New Patent Rule Upsets Universities

University lawyers say regulation would delay publication of research

Last year, Congress decided that universities would do better as entrepreneurs than the government in exploiting patents on inventions developed from federally funded university research. Legislators approved a bill that shifted the right to own the patents from the government to the universities, as well as other nonprofit institutions and small businesses holding government contracts. The law has been generally lauded for providing uniformity to federal patent law that previously differed from agency to agency.

Two months ago, the regulations governing implementation of the 1980 law were announced by the Office of Management and Budget (OMB). Despite initial praise for the law, the proposed regulations include an unexpected provision that has drawn heavy criticism from more than a dozen universities and patent attorneys.

The clause under dispute says that a federal agency may require a university to inform the government about patentable research 3 months before a researcher submits a manuscript for publication in a professional journal. Government officials say that the purpose of the clause is to protect patent rights abroad because, they maintain, other nations regard submission of a paper as public disclosure of an invention. By notifying the federal agency, the university gives the government a chance to decide whether it wants to patent the invention should the school choose not to file. Universities and lawyers who allege that the provision will restrict the free exchange of scientific information are calling for its elimination.

The reporting provision, which individual agencies may choose to implement or not, was included at the insistence of the Departments of Energy and Defense. Charles Lowe, an official at the National Institutes of Health, said that the provision "is not a substantial issue with NIH."

University patent lawyers contend that the most troublesome aspect of the provision is that a researcher, under pressure "to publish or perish," may have to delay submitting a paper for 3 months just to satisfy the regulation. The provision "will require the academic scientist to make a choice between protection of patent rights and the traditional practice of prompt reporting of research results," Thomas E. Gaffney, chairman of the pharmacology department of the Medical University of South Carolina, wrote in a letter to the government. The comment period on the regulations closed 31 August.

On the other hand, James Denny, who is assistant general counsel for patents in the Energy Department and is the chairman of the interagency committee that produced the OMB regulations, claims that even an oral presentation at a conference may constitute public disclosure. Denny says that the federal government has lost patent rights on many inventions because researchers submitted manuscripts without telling their schools.

Based on a review of letters that have been filed with OMB, many patent lawyers representing universities disagree with the government's view that submission of a paper could forfeit a school's right to own the patent. A lawyer for University Patents, Inc., which represents several universities including the University of Illinois and the University of Chicago, wrote that submitting a manuscript "is not treated as public disclosure (by foreign countries) and hence will not be considered a bar to patenting."

University officials are also disturbed that the government has linked foreign patent rights and national security. In the *Federal Register* on 2 July, the regulations were prefaced with a notice by OMB administrator David Sowle, who stated that agencies favoring the provisions say it is necessary to assure the protection of foreign patent rights, particularly when national security interests are involved. The universities say Sowle is contradicting himself because the purpose of filing a patent is disclosure to the public whereas security interests require secrecy. Denny is quick to say that the reference to national security was "an unfortunate statement. The clause doesn't have anything to do with security. I wouldn't pay attention to the phrase. We're concerned with foreign patent rights." Denny said that Sowle was apparently referring to a small paragraph in the seven pages of regulations which permits the Central Intelligence Agency to deny patent rights to a university when necessary to protect intelligence activities.

University patent lawyers complain that the provision is impractical. Reuben Lorenz, a trust officer and vice president of the University of Wisconsin, wrote that the clause is based on "an erroneous assumption" that universities can control the submission of a paper or can know in advance when a researcher will publish or share study results at a conference.

Although the regulations allow universities to hold title to patents, the rules also say that the government may "march in" and claim ownership of the patent if the invention may benefit the public but has not been developed. The "march-in right," as it is known, is a carry-over from the old patent law, and, according to some lawyers, discourages industry from investing in academic research. Peter Barton Hutt, former general counsel for the Food and Drug Administration, has contended that industry needs assurance that its investment will not be jeopardized if a patent remains idle for a time. Denny, however, points out that the march-in rule has seldom, if ever, been used. With companies such as Monsanto, Hoechst and DuPont continuing to invest in academic research, the evidence appears weak that the march-in right is a significant problem.

The proposed regulations also require

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that every invention that is supported by federal money be reported to the government. Some researchers in biotechnology have worried about the potential paperwork if every new hybridoma qualifies as an invention. Although the new regulations do not address this problem specifically, NIH official Lowe said that the institute does not expect every new cell line to be reported. "We'll only require that potential products be reported," he said.—MARJORIE SUN

An Empty Plan for Renewable Energy

The United Nations Conference on New and Renewable Sources of Energy (UNERG) ended in Nairobi on 22 August with agreement that rich and poor countries alike must make a rapid transition to more sustainable patterns of energy use, but with no consensus on how it should be done. The conference, which cost some $50 million and attracted 5,000 delegates and hangers-on from 125 countries, essentially laid down a plan of action but failed to agree on a mechanism by which it should be implemented and financed.

This outcome was entirely predictable. The United States delegation, together with a few others from industrialized countries, went to Nairobi with instructions to oppose the creation of any new institution or international fund (*Science*, 24 July, p. 418). Delegates from Third World countries generally argued that new arrangements are needed to channel funds into the development of renewable energy resources in the developing world. This is needed, they maintained, to help poor countries overcome the crippling impact of high oil prices on their economic progress.

In the end, the industrialized North and the developing South agreed to disagree. The conference simply established a relatively powerless body within the United Nations to coordinate U.N. renewable energy programs and to report within a year on the need for new institutional or funding arrangements.

This outcome pleased the United States. James Stromayer, who coordinated U.S. preparations for the conference, told a reporter after the meeting that he was "thrilled" at the outcome, and added that "the notion that this conference should endow renewable energy with a large amount of money is not a legitimate question."

Although the Reagan Administration got essentially what it wanted from the conference, it did not take the event as seriously as many other governments did. The prime ministers of Canada, India, and Sweden attended UNERG, and Britain sent its minister of energy, David Howell. In contrast, the American delegation was led by the former counsel of Reagan's election committee, Stanton Anderson, a lawyer with no prior experience in energy matters or in dealings with the Third World.

Although this might be expected to draw some criticism from other delegations, the most vocal opposition to U.S. policy at the conference came from American nongovernmental organizations (NGO's). Immediately following a press briefing by the U.S. delegation, a group of American NGO's released a statement declaring that "in contrast to its verbal support at the UN Nairobi conference, the Reagan Administration is fast becoming one of the major obstacles to the worldwide use of renewable energy." The statement condemned the Administration for slashing domestic solar energy programs and said that "the U.S. delegation's opposition to increased international funding and institutional visibility for renewables constitutes a retreat from long-standing U.S. global commitments and responsibilities."

Was the conference a waste of money and effort? "It was only a failure if you wanted to have a new fund or a new institution," says Charles Weiss, science and technology adviser to the World Bank. "In terms of raising consciousness and focusing attention on renewable energy, it was very successful," he suggests. The program of action, which was drafted during two years of preparations and finalized in Nairobi, highlights the pressing need to overcome fuelwood shortages in many regions of the Third World, calls for increased research and development and training to develop renewable energy technologies, and urges stepped-up technology transfer from North to South on equitable terms. In developing positions on these issues, many governments were forced to consider for the first time the potential role of new and renewable energy in their national programs—a fact that many observers believe will be the most long-lasting impact of the conference. Indeed, Enrique Iglesias, the secretary-general of the conference, argues that UNERG has focused attention on renewable energy in much the same way that the Stockholm conference raised consciousness about the environment a decade ago.

But the issue of financing will not simply disappear. Studies by the World Bank indicate that the developing countries will need to invest at least $50 billion a year in energy development over the next 5 years. The bank itself was hoping to double its support for energy projects in 1982–1986, perhaps through the creation of a separate energy affiliate. But earlier this year the Reagan Administration said that it cannot support the establishment of a new institution, a position it clung to at the Ottawa summit meeting in July.

Administration officials have said that they would not oppose increased lending for energy projects within the World Bank's current structure. But an interagency study, led by the Treasury Department, has concluded that doubling the World Bank's energy lending cannot be justified. The study essentially argues that the private sector will provide sufficient investment in Third World energy development if only Third World governments will open their doors to multinational enterprises. In a move that could not have been better timed to undermine discussions on finance at UNERG, the study was released a week before the conference opened.

Disagreements on finance did not erupt with much force at the conference, however, because this issue will be a focus of negotiation at the North-South summit meeting in Cancun, Mexico, on 22–23 October. That meeting is expected to settle the fate of the World Bank's planned expansion of its energy lending.

—COLIN NORMAN

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