virus and spraying it on the fish. A private company estimated it would have to spend $700,000 to put the virus into commercial production. To protect that investment, it asked for a license granting exclusive rights to sell the virus for six years.

School officials were willing, but the original research had been partly financed by the U.S. Departments of Commerce and Interior. These agencies refused to go along with the six-year license, and the deal fell through. The hangup over the use of public money for potential private gain has caused "a marked delay" in bringing the fish-saving technology to market, says Ralph Shay, Oregon State's assistant dean of research.

It's the continuation of an old, old argument: Do government rules thwart the transformation of a federally financed invention into a commercial product the public can buy in the marketplace? One side holds that if the government bankrolls a discovery, then it's rightfully the people's product and should be available to everybody, with no one producer allowed a patent monopoly.

The opposing view insists that if all producers can have a government invention, then no one will want it, because there's no profit in spending a lot of money developing a marketable product that anyone can legally copy. This, it's said, is the reason why private producers have obtained licenses to exploit less than 10% of the 28,000 patents owned by the government and available for copying.

Decline of Innovative Spirit

The argument has been merely smoldering in recent years, but it could heat up again soon in connection with a Carter administration study on how to cure an alleged decline of the innovative spirit within U.S. industry. The study, to be sent to the White House later this month, will include possible changes in patent policy. Under discussion are some changes dealing with patents generally, such as a possible extension of the current 17-year life of a patent monopoly and ways to make patents less vulnerable to being overturned in court.

But the innovation study also is prompting a new look at the narrower but hotly controversial question of who should have control of inventions arising from government-financed research. Currently it's rather easy for a company to get a nonexclusive license from the government to put such an invention on the market, but this means its competitors can, too. In a report to the Commerce Department, an advisory panel of private patent experts chaired by Robert Benson, an Allis-Chalmers Corp. lawyer, said this all-comers availability is part of the innovation problem:

"If the results of federally sponsored R&D do not reach the consumer in the form of tangible benefits, the government has not completed its job and has not been a good steward of the taxpayer's money. The right to exclude others conferred by a patent, or an exclusive license under a patent, may be the only incentive great enough to induce the investment needed for development and marketing of products."

Stating the opposite view, Admiral Hyman Rickover, the Navy's veteran apostle of nuclear-powered ships, has told Congress that granting of exclusive licenses "promotes greater concentration of economic power in the hands of large corporations; it impedes the development and dissemination of technology; it is costly to the taxpayer, and it hurts small business." He maintains that "the rights to inventions developed at public expense should be made available for use by any U.S. citizen."

In practice, however, neither of the hard-line positions has been fully triumphant. The way the government grants rights to inventions it has financed is messy, with different agencies wandering all over the lot. Some 20 separate statutes and regulations govern how the various bureaucracies treat patent rights. The Pentagon, the government's biggest font of R&D contracts, generally lets an inventing company keep the rights to an invention, Admiral Rickover's view notwithstanding. The more restrictive law which created the Energy Department allows it to let a contractor keep an invention for exclusive use. But few such waivers have been granted, except to small businesses.

And the policies keep changing. The National Technical Information Service, a

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cubbyhole in the Commerce Department, in recent years has increasingly tried to act as a clearing house for companies interested in using government-owned patents. It publishes descriptions of inventions to which the government has retained title, and invites potential producers to ask for licenses of the nonexclusive, anyone-can-have-it variety. But if there have been no takers after six months, a single company is eligible to ask for an exclusive license granting a five-year monopoly on the invention.

"We haven't been getting a hell of a lot of attention," says Douglas Campion, a patent specialist at the agency. Only a "handful" of nonexclusive licenses have been awarded for government-owned inventions, such as a special kind of paint developed by the Navy. But Mr. Campion says negotiations with several companies for five-year monopoly licenses are under way, and he predicts: "In the next few years we're going to be able to point to some real successes."

In carrying out government-financed research, university scientists occasionally come up with an invention showing commercial promise, such as a computer component developed at the Massachusetts Institute of Technology. The Health, Education and Welfare Department and the National Science Foundation, which both give a lot of research money to universities, have worked out an elaborate arrangement designed to ease the progress of these inventions into the marketplace.

Under current rules, these agencies can sign what are known as institutional patent agreements, or IPAs, with universities that have shown a knack for peddling their inventions to companies that will produce them. With such an agreement in effect, a university can become the owner of a patented invention resulting from government-financed research and can give a monopoly license to a private production company for up to five years.

After months of haggling among patent lawyers from several federal agencies, rules were proclaimed early last year with the aim of spreading the use of these institutional patent agreements through the government. This, in turn, rang warning bells on Capitol Hill, where some lawmakers feared a trend toward "giveaways" to private monopolists of inventions paid for by the public. Democratic Sen. Gaylord Nelson of Wisconsin, chairman of the Senate Small Business Committee, asked the administration to suspend the new rules while he held hearings.

At the hearings last spring, university officials made a strong defense of IPAs, and Sen. Nelson came away impressed. "Based on what I heard," he says now, "the IPAs with nonprofit organizations and universities seem pretty well designed and in the public interest. We found nothing that would indicate that there's anything wrong with them, though there may be somewhere."

The government-wide IPA rules were reinstated last July, and other agencies were free but not required to take them up. "Nothing has happened," says Howard Bremer, president of the Society of University Patent Administrators and a patent lawyer at the University of Wisconsin. "No agency that didn't have an IPA plan has adopted that approach."

The confusing rules could be tidied up in part by a bill sponsored by Republican Sen. Robert Dole of Kansas and Democratic Sen. Birch Bayh of Indiana. Generally, it would allow universities, nonprofit institutions and small businesses to own 17-year patents on inventions made under federal R&D contracts. The patent-owners, in turn, could grant exclusive or nonexclusive five-year licenses to companies that would produce the invention. The bill would, in effect, put on the lawbooks the main features of institutional patent agreements for universities, and extend them to small businesses.

Pressure for Common Position

The Dole-Bayh bill, along with the elaborate innovation study itself, puts pressure on contending factions within the administration to arrive at a common position on patent policy. Despite the sick salmon episode, the Commerce Department traditionally has advocated giving R&D contractors easy access to patent rights, and is pressing this viewpoint in the internal debate. The Justice Department, traditionally hostile to anything smacking of monopoly, says it's reassessing its position.

A more uniform patent policy applying to all federal agencies that bankroll research by private companies and universities probably would be desirable. However, it may be neither desirable nor possible to treat all inventors alike. Small companies tend to have the strongest need for a patent monopoly, which may be a precondition of getting venture capital for bringing the new product to market. Bigger companies with established market positions tend to show less interest in patent protection.

It's clear, in any case, that worries over the innovation "lag" are building pressure for change in patent policy. Donald Dunner, a Washington patent lawyer who's president-elect of the American Patent Law Association, thinks something may come of it. "Right now," he says, "the atmosphere is much different than it was just a few months ago."

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