

Patent office sets firm guidelines on protection of plants

Munich. Plants can be patented, according to a landmark decision published by the European Patent Office (EPO) last week — provided that they are the product of a wholly microbiological process. Furthermore, in order to demonstrate that they contravene “public morality”, and thus cannot be patented, critics must show that biotechnological inventions are harmful to society or to the environment.

Both rulings, which involve crucial interpretations of the European Patent Convention, have been offered as part of a lengthy explanation by the EPO's board of appeals for its decision in February that a patent covering a genetic engineering process for producing herbicide-resistant plants cannot cover the plants and seeds resulting from this process (see *Nature* 374, 8; 1995).

Patent lawyers claim that the appeal court's rulings have, for the first time, provided clear guidelines on what will and what will not be accepted for patenting in plant biotechnology, eliminating much of the confusion caused in particular by the convention's explicit ban on the patenting of new plant varieties.

The rulings relate to a broad patent granted by the EPO in 1990 to the Belgian company Plant Genetics Systems and the US biotechnology company Biogen Inc. for plant cells produced through genetic engineering which are resistant to glutamine synthetase inhibitors. An appeal was subsequently made against the patent by the environmentalist group Greenpeace.

In February, the Technical Board of Appeal ruled that although a patent could be granted for a method of producing herbicide-resistant plants and seeds, it could not be granted on the plants and seeds themselves. In explaining this decision, the board now says that it rejected Greenpeace's claim that the process contravened “public morality” since, despite the environmentalist group's concerns, there was no clear evidence that the plants produced would result in harm to the natural environment.

In describing why it had agreed to allow the patents to be granted on the plant cells arising from the process, the board said that such cells “cannot be considered to fall under the definition of a plant or of a plant variety”, noting further that “plant cells are considered to be ‘microbiological products’ in the broad sense under the current practice of the EPO.” Such products are not excluded from patenting by the convention.

“This decision is a major victory for the biotechnology industry, providing the industry with the legal security for future research and planning,” one patent attorney commented last week. □

White House rejects proposal for Department of Science

Washington. Jack Gibbons, President Bill Clinton's science advisor, has rejected proposals for a new Department of Science, and fiercely criticized recent congressional action on the science and technology budget, which he has branded “a ruthless attack on this nation's future”.

In an uncharacteristically forthright attack on the Republican programme, made at the annual science budget forum organized by the American Association for the Advancement of Science last week, Gibbons said: “My hope is that wise heads in Congress will intervene, and save the nation from permanently damaging our research and development base. But my fear is that history will record that extremists in Congress prevailed in an atmosphere of budget chaos, driven by a fundamental disregard for reinvestment in science and technology.”

Cuts already imposed by Congress in the current 1995 financial year “read like a litany of the lost,” Gibbons said. But Republican congressional staff warned the budget forum to expect far more substantial budget cuts for the 1996 financial year. Harlan Watson, staff director of the energy and environment subcommittee in the House of Representatives, told the AAAS that the discretionary budget — of which science and technology is a substantial part — would face cuts of 20 to 25 per cent.

Roscoe Bartlett (Republican, Maryland), expressed concern that top research universities, such as Johns Hopkins in Baltimore, were so dependent on the government for support. “We need more money for basic research, but 90 per cent of it should not come from the federal government,” he said.

Bartlett also said that government laboratories should not be “usurping” university research money, and called for something akin to the military's base-closure commission to rationalize these laboratories.

Many of the thousand-or-so science policy specialists who attended last week's forum were surprised by its level of partisan rhetoric, and alarmed by the likely consequences for science funding. Several said that the division between Democrats and Republicans on science policy had never before been so deep, or so public.

In rejecting the Department of Science proposal, Gibbons said that US science relied upon pluralism of support to ensure that good ideas were funded. He also argued that the proposal would divorce science from the agencies, such as the Energy Department and the Environmental Protection Agency, whose missions it is supposed to support. “This administration unequivocally opposes the creation of a Department of Science of the kind now being discussed

in Congress,” he said.

The Department of Science proposal has been championed by Robert Walker (Republican, Pennsylvania), who claims that it could eliminate 5,000 administrative jobs and provide a home for the nuclear weapons programme if the Department of Energy is abolished (see *Nature* 374, 201; 1995).

Describing proposed Republican cuts as “across the board salvos” that could “wreak havoc throughout the research enterprise,” Gibbons cited a recent list of “illustrative” cuts produced by John Kasich (Republican, Ohio), chairman of the House budget committee, which included \$2.5 billion from the National Institutes of Health over five years.

He added that Neal Lane, the director of the National Science Foundation (NSF) “had been told to expect at least a 20 per cent cut”. NSF officials say this is untrue: last month, a House subcommittee chairman asked the agency, and all others under his jurisdiction, to say what the consequences of such a cut would be (see *Nature* 374, 294; 1995).

The Republican majority in the House of Representatives is likely to present its own budget proposal in the second week of May, and the House and Senate will complete their 1996 budget bills in September. In theory, the president can veto budget bills, but House leaders have threatened to bring the government to a halt if he tries to do so.

Colin Macilwain

Earth Day is make or break for greens

Washington. The Clinton administration and environmental groups are using this weekend's celebrations of the 25th Earth Day — 22 April — to try to rally the public in defence of environmental rules and regulations, now under attack in the Republican-controlled Congress.

On Tuesday, vice-president Al Gore launched the administration's National Environmental Technology Strategy. The document charts environmental progress made in the US since the first Earth Day in 1970 and sets some goals for the fiftieth one, in 2020. It sets no new priorities for environmental research, but promises to review them in six month's time.

Some thirty US environmental groups are also planning to use Earth Day to launch one of their largest-ever public relations campaigns against Congress's plans to soften environmental regulation. In particular, the groups oppose risk assessment legislation which has been passed in the House and is now under consideration in the Senate.

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