

INTELLECTUAL PROPERTY RIGHTS AND NATIONAL INNOVATION

SYSTEMS. Some lesson from the Mexican experience.

By J Aboites* and M. Cimoli**

*UAM-X, Mexico city, **ECLAC, UN, Santiago, Chile.

During the second half of the 1980s, important changes took place in the regulatory framework for intellectual property rights (IPRs) in the industrialized and less developed countries. The reasons behind these changes were, on the one hand, governments' and firms' growing acceptance of the importance of knowledge assets in international trade; and, on the other, the US government's pressure during the GATT negotiations — the Uruguay Round — to harmonize institutional norms regarding intellectual property rights. Underlying this proposal, most developed economies support the idea that the heterogeneity of IPRs in GATT member countries produces serious distortions in world trade, and particularly discourages foreign direct investment. The debate has concluded with an international proposal that was called *Trade Related Aspects of Intellectual Property Rights* (TRIPS). This initiative was passed in 1993, when GATT/WTO member countries approved TRIPS during the Marrakech Conference.

Mexico has accepted this norm and introduced changes in the domestic law that regulates IPRs. A new norm has been introduced, together with the consolidation of the trade reform which began during the second half of the 1980s, and which concluded with the signing of NAFTA and Mexico's membership in the OECD. The IPRs that correspond to the previous industrial property law (1976) have changed radically. The new law incorporated most of the reforms carried out between 1987 and 1997 in such important issues as: (a) a breeder's rights; (b) an integrated circuit's layout design; (c) industrial secrecy; (d) computer programs; and (e) industrial designs. Under these circumstances and considering the characterization of the core patent cycle as *granting*, *protection* and *use* (ONU, 1990; Doer, 1999), we can briefly describe the main structural changes. The changes in the *granting of patents* (1991) included new areas of patenting (pharmaceuticals, bio technological and chemical products), as well as the acceptance of the novelty test from the Patent Cooperation Treaty (PCT). The changes in *protection* were based on the duration of the period of patent protection: this period was ten years in 1976, and it was extended to twenty years in 1991. As for *use*, the importing of a patented product was again incorporated in 1991. This right to exploit patents was the center

of a controversy during the 1970s, given that it would permit transnational companies to import patented products without having to produce them locally.

Mexico is a country that has implemented important economic reforms as trade liberalization, privatization of state companies and economic integration with the USA (NAFTA). The central idea of this paper is that these economic changes and the new IPR framework can not be understanding outside of the behavioral patterns and linkages that characterize the Mexican innovation system. Thus, the analysis of the new IPR framework is applicable to a collection of different agents –resident, no residents, transnational companies, local firms, universities, research centers and sectors- and the interactive linkages between them. In a such context, this paper argues that analyzing the experience of the new intellectual property law the use of patents is a weak incentive for the local creation and diffusion of technology; since, it does not favor the local efforts on R&D -in local firms and thorough FDI of transnational companies- and relationships linking the agents of innovation system. A large part of the problem can be related to the role played by the transnational companies that use used patents to block competition and to protect their markets. In general, this paper shows that the new IPR's framework does not promote the diffusion of innovation in the Mexican system.

Section two describe the interaction between the changes in the IPR's regulatory framework, the structural economic reforms and their impact on the patenting activity pattern. Comparing the evolution of patenting activities in two periods, before trade liberalization (1982—87) and during the process itself (1988—99), we can state that: (a) before trade liberalization, patent applications by residents and non-residents decreased; (b) during the process of liberalization, non-resident applications grew considerably, while resident patenting continued its tendency to decrease. As a result, there was strong growth of patenting by non-residents, compared to total patenting. The United States is the country that has increased its participation the most (60 per cent), despite a decrease during the 1995 crisis. Europe and Japan follow. In this context, two important trends can be observed: (a) the flow of total and non-resident patent applications is closely linked to domestic and foreign direct investment during the 1978—96 period; and (b) there is no significant relation between resident patenting activities and the evolution of total private sector investment.