

AN EVALUATION OF THE USE OF INTELLECTUAL
PROPERTY RIGHTS IN PUBLIC ORGANIZATIONS OF
SCIENCE & TECHNOLOGY IN BRAZIL

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Abstract

Public research institutions, as well as universities, have been undergoing institutional reorganization that is far from the end. Yet, which has been redefining their roles and their forms of participation in the national systems of innovation have been changing considerably. These changes have been triggered by the inter-relationship of phenomena of distinct natures. Political, social, institutional, economic, scientific and technological changes have been shaping a new social contract in the area of research and innovation.

The role of these institutions has been defined and should be reorganized taking into consideration the technical-economic system, as well as their mechanisms for

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regulation, among which intellectual property should be stressed. In this context, the rights of intellectual property have taken on a vital role.

The networks and systems of technological innovation have been being organized according to their division of core competencies, which involves a distribution of tasks that seeks to gather, in one same program, all of the relevant agents to conduct the innovative process. It means that one project or program should encompass agents ranging from their most basic scientific components to the phases of development of a product or a service, and reaching the phases of commercialization and distribution. Thus, an innovative network – or any other type of project or program involving cooperation – must define, from the start, the property rights of all of its participants, including those of a public or state-owned character. Therefore it can be stated that the definition of property rights creates a fundamental institutional framework among all of the agents involved in the innovative process (Salles Filho et al., 2000; Carvalho & Pessanha, 2000).

In order to achieve an effective participation in partnerships, the core and related competencies among the agents must be identified, a measure which implies in mobilizing the complementary assets (Prahalad & Hamel, 1998; Williamson, 1985; Teece, 1986). The complementary nature of the agents has a strong influence on an institution's efficiency, for, in order to carry out innovation, it is necessary to develop many diverse assets, such as marketing, dedicated equipment, distribution and services, and after-sales service, among others. The access to property of the complementary assets, particularly those which are specialized or “co-specialized”, aids in defining who will win and who will lose in an innovative process. Imitators may supersede first comers if they have access to vital complementary assets. In this specific case, the development of contractual mechanisms – especially those of

property rights – is of the utmost importance. From this perspective, the rights to intellectual property may also be perceived as an element of reference for the interaction among the (public and private) economic agents which take part in the innovative process (Carvalho, 1997).

Notwithstanding the efforts that public institutions have been making, nor the efforts which have been undertaken by some related networks (such as, in Brazil, the REPICT – the Network of Intellectual Property, Cooperation, Negotiation and Trade of Technology- which is linked to the Technological Network of Rio de Janeiro), the issue of intellectual property is still being undertaken in Latin American countries. It is a known fact that public research institutions have been working on and internalizing this aspect for a long time, but most of them require more effective efforts.

The aim of this paper is to analyze the current situation of the use of mechanisms of intellectual property in public research organizations in Brazil.

Considering Brazil's situation in investments in Science and Technology, the Program for Innovation and Competitiveness of the Pluri-annual Plan (PPA) 2000-3 involves resources to the order of R\$ 5.3 billion, of which R\$ 3 billion are destined to partnerships involving public and private organizations (Scholze & Chamas, 2000).

Without any margin of doubt, this investment has a strong impact on the national innovation system and its repercussions can be felt equally in terms of the appropriation of the results of research. In this picture, the Ministry of Science and Technology (MCT) and the Ministry of Education (MEC) have taken up initiatives aiming to discipline the establishment of grants, in compliance with articles 88 and 89 of the National Law of Industrial Property.

Some institutions have established explicit policies for safeguarding intellectual property whereas some are merely toddling along in the field. On the whole, however, the issue under analysis is one which has aroused growing interest.

It is to be expected that institutions which finance R&D in the private sector should have more specifically defined policies regarding the safeguarding of the rights to intellectual property and the division of the fruits which these rights may come to bear (Scholze & Chamas, 2000).

Other institutions, such as the Oswaldo Cruz Foundation (Fiocruz), the most important Brazilian health research institution, have presented a historical trajectory in which intellectual property rights have made up a sound source of resources. Since the decade of 1930, the patenting of vaccines has been a relevant financing mechanism for research in the Oswaldo Cruz Foundation (Salles-Filho et al., 2000).

The same has occurred with some state foundations that finance research, particularly the Foundation for the Support of Research in the state of São Paulo (FAPESP). For example, its Program for Supporting the Creation of Technological Capacity in universities, research and development institutions and in enterprises (PITE) foresees that the results derived from the project will belong to the entities. In the same way, the rights to patents which may come to be requested and the rights to the commercialization or trade of the products, processes, systems or services which have resulted from the project will belong to the organizations involved (FAPESP, 2000).

The Brazilian Enterprise of Agricultural Research (Embrapa) is another institution that has been striving to define regulations and set up corporate policies regarding intellectual property. The main milestone has been the debate created when the Law for the Protection of Varieties came into effect in 1997 (Embrapa, 2000).

Some public universities, in addition to the regulation at the ministerial level, have sought to establish norms and requests to handle and regulate the rights of intellectual property. Scholze & Chamas (2000) cite, as examples, the University of São Paulo (USP), the State University of Campinas (Unicamp), the Federal University of Rio de Janeiro (UFRJ) and the Federal University of São Carlos (UFSCar), among others.

As preliminary conclusion, we can expect the current situation of the institutionalization of intellectual property in the public institutions of research and financing and universities is characterized by great heterogeneity. Furthermore, the chances of conflicts arising from contradictory policies cannot be overlooked among, for example, the agents which finance, develop and adopt innovation. From this perspective, describing and analyzing the situation in some selected institutions is a manner to better understand the phenomenon and provide subsidies for these same institutions to be able to define and set up more consistent policies regarding intellectual property.

Also, involvement of the research institutions cannot limit itself merely to organizational issues related to the use of intellectual property (as essential as they may be). There is a dimension in the policies of innovation which goes beyond the organizational capacity itself of these institutions. This dimension comes precisely from the realization that some of the most important mechanisms of property, such as patents, should be regarded as investments of risk (Buainain & Carvalho, 2000), which therefore require a broader-reaching institutional strategy. There are many alternatives which can be used to handle this issue, one of them being the creation of specific funds for the promotion and exploitation of mechanisms of property rights. These funds have made it possible, in some countries, for the agents to effectively explore new technological opportunities in the most varied types of projects, ranging

from those directed to the advance of generic knowledge to those dealing with the development of a specific market.

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