

# UTNE <sup>UR</sup> READER

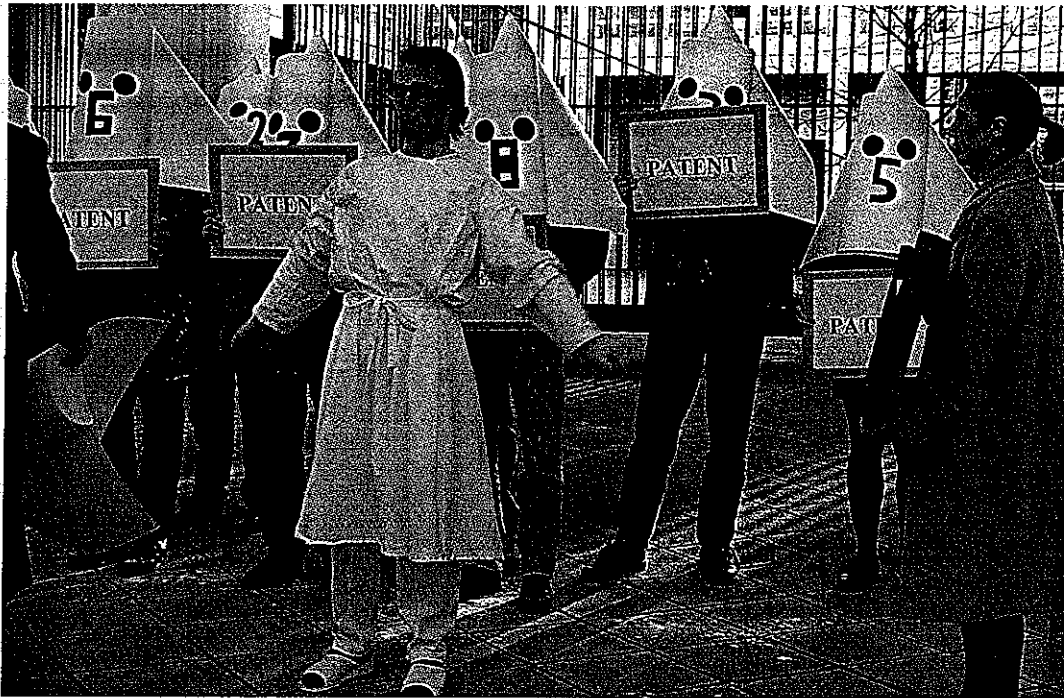
JULY-AUGUST 95 NO. 70

THE BEST OF THE ALTERNATIVE MEDIA

\$4.95 USA \$5.95 CAN

## LIFE FOR SALE

*Europe says no to patenting life forms, but the U.S. moves ahead*



STREET PROTESTS AGAINST GENETIC PATENTING IN BRUSSELS HELPED SWAY EUROPEAN POLITICIANS.

**O**n March 1, 1995, after six years of debate, the European Parliament rejected a European Union directive that would have allowed the patenting of virtually all life forms. A key article in the rejected directive would have allowed

for the patenting of any living "invention": whether a human body part, a gene, a cell, a genetically engineered animal or plant. The vote, a stunning victory for the Greens in the European Parliament, reflected a growing opposi-

tion to life patenting in Europe that culminated in street demonstrations in Brussels prior to the vote.

The European vote was correctly called "a surprise victory of ethical considerations over commercial profit" by Diana Johnstone in *In These Times* (April 3, 1995). There was immediate favorable reaction around the globe from environmental, social justice, and religious leaders. Not everyone was pleased, though. European biotechnology and pharmaceutical corporations claimed that the vote could harm the competitiveness of their industry. As *Biotechnology Business Review* (March 15, 1995) reports, European firms were especially concerned that the action would play into the hands of rival research interests in the United States and Japan, where an ever-increasing number of patents on life forms are being granted.

European awareness of the bizarre and chilling potential of life patenting was heightened when the European Greens publicized a patent application before the European Patent Office that would have allowed the patenting of a genetically engineered woman. The application, jointly filed by the Baylor College of Medicine and Grenada Biosciences of Texas, covered females who in the future would be genetically engineered to produce valuable biochemicals in their mammary glands. The patent was carefully crafted to cover all female mammals, including humans. The application was designed to include women because, says Brian Lucas, a British patent attorney who represented Baylor College, "Someone, somewhere may decide that humans are patentable."

Over the past decade, the United States has been the unquestioned leader in the patenting of life. The U.S. Patent and Trademark Office has patented human cells, cell lines, and genes; seven animals (patents are pending for more than 200 genetically altered animals); and numerous altered plants and microorganisms.

It all started with a little-known 1980 U.S. Supreme Court decision, *Diamond v. Chakrabarty*, that allowed the patenting of microorganisms. In its unfortunate and enormous impact on life and the environment, this unheralded court decision (in which the justices were divided 5-4) is among the most important judicial events of the

20th century. The patenting of life was extended by the Reagan administration in 1985 to include plants. Then a 1987 ruling by the patent office allowed for the patenting of all animals, including human embryos and fetuses. Only human beings were held to be potentially exempt because patenting might violate the 13th Amendment's prohibition on slavery. The patent office has consistently refused to question the ethics of its life-patenting orgy. *New Scientist* (Feb. 11, 1995) quotes patent expert Rebecca Eisenberg stating the obvious: "In the U.S., we think of the morality issue as outside the realm of the patent system."

The U.S. government and transnational corporations have also aggressively gone overseas to patent life forms. The Rural Advancement Foundation International (RAFI) summarized the situation in *RAFI Communiqué* (Nov. 1994): "A growing number of pharmaceutical corporations and biotechnology companies (and their intermediaries) are stalking the forests, fields, and waters of the developing world in search of biological riches and indigenous knowledge." RAFI quotes a spokesperson for Monsanto, a leading corporation in international life patents: "You never know what you're going to find or where you're going to find it. Nothing is off limits." The full extent of the bio-prospecting was shown when the U.S. Department of Commerce filed an international patent application on a cell line cultivated from blood taken in Panama from a woman of the Guaymi tribe. The Centers for Disease Control scientists listed on the patent application as the "inventors" of the Guaymi woman's cell line hoped that it might produce valuable anti-cancer agents and other pharmaceuticals.

News of the patent application shocked the Guaymi people. Isidro Acosta, president of the Guaymi General Congress, said, "It's fundamentally immoral, contrary to the Guaymi view of nature and our place in it. To patent human material . . . to take human DNA and patent its products . . . that violates the integrity of life itself, and our deepest sense of morality."

Thanks to an international alarm sounded by RAFI—and the fact that the patent had not resulted in any commercial uses—the Department of Commerce abandoned the patent application in November 1993. Nevertheless, it

is emblematic of an extraordinary and novel type of colonization that is now sweeping the globe, a new bioimperialism through which industrialized countries and transnational corporations are using biotechnology to expropriate and gain patent ownership of the microorganisms, plants, and animals of the Third World—and are also proceeding to patent the body parts and elements of the people of those regions.

As it goes international and is aided by GATT and other trade agreements, the biotech industry will in the next decades have patented all the major animal species and the more than 100,000 genes that make up the human genome. This means nothing less than the corporate enclosure of much of the living world. Farmers will become a high-tech version of tenant farmers, paying corporations royalty fees every time they use a patented plant or animal. Researchers will not be able to use human material for research without paying patent fees. In a scathing article in the British magazine *Living Marxism* (March 1995), Joseph Kaplinsky comments that, ironically, the patenting of life may destroy scientists' ability to use biochemical material freely to cure disease: "The consequence of the patenting of this 'intellectual property' is to destroy the collective ability of humanity to advance science and knowledge."

Despite the anti-patenting vote in Europe, there are powerful forces moving the other way. Many—including the Clinton administration—see life patenting as a major growth industry of the 21st century. It is estimated that biotechnology life patents will be worth \$60 billion worldwide by the year 2010.

Unless the United States, Japan, and individual countries in Europe quickly ban the patenting of life, the juggernaut will not be stopped. For the current U.S. Congress, which purports to respect life, rescinding the patenting of life should be a top priority. Surely, Thomas Jefferson could not have imagined that the Patent Act, which he originated two centuries ago, would be used to patent human embryos, genes, and cells and genetically engineered animals.

—Andrew Kimbrell

Andrew Kimbrell, director of the Washington, D.C.-based International Center for Technology Assessment, is the author of *The Human Body Shop: The Engineering and Marketing of Life* (HarperCollins).