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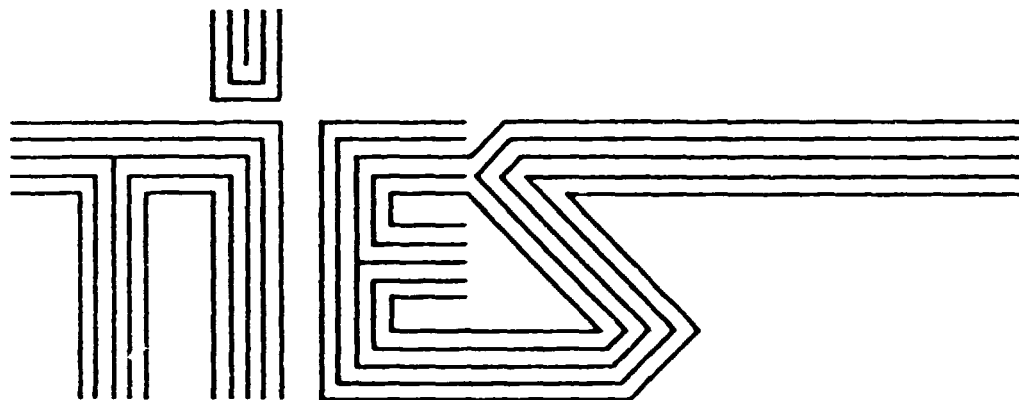
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UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION

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# NEWSLETTER

Technological  
Information  
Exchange  
System

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Compiled by the Industrial Technology Promotion Division, Department for Industrial Promotion, Consultations and Technology, UNIDO, P.O. Box 300, A-1400 Vienna, Austria.

Dear Reader,

In our previous notes, we have presented the many facets of the UNIDO programme on technology acquisition and negotiation. The essence of this programme focuses on the creation and strengthening of mechanisms that will facilitate the flow of technology from developed to developing countries; thus the attention to technological access, the selection, evaluation and acquisition of technology and technological cooperation. This programme is however but one of the elements of a closely interrelated package of programmes which UNIDO has developed in an attempt to lend vitality to the concept of industrial cooperation.

The merger in July this year of the Industrial Technology Development Division and the Industrial Technology Promotion Division into one Division, henceforth known as the Technology Development and Promotion Division, is meant to give an intense focus to the efforts of UNIDO in promoting the development, transfer and application of industrial technology in developing countries. This is undertaken through a variety of promotional services addressed to delivery of industrial and technological information; increasing awareness on new technologies; strengthening long-term technological capability particularly through the creation of international and regional centres; strengthening capabilities for technology acquisition and export, as well as for technology management and technology policy formulation.

UNIDO has also developed strong programmes in investment promotion services, industrial studies and research and a system of intergovernmental consultations on the future of specific sectors of industry. Its ability to enter into direct cooperation with both private and public industrial enterprises in developed and developing countries alike has given way to a very effective interaction with industry, so much so that the cooperating companies have, in some cases, been prepared to fund UNIDO so that it can exercise its intermediary role to the full.

UNIDO attaches particular importance to promoting North-South investment and flows of technology from industrialized to developing countries and among developing countries themselves. The primary instruments for investment promotion activities are the investment promotion fora which are usually preceded or accompanied by a workshop/seminar on technology transfer and joint venture negotiations; and a network of investment promotion services located in industrialized countries and financed by respective governments. These services exist in Cologne, Milan, Paris, Seoul, Tokyo, Vienna, Warsaw, Washington and Zurich. They assist in identifying partners to sponsor projects in developing countries and provide these countries with direct access to technological, managerial and financial assistance.

From a global perspective, the working environment is fast changing and exposed to various complexities: the increasing globalization of industrial and technology markets, accelerating advances in technology and short lead times for their commercialization, regional market integration movements, liberalization in investment and technology regimes, changing approaches to intellectual property, impact of debt burdens and concerns for energy efficiency and environment sustainability. UNIDO keeps a sharp eye on these major changes and makes corresponding adjustments in its programme instruments to more effectively deal with the challenges of a changing world.

Technology Acquisition and Negotiation Section  
Technology Development and Promotion Division

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# UNIDO NEWS

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## BUILD - OPERATE - TRANSFER (BOT)

### GUIDELINES UNDER PREPARATION

**W**hat is the philosophy behind the use of the BOT scheme? Is BOT contracting an entirely new type of contract or is it simply a new technique of combining or grouping already known contracts used in construction and in financing of large industrial plants or infrastructural projects? What needs are there that a BOT scheme can meet but which traditional contracting cannot? What is the nature and configuration of risks in a BOT scheme compared with the traditional risk structure, say of pure turn-key arrangements, considering the many parties involved? How should the distribution of risks be managed? What in fact, are these risks and how should they be met?

These are a few of the questions that will be tackled by a group of experts being organized by UNIDO to prepare a set of guidelines on the development, negotiation and contracting of BOT contractual arrangements.

One of the basic purposes of the guidelines is to make all parties aware of the changing character of risks in a BOT scheme as compared to the standard and traditional contractual structure used in the construction of large plants. At the same time, the Guidelines shall point out methods on how to meet the new risks and how to differentiate between the risks that should be decreased or minimized and those that are unavoidable.

Among the subjects to be covered by the Guidelines are: an overview of the BOT concept; development of the BOT concept; the legislative framework; tendering; basic features of multiple contracts involved; contractual issues of contracts involved; the risk structure of parties involved; financing; insurance; period of operation and transfer of ownership.

The group of experts are expected to meet in December this year at UNIDO's headquarters in Vienna. It is foreseen that the guidelines will be in their final form by the middle of 1993.

## TANZANIA

### TECHNOLOGY TRANSFER NEGOTIATION COURSE

**U**NIDO, in cooperation with the Tanzanian Commission on Science and Technology (COSYTECH), organized a training course on Technology Transfer Negotiation and Contracting in Zanzibar (United Republic of Tanzania) from 28 September to 2 October 1992.

The course was attended by senior executives and managers of national government institutions and private enterprises dealing with technology evaluation, acquisition and negotiation as well as by representatives of R&D institutes involved with technology development. National experts contributed to the workshop by elaborating on the Tanzanian experience in such areas as technology transfer and development in the textile industry; networking of technological information; the localization process of imported technology; technology contracting and negotiating; and a case study on the experience of a Tanzanian company in technology acquisition and development.

The organization of this training course falls under a project of technical assistance to the Government of the United Republic of Tanzania which aims to establish a central mechanism that will coordinate, integrate and consolidate efforts of various government institutions in the areas of technology transfer and development. The training component aims at enhancing awareness of negotiators on the broad range of issues of critical importance in the successful acquisition and negotiation of foreign technologies; to strengthen their negotiating skills; and to identify strategies in the negotiation of contracts and in the preparation of the contractual package.

## UNIDO TECHNOLOGY TRANSFER NEGOTIATION MANUAL

### LES forms Ad Hoc Committee

**A**s part of the UNIDO-LES Cooperation in the field of technology acquisition, the Licensing Executives Society (LES) recently formed an *Ad Hoc* committee

to review and assess the UNIDO **Manual on Technology Transfer Negotiations** as a means of assisting UNIDO in its final completion. UNIDO is forming its own committee for a similar review.

The LES *Ad Hoc* committee is chaired by Dr. Arthur Wolff, President of LES Austria with membership consisting of Messrs. Michael Burnside of the UK, Robert Goldscheider of the International Licensing Network Ltd. of the USA and Paul Passley of Monsanto, USA, all of whom serve on the committee on a voluntary basis. The scope of the review will cover format, quality, suitability and comprehensiveness.

It is the intention that after the respective reviews by the LES *Ad Hoc* committee and the UNIDO committee, a joint LES-UNIDO meeting will be convened to present the results of the assessment and make joint recommendations on the remaining work to be done in order to finalize the **Manual**. Through this joint UNIDO-LES work, it is envisioned that the **Manual** will reflect the consensual views on the issues surrounding technology transfer and licensing and as such could be regarded as a sound professional tool for practitioners and negotiators in general, both from developing and developed countries.

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## REGISTRY NEWS

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### REPUBLIC OF KOREA

#### BROADENED TAX BENEFITS FOR FOREIGN TECHNOLOGY PROVIDERS

**T**o strengthen the competitiveness of local manufacturing industry by promoting the importation of certain advanced technologies, the Korean government recently announced its plan to broaden the range of tax benefits available to foreign technology providers.

The plan first envisages an extension of the period of royalty income tax exemption. Under the present regulation, the five year period of tax exemption starts to run from the date of the relevant authority's acceptance of a report on the underlying technology transfer agreement. According to the announced revision, the five-year period will be computed from "date of the first sale of a licensed product".

Through this change, the tax exemption period granted to a qualified foreign technology transferor will in effect be substantially extended, as it normally takes a considerable period of time for a local licensee to invest, develop and market the licensed product, even after the reporting procedure has been completed.

The announcement further contemplates an expansion of the technologies eligible for the treatment of royalty income tax exemption. The current list comprises 71 areas of industry, including: precision test equipment, optical instruments, NC machinery, internal combustion engines; computers and peripherals, memory media, computer networking and software, industrial control apparatus, laser generation and application, optical communication; synthetic polymers, raw and intermediate medicinal products, raw and intermediate agrochemicals, CFC substitutes, functional

paint composition; genetic engineering; alternative energy and generation; pollution control industry, and the like.

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### REPUBLIC OF KOREA

#### REGULATIONS ON INTERNATIONAL LICENSING

**T**he two basic policies followed by the Korean government in regulating international licensing agreements are to manage foreign exchange and prohibit anti-competitive trade practices.

From the point of view of unfair or anti-competitive trade practices, Korean antitrust law is not highly developed. Rather than relying, as common law countries do, on post-agreement court attacks to suppress monopolistic or anti-competitive behaviour, the Korean system provide: for ministerial review of international licensing contracts. While this system sometimes appears to be a burden on competent parties' freedom of contract, there is the obvious advantage of ending up with an agreement approved in advance by the government.

Under the Korean Foreign Capital Inducement Act (FCIA), international licensing agreements must be reported to the competent ministry (Article 23).

The receiving ministry reviews the agreement principally in terms of royalty amount and contract period, with foreign exchange considerations foremost in mind. A copy of the report is also sent to the Fair Trade Commission (FTC), which reviews the international licensing agreement to determine whether it contains any provisions that are prohibited as unfair trade practices under Article 5 of the FTC's Public Notice 90-9. The FTC's own jurisdiction over international licensing agreements is set forth in the Monopoly Regulation and Fair Trade Act (Article 33).

The receiving ministry then combines its own review with the FTC's and decides whether to accept or refuse the report, i.e. whether to approve or reject the international licensing agreement. Without the ministry's prior approval, the Korean licensee will be unable to remit royalties.

Under the current rules, certain categories of licence are exempted from ministerial/FTC review, i.e. where the contract period is no longer than three years or the royalty rate or amount is below a certain level no report of the licensing agreement is required. The only formality that appears in these exempted cases is obtaining approval from a foreign exchange bank in Korea, whose approval is almost automatic.

**Recent trend towards greater liberality:** The recent trend in reviewing international license agreements is towards a greater liberality in approving the parties' agreed contract periods and royalty rates. There have been fewer ministerial requests to reduce royalties and/or the contract period. It should be noted however, that the beginning of this liberalizing trend was in the period when Korea enjoyed a trade surplus; at the present time, and for the foreseeable future, trade deficits are the rule.

**Unfair trade practices:** Concerning unfair trade practices, there has not been a noticeable increase in parties' freedom of contract, with the FTC continuing the same strong enforcement of its policies.

The following translation of Article 5 of FTC Public Notice 90-9 reveals that most of the prohibited contract terms are traditionally recognized anti-competitive provisions, such as tying agreements, division of markets, control of sales activities, prohibition of competition, patent and know-how grantbacks and payment of royalties after termination of expiry of the license agreement. It should be noted that Article 5 applies to trademark licensing agreements as well as to licenses for patents and know-how.

**PROHIBITED CONTRACT TERMS  
UNDER ARTICLE 5 OF FTC PUBLIC  
NOTICE 90-9 (UNFAIR PROVISIONS IN  
TECHNOLOGY INDUCEMENT AGREEMENTS)**

1. Any provision by which the technology recipient is unreasonably obligated to purchase from the foreign supplier or a person designated by him, raw materials,

parts, equipment, and other relevant items required by the technology recipient to manufacture the products (hereafter referred to as "contract products") with the use of the technology supplied by the foreign supplier (hereafter "contract technology");

2. Any provision that prohibits the technology recipient from selling or exporting contract products in territories other than the 'restricted territories' listed below or obligates the technology recipient to obtain the technology supplier's prior approval to sell or export there. Restricted territories are defined as:

(a) territories in which the technology supplier has previously registered the contract technology;

(b) territories in which the technology supplier has been engaged in regular sales activities with respect to the contract products;

(c) territories in which a third party has acquired the right from the technology supplier to sell the contract products exclusively; and

(d) territories to which the export of the contract products is restricted under the laws of the technology supplier's country.

3. Any provision by which restrictions are imposed upon sales outlets, amount of sales, method of sales and resale price of the contract products; however, this provision does not apply where the technology supplier allows the technology recipient to sell or export the contract products into a restricted territory as described in 2. above and subsequently the technology recipient does sell or export there;

4. Any provision by which the technology supplier does not grant to the technology recipient a right to use the contract technology exclusively and restrains him from dealing in competitive or similar products, or using competitive or similar technology during the term of the contract;

5. Any provision that restricts the technology recipient from dealing in competitive or similar products, or using competitive or similar technology for a considerable period of time after either the expiration of the term of the contract or an early termination of the contract; however, this provision shall not apply if the early termination of the contract is attributable to the malfeasance of the technology recipient and the period of the restriction is within the term of the original contract;

6. Any provision by which the technology recipient is prohibited or restrained from using the following technology continuously after the expiry of the contract or in the event of an early termination of the contract: technology other than that which the technology supplier has exclusive rights to, such as industrial property rights, or technology the exclusive nature of which is extinguished after the time of contracting but before the time of expiry or termination; however, this provision

shall not apply in the event that the early termination of the contract is attributable to the technology recipient;

7. Any provision by which the technology supplier is entitled to unilaterally determine the method for the calculation of royalties without specifying it in the agreement;

8. Any provision by which the royalties are imposed upon products other than the contract products manufactured or sold with the use of the contract technology during the term of the contract;

9. Any provision by which the technology supplier may supply the technology without reasonable cause long after the effective date of the contract or the date of advance payment by the technology recipient;

10. Any provision by which the technology supplier determines the scope of sales promotion expenses, including advertising, and requires the technology recipient to bear such expenses;

11. Any provision by which the technology recipient, in case of a patent license, is forced to acquire an additional license on other patented materials;

12. Any provision by which the technology supplier is entitled to unilaterally designate an arbitral organization or a court to resolve a dispute between the parties to the contract; and

13. Any provision by which the technology recipient is unreasonably disadvantaged in the light of international contract practice.

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## PAKISTAN

### CEILING ON ROYALTIES AND TECHNICAL FEES LIFTED

The Pakistan government has recently abolished the ceilings on the payment of royalty and technical fees

in foreign exchange. Designated banks may now obtain remittances of royalties and technical fees under a registered agreement without the approval of the State Bank.

To comply with the government's decision, the State Bank amended its exchange control manual and issued revised guidelines:

- All agreements executed by private industrial companies with foreign firms which conform to the standard terms of the guidelines will be registered with the State Bank. After registering the agreement, designated banks may collect remittances of royalties and technical fees without the approval of the State Bank.
- Local companies will designate an authorized dealer through which payments under the agreement must be made.
- The company must submit the original agreement for registration, together with four copies, to the State Bank Exchange Control Department through the designated bank within 30 days from the date of the agreement. The original agreement will be returned to the bank duly registered if it conforms to the standard terms.
- No procedural changes have been adopted with regard to royalties and technical fee agreements made between public industrial companies and foreign firms. These agreements will continue to be approved by the Minister of Industries or the Investment Promotion Bureau.
- While eliminating the ceilings on remittances of royalty and technical fees, the company will be subject to the following conditions:
  - It must be incorporated and operating in Pakistan.
  - Applications for remittances of royalties and technical fees must comply with the prescribed form in duplicate, together with a photostat copy of the relative sanctions given by the State Bank or the Investment Promotion Bureau.
  - The accuracy of the information furnished in the application must be certified by the auditors of the company. Another certified statement showing the calculations of royalty and technical fees and the charges in equity of any foreign beneficiaries held in the Pakistan company should also be enclosed with the application.

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# TECHNOLOGY ACQUISITION

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## TAIWAN PROVINCE OF CHINA

### FOREIGN TECHNOLOGY TRANSFER TO TAIWAN

by C.Y. Huang, Tsar & Tsai Law Offices, Taipei

#### *Introduction*

With annual growth rates generally exceeding 7 per cent, a currency that has appreciated more than 45 per cent against the US dollar in less than three years, and an annual per capita income approaching US\$10,000, Taiwan has risen to become the 13th largest economy in the world. This economic expansion can be attributed to the strength of Taiwan's industrial sector, largely based on technology licensed from abroad.

Taiwan presently confronts a dilemma that afflicts other newly industrialized countries: rising wages and currency appreciation, which inevitably erodes manufacturing competitiveness and profitability in global markets. In order to maintain Taiwan's current rates of economic growth, Taiwanese manufacturers develop technologically sophisticated, capital-intensive upstream products with high added value, while simultaneously improving their downstream industries through improved marketing and distribution.

In the light of these economic trends, the Taiwan government has implemented policy measures over the past few years to facilitate and expedite the process of acquiring foreign investment and technology.

#### *Overview of the legal environment*

Technology transfer may take the form of licensing (transfer of technology in return for royalty payment) or capitalization transfer of technology in return for equity shares. The licensing of technology, trademarks and patents in Taiwan is governed by the Civil Code, Trademark Law, Patent Law and the Statute for Technical Co-operation. The capitalization of know-how is governed by the Company Law and other related investment laws and regulations.

A technology licensing contract may assume two basic forms:

- exclusive, in which the foreign licensor may not grant licenses to other parties within the territory outlined in the contract; and

- non-exclusive, in which the licensor is free to grant licenses to other parties.

An exclusive arrangement can also be structured in such a way that the licensee is contractually bound to the licensor to sell its production output exclusively to the licensor. Production on an Original Equipment Manufacturing basis is the most common form of this type of licensing arrangement.

Closely related to exclusivity and non-exclusivity is the issue of parallel imports, in which a local licensee seeks to restrict the importation of identical or similar goods produced outside the territory under technology licensed to other parties by the same foreign licensor. Attempts to deliberately exclude parallel imports, however, conflict with current Taiwan free trade policy, which permits such practices. One remedial measure sought by local licensees is to incorporate provisions into the licensing contract that provide for liquidated damages in the event that parallel importation should occur.

#### *Technology licensing*

The Statute for Technical Co-operation governs the licensing of foreign technology to local licensees. Although neither the Statute itself nor other Taiwan laws require foreign technology to be licensed pursuant to the Statute, it is advisable to sanction technology transfer agreements to ensure the availability of other critical aspects of technology transfer, such as the repatriation of currency, trademark licensing and tax benefits.

Approval of a Technical Co-operation Application (TCA), which must be submitted jointly by both the foreign licensor and local licensee, is granted by the Investment Commission (IC) of the Ministry of Economic Affairs (MOEA).

The scope of TCA coverage was recently expanded to include the transfer of intangible technology in the service industry, such as certain marketing and management methods. Two notable examples are Fidelity International, which received TCA approval for the transfer of fund management expertise, and Johnson & Johnson, which obtained TCA approval for its marketing methods.

Royalty payments for licensing arrangements may be made by lump-sum payments. Continuing royalties are also allowed, but are subject to increased government scrutiny before TCA approval. As a matter of policy, standard continuing royalty rates are not permitted to exceed 5 per cent of the net sales of the licensed products. Net sales are calculated according to the

following government prescribed formula: gross invoice amount net of taxes, dues, freight or shipping charges, packing expenses, insurance, advertising expenditure, commissions, discounts or rebates; the CIF price of imported materials, components and parts; and import duties thereon. This formula is designed to minimize inflation of royalty payments by whittling down the royalty base to only the portion of the value added by the local licensee. The Taiwan government regularly requires the revision of royalty arrangements to conform with the 5 per cent margin policy.

Exceptions to the 5 per cent rule are occasionally granted in special cases, such as certain high-technology industries as computer software.

When considering a technology transfer agreement for TCA approval, the IC will normally require the deletion of any export-restriction clause, which restricts export of products manufactured under license. (Article 9 of the Statute for Technical Co-operation requires that the sales market of products produced under a TCA shall not be limited to the territory of the ROC.) A method that could be used to deal with this requirement would be for the foreign licensor to obtain majority interest in the local licensee and to control the local licensee's export market. The IC also does not permit provisions that require the local licensee to purchase raw materials exclusively from the foreign licensor or a single source designated by such licensor.

Contractual provisions stipulating that the local licensee will bear the tax burden from the royalties and fees payable are not permitted by the IC. Under the income tax, royalty payments made to a non-resident alien or a company without fixed place of business in Taiwan are in general subject to 20 per cent withholding tax. Three types of royalties are exempt from income tax and thus exempt from withholding tax. They include:

- **Patent royalties.** Royalty payments received by a foreign company on account of a patent registered by a foreign company with the National Bureau of Standards (NBS) and approved to be used by a local enterprise by the IC based on a TCA are exempt from income tax.
- **Trademark royalties.** Trademark royalties received by a foreign company on account of a trademark registered by a foreign company with the NBS and used by a local enterprise under a licence approved by the NBS under an approved TCA, are exempt from income tax.
- **Technical service fees.** Technical service fees received by a foreign company on account of know-how provided to a local enterprise, i.e. "high-tech industry" or "key science and technology industry", may also qualify for income tax exemption on the basis of an approved TCA or special approval of the MOEA.

Normally, the IC only grants technology licences for a duration of five years from the date of approval.

Applications for any extensions must be submitted before the expiry of the preceding licence. Any extensions incorporated into the technology transfer contract between the parties are neither recognized nor permitted. In practice, however, exceptions are made to the five-year rule in special instances, such as where the technology to be licensed is deemed to be highly beneficial to Taiwan or the royalties are to be paid in a lump-sum arrangement. Control Data and Hyatt International, for example, both received approvals for franchise licences exceeding a period of five years.

Prior to 1987, TCA approval was required for foreign licensors for the outward remittance of any royalties or other licence payments. The liberalization of outward foreign exchange controls on 15 July 1987 has simplified this procedure and at present a company registered in Taiwan may remit an amount not exceeding US\$3 million per year for royalty payment or other purposes without prior consent from the Central Bank of China. However, TCA approval from the IC is still advisable to ensure the right to full royalty remittance.

### *Licensing of trademarks*

As regards the licensing of trademarks owned by foreign companies, the NBS used to take a restrictive attitude. One of the following three conditions must be met by parties seeking trademark licensing in order for the NBS to review their applications:

- TCA approval;
- the foreign licensor or its parent or subsidiary has at least 20 per cent ownership of the local licensee; or
- the licensed product is of good quality and has an international market.

However, with the internationalization and liberalization of the Taiwan economy in recent years, the NBS has now substantially liberalized its foreign trademark licensing practice, especially in the area of products with an international market. (For example, "international market" use to require substantial export of the licensed products. International market requirements can now be satisfied if the licensor sells products internationally.)

### *Sub-licensing*

The NBS does not allow the sub-licence of a trademark, and the IC does not approve of sub-licensing. In practice, however, sub-licensing is quite common in Taiwan. This is a grey area that needs to be addressed.

### *Fair Trade Law*

The Fair Trade Law, which came into effect on 4 February 1992, represents the first comprehensive body of legislation governing matters relating to anti-trust and unfair competition in Taiwan. It was drafted to serve two primary purposes:

- to prevent intra-industry collisions that may have adverse effects on free competition; and
- to supplement existing laws and regulations protecting trademark rights.

Many types of licensing arrangements may have implications under the Fair Trade Law. For example, a technology transfer agreement may involve the licensing of technology to a local licensee on an exclusive basis by a foreign licensor who is the only known possessor of the technology. Under this arrangement, the local licensee confronts no competition. It has the ability to set pricing and to exclude other competitors from entering its specific market, simply on the basis that it can restrict the technology, product or service and aggregate the quantity of the particular product or service supplied to other industries or the consumer. In essence, the local licensee can monopolize the specific market by means of a contractual agreement and, as a result, restrict free competition.

Furthermore, a large proportion of technology transfer contracts have non-competition clauses. These prohibit the local licensee from engaging in competition with the foreign licensor for a specified number of years in a specific geographical region using technology provided by the foreign licensor after the expiry of the contract. Taiwan courts already restrict the scope of non-competition clauses in accordance with the equities of each case. However, since non-competition clauses may also effectively restrict free market competition in a given market for a duration of time after its expiry, problems may also arise under the Fair Trade Law. There exists a large loophole in the Fair Trade Law in so far as the Fair Trade Commission (FTC) may sanction monopolistic situations. Article 12 of the Fair Trade Law stipulates that the FTC has the authority to approve combinations and concerted actions between enterprises that thereby obtain a market share equivalent to between one-fourth and one-third of the market if it deems that the benefits derived from such monopolistic enterprises outweigh the disadvantages of limiting free competition. Such benefits include reduction of cost, improvement in quality, increases in efficiency and the upgrading of technical skills. In the future, IC approval of TCAs must be made in conjunction with FTC review, so as to either sanction or prohibit any potentially monopolistic licensing agreements between foreign licensors and local licensees.

### *Capitalization of technology*

In addition to the above-mentioned licensing of technology, the patent rights or the unpatented technical know-how owned by a foreign enterprise or foreign individual may be capitalized as equity investment in a foreign-invested company through the foreign investment application (FIA) process. This may be pursuant to the Statute for Investment by Foreign Nationals or the Statute for Investment by Overseas Chinese.

"Patent rights" referred to in these statutes, according to regulations promulgated by the MOEA, means

the legal right of the foreign party to put into practice a patent relating to a new invention, model or design approved by the Taiwan government. "Technical know-how" refers to a newly developed technology having economic value, required by the investment local enterprise and which has not been previously adopted in Taiwan. Such patent rights or technical know-how must be capable of being used either for production or manufacture of new products not presently capable of production or manufacture in Taiwan or for improvement of the quality of existing products or for cost reduction. Generally, the amount of such capitalized patent rights must not exceed 20 per cent of the paid-in capital stocks of the invested enterprise (25 per cent for Science-Based Industrial Park (SIP) enterprises). On the other hand, the prescribed limitation with respect to the amount of the capitalized technical know-how is 15 per cent.

The foreign enterprise or individual capitalizing on such technical know-how is simultaneously obliged to make additional capital contributions in cash or in kind in an equal amount or more. Furthermore, shares representing the capitalized patent rights must not be assigned to any third party **within the effective period of such patent right**, while the shares representing the capitalized technical know-how are not permitted to be assigned to any third party **within two years from the completion date of the FIA project**. In respect of patent rights or technical know-how capitalized as equity investment as described above, the foreign enterprise or the foreign individual must not supply such rights or know-how to, or re-invest them in, any other enterprise in Taiwan.

Although the foreign enterprise or foreign national may alternatively capitalize the patent rights or technology know-how as equity investment in an FIA company, the dividends of the shares of such FIA company will be subject to legal reserves and income tax. The current rate for non-resident shareholders of an FIA company is 20 per cent. This also explains the preference of foreign enterprises and foreigners to adopt the form of technology licensing discussed above.

### *Conclusion*

An attractive environment for foreign investment, coupled with a capable, well-educated labour force working at a relatively low wage, has been the key to Taiwan's economic success. However, the era of a labour-intensive export-driven economy is coming to a close.

In order to engender technological development, emphasis cannot be given solely to Taiwan's manufacturing sector. A precondition to raising the technological level of industries and improving the quality of life in Taiwan is the encouragement of investment by Taiwan business and entrepreneurs in foreign companies involved in technological research, development and production.

The Taiwan government has become keenly aware that the next ten years will serve as the linchpin for Taiwan's economic future and thus its position in the global market-place. In response to these needs, the government stands ready to continue to enact the regulatory reforms necessary to bring Taiwan into a new phase of industrial development. In this new phase, Taiwan's venture capital investors will tap the research and development of the technologically advanced countries. Tax incentives (mainly income tax credit) for venture capital investment will mark the first steps towards encouraging greater venture capital and technological cross-fertilization.

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## MERCOSUR

### Technology and Industrial Property

by Dr. Fernando Noetinger

#### Introduction

During the last years we have witnessed a marked trend towards the so-called "globalization of the world" or the "internationalization of relationships" among states.

History has shown us that isolation, the closing of frontiers and any other intent to live apart from the rest of the nations leads unavoidably to an irreversible process of self-destruction from which it is a short distance to the loss of national identity.

A misconception of nationalism has led many countries to advocate the granting of privileges to anything local over anything foreign. It was believed that this was the only way of assuring and strengthening a position in the concert of nations. However, import substitution programmes only proved to be the most adequate instrument for widening the technological gap.

In fact, nowadays we see a reaccommodation of frontiers by virtue of political or economic integration or of the recovery of freedom, whose geopolitical consequences still remain to be seen.

Among the integration processes currently taking place are four well defined groups: in the first place, we have Europe with the group of 12 nations and a population of more than 300 million, with actual prospects of accepting new members, among which we could mention Austria, Cyprus, Finland, Sweden and Turkey. The Southeast Asian group totals a population of 410 million. Then, there is a group formed by the United States, Canada and Mexico (NAFTA), involving 360 million

people. And finally, under MERCOSUR, Argentina, Brazil, Paraguay and Uruguay constitute a market of 186 million people.

We are presently going to refer to this last forum, which poses a true challenge – not free from obstacles – to a group of countries that have accepted the principle that non-involvement implies self-exclusion and where political motivation is the true driving impulse of the process.

#### "MERCOSUR"

On 26 March 1991, the Presidents of Argentina, Brazil, Paraguay and Uruguay signed the "Treaty of Asunción", under which they created the "SOUTHERN COMMON MARKET" – "MERCOSUR".

Although the Common Market will be formally created by 31 December 1994, intermediate goals have been established for different stages of this transition period:

- (a) free trade, with decreasing duties until "0 duty" is achieved;
- (b) common customs, with common external duties;
- (c) finally, a common market.

The provisions of the Treaty of Asunción have been complemented by other rules adopted by member countries simultaneously with the creation of Mercosur. Said complementary agreements that contribute to the constitution of the common market are:

- i. Establishment of a "General System of Origin";
- ii. Establishment of a "System for the Solution of Controversies" that may arise among the member countries;
- iii. Possibility of each country applying safeguarding provisions for exceptional cases, until 31 December 1994.

In order to coordinate macroeconomic and sectorial policies, ten subgroups have been created to work on the following issues: trade, customs, technical standards, trade-related fiscal and monetary policies, land transportation, sea transportation, industrial and technological policies and coordination of macroeconomic policies.

Undoubtedly, those groups dealing with technical standards and industrial and technological policies are the ones of greatest interest for our activity. Regarding standards, everything seems to confirm that UNE-ISO standards will be followed as closely as possible.

## Industrial Property

As in any process leading to the creation of a common market, the free circulation of goods, services and productive factors is one of the aims of the Treaty of Asunción, undoubtedly inspired by the Treaty of Rome. We must bear in mind however that MERCOSUR is not an "economic community" but a "common market".

This free circulation of goods will however be restricted by a non-duty barrier, arising from industrial property rights. Therefore studies aiming at the compatibility of said different rights on which industrial or intellectual property are based should be promoted.

A key issue will also be how each country will face the different problems arising from the "exhaustion of rights", in particular the attitude towards parallel imports.

Although a comparative analysis of the different legal frameworks for the four countries does not fall within the scope of this paper, we do want to point out that among the asymmetries to be overcome in order to achieve the goals proposed for the different stages, we should undoubtedly include the industrial property issue.

We shall now try to point out very briefly some aspects that show differences – of varying importance that should be gradually harmonized in order to avoid distortions in the treatment of the different institutions conforming industrial property and transfer of technology.

### International Agreements

An analysis of international agreements does not include the so-called "Panamerican Agreements" by reason of their limited incidence in the MERCOSUR region.

The following list includes the most important international treaties directly related to this issue, followed by the position of each country regarding ratification, which will give an idea of the current situation of the group in relation to supranational legislation.

- (a) **Paris Convention:** Argentina, Brazil and Uruguay are signatories, but not Paraguay.
- (b) **PCT:** Only Brazil is a party to the Patent Cooperation Treaty.
- (c) **Madrid Agreement:** Only Brazil is a member.
- (d) **Strasbourg Agreement on the International Classification of Patents:** Only Brazil is a member.
- (e) **Nice Agreement on the International Classification of Marks:** Although the four countries have adopted the international classification, only Uruguay is signatory to the Nice Agreement.

(f) **The Hague Convention:** Only Argentina is a member.

(g) **Treaty of Nairobi for the protection of the Olympic Symbol:** Argentina, Brazil and Uruguay have ratified this Treaty.

(g) **WIPO:** The four countries have ratified the Convention established by the WIPO.

### Internal Legislation

#### Patents

Although all the member countries have a patent system, their respective legislations are similar in their governing principles but show differences regarding such aspects as patentable matter and filing procedures.

Argentina has a new patent bill in an advanced stage of analysis, which is expected to be enacted by Congress in only a few months and will imply a considerable progress in the protection of inventor's rights.

Brazil and Paraguay are also considering the introduction of amendments to their respective laws.

Without prejudice to the changes that will surely be introduced as a result of a re-evaluation of industrial property throughout Latin America, the currently applicable laws in the four countries are the following:

- (a) **Argentina:** Law 111 of 1864.
- (b) **Brazil:** Law 5772 (Industrial Property Code) of 21 December 1971.
- (c) **Paraguay:** Law 773 of 3 September 1925, quite similar to the patent law now effective in Argentina.
- (d) **Uruguay:** Law 10.089 of 12 December 1941.

#### Trademarks

In this case also, the differences reside in application and interpretation aspects rather than in the governing principles of the different legislations.

The jurisprudence of Argentine courts has certainly been generous with trademark owners who, not having registered their marks in Argentina, find that said marks have been registered by a third party. (On the grounds of the principles of *bona fide* business relations, and for the sake of consumers protection, under certain conditions, the Argentine courts have cancelled registrations showing clear evidence of imitation or plagiarism.

It is also possible to cancel a trademark registration when it has been applied for by somebody who was or should be aware that it belonged to a third party.

Although nullity of a trademark registration can be demanded in all the member countries, statute of limitation may apply, as is the case of Paraguay, where legal actions must be brought within two years of the granting of the registration.

In Uruguay there is a similar term, but it only applies to nullity based on prior use of the trademark or on the existence of a previous registration of a similar or identical mark (Article 10). However, for actions based on the non-registrability of the mark (Article 2), the action can be brought at any time.

Unfortunately, during the last year an increase of infringements has been noticed by Brazilian and Argentine authorities and companies, who have detected applications in one country by applicants that are not the trademark owner in the other country.

For the sake of information, we shall now mention the laws currently effective in each of the four countries.

(a) **Argentina:** Law 22.362 of 26 December 1980.

(b) **Brazil:** Law 5772 (Industrial Property Code) of 21 December 1971.

(c) **Paraguay:** Law 751 of 20 October 1979.

(d) **Uruguay:** Law 9956 of 1 October 1940.

#### *Industrial Models*

With the sole exception of Paraguay, all the countries have a system for the protection of industrial models and designs.

#### *Utility Models*

Only Brazil and Paraguay have systems protecting utility models. In the case of Brazil, the said system is included in the above mentioned Industrial Property Code, while the Uruguay government passed Law 14,549 on 29 July 1976, dealing particularly with this matter.

#### *Licence Agreements*

Although the legal framework of licence agreements is not identical for the four countries, there is a general trend towards the lifting of any restrictions hampering the free access of foreign technologies.

The current situation in the member countries is the following:

##### **Argentina**

Agreements are valid upon execution, any further proceedings not being necessary to make them legal and enforceable.

However, there are certain requirements whose fulfillment entitle to tax benefits:

In the case of agreements between independent parties, the filing of a copy with the corresponding authority entitles the licensee to have his payments to the licensor charged against expenses in the company's balance sheet. In addition, withholding tax rate applied to payments made to the licensor will be reduced.

As for agreements entered between related companies, the above mentioned fiscal benefits will apply upon approval of the agreement by the corresponding authority, to which effect there are some restrictions regarding maximum rates (5 per cent), term (no more than 5 years) and the prohibition of paying royalties for use of trademarks.

These requirements are flexible enough not to become an obstacle to companies supplying and receiving technology.

##### **Brazil**

Brazil is engaged in a flexibility process of the regulations applicable to licence agreements. This process includes the modification of the Industrial Property Code of 1971.

Resolution No. 22 of the National Institute of Industrial Property (INPI), effective since 27 February 1991, repeals, among others, Rule 15/75, and contains some provisions that undoubtedly imply a great progress in the said direction, since negotiations among the parties have acquired more dynamism and relevance, and registration procedures have become simplified.

##### **Paraguay**

Paraguay does not have and has never had specific legislation on technology transfers. This means that the country does not have a registry and that there is free contracting, subject to the general principles of law.

In the matter of trademarks, however, Articles 29 through 36 of Law 751 contain certain provisions applicable to licence agreements, among which we could mention that:

(a) All trademark licences must be registered in the Industrial Property Office.

(b) Under the corresponding agreement, the Licensor must provide quality controls.

##### **Uruguay**

In Uruguay there are no rules implying a control over this kind of agreements or restrictions to free contracting.

## Conclusion

Although the Treaty of Asunción does not include a provision similar to paragraph 36 of the Treaty of Rome, it cannot be said that in view of the necessity of establishing the free circulation of products and services the industrial property system has been discarded.

From now on, this issue will surely be discussed and negotiated, seeking harmonization of the different legislations. In June 1992, the heads of the four industrial property offices met in Asunción and discussed this matter. This meeting was most probably the first of several rounds that will be adding more precision to an issue of particular importance for the future development of the region.

Those who have lived in countries where excessive interventionism by the State has been the rule, usually accompanied by a degree of discretion in the acts of government, see this "integrated space" as a reaffirmation of the will of our respective governments to deregulate, thus increasing the presence of the private sector in the economy.

## TECHNOLOGY TRANSFER TRENDS: AN OVERVIEW OF STRATEGIC PARTNERING

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(Second of a series)

### CHAPTER III

#### THE GROWTH OF STRATEGIC PARTNERING ACTIVITY

In the previous chapter, published in *TIES Newsletter* No. 45, we saw how the growing knowledge-intensity of production and shifts in the structure of demand gave rise to changes in competitive behaviour and to new corporate strategies. This chapter provides a quantitative overview of one of these strategies – independently initiated inter-firm collaborative agreements, particularly those involving joint knowledge production and sharing. Broader based R&D consortia, many of which have been promoted by explicit government policies, will be discussed in Chapters IV and V.

#### Box 3.1: Data based research on strategic partnerships

The Centre for Science and Technology Policy at Rensselaer Polytechnic Institute in Troy, N.Y. Their studies included an in depth analysis of the activities of 41 semiconductor firms from the US, Europe, Japan and Korea (Haklisch:1986) and work on the machine tool industry and biotechnology firms (Fusfeld and Haklisch:1985; Haklisch and Vonortas:1987).

Futuro Organizzazione Risorse (FOR), a research subsidiary of the Italian chemical firm MON-TEDISON in Rome, whose analyses were based on a sample of 143 European and 157 US companies and covered the period 1978-1983 (Mariotti and Ricotta:1986).

A team from the University of Pisa and Cornell University based at the University of Pisa, using a sample of 70 cooperative agreements taken from the financial press in 1980 (Mariti and Smiley:1983).

Venture Economics of Wellesely, Ma., which focussed on strategic investments in venture capital backed companies, mainly involving US companies (Venture Economics:1987).

Centro Studi IBM Italia, whose database dealt solely with alliances in the information technologies sector. The 934 agreements it contains cover the years 1985-88 (Camagni:1989; Camagni and Garbarotto:1988).

Polytechnico di Milano has developed the ARPA database containing over 2,000 agreements concluded in the 1980-86 period in the information technology sector, notably for semiconductor, data processing and telecommunications industries (Cainarca et al.:1989; Cainarca, Colombo and Mariotti:1992).

LAREA/CEREM of the Université de Paris X, Nanterre, whose database contains 2,169 inter-firm agreements in which at least one of the partners is a European firm. The data set covers information technology, biotechnology, automobiles and materials, and spans the years 1980-89 (Delapierre, Lemette, Mytelka, Vavakova and Zimmermann:1988; Delapierre:1991; Delapierre and Michalet:1989; Delapierre and Mytelka:1988; Mytelka:1989,1991).

MERIT, University of Limburg, Maastricht, The Netherlands, inherited and built upon the TNO/TASC database. The MERIT-CATI database

**Strategic Partnering Activity grew Dramatically During the 1980s**

During the 1980s interfirm collaboration in R&D in production and marketing rose dramatically. Many of the earliest efforts to quantify this phenomenon

focused exclusively on the information technologies, especially on the semiconductor and computer industries where such activity seemed to be most intense (Box 3.1). Others covered a larger number of sectors but dealt with the experience of only a small sample of companies.

Much of this earlier work was summarized by François Chesnais (1988) and subsequently included in the OECD's report *Technology and the Economy: The Key Relationships* (1992). Nevertheless it is worth looking briefly at some of these data here.

In one of the first such studies, Carmela Haklisch documented the rise in agreements among semiconductor firms from an average of two per year in the period 1978-80 to roughly 25 per year in the period 1982-84 for a set of 121 agreements involving 41 Japanese, American, European and Korean semiconductor firms (Haklisch:1986,33). No attempt was made in this study, however, to distinguish between earlier forms of one-way technology relationships such as licensing and cross licensing and the two-way partnerships that characterize contemporary strategic partnering activity (Box 1.2, which appeared in the previous issue of the *TIES Newsletter*).

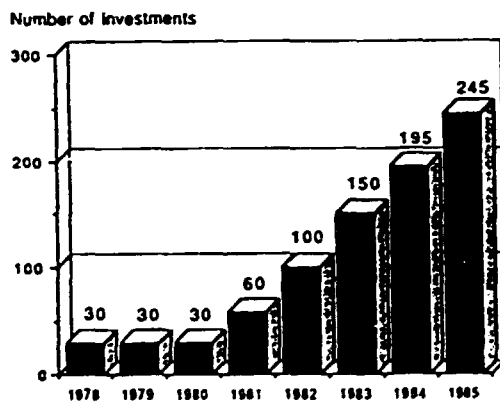


Figure 3.1: Corporate Strategic Investments in Venture Capital Backed Companies, 1978-1985. Source: Venture Economics Inc., 1987

Data supplied by Venture Economics on the number of corporate strategic investments in venture-capital-backed companies (Figure 3.1) showed a similar rise. From 30 per year in the first three years of their survey, the total doubles in 1981 and doubles again two year later. In 1985, 245 corporate strategic investments were made. As in the Haklisch study, it was unclear whether all such investments could be regarded as strategic partnerships.

To overcome the data limitations resulting from a short time span or a focus on a single sector and to resolve the definitional problems resulting from the aggregation of licensing, acquisitions, joint ventures and non-equity agreements under the banner of strategic partnerships, recent efforts have attempted to collect and code data following more rigorous conventions. These newer databases still contain biases as

sociated with the use of publicly available information, but through more careful coding, the inclusion of multiple sectors and a ten-year time frame, data reliability has considerably improved.

Two of the most comprehensive databases are those developed by the LAREA/CEREM in Paris and MERIT in Maastricht (Box 3.1). The former includes agreements in R&D, marketing and production but limits its coverage to cases in which at least one European firm is a partner. The latter places no restriction on the nationality of participants but deals with fewer sectors and limits the coverage to R&D related agreements. Taken together these two databases, however, provide the most comprehensive source of current information on strategic partnering activity.

Both the LAREA/CEREM and the MERIT-CATI databases document a substantial increase in strategic partnering activity over the 1980s (Figure 3.2). From a relatively slow upward progression in the early part of the decade, the number of new agreements rose sharply in the mid-1980s. In the CATI database the end of the 1980s are marked by a slower rate of growth in the number of agreements world-wide.

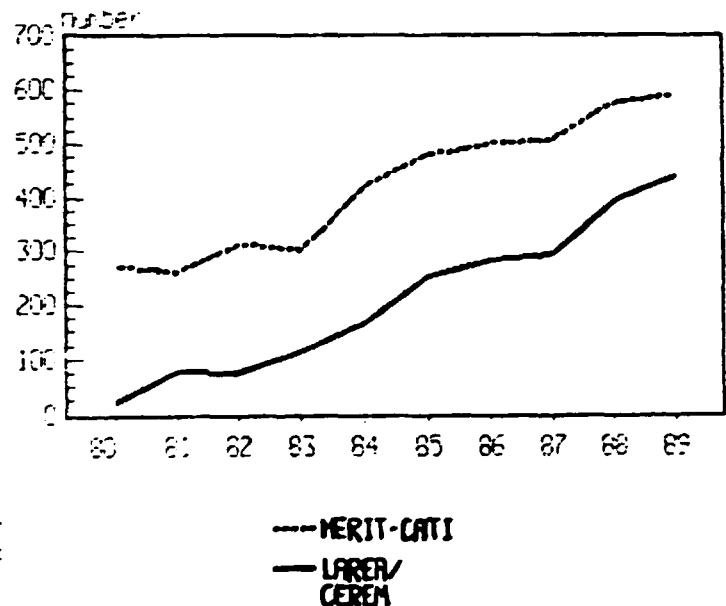


Figure 3.2: Growth of Strategic Partnering Activity, 1980-1989 (equity and non-equity agreements). Source: LAREA/CEREM database, 1992, Hagedoorn and Schakenraad:1992)

The LAREA/CEREM data base, on the other hand, shows a similar slowdown in new agreements involving European firms in 1986 and 1987. But this is followed by a significant increase in the number of new agreements in 1988 and a smaller increase in 1989. If we add to these private, and for the most part bilateral partnerships, the large number of R&D consortia initiated during the 1980s and early 1990s (see Chapters IV and V), there is no doubt that the growth of strategic partnering activity has remained robust.



### There are Important Differences in Strategic Partnering Activity across Industrial Sectors

The LAREA/CEREM and the MERIT-CATI databases enable us to analyze differences in partnering activity across industrial sectors. Both databases, for example, illustrate the extent to which strategic partnering activity is particularly intense in the information technologies sector. This sector alone accounts for 43 per cent of all agreements in the LAREA/CEREM database and 59 per cent of all agreements in the MERIT-CATI database.

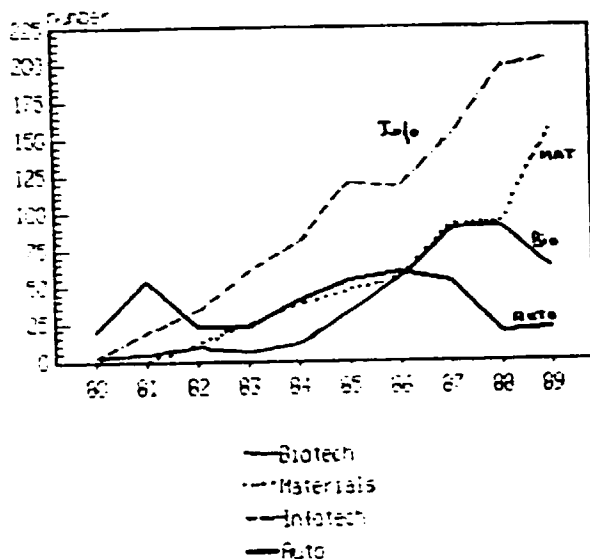


Figure 3.3: Number of Alliances by Industrial Section, 1980-1989. (Source: LAREA/CEREM: Université Paris X)

This was not always the case. Rather, the intensity of partnering activity across sectors has changed markedly over the 1980s. Thus Figure 3.3, which graphs the 2,169 agreements in the LAREA/CEREM database, shows the early growth of partnering activity by European firms in the automobile sector, the relatively slow start in the biotechnology sector, the steady increase in partnering in the information technology sector and the sharp rise in partnering towards the end of the decade in the materials sector.

#### The Functions of Inter-firm Collaborative Agreements have also Changed Over Time

Of the nearly 9,000 agreements contained in the MERIT-CATI database a total of 4,619 can be classified as international technological cooperation agreements. These include joint ventures, the formation of research corporations and technology exchange agreements. Table 3.1 breaks down these data into four time periods. From an annual average of 63 per year in the 1975-79 period, the number of agreements involving joint knowledge production rose to 300 per year during 1980-84 and nearly doubled again, reaching a high of 536 per year in the 1986-89 period. If, over the entire five year period 1975-79, a total of 317 international technological cooperation agreements in bio-technol-

ogy, information technology and new materials were signed by the end of the 1980s, nearly twice that number of agreements were being signed each year.

Table 3.1: Technology Cooperation Agreements in Biotechnology, Information Technology and New Materials (in Number of Agreements)

	Biotechnology	Information Technology	New Materials
before 1974	11	122	36
1975-79	92	187	38
1980-84	392	927	185
1985	718	1,482	429
Total	1,213	2,718	688

Source: Hagedoorn and Schakenraad: 1990, tables 1, 2 and 3.

Table 3.2: Motivations for Inter-firm Cooperative Agreements

Motivations for the Agreement	% of total reported motivations
Technology transfer (a one way flow of information, generally via a license)	29 per cent
Technological complementarity (long-term transactions involving an exchange or sharing of technology between parties)	41 per cent
Marketing agreements (often between a producer and a distributor)	21 per cent
Economies of scale in production and/or in distribution (including the rationalization of production through specialization in component production)	16 per cent
Risk sharing (agreements which involve none of the above motivations, but provide for the management of the operation by one partner while the other contributes capital and absorbs some of the risks of failure)	14 per cent

Source: Data are from the FOR database as reported in Mariti and Smiley: 1983, p.442.

The role that knowledge production and sharing is playing in strategic partnering activity, also emerges from a look at the motives partners give for entering into such alliances. Using data from the FOR database, Mariti and Smiley found that although many agreements were motivated by more than one concern, giving rise to some double counting, technological complementarity, defined as a long term transaction involving an exchange or sharing of technology between the parties was a primary motive for many of these agreements (Table 3.2). Considerable variation in the importance of knowledge production and sharing in strategic partnering activity appears, however, when the data are broken down by partner/country and by industrial sector. Data from the LAREA/CEREM database shows a concentration on knowledge production and sharing in intra-EC agreement. Data from the INSEAD database also point to the very high proportion of agreements involving knowledge production and sharing or what they classify as "development" among the 195 intra-EC agreements and in the 169 EC-USA agreements and 56 intra-USA agreements they surveyed (Table 3.3). In contrast, "Development" is of far lesser importance in international agreements involving Japanese firms, most of which emphasize production over development or marketing.

Table 3.3: Agreements by Function\* and by Region/country (per cent of total)

	Devel- opent	Pro- ductio n	Mark- eting	Total
Intra-EC	74.4	51.2	15.9	195
EC-USA	65.0	49.1	24.2	169
EC-Japan	49.3	55.0	27.5	69
USA-Japan	42.4	62.7	42.4	59
USA-USA	71.4	33.9	17.9	56
Japan-Japan	57.1	28.6	14.3	14

\* Functions are not exclusive in this table.

Source: Adapted from Hergert and Morris:1988, p.108.

These findings with respect to Japanese firms are confirmed by data on the trend in Japanese international partnerships compiled by Professor Hirota Takeuchi. Over the period 1982 through 1986 the number of 'international coalitions' involving Japanese firms rose from 1,009 to a high of 1,436 in 1985 declining to 1,202 in 1986. Japanese-North American coalitions accounted for over 40 per cent of the total throughout this period, but coalitions with European partners fell from roughly a third to a quarter of the total, while those with Asian partners rose from less than one fifth to nearly a third (Imai:1988:9). Of the 4,709 international

coalitions for which a breakdown by function and industry was provided, fully 30.3 per cent were in marketing and sales, including brand licensing and a further 26 per cent in production including OEM and parts supply. Twenty per cent of these coalitions involved technology transfer or development (Imai:1988:9).

The pattern of competition and product life cycles differs across sectors and thus one would expect some variation in the timing and importance of specific strategic options. Taking this into consideration, it is nonetheless interesting to note that a sector by sector review shows a rising trend in strategic partnering activity across all knowledge-intensive sectors and a focus on knowledge production and sharing in these agreements. Of the 300 international coalitions by Japanese firm that focused on 'technology development', for example, 33 per cent were in the electrical machinery sector, 28 per cent in basic materials, 12 per cent in machinery, 9 per cent in the transport sector and 5 per cent in precision instruments (Imai:1988:9a).

Although Fusfeld and Haklisch have argued that the biotechnology industry is still "in an early and highly competitive stage, in which patentable processes and know-how are of great importance (and where even basic research can lead to commercial concepts that companies can quickly connect to practice...)" (Fusfeld and Haklisch:1985:9) more recent data, however, show that biotechnology firms are nonetheless increasingly able to identify opportunities for cooperative activity in this sector. The MERIT-CATI database, for example, reveals a steep rise in the number of biotechnology agreements worldwide in the mid-1980s (Table 3.1). The more intensive partnering activity among information technology firms that characterize both the MERIT-CATI and the LAREA/CEREM databases may thus only reflect the relative newness of biotechnology firms and hence their non-availability for strategic partnering activity until the 1980s.

#### Restructuring in the Information Technology Industry is Leading to an Increase in Equity-based Global Agreements

While technological cooperation remains an important activity within the strategic partnership, inter-firm collaborative agreements increasingly involve more than one function. Figure 3.4 provides a breakdown of these agreements by function into four main types - knowledge production, goods production, commercialization and global agreements, where the latter includes agreements involving all three of the preceding functions. In the first half of the decade the share of each of these four types of agreements in the total number of agreements was quite similar and their rate of increase progressed at roughly the same pace. During the latter half of the 80s, the number of global agreements increased sharply. By the end of the decade global agreements were accounting for nearly half of the new agreements being signed each year. How might we explain this change?

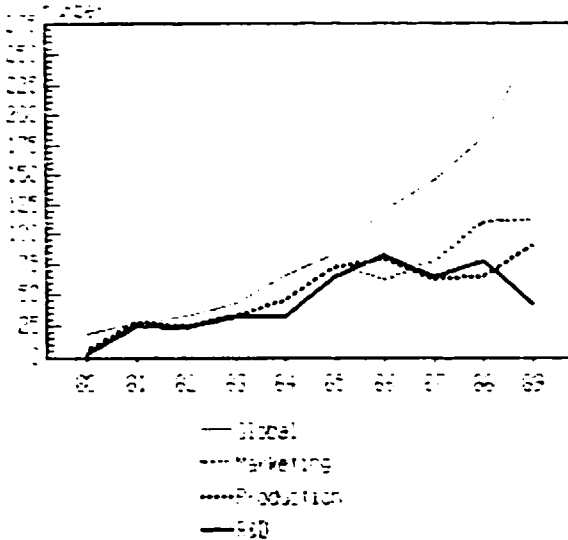


Figure 3.4: Alliance Functions by year — 1980-89. (Source: LAREA/CEREM, Univeristé Paris X)

One explanation for the increased importance of global agreements lies in the way such agreements are being used in the current restructuring of the information technology industry. This emerges clearly from an analysis of these agreements within sectors by function and form, where the latter distinguishes between non-equity alliances and equity-based ventures. Figure 3.5 provides data on each of the four industrial sectors from this desegregated perspective. It graphically illustrates the weight of information technology agreements in the total pool of agreements and hence the disproportionate influence that changes in the form and function of these agreements will have on the overall pattern. It also shows the extent to which equity-based agreements considerably outstrip the number of non-equity alliances in the information and materials sector. In contrast, non-equity alliances dominate in the biotechnology sector and equity ventures and non-equity alliances account for roughly equal shares of total agreements in the automobile sector. Lastly, Figure 3.5 reveals that there is a tendency for equity based ventures to be global in nature. Non-equity ventures give greater

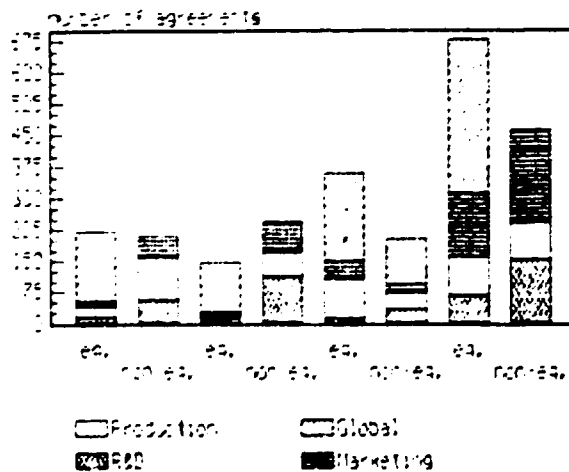


Figure 3.5: Equity ventures and non-equity alliances by function and industrial sector (N = 2169). (Source: Auto-Bio-Material-Info LAREA/CEREM database 1992)

weight to R&D in the biotechnology and information technology sectors and to production in the automobile sector. Figure 3.5 thus supports the view that the shift towards global alliances and equity-based ventures and away from single or dual function alliances is heavily influenced by the growing importance of global equity-based ventures in the information technology sector.

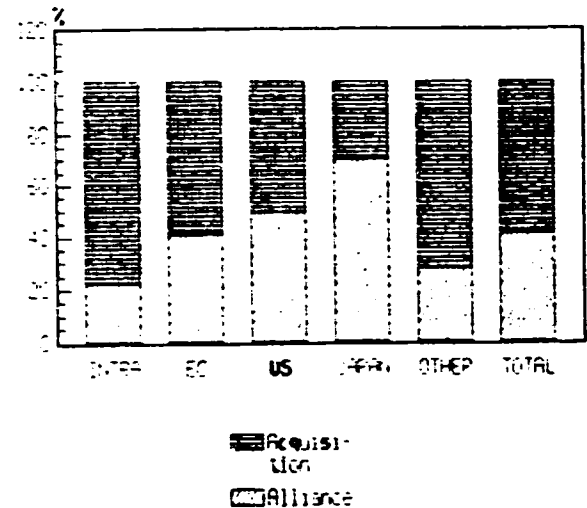


Figure 3.6: Alliances and acquisitions in information technology: a comparison across partners for EC-based firms (Source: LAREA/CEREM database 1992 and Delapierre:1991, p.149)

When these alliances are broken down further by partners, the importance of mergers and take overs in the information technology industry, particularly intra-nationally within EC member countries, emerges as a powerful factor in the move towards global, equity-based agreements in this sector. Figure 3.6 compares intra-national alliances for European-based firms to their intra-EC, EC-US, EC-Japan and other alliances. Equity-based ventures predominate only in intra-national agreements. As Michel Delapierre has argued, the intensification of competition in the information technology industry worldwide, coupled with the decision to create a single European market, stimulated the drive by larger European corporations to consolidate their position within Europe, first through mergers and acquisitions in the home market and then through intra-EC equity ventures and non-equity alliances aimed, in particular, at the acquisition of marketing and distribution channels (Delapierre:1991).

#### The Function of Biotechnology Alliances Differ with Different Partners

Not only are there country or regional variations in partnering activity, but there are important differences in the type of corporate or institutional partners sought by different types of companies. The pattern of partnering activity in biotechnology provides a good illustration of some of these differences (Pisano, Weijian Shan and Teece:1988; Barley and Freeman:1990). Smaller dedicated biotechnology firms normally lack the resources to invest in product development and marketing. Fre-

quently, therefore, they license their product to larger, more diversified corporations who have the experience and the resources to undertake these functions. Such firms also tend to be under considerable financial pressure because the research process is long and uncertain. Thus many of their alliances involve venture capitalists at least in the initial phase. When these investors withdraw, equity-based alliances and joint ventures

with larger diversified corporations in the pharmaceutical, petrochemical or agro-business sectors or outright acquisition by a larger corporation often follows. Table 3.4 illustrates this pattern for the strategic alliances formed by US dedicated biotechnology firms.

(To be continued in next issue of TIES Newsletter.)

Table 3.4

Types of Firms with whom US Dedicated Biotechnology Firms have Strategic Alliances

Firm Type	Equity	Grant	JV	R&D	Manuf.	Market	License	Other	Total
DBF	79	-	12	97	21	68	46	16	339
DC	32	-	48	278	60	205	126	26	775
RO	8	43	4	132	6	18	76	2	289
INV	219	-	3	9	-	-	-	-	231
GOVT	-	24	4	17	-	1	11	3	60
Other	38	-	26	75	16	87	46	7	295

KEY: DBF = Dedicated Biotechnology Firm; DC = Diversified Corporation; RO = Research Organization: University, Research Institute or Research Hospital; INV = Investor; GOVT = Federal or State Government Agency

Source: Adapted from Barley and Freeman:1990, Table 6.

## LEGISLATION

### ANDEAN PACT COUNTRIES

#### DECISION 291

**Common Regime for the Treatment of Foreign Capital and Trademarks, Patents, Licences and Royalties**

*THE COMMISSION OF THE CARTAGENA AGREEMENT,*

**BEARING IN MIND:** Articles 7, 26 and 27 of the Cartagena Agreement, Decision 220 of the Commission and Proposal 228 of the Board;

**CONSIDERING:** that the Presidents of the States Members of the Cartagena Agreement, at the meeting held in the city of La Paz, Bolivia, on 29 and 30 November 1990, expressed their approval for the "growing convergence between the economic policies of the Andean countries in the search for greater efficiency and competitiveness in their economies through the liberalization and opening up of commerce and international investment, in line with the interests of our countries, and the introduction of an economic rationality based on private initiative in the area of taxation and in a redesigned and efficient State";

That, further, at the meeting referred to the Andean Presidents agreed to remove obstacles to foreign investment and to encourage the free circulation of sub-regional capital;

That the new foreign investment policies prevailing in the subregion make it essential to review and update the community regulations approved in Decision 220 of the Commission, for the purpose of stimulating and promoting the flow of capital and foreign technologies towards the Andean economies;

## DECIDES

To replace Decision 220 by the following Decision:

## CHAPTER I

### DEFINITIONS

**Article 1.** For the purposes of this Regime it shall be understood that:

*Direct foreign investment* means the contributions from abroad of the property of natural or legal foreign persons to the capital of an enterprise, in freely convertible currency or in physical or tangible goods, such as industrial plant, new and reconditioned machinery, new and reconditioned equipment, raw materials and intermediate products.

Equally, direct foreign investment shall be considered to be those investments in national currency coming from resources with the right to be sent abroad and the reinvestments that are made in conformity with this Regime.

Member States, in conformity with their respective national legislations, may consider, as a contribution of capital, intangible technological contributions, such as trademarks, industrial models, technical assistance and technical know-how, patented or not patented, which may be made in the form of physical goods, technical documents and instructions.

*A national investor* means the State, national natural persons and legal persons defined as nationals by the legislations of the Member States.

Also considered as national investors shall be foreign natural persons with continuous residence in the recipient country of not less than a year who waive before the competent national authority the right to re-export capital and to transfer profits abroad. The competent national authority of the recipient country may exempt such persons from the requirement of continuous residence of not less than a year.

Each Member State may exempt natural foreign persons whose investments have been generated internally, from the waiver provided for in the paragraph above.

Also considered as investments by national investors shall be the investments of property of subregional investors under the terms established in this Decision.

*A subregional investor* means the national investor of any Member State different from the recipient country.

*A foreign investor* means the owner of a direct foreign investment.

*A national enterprise* means an enterprise set up in the recipient country, whose capital belongs to the extent of more than 80 per cent to national investors, provided that, in the opinion of the competent national authority, this percentage is reflected in the technical, financial, administrative and commercial direction of the enterprise.

*A mixed enterprise* means an enterprise set up in the recipient country, whose capital belongs to national investors in a proportion varying between 51 and 80 per cent, this percentage being reflected in the technical, financial, administrative and commercial management of the enterprise.

Similarly, mixed enterprises shall be considered those in which there is participation by the State, semi-official bodies or State enterprises of the recipient country to the extent of not less than 30 per cent of the share capital, provided that, in the opinion of the competent national authority, the State, semi-official body or State enterprise has a decisive say in the enterprise's decisions.

A decisive say is taken to mean the obligation that there should be approval by the State representatives of the basic decisions for the operation of the enterprise.

For the purposes of this Decision, a semi-official body or State enterprise shall mean one established in the recipient country whose capital belongs to the State to the extent of more than 80 per cent, provided that the latter has a decisive say in the decisions of the enterprise.

*A foreign enterprise* means one set up or established in the recipient country whose national investor capital is below 51 per cent, or when higher than that, in the opinion of the competent national authority, the percentage is not reflected in the technical, financial, administrative and commercial management of the enterprise.

*Neutral capital* means the investments of public international financial bodies, of which all the States Members of the Cartagena Agreement form part, and which appear in the Annex to this Regime. Such investments shall not be considered either as national or foreign in the enterprise in which they are made.

To determine whether the enterprise in which these investments are made is to be described as national, mixed or foreign, the neutral capital contribution shall be excluded from the calculation basis and account

shall be taken only of the percentage share of the national and foreign investors in the remaining amount of capital.

*Reinvestment* means the investment of all or part of the undistributed profits or other hereditary resources, stemming from direct foreign investment in the event that such is permitted by the national legislation, in the same enterprise in which they have been generated.

*Recipient country* means one in which the direct foreign investment is made.

*Commission* means the Commission of the Cartagena Agreement.

*Board* means the Board of the Cartagena Agreement.

*Member State* means one of the States Members of the Cartagena Agreement.

## CHAPTER II

### RIGHTS AND OBLIGATIONS OF FOREIGN INVESTORS

**Article 2.** Foreign investors shall have the same rights and obligations as those to which national investors are subject, except as provided for by the legislations of each Member State.

**Article 3.** Any direct foreign investment or investment by subregional investors which meets the conditions set down in this Regime and in the respective national legislations of the Member States shall be registered with the competent national authority in freely convertible currency.

**Article 4.** The owners of a direct foreign investment and subregional investors shall have the right to transfer abroad, in freely convertible currency and under the terms provided for by the legislation of each Member State, the audited net profits stemming from their direct foreign investment.

The competent national authority may also register in freely convertible currency the investment of the surpluses of distributed profits.

**Article 5.** The foreign investor and the subregional investor shall have the right to re-export the sums of money which they obtain when they sell, within the recipient country, their shares, holdings or rights, or when there is a reduction of the capital or liquidation of the enterprise, after payment of the relevant taxes.

The sale of shares, holdings or rights by a foreign or subregional investor to another foreign or subregional investor shall be registered with the competent national authority whenever so stipulated by the national legislation, and shall not be considered as a re-export of capital.

**Article 6.** The registered capital shall be made up of the amount of the initial direct foreign investment plus the subsequent increments and reinvestments, registered and actually made, in accordance with the provisions of this Regime, minus the net losses, if any.

**Article 7.** Reinvestment, in conformity with the definition in Article 1, in national, mixed or foreign enterprises, shall be considered as a foreign investment and carried out subject to the regulations that each Member State draws up. In any event, the obligation to register with the competent national authority shall obtain.

**Article 8.** Products made by the national, mixed or foreign enterprises which comply with the special regulations or requirements of specific origin fixed by the Commission and the Board shall enjoy the advantages devolving from the Liberalization Programme of the Cartagena Agreement, as provided for in Chapter X of the Agreement.

**Article 9.** The capital of the shareholding companies shall be represented by registered stock.

**Article 10.** In the settlement of disputes or conflicts devolving from direct foreign investments or regional investors or the transfer of foreign technology, Member States shall apply the provisions of their internal legislations.

## CHAPTER III

### COMPETENT NATIONAL AUTHORITIES

**Article 11.** Member States shall designate the competent national authority or authorities to be responsible for fulfilment of the obligations entered into by foreign natural or legal persons to whom this Regime refers.

## CHAPTER IV

### IMPORT OF TECHNOLOGY

**Article 12.** Contracts for licensing technology, technical assistance, technical services, and basic and detailed engineering and other technology contracts in accordance with the respective legislations of Member States shall be registered with the competent national authority of the respective Member State, which shall evaluate the actual contribution of the imported technology through estimation of the probable profits, price of the goods incorporating technology and other specific forms of quantification of the effect of the imported technology.

**Article 13.** Contracts dealing with the import of technology shall contain, at least, clauses relating to the following points:

- (a) Identification of the parties with explicit reference to their nationality and residence;

(b) Identification of the modalities governing the transfer of the technology to be imported;

(c) Contractual value of each of the items involved in the transfer of technology;

(d) Determination of the time for which they are in force.

**Article 14.** For the purposes of contracts dealing with the transfer of foreign technology, trade marks or patents, Member States shall take it into consideration that such contracts do not contain the following:

- Clauses by virtue of which the provision of technology or the use of a trademark carries with it the obligation for the country or the recipient enterprise to acquire, from a set source, capital goods, intermediate products, raw materials or other technologies or to make permanent use of personnel specified by the enterprise supplying the technology;
- Clauses under which the enterprise selling technology or party permitting the use of a trade mark reserves the right to fix the sale or resale prices of the products manufactured on the basis of the relevant technology;
- Clauses containing restrictions on the volume and structure of production;
- Clauses prohibiting the use of competitive technologies;
- Clauses establishing a purchase option, either total or partial, in favour of the technology supplier;
- Clauses obliging the purchaser of the technology to transfer to the supplier the inventions or improvements obtained through the use of the given technology;
- Clauses obliging the payment of royalties to holders of patents or trademarks for patents or trademarks not utilized or sold; and
- Other clauses of equivalent effect.

Other than in exceptional cases duly classified by the competent national authority of the recipient country, clauses in which the export of products made on the basis of the relevant technology is prohibited or limited in any manner shall not be acceptable.

In no case shall clauses of this type relating to sub-regional exchange or for the export of similar products to third countries be acceptable.

**Article 15.** Intangible technological contributions, to the extent that they do not constitute capital contributions, shall accord the right to the payment of royalties, in conformity with the legislation of Member States.

Royalties earned shall be capitalized, in conformity with the terms envisaged in this Regime, following payment of the relevant taxes.

When these contributions are supplied to a foreign enterprise by its parent company or by another subsidiary of the same parent company, the payment of royalties may be authorized in cases previously declared by the competent national authority of the recipient country.

## CHAPTER V

### *TREATMENT OF INVESTMENTS BY THE ANDEAN DEVELOPMENT CORPORATION AND THE BODIES WITH AN OPTION FOR THE TREATMENT OF NEUTRAL CAPITAL*

**Article 16.** Without prejudice to the provisions of the constituent agreement, the direct investments of the Andean Development Corporation shall be considered as national in each State Member of the Cartagena Agreement.

**Article 17.** The international governmental financing authorities, of which none of the States Members of the Cartagena Agreement form part, and the foreign governmental bodies for cooperation in development, whatever their legal nature, may request the Commission to classify capital for investments and for inclusion in the Annex to this Regime. The Commission shall decide on the requests submitted to it at the first meeting following submission of them.

**Article 18.** Together with their request, the bodies referred to in the previous Article shall submit a copy of the constituent agreement or legal statute governing them, together with the maximum amount of information possible on their investment policy, operating regulations and investments made, by country and sector.

## PROVISIONAL ARRANGEMENTS

### First Provisional Arrangement

Foreign enterprises having a current processing agreement under the terms of Chapter II of Decision 220 may request the relevant competent national authorities to leave the agreement in force.

### Second Provisional Arrangement

When handling projects that relate to products reserved for or allocated exclusively to Ecuador, the four remaining countries undertake not to register direct foreign investment in their territories.

Done in the City of Lima, Peru, on the twenty-first day of March one thousand nine hundred and ninety-one.

**ANNEX**

**NAMES OF ENTERPRISES WITH AN OPTION ON THE TREATMENT OF NEUTRAL CAPITAL FOR THEIR INVESTMENTS**

- Inter-American Development Bank (IDB)
- International Financial Corporation (IFC)
- Deutsche Entwicklungs Gesellschaft (DEG)
- Danish Industrialization Fund for Developing Countries (IFU)
- Inter-American Investment Corporation (IIC)

**COLOMBIA:**

**COMMERCE CONTRACTS FOR THE IMPORT OF TECHNOLOGY, TRADE MARKS AND PATENTS**

*INCOMEX is the competent authority for their registration.*

**MINISTRY OF ECONOMIC DEVELOPMENT**

**DECREE No. 259 OF 12 February 1992**

**"Regulating Decision 291\* of the Commission of the Cartagena Agreement".**

The President of the Republic of Colombia, in exercise of his constitutional powers and especially those conferred upon him by Article 189.11 of the Political Constitution, and pursuant to Decision 291 of the Commission of the Cartagena Agreement,

**HEREBY DECREES**

**Article 1.** The Colombian Institute of Foreign Trade, INCOMEX, attached to the Ministry of Foreign Trade, shall be the competent authority for registering import contracts for licensing technology, technical assistance, technical services, basic engineering, trade marks, patents and other technological contracts.

Registration shall conform with what is set forth in this Decree and shall accord with the technological development policies laid down by the Ministry of Economic Development.

*Paragraph.* The registration of contracts described in this article shall be automatic once the requirements of Article 2 of this Decree have been met. The Senior Foreign Trade Council may determine cases in which

as an exception authorization is required from the Services and Technology Committee set up under Article 30 of Decree 2350 of 1991.

**Article 2.** The Colombian Institute of Foreign Trade (INCOMEX) shall register the contracts described in Article 1 of this Decree, provided they meet the following requirements:

(a) Identification of the parties, with explicit reference to their nationality and domicile;

(b) Identification of the methods by which the technology imported is transferred;

(c) Contractual value of each of the elements involved in the transfer of technology, and

(d) Determination of the period of validity.

*Paragraph 1.* The Colombian Institute of Foreign Trade (INCOMEX) shall not register contracts which contain any of the following clauses:

(a) Clauses in conformity with which the enterprise selling the technology or granting the use of a trade mark reserves the right to fix the sale or resale prices of the products manufactured on the basis of the relevant technology, and

(b) Clauses which oblige the purchaser of the technology to transfer to the supplier the inventions or improvements which derive from the use of the said technology.

*Paragraph 2.* In conformity with what is laid down in Article 12 of Decision 291 of the Commission of the Cartagena Agreement, the Colombian Institute of Foreign Trade (INCOMEX) shall not register contracts containing clauses which prohibit or limit in any way the export of the products manufactured on the basis of the relevant technology or which prohibit or limit subregional exchange or the export of similar products to third parties.

**Article 3.** Unless the Senior Foreign Trade Council fixes a different period, the Colombian Institute of Foreign Trade (INCOMEX) shall have a period of eight (8) working days to effect the registration described in Article 1 of this Decree.

In any event, when the expiry of the period fixed for registration by the Colombian Institute of Foreign Trade (INCOMEX) has not been ruled against, the contract shall be understood to be registered.

*Paragraph 1.* Notification of the registration shall be sent quarterly to the Ministry of Economic Development as supporting material for the design of technological development policies.

*Paragraph 2.* For the purposes of payment of the relevant royalties, the registration shall take full effect from the date of registration or from the expiry of the



period, unless the Colombian Institute of Foreign Trade has declared it invalid.

**Article 4.** The payments that are made in the fulfilment of the contracts referred to in this Decree shall accord with the exchange regulations in force.

**Article 5.** In accordance with provisional Article 52 of Decree 2350 of 1991, the Royalties Committee of the Ministry of Economic Development shall continue to function until such time as the cadre of personnel of the Ministry of Foreign Trade is approved and the employees are transferred to it.

**Article 6.** This Decree shall enter into force from the date of its publication and supersede all provisions contrary to it, especially Decree 2561 of 1991.

For publication and implementation.

Done in Santa Fé de Bogotá on 12 February 1992.

\* Decision 291/91 of the Commission of the Cartagena Agreement deals with the Andean common rules for the treatment of foreign capital and on trade marks, patents, licences and royalties. See the review *Legislación Económica*, No. 926.

## INCOMEX

### SOI External Circular No. 025, Santa Fé de Bogotá, dated 1 April 1992 to the Colombian Institute of Foreign Trade and the Users

**Reference:** Registration of technology import contracts. Decree 259/92

For your information and that of the users, I would like to inform you that Article 10 of Decree 259 of 1992 named INCOMEX as the competent authority for registering import contracts relating to technology licensing, technical assistance, technical services, basic and detailed engineering, trademarks, patents and other technological contracts.

When registering the contracts referred to, INCOMEX shall observe the following instructions:

**1. Pro forma requirements:** The registration of contracts shall be automatic, provided the following requirements are met:

- (a) Identification of the methods used for the technology to be imported;
- (b) Identification of the methods by which the technology to be imported is transferred;
- (c) Contractual value of each of the elements involved in the transfer of technology;
- (d) Determination of the period of validity.

**2. Substantive requirements:** INCOMEX shall not register contracts containing any of the following clauses:

- (a) Clauses in accordance with which the enterprise selling technology or granting the use of a trademark reserves the right to fix the sale or resale prices of the products manufactured on the basis of the relevant technology;
- (b) Clauses which oblige the purchaser of the technology to transfer to the supplier any inventions or improvements which are derived from use of the said technology;
- (c) Clauses which prohibit or limit in any way the products manufactured on the basis of the relevant technology or which prohibit or limit subregional exchange or the export of similar products to third countries.

**3. Period for registration:** INCOMEX shall register such contracts within a maximum period of eight working days.

**4. Competence:** The Regional Directorate for INCOMEX in Bogotá shall be competent to register the technology import contracts. INCOMEX shall subsequently authorize other regional directorates to carry out the said registration.

**5. Initial procedure:** An authenticated photocopy of the identity card of the national receiver, or the tax registration number, if it is a question of a legal entity, shall be submitted one single time. The submission shall be made to the Bogotá Regional Directorate and should be repeated when there is a change in the tax number or in the trade name.

**6. Registration form:** The form which appears as an annex to this Circular shall be adopted as the form for registration, amendment, extension and addition; it shall be distributed free to those interested by the Bogotá Regional Directorate.

**7. Annexes to registration form:** The application for registration shall be submitted in duplicate and shall be accompanied only by the following documents:

- (a) The contract in Spanish, i.e. in the original version or an authentic copy, or in an official translation if it has been drawn up in a foreign language;
- (b) Power of attorney, where appropriate.

**8. Signature of the registration form:** Any of the contracting parties or their attorneys may sign the registration form. It is assumed that whoever signs is empowered to do so, but INCOMEX may request, whenever it deems necessary, verification of the identity and status of the signatory.

**9. Preliminary examination:** Once the application for contract registration has been received, INCOMEX shall make a check of the *pro forma* requirements.

Should it be necessary to have additional information or documents, corrections or clarifications, INCOMEX shall request them a single time by returning the application within the **two days** following the submission of it. It shall not be permissible to return the application a second time on account of deficiencies existing at the time of the first submission. The period of eight-days for processing the application for registration shall commence from the second submission on completion of the requirements imposed.

**10. Registration of the application:** When the application for registration has been studied and its conformity with Article 2 of Decree 259 of 1992 has been noted, INCOMEX shall proceed to register it in ascending order, with ending of the numeration in each calendar year.

The registration number shall be recorded on the two application forms and inside the contract, which shall be numbered and initialled. The second original of the form shall be delivered to the applicant as proof of registration, together with the original of the registered contract.

**11. Period of validity of the registration:** Registration, publication or extension of the import contracts referred to in this Circular shall have an initial period of validity of five (5) years, which may be extended indefinitely for equal periods.

Industrial Technology of the Ministry of Development, registrations, extensions of, and additions to, technology import contracts as provided for in Decrees 2350 of 1991 and 259 of 1992.

INCOMEX shall initiate the registration of the technology import contracts on the tenth of April 1992.

To be published in the **Official Gazette** of the Ministry of Foreign Trade under the heading "INCOMEX".

Cordially yours,

Signed: Leonardo Sicard Abad, Director-General

(Translations of the form itself is available on request from the TIES office, UNIDO, Vienna)

## MEXICO

### LAW FOR THE PROMOTION AND PROTECTION OF INDUSTRIAL PROPERTY

(Translation of Spanish original published in the **Official Federal Journal** of 27 June 1991, and effective 28 June 1991 - first of a series)

#### General Provisions

**Article 1:** The provisions of this Law are of public order and are to be observed throughout the entire Republic,

without detriment to what is established in the International Treaties to which Mexico is a signatory. Its administrative application corresponds to the Federal Executive through the Ministry of Commerce and Industrial Development.

**Article 2:** The purposes of this Law are:

1. To set down the foundations for a permanent system of improvement aimed at perfecting the processes and products in the nation's industrial and commercial activities;

2. To promote and stimulate inventive activities for industrial application, technical improvements and the dissemination of technological knowledge throughout the productive sectors;

3. To sponsor and foster improvement of the quality of products and services in industry and commerce, according to the interests of the consumers;

4. To promote creativity in the design and presentation of new and useful products;

5. To protect industrial property by the regulation of patents of invention; registration of utility models, industrial designs, marks and slogans; trade names; appellations of origin and trade secrets; and

6. To prevent acts against industrial property or which constitute unfair competition, and to establish the sanctions and penalties therefor.

**Article 3:** For the purposes of this Law, the following terms shall mean:

1. The Law: this Law;

2. International Treaties: The international treaties, agreements or conventions to which Mexico is a party;

3. The Ministry: The Ministry of Commerce and Industrial Development;

4. The Institute: The Mexican Industrial Property Institute;

5. The Official Journal: The **Official Federal Journal**;

6. The Gazette: The **Gazette** referred to in Article 8 of this Law.

**Article 4:** No patents, registrations or authorizations shall be granted for, nor will any publicity be made in the **Gazette** of, any of the legal institutions regulated by this Law, when their contents or form are contrary to public order, morals and good customs, or when they violate any legal provision.

**Article 5:** The Ministry will promote inventions having industrial application and their commercial development by:

1. The dissemination of documentary information on inventions published domestically or abroad, and assistance in their consultation and use;

2. The preparation, updating and dissemination of directories of individuals and corporate entities devoted to the generation of inventions and technological research activities, as well as the rendering of services related to the industrial and commercial development of production processes or the resulting products and services;

3. The holding of competitions, contests and exhibits and the granting of prizes and acknowledgements to stimulate inventive activity and creativity in the design and presentation of products; and

4. Assistance to companies or financial institutions, to carry out or finance the construction of prototypes and industrial and commercial development of certain inventions.

**Article 6:** The Ministry shall disseminate among individuals, groups, research, higher education or technical assistance associations or institutions, information about the provisions of this Law and its Regulations and their scope, to facilitate their activities in the generation of inventions and in the subsequent industrial and commercial development.

To promote and stimulate inventions and creations with an industrial or commercial application, the Ministry may enter into cooperation, coordination and collaboration agreements, as the case may be, with domestic or foreign, public or private institutions.

**Article 7:** The Mexican Industrial Property Institute will be a semi-state agency, with its own juridical capacity and patrimony and shall have the following functions, among others:

1. To be the body for consultation and technical support, in connection with industrial property, for the Ministry;

2. To disseminate, assist and provide services to the public in this field;

3. To cooperate with the Ministry in the carrying out of the functions provided for in Articles 5 and 6 of this Law;

4. To organize and update documentation on inventions published in the country or abroad;

5. To carry out studies about the situation of industrial property in the international field;

6. To carry out research of the state of the art; and

7. All the others required for its efficient operation.

**Article 8:** The Ministry shall publish at least quarterly the *Gazette*, wherein the publications referred to in this Law will be made and wherein any information of interest on industrial property and other topics to be determined

shall be disclosed. The date it is put into circulation shall be set forth in each volume thereof.

## INVENTIONS, UTILITY MODELS AND INDUSTRIAL DESIGNS

### CHAPTER I:

#### *Preliminary Provisions*

**Article 9:** Any individual who makes an invention, utility model or industrial design, or his assignee, will have the exclusive right of exploiting the same to his benefit, either by himself or by third parties who have his consent, in accordance with the provisions of this Law and its Regulations.

**Article 10:** The right referred to in Article 9 will be granted by means of a patent, in the case of inventions; and in the case of utility models and industrial designs, by means of registrations.

**Article 11:** The holder of patents or registrations may be individuals or corporate entities.

**Article 12:** For the purposes of this Title, the following terms shall mean:

1. Novel, anything not found in the state-of-the-art;

2. State-of-the-art, the assortment of technical knowledge that has become public through oral or written description, by exploitation or by any other means of dissemination or information, either domestically or abroad. In the case of utility models, only the technical knowledge that has been made public domestically will be considered.

3. Inventive activity, a creative process, the results of which are not apparent, from the state-of-the-art, to a person with technical knowledge in that field;

4. Industrial application, the possibility of any product or process to be made or used, as the case may be, in industry, including therein agriculture, cattle breeding, fishing, mining, the so-called transformation industries, construction and all types of services;

5. Claim, the essential characteristic of a product or process, the protection of which is precisely and specifically claimed in the patent or registration application and that is granted, in such case, in the respective certificate; and

6. Filing date, the date when the application is delivered to the Ministry, or to its agencies authorized for this purpose, in the interior of the Republic, provided it meets the requirements set forth in this Law and its Regulations or, otherwise, when said requirements are met.

**Article 13:** Assumed to be the inventor are the individual or individuals who so purport in the patent or registration application. The inventor or inventors shall

have the right to be mentioned in the corresponding certificate or to oppose being mentioned.

**Article 14:** The provisions of Article 163 of the Federal Labour Law will apply to inventions, utility models and industrial designs made by persons who are subject to a labour relationship.

## CHAPTER II:

### *Inventions*

**Article 15:** Patentable are inventions that are novel, the result of an inventive activity and susceptible of industrial application, in the terms of this Law.

**Article 16:** Considered as an invention is every human creation that allows matter or energy existing in nature to be transformed, for exploitation by man, through the immediate satisfaction of a specific need. Included among inventions are processes or products for industrial application.

**Article 17:** To determine that an invention is novel and the result of an inventive activity, the state-of-the-art on the date the patent application is filed or, in such case, the recognized priority date, will be taken into account. Moreover, to determine if the invention is novel, all patent applications filed in Mexico prior to that date and still pending will be included in the state-of-the-art, even if the publication referred to in Article 52 of this Law is made at a later time.

**Article 18:** An invention will still be considered as novel even if it has been disclosed, provided that within twelve months prior to the filing date of the patent application, or in such case, of the recognized priority date, the inventor or his assignee had disclosed the invention by any communication medium or had exhibited it at a domestic or international exhibition. When the respective application is filed, documentary evidence shall be included, under the conditions to be established in the Regulations of this Law.

**Article 19:** For the purpose of this Law, the following shall not be deemed to be inventions:

1. Theoretical or scientific principles;
2. Discoveries consisting of making known or disclosing something that already existed in nature, even if previously unknown to man;
3. Schemes, plans, rules and methods to perform mental feats, games or business;
4. Computer software;
5. Forms of presentation of information;
6. Aesthetic creations and artistic or literary works;

7. The methods of surgical or therapeutic treatment or diagnosis applicable to the human body and those relating to animals; and

8. The juxtaposition of known inventions or mixtures of known products, their variation of form, dimensions or materials, unless there is actually a combination or amalgamation of such type they cannot function separately or that the qualities or characteristic functions thereof are modified to obtain an industrial result not obvious to a person with technical knowledge in that field.

**Article 20:** The inventions that refer to living matter, without detriment to what is provided for in other statutes, shall be governed by the following:

1. The following will be patentable:

- (a) Plant varieties;
- (b) Inventions related to microorganisms, such as those made by using them, inventions that are applied to microorganisms or inventions that result therefrom. Included in this provision are all types of microorganisms, such as bacteria, fungi, algae, virus, microplasmas, protozoa and, in general, cells that do not reproduce sexually; and
- (c) Biotechnological processes for obtaining pharmaceuticals, medicines in general, foods and beverages for animal and human consumption, fertilizers, pesticides, herbicides, fungicides or products with a biological activity.

2. The following will not be patentable:

- (a) Essentially biological processes for obtaining or reproducing plants, animals or their varieties, including genetic processes or processes related to material which is capable of self-replication, by itself or by any other indirect manner, when they consist simply of selecting or isolating available biological material or leaving it to act under natural conditions;
- (b) Plant species and animal species and breeds;
- (c) Biological material, as found in nature;
- (d) Genetic material; and
- (e) Inventions relating to the living matter that composes the human body.

**Article 21:** The right conferred by the patent will be determined by the allowed claims. The specification and the drawings or blueprints or, in such case, the deposit of the biological material referred to in Article 47, section 1, of this Law, will be used to interpret them.

**Article 22:** The right conferred by a patent shall have no effects whatsoever against:

1. A third party who, in the private or academic field, performs, for non-commercial purposes, purely ex-

perimental, scientific or technological research, testing or teaching activities, and for this purpose produces or uses a product or process equal to the patented one;

2. Anyone who trades with, acquires or uses the patented product or the product obtained by the patented process, after such product has been legally introduced into trade;

3. Anyone who, prior to the filing date of the patent application or, in such case, the recognized priority date, uses the patented process, manufactures the patented product, or takes the preparatory measures required to carry out such use or manufacture;

4. The use of the particular invention in transportation vehicles, of other countries, forming part thereof, when such vehicles are in transit in the national territory;

5. A third party who, in the case of patents related to living matter, uses the patented product as an initial source of variation or propagation to obtain other products, unless said use is repetitive; and

6. A third party who, in the case of patents related to products that consist of living matter, uses, puts into circulation or trades with the patented products, for purposes other than multiplication or propagation, after they have been legally introduced into trade by the holder of the patent or by the person having obtained a license.

The carrying out of an activity contemplated in this Article will not constitute an administrative infringement or a criminal offense, in the terms of this Law.

**Article 23:** The patent shall have an unextendable term of 20 years, starting from the filing date of the application, and it will be subject to the payment of the government fees set forth in the corresponding law.

In the case of pharminochemical or pharmaceutical products or processes for obtaining these products, the term of the patent may be extended for three additional years, provided that the patentee grants a license to work the same to a corporate entity with a majority of Mexican capital.

The license referred to in the preceding paragraph shall be subject to the following:

1. It shall be granted by means of an agreement, within six months from the grant of the patent or the date on which the competent authorities grant the sanitary registration allowing the distribution of the product in Mexico, whichever is later;

2. It shall be recorded with the Ministry;

3. Its duration shall be from the date of its grant up to the date of expiration of the patent, including its extension;

4. It shall be irrevocable and non-exclusive and it may be assigned to a third party only if the holder of the patent grants his authorization;

5. It may be canceled if the grantee does not work the patent in the terms agreed upon.

**Article 24:** After a patent has been granted, the holder thereof may bring an action for damages against third parties who may have worked the patented process or product, without his consent, prior to such grant, when such working took place after the effective publication date of the application in the *Gazette*.

**Article 25:** The working of the patented invention consists of the utilization of the patented process, the manufacture and distribution of or the manufacture and trade with the patented product, effected in Mexico by the holder of the patent. The exploitation carried out by the person referred to in Article 69 of this Law shall be deemed as made by the holder of the patent.

**Article 26:** A statement in the sense that there is a pending or granted patent can only be made in the case of products or processes falling in whichever of these circumstances.

## CHAPTER III:

### *Utility Models*

**Article 27:** Utility models that are novel and that can be industrially applied will qualify for registration.

**Article 28:** Considered as utility models are the goods, utensils, apparatus or tools which, as a result of a modification of their arrangement, configuration, structure or form, perform a different function with respect to the parts that compose them or present advantages as to their utility.

**Article 29:** The registration of utility models shall have an unextendable term of ten years, starting from the filing date of the application, and it will be subject to the payment of the government fees set forth in the corresponding law.

The working of the utility model and the limitation of the rights which its registration confers upon its holder shall be governed, where relevant, by the provisions of Articles 22 and 25 of this Law.

**Article 30:** The registration procedures for a utility model shall be governed, where relevant, by the rules contained in Chapter V of this Title, except for Articles 45 and 51 through 55.

## CHAPTER IV:

### *Industrial Designs*

**Article 31:** Eligible for registration are industrial designs that are original and that can be industrially applied. Un-

derstood as original is a design that is not equal or confusingly similar to another that is publicly known in the country.

**Article 32:** Industrial designs include:

1. Industrial drawings, which are all combinations of figures, lines or colours that are incorporated in an industrial product for ornamental purposes and that give it a special aspect of its own; and

2. Industrial models, constituted by every tridimensional form that serves as a sample or pattern for the manufacture of an industrial product, which give it a special appearance, insofar as it does not imply technical effects.

**Article 33:** The following are to be attached to applications for registration of industrial designs:

1. A graphic or photographic reproduction of the corresponding design; and

2. An indication of the type of product for which the design will be used.

**Article 34:** The description contained in the application shall refer briefly to the graphic or photographic reproduction of the design, in which it shall be clearly indicated the perspective from which it is illustrated.

**Article 35:** The application shall include as a claim, the title of the industrial design followed by the words "as referred to and illustrated above".

**Article 36:** The registration of industrial designs will have an unextendable term of fifteen years, starting from the filing date of the application, and it will be subject to the payment of the government fees set forth in the corresponding law.

The working of industrial designs and the limitation of the rights which its registration confers upon its holder shall be governed, where relevant, by the provisions of Articles 22 and 25 of this Law.

**Article 37:** The registration procedures for industrial designs shall be governed, where relevant, by the rules contained in Chapter V of this Title, except for Article 45 and 51 through 55.

## CHAPTER V:

### *Procedure for Obtaining a Patent*

**Article 38:** To obtain a patent, a written application is to be filed with the Ministry, indicating the name and address of the inventor and of the applicant, the nationality of the applicant, the title of the invention, and all other information called for under this Law and its Regulations, and evidence of the payment of the respective government fees shall be provided.

The pending patent application and its attachments will be confidential until the time of its publication.

**Article 39:** A patent may be applied for directly by the inventor or by his assignee or through the representatives thereof.

**Article 40:** When a patent is applied for after it has been applied for in other countries, the first filing date in another country may be recognized as the priority date, provided it is filed in Mexico within the terms established in International Treaties or otherwise within twelve months following the patent application in the country of origin.

**Article 41:** For recognition of the priority referred to in the preceding article, the following requirements must be fulfilled:

1. When applying for the patent, the applicant shall claim the priority and indicate the country of origin and the filing date of the application in that country;

2. That the application filed in Mexico does not aim at the grant of additional rights than those derived from the claims filed abroad. If there shall be the intent to obtain additional rights than those derived from the claims contained in the application filed abroad, the priority shall only be partial and refer to this application. With respect to the additional claims, a new priority claim may be applied for.

3. The requirements established in International Treaties, in this Law and its Regulations must be fulfilled within three months following the filing of the application; and

4. There must be reciprocity in the country of origin.

**Article 42:** When several inventors, independently of each other, have made the same invention, the right to the patent will pertain to the one who has the application with the earliest filing date or recognized priority date in such case, provided said application is not rejected or abandoned.

**Article 43:** The patent application shall refer to one single invention, or to one group of inventions so related to each other that they form one single inventive concept.

**Article 44:** If the application does not comply with the provisions of the preceding article, the Ministry will so communicate to the applicant in writing, so that he may, within a two-month term, divide it into various applications preserving as the date of each one the date of the initial application and, in such case, the recognized priority date. If at the end of said term the applicant has not divided up his application, the application will be deemed to be abandoned.

**Article 45:** One single patent application may contain:

1. The claims to a particular product and claims relating to processes especially conceived for its manufacture or utilization;

2. The claims to a particular process and claims relating to an apparatus, or to a medium especially conceived for its application; and

3. The claims to a particular product and claims to a process especially conceived for its manufacture and of an apparatus or medium especially conceived for its application.

**Article 46:** The process and the machinery or apparatus for obtaining a utility model or an industrial design will be the subject of patent applications separate from the application for registration of the latter.

**Article 47:** The following shall accompany a patent application:

1. A description of the invention which shall be sufficiently clear and complete to allow it to be fully understood and, in such case, to guide its implementation by someone having medium skills and knowledge in that field. It shall also include the best method known by the applicant to put the invention into practice, when this is not clear from the description of the invention.

In the case of biological material in which the description of the invention cannot be set forth in detail therein, the application shall be supplemented by a receipt showing the deposit of said material in an institution recognized by the Ministry, pursuant to the provisions of the Regulations of this Law;

2. The technical blueprints or drawings required to understand the description;

3. One or more claims, which shall be clear and concise and may not be broader than the contents of the description; and

4. An abstract of the invention, which will be used solely for publication and as an element of technical information.

**Article 48:** When a patent application has to be divided up, the applicant shall file the description, the claims, the blueprints or drawings necessary for each application, except for the documentation related to the claimed priority and, in such case, a translation thereof, which are already on record in the parent application. The blueprints or drawings and description filed shall not be altered so to modify the invention recited in the original application.

**Article 49:** The applicant may convert a patent application into one for utility model or an industrial design, and vice versa, when it is apparent from the content of the application that it does not relate to what is applied for.

The applicant can only carry out the conversion of the application within three months from the filing date or within three months from the date the Ministry requests the conversion, provided the application has not become abandoned. In case the applicant does not convert the application within the term granted by the Ministry, it shall be deemed to be abandoned.

**Article 50:** Once the application is filed, the Ministry will formally examine the documentation, and may request the applicant to specify or clarify whatever it deems necessary, or to remedy any omissions. If the applicant fails to satisfy this requirement within a two-month term, the application shall be deemed to be abandoned. The documents filed shall under no circumstances contain additional claims or claims broader than those filed with the original application; in the latter case, a new application will be necessary.

**Article 51:** Regarding patent applications related to nuclear energy, the opinion of the National Commission on Nuclear Safety and Safeguards will be required prior to their publication. When, in the opinion of said commission, the invention endangers nuclear safety, in the terms of the Regulatory Law of Article 27 of the Constitution on Nuclear Matters, the Ministry, on the basis of said opinion, will refuse to grant the patent applied for.

No reconsideration on resolutions issued based on the opinion of the cited commission will be possible.

**Article 52:** The publication of the pending patent application will be carried out as soon as possible after the expiration of a term of 18 months following the filing date, or in such case, the recognized priority date. At the request of applicant, the application will be published prior to the expiration of said term.

**Article 53:** After publication of the patent application, the Ministry will make an examination on the merits of the invention, to determine if the requirements established in Article 15 of this Law are satisfied.

To carry out examinations on the merits, the Ministry will request the technical support of the Institute and, if necessary, it may request technical support from specialized national agencies and institutions.

**Article 54:** The Ministry may accept or require the examination on the merits carried out by foreign examining offices, in the terms of the Regulations of this Law.

**Article 55:** If during the examination on the merits, it is found that there is a possible full or partial infringement of the rights acquired by third parties, that the invention lacks novelty, or that additional or supplementary information or documentation is needed, the applicant will be notified in writing to make the respective clarifications or submit the required information or documentation, within a term of two months. If the applicant fails to comply with the requirement within said term, the application will be deemed to be abandoned.

**Article 56:** If the Ministry rejects the patent, it will so notify the applicant in writing, mentioning the reasons and the legal grounds for its resolution.

**Article 57:** When the grant of a patent is in order, the applicant will be notified in writing so that he may satisfy the requirements for its publication, and pay the government fees for the issuance of the Letters Patent within a term of two months. If, at the expiration of said term, the applicant has

failed to comply with the provisions of this Article, his application will be deemed to be abandoned.

**Article 58:** The Ministry, due to justified reasons, and upon request made prior to the expiration of the terms established in Articles 44 and 55 of this Law, may extend them only one time, for a like period.

**Article 59:** The Ministry will issue Letters Patent for each patent, which will serve the holder as evidence and official recognition of the patent. The Letters Patent will include one copy of the specification, the claims and the drawings, if any, and the following will also be recorded therein:

1. Number and classification of the patent;
2. Name and address of the person or person to whom it is issued;
3. Name of the inventor or inventors;

4. Filing date of the application and, in such case the recognized priority date and date of issue;

5. Title of the invention; and
6. Its term.

**Article 60:** Once the patent is granted, the Ministry will publish it in the Gazette, which will contain the information referred to in Articles 47, section 4, and 59 of this Law.

**Article 61:** Changes will be permitted in the text or drawings of a Letters Patent only in the following cases:

- i. To correct obvious errors or formal errors; and
2. To limit the scope of the claims.

(To be continued in the next issue of the TIES Newsletter)

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## RECENT PUBLICATIONS

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PPD.227(SPI/C.) Report of meeting on Industrial Cooperation on Production and Application of Advanced Machine Tools among Selected Developing Countries. New Delhi, India, 9-14 March 1992.

PPD.228(SPI/C.) Report of meeting of the Constitutive Assembly for the Establishment of the African Iron and Steel Association. Algiers, Algeria, 16-18 December 1991.

PPD.R.56 Report of workshop on Consumer Protection and Product Standardization in Developing Countries. San Juan, Puerto Rico, 1-5 June 1992.

IPCT.156(SPI/C.) Privatization: Theory and Policy (in French only)

IPCT.165(SPI/C.) Technology Trends Series No. 16: Trends in Informatics-related Service Industries in Selected Developed and Developing Countries.

### **L'ES NOUVELLES**

As in previous issues of the TIES Newsletter, we take pleasure in reproducing the table of contents of the most recent issue of L'ES Nouvelles, the journal of the Licensing Executives Society:

L'ES Nouvelles, Volume XXVII, No. 3  
September 1992

**Mixed Licenses in Selected Jurisdictions**, by I.E.S. International Patent and Technology Committee

**Determining Reasonable Royalty**, by Wm. Marshall Lee

**How Licensing Helps Small Bio-Tech Firm**, by Clayton I. Duncan

**ADR Gives Parties Control of Process**, by M. Scott Donahy

**Rights, Duties After License Term Expires**, by Kevin E. Mann

**Compulsory Licenses in Canada**, by James A. Devenney, O.C. and Gunars Gaikis

**Canadian View of Licensing Agreements**, by Vello E. Mijal

**Egyptian 'Open-Door' Experience**, by Dr. Wahby G. Wahba

**How Property Protection Fuels Economics**, by Richard T. Rapp and Richard P. Rozek

**Environment Offers Licensing Opportunity**, by Mical McCann

**Recent Developments in the Law of Licensing**, by Brian G. Brunsvold