

Patents on life break taboo

The greatest organised pillage in the history of mankind

Patents on life, be they on plants, animals or humans, monstrously violate a moral taboo. The creation of life, natural reproduction, the growth of life and life itself are put on a level with technical inventions. Against all conventions and ethical values, life is being declared technically feasible and placed on a level with industrial products like light bulbs and car engines.

First bacteria, then the cancer mouse

There have been endeavours internationally to extend patent law to living nature since the beginning of the 1980s. The first patent on a bacterium was granted in 1980 in the USA. The patent was issued noting that bacteria were “much more similar to inanimate chemical compounds than horses or bees or raspberries”, and were thus not irreconcilable with patent law designed for technical inventions. But in 1988 the first mammal was patented in the USA – the so-called “cancer mouse”. In Europe patenting became extended in a slightly delayed course parallel in time. The European Patent Office in Munich in 1981 patented the first micro-organism, and the “cancer mouse” was patented in 1992. Apart from this, patents have been granted on plants increasingly in Europe and the USA.

EU patent Directive under criticism

In Europe patenting plants and animals occurred without legal basis until the end of the 1990s. Industrial interests nonetheless managed, through intensive lobbying, to establish a new patent Directive in the European parliament, which in 1998 approved a Directive on the “legal protection of genetically engineered inventions”. This aimed to legalise patents on plants, animals, human genes and parts of the human body. The Dutch and Italian governments filed an objection to the Directive at the European Court of Justice. Its objection was supported by a vote in the European Council, which in September 1999 declared itself opposed to patents on life.

European Patent Convention re-interpreted

In the meantime the European Patent Office in Munich tried at a stroke to change the situation to the benefit of corporate interests. The Office's Administrative Council and Enlarged Board of Appeal, acting contrary to the wording of the European Patent Convention then in force, in 1999 approved patents on life on the sly. No matter, they said, whether the genes examined were human, animal or bacterial, they were all subject to the claim of the “creative” inventor. No matter whether genes came from crop plants cultivated for hundreds of years or from mice or insects from rainforests, or whether genes were transferred to cows, potatoes or intestinal bacteria, rights to their possession included the genes and manipulated forms of life and their natural successors. Natural reproduction thus becomes part of pseudo-industrial production.

While industrial processes have to date been reliant on investment and the employment of productive labour, the new lords of creation only have to wait for pigs to reproduce, mice to give birth or plants to produce fruit and seeds. Whether soybeans or cotton be harvested, calves be sold, or mice with cancer born, the ownership rights are assured. Genetic engineering becomes a means of assuming ownership, and life becomes a product.

For the “life industry” patentable material, from microbes to human beings, is everything. Patent claims, as a result of which agriculture, farmers and consumers become entangled in a web of new dependencies, are correspondingly far-reaching.

Patent applications in overview

Over 15,000 patents involving genetic engineering have now been applied for at the European Patent Office in Munich. A number of these are especially controversial.

- Over 15,000 applications in Europe are related to *plants*. Over 100 of these have already been issued.
- Of some 600 applications on *animals*, a dozen or so have already been approved.
- Over 2,000 patents for *human genes* have been applied for at the EPO; in 1998 about 300 of these were already legal.

According to research by Greenpeace some 40 more applications on plants and animals a month have to be added to this. A common feature of these applications is that the patent claims go far beyond what can be “invented” or has been done. As a whole these applications for patents show the lack of restraint with which the genetic engineering industry plans to attack living nature. Everything which can be described, analysed and changed is to be controlled and monopolised, into the last generation and in the most profitable application – everything up to people themselves.

Examples of patents issued

Through its decisions in the last few years the European Patent Office has systematically extended patenting on life. The lines between patenting the techniques themselves, to which Greenpeace does not object in any way, and the illegal appropriation and exploitation of life, have been systematically blurred. The patents have long ago included people too.

- Patent on *breeding humans*

Patent no. EP 695351 covers the withdrawal of cells from human embryos, genetic manipulation of these cells, and breeding genetically altered embryos from them. Patenting and making commercial use of human embryos leads to human existence, the human body and its organs being wholly commercially available..

- Patent on *babies' blood*

Patent no. EP 343217 extends to blood from human fetuses, the umbilical cord and the placenta. In the Patent Office's judgement this patent also covers the commercial utilisation of human embryos and fetuses. In the examiners' views this is not, however, a reason for revoking the patent. Doctors and the No Patents on Life organisation have lodged an objection to this patent.

- Patent on *cancer mouse*

Patent no. EP 169672 covers all mammals except humans which are manipulated with cancer genes. These animals have been a flop both commercially and scientifically. But the patent, in which mammals were in Europe in 1992 declared a human invention, acted as a foot in the door for a host of other patents, on everything from genetically manipulated giant pigs and fish protected from frost to breeding people. Numerous objections to the cancer-mouse patent are still pending, as the Patent Office has so far refused to conclude negotiations begun as far back as 1995.

- Patent on *soybeans*

The first genetically manipulated soybeans came onto the European market in 1996. At this time the Monsanto company had its patent in the USA and Europe already secured.

Monsanto's patent no. EP 546 090 covers genetically modified plants which have been made resistant to the company's own herbicide, Roundup Ready (glyphosate). The species covered

are “corn, wheat, rice, soybean, cotton, sugar beet, oilseed rape, canola, flax, sunflower, potato, tobacco, tomato, alfalfa, poplar, pine, apple and grape.” In the USA the patent has already been protected in cultivation and trade with Roundup Ready soybeans. Various conditions which ensure Monsanto has access to farmers’ fields and forbid retention of seeds on farms have been attached to the sale of the seed. Private detectives have even been hired in order to control contracts. Greenpeace filed an objection to the patent in 1997.

Unlimited exploiting and degrading life breaks taboo

The World Medical Association, farmers’ federations and representatives of the World Bank and the UN development aid organisation, the UNDP, have strongly criticised the increasing patenting of life. The 1999 UNDP report on human development says that the “inexorable advance of rights on intellectual property must be stopped and questioned.” In its recommendation on biotechnology and intellectual property (Recommendation 1425 (1999)) the Council of Europe resolved that “The Assembly believes that neither plant, animal nor human derived genes, cells, tissues or organs can be considered as inventions nor be subject to monopolies granted by patents.”

Patenting genes and forms of life is the biggest organised pillage in the history of mankind. Genetic engineering corporations make claims to possess what is the common basis of life, something which no one can invent or manufacture.

Patents on life at the same time destroy nature and biological diversity. The manipulation of plants and animals is turning into a matter of business. The economic interests of the genetic engineering corporations are turning the hazards of genetic engineering into a global threat. What pays is not conserving nature but the manipulation and suppression of diversity by genetically engineered creations.

Greenpeace demands

- No patents on human genes, cells, tissues, organs or whole human beings. Parts of humans must not be degraded to goods, and there must be no claims to the ownership of humans.
- Life, including that of plants and animals, is not an invention of the genetic engineering industry, and therefore must not be allowed to be patented. Genetic engineering corporations must not be allowed to claim ownership of the common natural heritage of biological diversity.

Christoph Then, Greenpeace Germany