

Pesquisa FAPESP - 11.2002 - Edição 81

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An appeal for flexibility

Rules for intellectual property step up debate between the rich and the poor countries

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The current situation in the world as far as patents are concerned can only be classed as schizophrenic. On the one hand its use as an instrument of protection of intellectual property and of stimulus to technological innovation has never been so defended by the rich and the poor: the intention of the World Trade Organization (WTO) is to extend the minimum of patent protection to all of its one hundred and forty two countries until 2006, and nations such as Brazil have as their almost obsessive goal to increase the number of national patents registered here and abroad.

On the other hand, the developing countries seem to have entered into a fight to death (for now relatively successful) to reduce the patenting monopoly of the rich countries, mainly in the areas of biotechnology and of the pharmaceutical industry. The last victory in this war, by the way, came last October: during the general assembly of the World Intellectual Property Organization (WIPO) in Geneva in Switzerland, the poor countries managed to halt the advance of a project that intends to establish a global system of patents, abolishing the prerogatives of national patenting offices to approve or deny a determined request.

The reply to this oscillation between two extremes could well lie in a principle often cited at world meetings about sustainable development, generally ignored in practice: that of common responsibilities, but differentiated. "We are not saying that the poor countries should not obey the patenting laws", says John Barton, from the Law School of Stanford University in the United States. "What we're trying to say is that the rules should be established with their interests in mind", says the lawyer.

Barton coordinated the writing of the report *Integrating the Rights of Intellectual Property and Development Policy*, sent by the British government to an international commission of specialists and concluded last September. The message in the text, a brochure of two hundred heavy, but elucidating, pages, is a call for flexibility.

"We arrived at this conclusion by observing three main points: in the first place, fair-mindedness demands that the poor nations pay a lesser part of the costs of R&D than the richer nations. In second place, poorer countries frequently don't have the scientists who could possibly benefit from the rules of intellectual property. And finally, history teaches us that many of the current developed nations prospered in periods during which intellectual property rules were weaker", says Barton.

Lessons from history

To a certain degree, the discussion about strengthening or making the patents system more flexible would not make the slightest bit of sense to the current developed countries if it had been in place when they themselves were climbing the ramp towards the First World. Almost all of them, during that phase of their development, opted for a model that privileged the incorporation of another's technology at the least possible cost. It is enough to say that until 1861 the United States had attempted to inhibit the registration of foreign patents by charging a tax ten times more than that demanded from the American inventors; until 1836, only patents were granted to citizens born in their country.

The economic growth of the Asian countries, such as Japan and South Korea, has also been hitched up to a patenting system much more feeble. For some types of products, the protection time did not go beyond three years, while others (such as medicines and chemicals) only started having the patent guarantees very recently (in the case of medicines in Japan only in 1976). It is not by chance that, according to estimates made by the World Bank, South Korea would be the greatest loser with the establishing of a unique system of patent protection in the world: The Koreans would lose up to US\$ 15 billion annually, whereas the United States would be the greatest benefactor, earning a further US\$ 19 billion per year.

Pharmaceutical battle

Meanwhile, the battlefield on which the developing countries are managing to impose their power of bargaining in bloc is in the pharmaceutical industry. But not without resistance, especially from the United States - though the underdeveloped world responds for only 20% of the pharmaceutical market of the planet, this percentage refers to a sum of US\$ 406 billion annually.

The policy of the more important countries in the developing world, notably Brazil and India, has been to threaten the more indispensable and expensive medicines such as the cocktail of anti-retrovirus drugs used to combat Aids, with the so-called compulsory license. In this case, industries of the country receive permission to produce a generic version of the medicine of the multinational company. For now, only the threat has worked in the majority of cases: in order to avoid breaking the patent, the pharmaceutical companies have agreed to reduce the price of their medicines.

Apparently the pressure to obtain more reasonable prices has reason to be: for a patient in the rich countries, the anti-Aid cocktail costs US\$ 10,000 annually, while the costs for producing it do not go over US\$ 500, according to a study by the American economist Jeffrey Sachs from Harvard University.

The US\$ 9,500 that are excess from this account, the multinational pharmaceutical companies argue, refers to costs incurred in the research sector - that reach US\$ 20 billion per year and cover tests with no less than 10,000 medicines so that five of them can reach the stage of testing on humans. To compensate for this effort the American legislation gives twenty years of a monopoly patent to each new registered medicine.

However, in spite of all of these arguments the challenge seems to be being won by the other

side: at the last world conference of the WTO, that took place in Doha in Qatar, during November of last year, the poor nations managed to include a declaration that the defense of public health could not be impeded by the determinations of the trade-related aspects of intellectual property rights (Trips) agreement, the WTO's bible for questions on patents. The inclusion of the declaration in defense of public health was considered a victory by Brazil and her Third World allies and by the at that time Brazilian Minister of Health, senator José Serra.

For Barton, the result at Doha is an example of the way forward: "The system of intellectual property is crucial to the pharmaceutical industry in the developed world. But the extension of this system to the poorer countries, such as, for example, those in the sub-Saharan region, brings little or no incentive (the area responds to only 1% of sales)" he says. On the other hand, the victory also brings economic benefits to developing countries such as India, whose generics industry is one of the largest in the world.

Patenting and evolution

The time has long past since the scientist Jonas Salk, the inventor of the first vaccine to eradicate infantile paralysis, responded to the phrase: "Can someone patent the sun?" to those who suggested that he should reserve the rights of intellectual property over his discovery. A battle as yet undefined in this field is to know if the advance of biotechnology and of genetic engineering is going to transform the patenting of genes and even of entire living organisms into a norm throughout the world.

Who gave the start to this ethical dilemma linked to the question was the North American company General Electric, who, in 1980, managed to obtain the first patent on a living being - in that case a genetically modified bacterium that can digest petroleum, the inventor having been the Indian microbiologist Ananda Chakrabarty. On the coattails of this polemic case, that received a positive yes from the Supreme Court of the USA after ten years of debate, came other similar patents - this time without the ecologically correct excuse of cleaning up oil spills. It has become the fashion to patent the genes of the most varied organisms. During 2000, the Celera Genomics company alone (the ex-sequencing company of the genomics superstar Craig Venter) had registered ,500 patents referring to genes at USPTO, the United States Patent Trade Office. The only demand of the organ is that the function of the gene be known.

Brazilian legislation, like that of the majority of Latin American countries, prohibits patenting of living things as a whole or in part - which clearly includes genes. "It would be like patenting the periodic table", Edgar Dutra Zanotto from the Federal University of São Carlos (UFScar) and the coordinator of FAPESP's Patenting and Licensing of Technology Center (Nuplitec), usually says. Thus it would only be possible to patent processes or products (such as diagnostics or medicines) based on a DNA sequence, once that it, by itself, can be found by anyone in nature.

Even so, the American pressure to include living things or their genes below the legal umbrella of a global system of patents, has been growing. On this point the European Union, and its policy frankly contrary to genetic abuse, has aligned itself with Latin America - as was clearly demonstrated at the last assembly of the WIPO in Geneva.

Paradoxically, there is a field that the immense majority of the poorer countries have attempted to include in the system of protection of intellectual property, and not to remove it from there. We are talking about the traditional knowledge of the native biodiversity of the megadiverse

countries of the Third World, an area that has turned itself into the center of considerable expectation (almost always frustrated) right from the creation of the Biodiversity Convention in the wake of Earth Summit in 1992. In this document (ratified until today by one hundred and sixty eight countries, among which is not the USA), it is stipulated that products created from knowledge of traditional populations over the biodiversity must render the rights of intellectual property to these native populations - who will have to be previously informed and to agree with the use of these resources.

Reality has shown fallen short of these good intentions. Up until now, successful cases do not exist in which the previous and informed consent and the sharing of the results with the community have occurred - in part because the dynamics of traditional knowledge does not lend itself well to being transformed into patents. "The classical hypothetical case to explain this is that of an indigenous tribe that lives throughout the Colombian and Brazilian Amazon and uses a determined plant as the basis for generating a medicine", states the biologist Nurit Bensusan, from the non-governmental organization Socio Environmental Institute (ISA). "If a company makes an agreement with the Brazilian part of the tribe, would they also have to make it with the Colombian part as well, which could be under a totally different legislation from the Brazilian?" asks the biologist.

The future

The response to the above dilemma, as well as those that surround the internationalization more and more of the patenting world, can only be looked at case by case, the specialists suggest. In spite of the pharmaceutical victories, Brazil cannot dodge out indefinitely from a patent's regime that is more rigid, says Zanotto. "Patents should be respected, if not in the rare cases of epidemics or catastrophe.

However, the problem revolves around who, with what speed and how to judge eventual requests and breaks. Let an appropriate organization, such as the WTO itself, creates a high level committee, representative of both the emerging and developed countries, that rapidly analyze, case by case, each request for the breaking of a patent." For the Nuplitech coordinator, the emergent countries, such as India and Brazil, also need to strengthen their own patenting system.

Barton says that he believes that a balance can be established: "Doha demonstrated that a viable intermediary point between the developed and the developing nations is of interest to all. It is not schizophrenic to conclude that we need more intellectual property in some areas and less in others - the secret is to turn both sides in the system fitting and effective".