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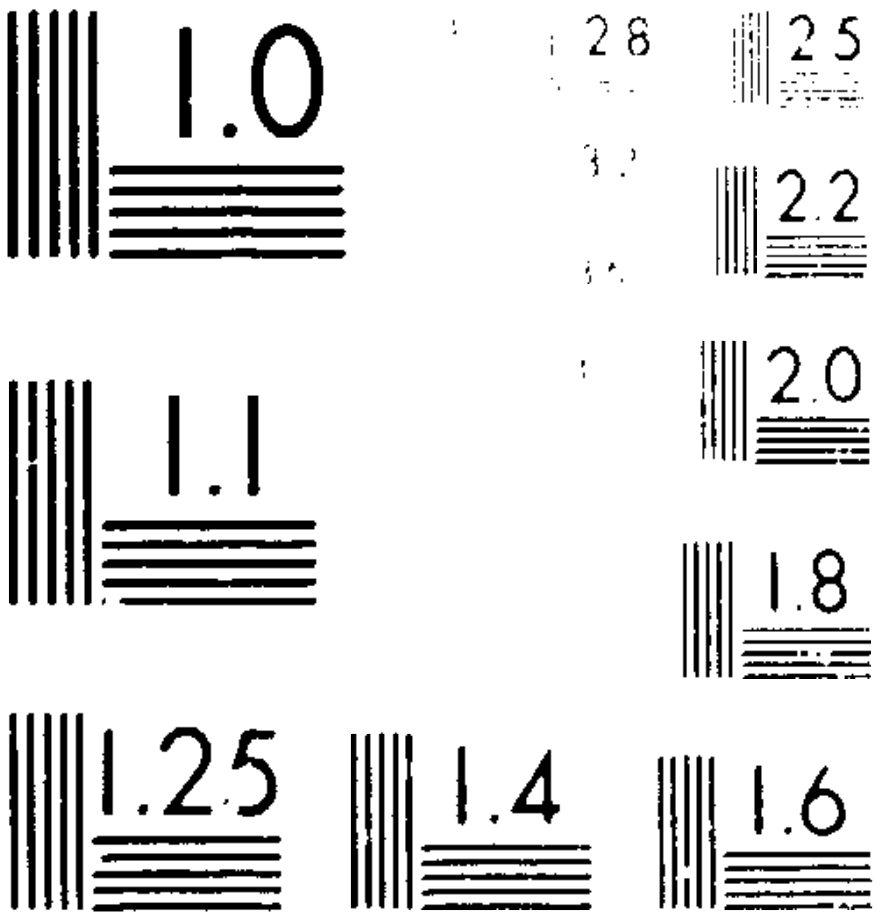
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PHILIPPINE EXPERIENCE IN TECHNOLOGY TRANSFER REGULATION*

by

Lilia R. Bautista**

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** Governor, Board of Investments, currently Vice-Chairman and Acting Executive Director of the Technology Transfer Board of the Philippines.

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Technology transfer regulation in the Philippines is not the sole responsibility of one agency in government. In the formulation of the Investment Priorities Plan (IPP) of the Board of Investments (BOI) the identification of the industries to be encouraged by the government with incentives, which are primarily fiscal in nature, to a great extent determines what technology is needed in the country. Yearly, the BOI comes up with a listing of projects classified as either pioneer or non-pioneer. Pioneer projects are entitled to a greater number of incentives because, while they are considered highly desirable to develop, they are admittedly high-risk and capital-intensive projects. Foreign participation is not restricted in pioneer projects and may reach as high as 100 per cent, in line with a government policy which evolved in recognition of the fact that Philippine capital and technology are often inadequate to effect the establishment of pioneer projects.

Pioneer projects are generally taken to mean projects for the manufacture of products not previously produced on a commercial scale or projects for the initiation of a new method or process in manufacturing never before tried in the country. On the other hand, non-pioneer projects are those which have proved to be within the technological and financial capacity of Filipinos. They may be established with incentives only by Filipino enterprises.

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*Governor, Board of Investments, concurrently Vice-Chairman and Acting Executive Director of the Technology Transfer Board of the Philippines.

One of the criteria for listing for a project as a pioneer industry deserving of incentives is the use of new technology to produce a new product in the Philippines or the adoption of a process which is new and untried in the Philippines, provided that the final product will involve substantial use and processing of domestic raw materials, whenever available. The technology aspect represents a major part of the evaluation procedure in determining the eligibility of projects for incentives available through the Board of Investments. Thus the Board has rejected projects which use an unproven technology, or has conditioned approval of projects on the submission of a foreign technology tie-up where local technology is not available. Projects registered with the Board can freely bring in the needed foreign technicians. The Board incentives also relate to importation of capital equipment, which in most cases is accompanied by the technology for the project. Foreign equity in lieu of foreign exchange remittances may partake of knowhow, in which case the Board and the Central Bank give the necessary value to such knowhow.

In cases of technical assistance to government projects which are foreign assisted, the National Economic and Development Authority (NEDA) has the primary role of looking into these projects in coordination with the specific agency in government responsible for the implementation of such projects.

The National Science Development Board (NSDB) and its attached agencies have research institutions to develop indigenuous technology and has the power to assist private entities in the research for adaptation and/or improvement of imported technology.

The Technology Resource Center (TRC) has the potential to provide alternative sources of technology because of its computerization of available patents and power to commercialize results from government researches.

In all importation of technology, when patent is involved, the

supplier of the technology would want some protection from infringement which the Patents Office can provide if the technology is patentable or registrable with it.

In all payments in foreign exchange for technology imports, the Central Bank as the central monetary authority in the country, control remittances. The extent of controls by the Central Bank varies in the inverse proportion to the available foreign exchange of the country. Thus, in 1970 when the country had a low foreign exchange reserve, royalty remittances were subjected to controls by the Central Bank, and up to this date, the balance of payment situation of the country is taken into account in the evaluation of the allowable royalty rate for each licensing agreement.

All the aforesaid government offices are represented in the Technology Transfer Board (TTB), an inter-agency body attached to the Ministry of Industry, which requires registration of all technology transfer arrangements.

The TTB was created by Presidential Decree 1520 which took effect on June 11, 1978. It repealed Sec. 33-A B and C of Republic Act 165, otherwise known as the Philippine Patent Law, as amended by Presidential Decree 1263, relative to voluntary licensing agreements. The rules of the TTB, after publication, took effect on October 10, 1978.

Prior to the TTB creation, technology transfer per se was not regulated at all, until the BOI for preferred industry, and the ad-hoc committee of the BOI and the Central Bank decided to screen licensing agreements under the general authority of the Central Bank to control foreign exchange remittance and that of the BOI to grant incentives to industry and to register foreign equity investments. In their screening, the BOI formulated guidelines which are substantially the present rules of the TTB.

The Technology Transfer Board (TTB) requires the registration of all technology transfer arrangements after due evaluation, in the light of the technology transfer policies formulated by it, subject to such sanctions as the Board and its member agencies may impose. Technology transfer arrangement has been defined by the Board as follows:

(i) the transfer, assignment or licensing of the use or exploitation of patents (whether registered with the Philippines Patent Office or not) for inventions, improvements, industrial models and drawings;

(ii) the licensing of the use or exploitation of trademarks;

(iii) the furnishing of technical knowhow and information by plans, diagrams, models, instruction sheets, instructions, formulae, specifications and training of personnel;

(iv) technical consultancy, services and assistance in whatever form it may be furnished.

In evaluating the agreement, the Board is guided by policy guidelines which include the following:

(a) Appropriateness and need for the technology/ industrial property right;

(b) Reasonableness of the technology payment in relation to the value of the technology to the technology recipient and the national economy as well. For this purpose, the rate of payment for contracts involving manufacturing or processing technology shall not go beyond the rate that will be established by the Board for the specific technology or industrial right to be transferred;

(c) Restrictive clauses shall not be allowed in any agreement; specifically, the following clauses shall be prohibited:

(i) Those which restrict the use of technology supplied after the expiry of the agreement (without prejudice to the application of the Philippines Patent Law);

(ii) Those which require payments for patents and other industrial property rights after their expiration, termination or invalidation;

(iii) Those which restrict the technology recipient from access to continued improvements in techniques and processes related to the technology involved during the period of the agreement, even if the technology recipient is willing to make additional payments thereon;

(iv) Those which provide that patentable improvements made by the technology recipient shall be patented in the name of the technology supplier; required to be exclusively assigned to the technology supplier; or required to be communicated to the technology supplier for its use, free of charge;

(v) Those which require the technology recipient not to contest the validity of any of the patents of the technology supplier;

(vi) Those which restrict a non-exclusive technology recipient from obtaining patented or unpatented technology from other technology suppliers with regard to the sale or manufacture of competing products;

(vii) Those which require the technology recipient to purchase his raw materials, components and equipment from the technology supplier or a person designated by him (except where it could be proven that the selling price is based on international

market prices or the same price that the supplier charges third parties and there are no cheaper sources of supply);

(viii) Those which restrict directly or indirectly the export of the products manufactured by the technology recipient under the agreement;

(ix) Those which limit the scope, volume of production or the sale or resale prices of the products manufactured by the technology recipient; and

(x) Those which limit the research activities of the technology recipient to improve the technology.

(d) The agreement shall provide that the law of the Philippines shall govern the interpretation of the contract.

(e) The agreement shall provide for a fixed term not exceeding five years and shall not contain an automatic renewal clause in order to ensure adequate adaptation and absorption of technology.

STUDY OF LICENSING AND TECHNICAL ASSISTANCE AGREEMENTS

Since the Technology Transfer Board accepted applications for registration of technology transfer arrangements on October 10, 1978 up to June 30, 1981, the TTB has acted on 324 contracts. Based on the statistics compiled by the TTB staff from the aforesaid contracts, hereunder are the findings which updates a previous study on the subject up to December 31, 1979**:

** BAUTISTA, L., Transfer of Technology Regulations in the Philippines, UNCTAD/TT/32 as of December 31, 1979.

A. Nationality-wise distribution vis-a-vis type of company

There appears to be a declining trend for licensing agreements between parent companies and subsidiaries indicating that there are more joint ventures with minority foreign capital (foreign equity is less than 50 per cent) and much more independent technology transfer arrangements. Table 1 shows that, for the period covered, technology transfer agreements with minority foreign capital participation companies have a percentage share of 28 per cent. Pure technical collaboration agreements (no foreign equity in licensee firm) comprised almost 50 per cent of total agreements surveyed, while 22 per cent were agreements made by subsidiaries/majority foreign capital participation group. As of 1979, licensing agreements with joint ventures were more compared to pure collaboration agreements while that of subsidiaries remained at 23 per cent. A number of these companies used to be mere distributors of finished products of foreign companies. With the programme of the Government to encourage greater local processing and utilization of local raw materials, more and more Philippine-owned firms have ventured into local manufacture, usually starting from assembly and proceeding to gradual local production of parts and components.

Among subsidiaries/majority foreign capital participation companies, the practice of formalizing license grants, knowhow transfer and technical assistance with the parent company is likewise predominant.

The United States still rank as number one among the foreign collaborators. While it has maintained its position, it may be noted that its share has decreased appreciably from 67 per cent (in 1970) to 50 per cent (in the period 1974-1978) to 42 per cent under the current study. Of the total number of agreements with American firms, 33 per cent represented contracts with parent companies/majority foreign participation companies, 20 per cent were agreements with minority foreign companies and 47 per cent is accounted for by purely technical collaboration agreements.

Japan, maintaining its rank as second among the foreign collaborators, showed a marked increase in participation from 7 per cent in a 1970 study*** to 22 per cent of total agreements surveyed. This clearly reflects the increasing participation of Japanese businessmen in Philippine industry. Of these agreements, 37 per cent were agreements with minority foreign companies, 62 per cent were pure technical collaboration agreements and only 1 out of 69 involved an agreement with a majority foreign capital company.

The third foreign collaborator is Switzerland to the extent of 7 per cent. Other significant foreign collaborators are the United Kingdom, the Federal Republic of Germany, France and Australia.

Agreements with American technology suppliers concentrate on textile and wearing apparel, electrical supplies, metals and metal products, pharmaceuticals and food industries (table 2).

Japan had 22 per cent of the agreements. They referred mainly to electrical supplies; transport equipment; motors, engines and machinery.

In the case of Switzerland and the Federal Republic of Germany, most agreements were in the manufacture of pharmaceuticals. The agreements with British technology suppliers, on the other hand, were mostly in textiles, and metals and metal products.

B. Industry-wise classification of agreements

The total agreements surveyed by industry, broken down into technical areas, were as follows: 15 per cent for electrical supplies appliances and accessories; 12 per cent for metals and metal

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*** Restrictions on exports in foreign collaboration agreements in the Republic of the Philippines, (TD/B/388), United Nations publication, Sales No. E.72.II.D.8.

products; 10 per cent for textile and wearing apparel and accessories; 9 per cent for pharmaceuticals; 7 per cent for food; 4 per cent for cars, car parts and transport equipment; 8 per cent for motors, engines, machinery, distribution transformers (see table 3).

Technical collaboration agreements in the field of electrical supplies, appliances and accessories showed a significant increase from 7 per cent to 14 per cent. As in the 1970 study, the majority of agreements were concluded in pharmaceuticals, food, metals and metal products, with the following additional industries having increased shares: motors, engines, machinery and cars, car parts and other transport equipment. New industries that came in with technical collaboration from the 1970 study list are: textile and wearing apparel; paper and paper products; telecommunications network; plastic and plastic products; non-metallic products; footwear and parts thereof; restaurant operation; pyrotechnic products; vehicle renting business; glass and glass products; manpower office; dynamic compaction; data processing and systems analysis. In the period 1974-1978, foreign technical collaboration in the following industries was noted: industrial chemicals, non-metallic products, glass and glass products, rubber products, plastic and plastic products, leather and leather products, wood and wood products, pulp and paper, transportation services, shipbuilding, oils and fats, air transport and other services. This increase in industries involving foreign technical collaboration emphasizes the fact that in the pursuit of the goal of industrialization, transfer of technology in various fields of manufacturing activities is necessary.

C. Types of assets transferred

Table 4 shows the type of assets transferred under the agreements surveyed. Most of the agreements pertain to a combination of knowhow and trademark, which had a 32.4 per cent share; 24 per cent pertains to a combination of patent, trademark and knowhow; and 30 per cent involves pure knowhow agreements. This bears out the

projection of the 1970 study for a trend towards knowhow agreements and a decrease in the licensing of foreign trademarks and tradenames, which was predominant during the period 1955-1970.

Table 5 shows the classification of agreements by type of assets transferred against country of supplier. In this table, percentage-wise, Japan has more pure knowhow arrangements than the United States which normally has a combination of patent, knowhow and trademark.

D. Duration

With the existing Technology Transfer Board guidelines requiring a maximum period of five years, without automatic renewal, most of the contracts submitted stipulate this length of duration. Only in 17 (most of them new contracts) out of 324, were there provisions exceeding the five-year period. In five cases involving new technology, exemptions to the five-year rule were granted. In one case involving a royalty free license on trademark use, an indefinite duration was allowed. This was actually in connection with a license agreement covering technology given to a subsidiary for a product already well-known in the country. In four other cases, periods of 7 and 8 years were allowed but only on the condition that the first 2 and 3 years respectively will not entail any royalty payments. In effect, the royalty payment period is 5 years only. In one case, the longer period was justified by the longer absorption period for the technology being transferred and in the other, being an entirely new product, allowance was made for a period for market development and penetration. In some of our major projects with longer gestation period, we expect that this may go beyond 5 years.

In four cases of renewal agreements of long standing, on the other hand, reduction from 5 to 3 years was further required, with the objective of encouraging the local technology recipients to develop their own capability.

Of the 324 agreements, 196 or 60 per cent are new agreements as reflected in table 6. Of this, agreements of pure collaboration with independent companies have the highest share at 55 per cent. This is equivalent to 65 per cent of the pure technical collaboration agreements. Pure technical collaboration agreements are generally new agreements.

Agreements of the subsidiaries/majority foreign capital participation group are generally renewals, accounting for 61 per cent, and 22 per cent of total agreements. Agreements with minority foreign capital participation are generally new and comprised about 28 per cent of total agreements.

E. Royalty rates

Table 7 shows the distribution of royalty rates by industry. The table shows that 11 out of 324 contracts had no royalty payments at all. These are in the areas of pharmaceutical manufacture, truck assembly, slide fastener, household chemical manufacture, textile and wearing apparel, and metal products. Presumably in these cases, royalty payments were built in with the import of raw materials and/or intermediate components directly from the technology suppliers. This figure, representing 4 per cent of total agreements surveyed, is a considerable reduction from the 57 per cent figure of the 1970 study. This does not clearly indicate, however, that foreign technology suppliers have ceased or are refraining from this practice. The sample data are heavily one-sided on contracts stipulating payments because foreign exchange remittance through the Central Bank is one of the stronger sanctions of the Technology Transfer Board as a regulatory body.

Table 7 shows that the average royalty range is from 1 per cent to 3 per cent, of which the 2 per cent rate has a 20 per cent share while the 1 per cent rate has 13.5 per cent and the 3 per cent rate has almost 17 per cent of the total agreements. There were also a

number of approvals at 2.51-2.99 per cent rate consisting of 3 per cent of the agreements. The average fee of 1-3 per cent represents a notable reduction from the average royalty range of 5-10 per cent observed in the 1970 study. This is largely attributable to government regulations introduced since 1973, particularly those relating to technology payments.

Except for the pharmaceutical industry, which exhibits a consistent rate of approval at a flat fee of 3 per cent, the other industries reflect a range of rates of approval. The electrical supplies, appliances and accessories industry for example, exhibits royalty rates within the range of 1 per cent to 4 per cent; the metals industry from 1 per cent to 4.5 per cent; motors from 1 per cent to 5 per cent; cars, car parts and transport equipment from 1 per cent to 4.99 per cent. This could be explained by the presence of a similar range of differences in several agreements in one industry such as: target market, i. e., one may be export-oriented and another is geared towards the domestic market; type of agreement in terms of being new or a renewal; the type of assets being transferred; and the duration of the agreement.

The running royalty remains as the usual form of payment for license grants and knowhow transfer, as reflected in table 8. It is present in 67 per cent of the contracts studied. Lump sum payments stipulated as the only form of payment or in addition to the running royalty may be noted in 17 per cent of the agreements surveyed. The fixed fee based on units sold or produced was present in 13 per cent of the agreements. The lump sum form of payment was particularly common in one-shot service contracts and had likewise been noted in two cases involving outright purchase of patent rights. Fixed fees based on units sold or produced were present in agreements involving electrical supplies, appliances and accessories, metals manufacture and cigarette manufacture.

F. Policy on royalty payments

In a number of cases, the Technology Transfer Board has imposed the use of local value-added as royalty base. This is defined as net sales minus the landed cost of imported raw materials and components. The rationale behind the use of local value-added as royalty is that payment should be made only on the basis of the value added by the local manufacture using the imported technology. It was also envisaged that this policy would encourage foreign technology suppliers to give more of their technology, particularly in relation to the manufacture of the intermediate parts and components, which would have effect of increasing their royalty income.

Where it becomes administratively burdensome, translation to net sales is allowed but with a corresponding reduction in the amount of royalty to the rate that is the equivalent using net sales as base.

In a number of cases, firms are required to submit an undertaking on the use of local raw materials whenever available.

In a few cases, royalties were based only on export sales. Basically, in such cases, there is doubt as to the necessity of importing the technology in view of existing capability and the simplicity of the processes involved, but the significant export earnings - such as in the case of 100 per cent export-oriented toy and garment manufacturing ventures - justified the approval. Thus royalties were based only on export sales with an explicit proviso that, in the event that there is a shift to the domestic market, domestic sales shall be royalty-free.

In three cases, royalties were based on domestic sales alone, which is voluntary on the part of the parties. In two of these three agreements, for which rates higher than the standard were given, the parties have committed themselves to a certain export performance.

In some cases, two levels of royalties were approved based on

domestic sales and export sales. Royalties on export sales are usually higher.

Another type of requirement that has been applied is that the royalties be serviced by the net foreign exchange earnings through the export of the licensed products. This means that royalties may be remitted only to the extent that the company has undertaken substantial exports and earned sufficient foreign exchange equal to the amount of accrued royalty obligations.

A recent policy guideline adopted by the Board is the granting of a 2 per cent bonus on net foreign exchange earnings. Net foreign exchange earning is defined as total foreign exchange inflow from export of the licensed product minus total foreign exchange outflow from imports of raw materials and intermediate components that go into the manufacture of the exported licensed products. This has been welcomed by many firms which have, as a result, come up with more concrete export programmes.

G. Royalty remittances

Total foreign exchange remittances for royalty payment and similar fees from the years 1974 to 1980, as reflected in the Central Bank records, are as follows:

Year	$000
1974	13,556
1975	14,578
1976	19,651
1977	26,552
1978	26,875
1979	28,740
1980	36,320

For the same period, the following are the total dollar disbursements (imports and loan repayments, royalties and other invisibles) of the Philippines:

Year	$ billion
1974	4.4
1975	5.2
1976	5.3
1977	5.3
1978	6.8
1979	8.9
1980	9.8

In terms of percentage of total dollar disbursements, the average on a seven-year period dollar outflow resulting from technical collaboration is a mere 0.36 per cent. This represents a very slight increase from the 1970 percentage of 0.25 per cent.

H. Restrictive clauses

Tables 9 and 10 list the types of restrictive clauses that were observed in the agreements surveyed. Of the restrictive provisions, clauses which provide that the interpretation of the agreement or disputes arising between the parties to the contract were to be settled in accordance with the laws of the licensor or other countries, had the highest share, having been observed in 40 per cent of the total agreements with restrictive clauses. These clauses were found to be common in agreements of minority foreign capital participation and in technical collaboration agreements.

Second in number of frequency are the export restrictions, which may be in the nature of a requirement for the licensor's permission prior to export; exports being allowed only to certain countries and/or prohibited in other countries; a total ban on exports; or a requirement that exports be made only through the licensor's agents/

distributors. Export restrictions were found in 25 per cent of the total agreements with restrictive clauses. This represents a substantial decrease from the 65 per cent figure of the 1970 study. This could be indicative of a growing awareness and increasing support for the Government's export promotion programme by private industry. The Philippine Government considers increased export activity as one of its major objectives and in fact encourages export-oriented ventures with certain incentives.

I. TTB policy on restrictive practices

As a rule, the restrictive business clauses enumerated in tables 9 and 10 are not allowed, as embodied in the Rules and Regulations of the Technology Transfer Board and therefore all the above contracts with restrictive clauses had to be renegotiated. In certain meritorious cases, compromises are made and exemptions granted.

For example, the requirement for permission or consent of the licensor prior to export is never allowed, but a wording reflecting prior mutual consultation between the parties is accepted. Prohibition to export to certain countries, particularly where there are existing exclusive licensees of the technology supplier, may only be allowed to the extent that the laws of the country where exportation will be made prohibit such exports. Total ban on exports and restrictions to export through the licensor's agents/distributors are absolutely prohibited as far as the TTB is concerned. The same is true of the tied-in purchase of raw materials. Provisions relating to sourcing of raw materials/equipment are in fact required to be explicit in stating that sourcing from suppliers other than the licensor is allowed provided the quality specifications and standards of the technology supplier are met.

Royalty free grantback of improvements is likewise an absolute prohibition as well as clauses providing that patent or process

improvements made by the licensee shall accrue to the licensor.

The prohibition on the post-termination restriction on use of knowhow, on the other hand, does not cover knowhow with valid patent registrations. Thus, a provision to the effect that the technology recipient shall cease using the patented knowhow acquired under a technology transfer arrangement is acceptable.

PERFORMANCE REPORT OF TTB

From October 10, 1978 to June 30, 1981, the TTB has acted on 324 applications, of which 259 have been registered. Of the 324 applications, denial have been made on 7 instances, mainly due to the absence of any technology or knowhow being transferred, as well as the lack of substantial benefits accruing to the economy. The balance consisting of 58 contracts are still in the process of re-negotiation which on the average takes around 45-60 days to accomplish.

In terms of tangible benefits both to the licensee and the national economy, measures normally used are foreign exchange savings resulting from the reduction of technology payments and foreign exchange earnings from export activity. The TTB policy prohibiting any form of export restriction is expected to broaden the export potential of Philippine-made products and thus generate greater foreign exchange earnings of the country. Employment generating capacity gives another indication of the benefits derived from the use of imported technology.

Using data gathered on 259 contracts registered with the TTB as of June 30, 1981, total foreign exchange savings from the required reduction of technology payments is estimated at $94,065,739. Annual foreign exchange savings per contract (using only those which were required to be reduced numbering 141 out of 259) is estimated at $133,427.00. Total estimated foreign exchange earnings for 5 years from projected exports is $1,188,377,424 or an annual foreign exchange earnings per exporting firm, numbering 104 of $2,285,341. The average

annual level of employment is placed at 10,848. In addition, all restrictive business clauses found in the contracts submitted for registration were required to be deleted.

REGIONAL APPROACH

The setting up of a technology transfer office and the consequent renegotiation of technology transfer arrangements that do not meet the guidelines of the TTB in terms of royalty payment and contract provisions are not the end objectives of technology transfer regulation. It is only the first phase in the orderly sharing of technology benefits among the technology suppliers, the buyers of technology and the recipient host country. No matter how much contracts are "sterilized" of restrictive clauses and sometimes excessive payments, absorption of technology imports and if necessary, adaptation to existing conditions in the recipient country, is necessary to arrive at a meaningful transfer of a particular technology. This first phase, however, is all important in conditioning the minds of the technology suppliers to the new norms of behavior in the field of technology transfer. The Philippine experience on technology transfer regulations has not been without problems. Like the adoption of rules in an otherwise free-for-all game, resistance on the part of the players has to be met with careful explanation and gradual adoption of policies and guidelines. Dialogues with the private sector, particularly the Chambers of Commerce, have been helpful. Local companies have been assisted by the TTB staff in explaining to their licensors the rationale of the TTB policies. In most cases, conditions felt unreasonable both from the view of the government and from the suppliers of the technology, after a thorough discussion, and sometimes with minor clarification, became acceptable to all the parties. In all those tripartite negotiations, it is important that there be some yardstick by which to judge the fairness of the terms of the transfer of technology, hence the need for clearcut technology transfer regulation.

It is always helpful that these norms be of universal acceptance or at least be uniform within the region. To arrive at some uniformity, exchange of information and experience on the subject is important. To get the best leverage, harmonization of the rules of technology transfer would be helpful, even if initially it is limited within the region.

An important element in the institutional mechanism for a meaningful technology transfer is the infrastructure to absorb the imported technology.

Lastly, the sincerity of the parties to really effect the transfer of technology transcends all contractual obligations.

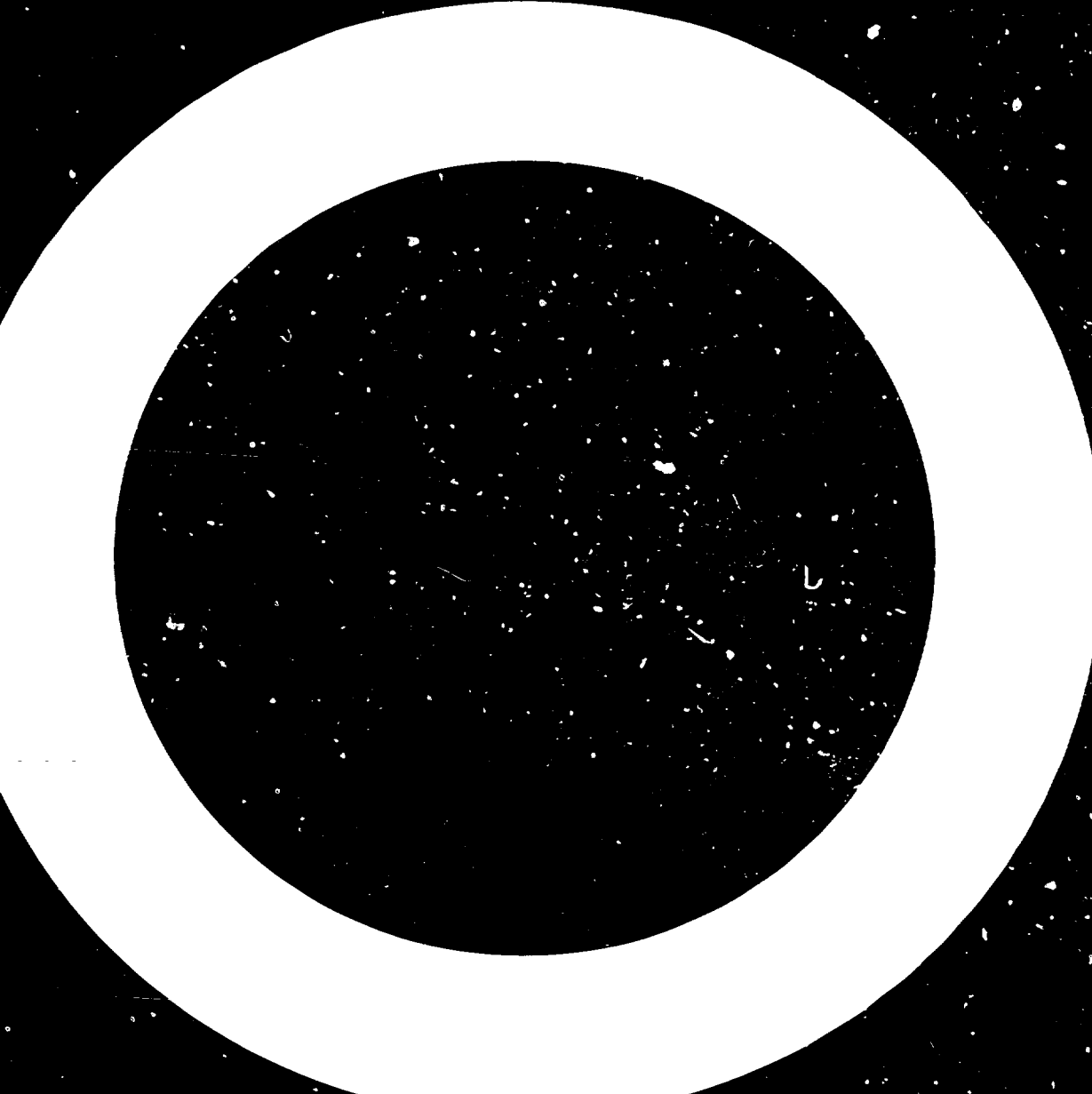

Table 1

NATIONALITY-WISE CLASSIFICATION OF AGREEMENTS BY TYPE OF COMPANY: (OCT 1978 - JUN 1981)

	NUMBER OF AGREEMENTS			
	Subsidiaries/ Majority Foreign Capital Participation Companies	Minority Foreign Capital Participation Companies	Purely Technical Collaboration Agreements	Total
United States	44	28	63	135
Japan	1	26	44	71
United Kingdom	3	4	8	15
Federal Republic of Germany	5	3	7	15
Switzerland	10	4	9	23
France	1	4	6	11
Italy	0	2	3	5
Australia	2	3	3	8
Denmark	1	1	0	2
Sweden	0	4	2	6
Korea	0	2	2	4
Bermuda	0	1	0	1
India	0	0	1	1
Belgium	0	0	1	1
Taiwan	0	1	1	2
New Zealand	0	1	1	2
Panama	1	1	0	2
Netherlands	2	0	1	3
Luxemburg	0	1	0	1
Hong Kong	2	0	5	7
Norway	0	0	1	1
Malaysia	0	2	0	2
Singapore	0	1	0	1
Canada	0	2	0	2
Mexico	0	0	2	2
China	0	0	1	1
TOTAL	72	91	161	324

Table 2

(OCTOBER 1978 - JUNE 1981)

NATIONALITY-WISE CLASSIFICATION OF LICENSOR BY PRODUCTS

	Agriculture	Foods	Beverages	Textile, wearing apparel & related parts	Electrical supplies, appliances and accessories	Paints, paint & printing materials	Pharmaceuticals	Metals & metal products, construction equipments & materials	Petroleum products	Cosmetics, toiletries, soaps & detergents	Motors, engines & machinery	Cigarette & Tobacco products	Office supplies & equipment	Car, car parts & other transport equipment	Rubber & rubber products	Paper & paper products	Telecommunications network	Mercury pollution technology	Plastic & plastic products	Basic chemicals	Industrial chemicals	Non-metallic mineral products	Instrument Operation	Fastener & related products	Printing ink products	Vehicle making business	Glass & glass products	Manpower Office	Data processing	Dynamic Compaction	Wood and wood products	Metal Ore mining	Water-based explosives	Inorganic chemical products	Photographic & optical goods	Iron & Steel	Miscellaneous products	TOTAL
United States	1	12	2	22	11	1	13	16	6	7	5	3	1	4	3	6	2		6	2	4	8	8			3	2	1	1					1		1	142
Japan		3	1	1	28	1		8	1		15		2	9	1			1			2										1						75
United Kingdom		1		4	1	1	1	1	1	1					1		1					1							1								15
Fed. Rep. of Germany		1		2			6	6		1							1			1	1									1	1						16
Switzerland		2			2		7	3							2	1				2	1	1	1		1					1							24
France			1	2			1	1		2	1								1			1												1			11
Italy					2		2				1										1																6
Australia						1		4			1										1	1																8
Denmark				1																				1														2
Taiwan	1	1																																				2
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Bermuda		1	1																																			2
Hongkong		3		1	1			1			1		1																									8
Belgium								1																														1
Luxemburg																						1																1
Norway																																				1		2
Malaysia	2																																					1
Singapore																1																						2
Canada	1										1								1																			2
Mexico							1				1																											1
China											1																											1
TOTAL	5	25	5	33	49	4	30	42	7	11	27	3	4	13	7	9	4	1	8	5	10	8	6	1	2	3	3	1	1	1	1	2	1	1	1	1	336

Table 3
(OCTOBER 1978 - JUNE 30, 1981)
INDUSTRY-WISE CLASSIFICATION OF AGREEMENTS

	Subsidiary, Foreign-Owned And/Or Controlled	Minority Foreign Capital Participation	Purely Technical Collaboration	Total
I) Agriculture	1	3	1	5
II) A. Food	5	8	12	25
B. Beverages	-	1	4	5
C. Textile and Wearing Apparel and Related Accessories	4	6	23	33
D. Electrical Supplies, Appliances and Accessories, Etc.	7	16	26	49
E. Paints, Paint Material and Printing Materials	-	2	2	4
F. Pharmaceutical	23	-	7	30
G. Metals, Metal Products, Construction Equipment and Materials	7	16	19	42
H. Petroleum Products	1	2	4	7
I. Cosmetics, Toiletries, Soaps and Deodorants	4	1	6	11
J. Motors, Engines, Machinery Distribution Transformers	1	9	17	27
K. Cigarette and Tobacco Products	-	-	3	3
L. Office Supplies and Equipment	1	2	1	4
M. Cars, Car Parts and Other Transport Equipment	1	4	8	13
N. Rubber and Rubber Products	2	3	2	7
O. Paper and Paper Products	6	1	2	9
P. Telecommunications Network	1	1	2	4
Q. Mercury Pollution Technology	-	1	-	1
R. Plastic and Plastic Products	3	3	2	8

Table 3
(October 1978 - June 30, 1981)
Industry-Wise Classification of Agreements
Page -2-

	Subsidiary, Foreign-Owned And/Or Controlled	Minority Foreign Capital Participation	Purely Technical Collaboration	Total
S. Household Chemicals	3	2	-	5
T. Industrial Chemicals	3	2	5	10
U. Non-Metallic Mineral Products	-	5	3	8
V. Restaurant Operation	-	-	6	6
W. Footwear and Parts thereof	-	1	-	1
X. Pyrotechnic Products	-	1	1	2
Y. Vehicle Renting Business	-	-	3	3
Z. Glass and Glass Products	1	1	1	3
AA. Manpower Office	-	-	1	1
BB. Data Processing and Systems	-	1	-	1
CC. Dynamic Compaction	-	1	-	1
DD. Wood and Wood Products	-	-	1	1
EE. Metal Ore Mining	-	-	2	2
FF. Water Based Explosives	-	1	-	1
GG. Inorganic Chemical Products	1	-	-	1
HH. Photographic and Optical Goods	1	-	1	2
II. Iron and Steel	-	-	2	2
JJ. Miscellaneous Products	-	-	1	1
T O T A L	76	94	168	338

*Total figure greater than total number of agreements because of some agreements having more than one product category as listed above.

Table 4
(OCTOBER 1978 - JUNE 1981)
CLASSIFICATION OF AGREEMENTS
BY TYPE OF ASSETS TRANSFERRED

Type of Assets	NUMBER OF AGREEMENTS			
	Subsidiaries/ Majority Foreign Capital Participation Companies	Minority Foreign Capital Participation Companies	Purely Technical Collaboration Agreements	Total
Patents, Trademarks, Knowhow	31	23	23	77
Patents, Trademarks	0	1	0	1
Patents, Knowhow	3	5	18	26
Trademarks, Knowhow	21	30	54	105
Patents	0	0	2	2
Trademarks	3	1	11	15
Knowhow	14	31	53	98
TOTAL	72	91	161	324

Table 5
(OCTOBER 1978 - JUNE 1981)
CLASSIFICATION OF AGREEMENTS BY TYPE OF ASSETS
TRANSFERRED AGAINST COUNTRY OF ORIGIN

Type of Assets	NUMBER OF AGREEMENTS							
	United States	Japan	Federal Republic Of Germany	Switzer-land	France	United Kingdom	Others	Total
Patent, Trademark, Knowhow	36	11	3	11	2	3	6	77
Patents, Trademark	1	0	0	0	0	0	0	1
Patents, Knowhow	8	10	1	2	0	0	5	26
Trademark, Knowhow	54	20	6	4	7	3	11	105
Patent	0	0	1	0	0	0	1	2
Trademark	10	3	1	0	0	0	1	15
Knowhow	26	22	3	6	2	9	30	98
T O T A L	135 VVVVV	71 VVVV	15 VVVV	23 VVVV	11 VVVV	15 VVVV	54 VVVV	324 VVVVV

TABLE 6
(Oct.1978 - June, 1981)

Type of Agreements Classified as to New/Renewal

	NEW	RENEWAL	TOTAL
I. Subsidiary/majority foreign capital participation co.	28	44	72
II. Minority foreign capital participation company	60	31	91
III. Pure technical collaboration	108	53	161
TOTAL	196	128	324

TABLE 7

INDUSTRY-WISE DISTRIBUTION BY ROYALTY RATES

	Agriculture	Foods	Beverages	Textile, wearing apparel & related parts	Electrical supplies, appliances and accessories	Paints, paint & printing materials	Pharmaceuticals *	Metals & metal products, construction equipments & materials	Petroleum products	Cosmetics *, toiletries, soaps and detergents	Motors *, engines and machinery	Cigarette & tobacco products	Office supplies & equipment	Car, car parts and other transport equipment	Rubber & rubber products	Paper & paper products	Telecommunications network	Mercury pollution technology	Plastic & plastic products	Household chemicals	Industrial chemicals *	Non-metallic mineral products	Restaurant Operation	Footwear & related products	Pyrotechnic products	Web ile renting business	Glass & glass products	Manpower Office	Data processing	Dynamic Compection	Wood and wood products	Metal Ore mining	Write-based explosives	Inorganic chemical products	Photographic & optical goods	Iron & Steel	Miscellaneous products	TOTAL
A. No royalty	1			1	1		2	1			1			2						1																11
B. (Less) 1%				2	5			5	1		3	1		1	1	2			1			1		1		1								1	1	31
C. 1.0%		7	1	14	7	1		5	1	2	3			4	1				1		1		5		1									1	56
D. 1.01 - 1.5%	1	3		1	10	2		1		1	2			2		1			2					1												27
E. 1.51 - 1.99%					7		1	1			3										2															14
F. 2.0%		4	1	10	5	2	2	14	2	6	4	1	1	1	2	2	1		1	2		3	1			2	1	1			2		1		1	73
G. 2.01 - 2.5%		2	1	1	6			1		1	4	3		1	1	1																				20
H. 2.51 - 2.59%					2									1		1																				5
I. 3.0%		1	2	1	5	1	25	2		1	2		1	3	2				1	1	3					2						1		1		55
J. 3.01 - 3.50%		2			1			1																												4
K. 3.51 - 3.99%				1									1																							2
L. 4.0%		1		1	1						2																					1	1			7
M. 4.01 - 4.5%					1						1											1														2
N. 4.51 - 4.99%								3			1			1					1																	1
O. 5.0%	3	2	1	2	11			9	3		6	2	1		1	2	3	1	1		2	2				1				1				1		6
P. Straight																																				54
TOTAL	5	22	6	34	66	6	30	43	7	11	32	8	4	16	8	10	4	1	7	5	8	8	6	1	2	3	3	3	1	1	0	2	1	1	3	2	3	368

** Total figure greater thantotal no. of agreements because of some agreements having more than one product category or more than one product line under one product category with varying levels of royalty.

Table 8
(OCTOBER 1978 - JUNE 1981)
TYPES OF TECHNOLOGY PAYMENTS BY COUNTRY OF ORIGIN

	NUMBER OF AGREEMENTS							
	United States	Japan	Germany	Switzer-land	France	United Kingdom	Others	Total
Running Royalty	97	48	8	18	10	10	22	213
Lump sum	5	2	2	3	1	5	9	27
Fixed Royalty	18	10	4	2	0	0	6	40
Lump sum Plus Running Royalty	8	9	0	0	0	0	10	27
Lump sum Plus Fixed Royalty	2	1	0	0	0	0	0	3
No Royalty	4	1	1	0	0	0	1	7
T O T A L	134 VVVVV	71 VVVV	15 VVVV	23 VVVV	11 VVVV	15 VVVV	48 VVVV	317 VVVVV

*Seven (7) of the total of 324 contracts surveyed were denied by the Board, thus the total figure of 317.

Table 9
(OCTOBER 1978 - JUNE 1981)
TYPES OF RESTRICTIVE CLAUSES

Type Of Restrictive Clauses	NUMBER OF AGREEMENTS: Subsidiaries/ Majority Foreign Capital Participation Companies	Minority Foreign Capital Participation Companies	Purely Technical Collaboration Agreements	Total
A. Exports restrictions such as the following nature: permission of licensor prior to export; exports permitted only to certain countries; exports prohibited; and exports restricted to licensor's agents/distributors	13	16	43	72
B. Tied-in purchase of raw materias/ equipment	6	8	24	38
C. Payment of Minimum Royalty	-	5	22	27
D. Royalty-free Grant-back of licensee's improvements	8	13	26	47
E. Patent/Process improvement of licensee accruing to licensor	1	3	2	6
F. Post-termination restriction on use of knowhow	10	16	28	54
G. Agreement construed or disputes settled according to laws other than the Philippines/ Agreement silent on governing law	24	34	57	115
H. Venue of arbitration other than Philippines/ neutral country	3	8	31	42
I. Period in excess of 5 years/indefinite	5	4	8	17
J. Automatic renewal of Agreement	4	16	21	40

Table 9
(October 1978 - June 1981)
Types of Restrictive Clauses
Page -2-

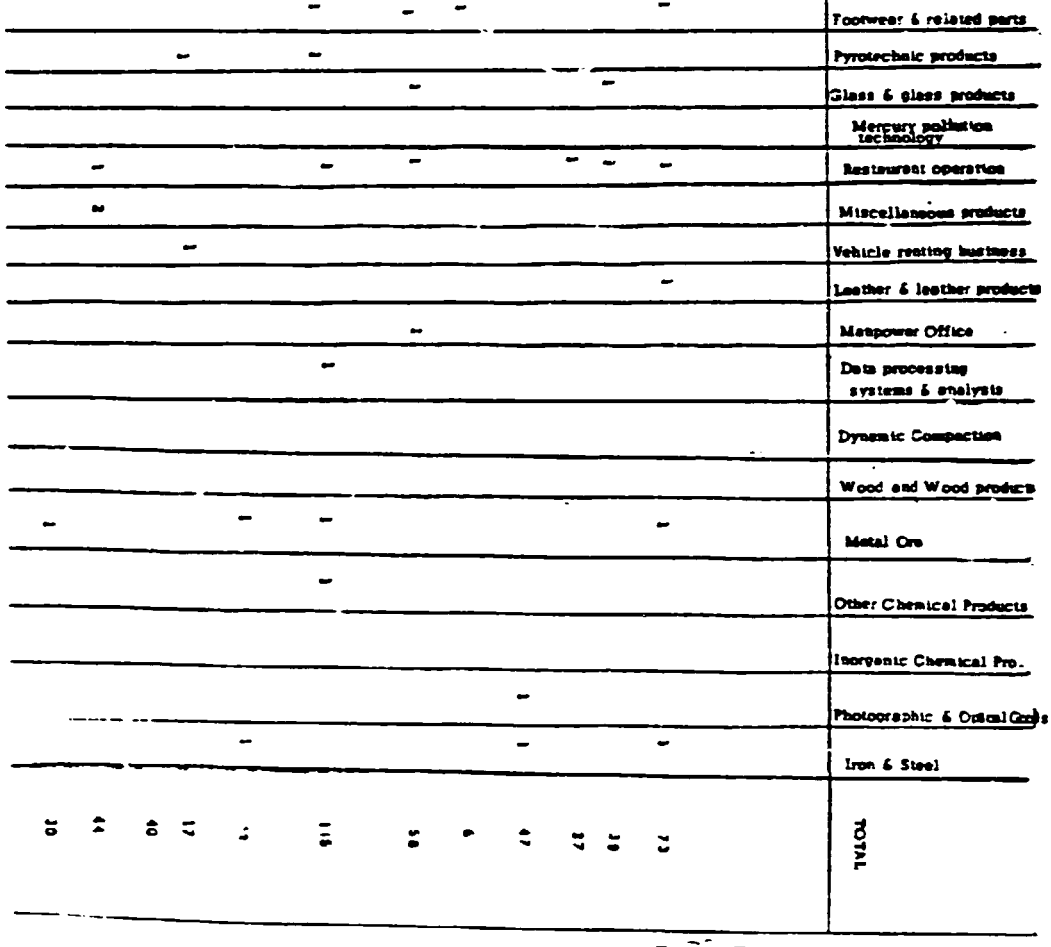
	NUMBER OF AGREEMENTS			
	Subsidiaries/ Majority Foreign Capital Participation Companies	Minority Foreign Capital Participation Companies	Purely Technical Collaboration Agreements	Total
K. Philippine taxes on royalties shouldered by licensee	7	13	24	44
L. Sole liability by licensee for infringement suits	7	8	15	30
M. Royalties charged on imported finished products/or on products manufactured out of non-licensor knowhow	2	2	-	4
N. No warranty provisions	3	10	18	31
O. Restriction on application/use of technology	-	1	4	5
P. Non-reciprocal grantback	-	2	3	5
Q. Prohibition on manufacture of competitive products	6	4	15	25
R. Price fixing	-	1	3	4
S. Secrecy obligation after contract termination	13	11	25	49
T. Restriction to contest validity of patents	-	-	16	16
Total number of agreements with restrictive provisions	60	79	148	287
Total number of agreements	72	91	161	324

NOTE: Most contracts have more than one restrictive clauses.

TABLE 10

INDUSTRY WISE CLASSIFICATION OF AGREEMENTS WITH RESTRICTIVE CLAUSES

	Agriculture	Foods	Beverages	Textile, wearing apparel & related parts	Electrical supplies, appliances & accessories	Paints, paint & printing materials	Pharmaceuticals	Metals & metal products	Petroleum products	Cosmetics, toiletries, soaps & detergents	Motors, gines & machinery	Cigarette & tobacco products	Office supplies and equipment	Car, car parts & other transport equipment	Rubber & rubber products	Paper & paper products	Telecommunications network	Plastic & plastic products	Household chemicals	Industrial chemicals	Non-metallic products
A. Export restrictions such as of the following nature: permission of licensor prior to export; exports only to certain countries; exports prohibited; exports restricted to licensor's agents/distributors		6		6	13	1	4	11	1	4	9			4	1	3		2		2	1
B. Tied-in purchase of raw materials		2	1		9		1	5		2	8	1		6		1	1	1			
C. Payment of minimum royalty		1	1	8	3	1	1	4			2			1		1					2
D. Royalty-free grantback of licensee's improvements		2	1	1	9		3	8	1	2	5		1	3	2		1			1	2
E. Patent/Process improvements accruing to licensor				3							2										1
F. Post-termination Restriction on use of knowhow		5		1	6	2	10	6		3	7	1	1	4	5	1			1	3	3
G. Agreements construed or disputes settled according to laws other than the Phils./ Agreement silent on governing law	2	12	2	8	21	2	13	13	2	3	10		1	6	1	4	4	3	2	2	
H. Venue - other than Philippines/ neutral country		3	1	2	11		1	5			7		1	3	1			1	2		1
I. Period in excess of 5 years/ indefinite		3		2	1		2	3			1			2		2		1			
J. Automatic renewal of Agreement		4		2	8	1		6	1	1	4			5		1		1		2	2
K. Phil. taxes on royalties shouldered by licensee		1	1	7	3	1	1	5		2	8		4	3			1		1	1	1
L. Sole liability by licensee for infringement		4	1	2	8			5		4	6				1						1


Footwear & related parts
Pyrotechnic products
Glass & glass products
Mercury pollution technology
Restaurant operation
Miscellaneous products
Vehicle renting business
Leather & leather products
Manpower Office
Data processing systems & analysis
Dynamic Compaction
Wood and Wood products
Metal Ore
Other Chemical Products
Inorganic Chemical Pro.
Photographic & Optical Goods
Iron & Steel
TOTAL
10
44
40
17
7
116
58
6
67
37
28
73

	M. Royalties charged on imported finished product	N. Restrictions on use/application of technology or mfd. out of non-	O. No warranty provisions	P. Non-reciprocal GB	Q. Prohibition on manufacture of competitive products	R. Price fixing	S. Secrecy obligation after cont. term.	T. Restriction to contest patent validity
Agriculture								
Foods	–	–	6		4		3	
Beverages		–	–	–				
Textile, wearing apparel					3	–	–	6
Electrical supplies, appliances & accessories	–		8	–			11	4
Paints, paint & printing materials								
Pharmaceuticals	3				5		10	
Metals & metal products			8	–			3	–
Petroleum products							–	
Cosmetics, toiletries, soaps & detergents			–		3		3	
Motors, engines & machinery			4	–	5	–	5	20
Cigarette & tobacco products				–				
Office supplies and equipment								
Car, car parts & other transport equipment						–		
Rubber & rubber products			–				–	–
Paper & paper products							–	
Telecommunication network								–
Plastic & plastic products							3	
Household chemicals					3			
Industrial chemicals					3		4	
Non-metallic products						–	3	–
Footwear & related parts								
Pyrotechnic products								
Glass & glass products		–						
Mercury pollution technology								
Restaurant operation		–						
Miscellaneous products								
Vehicle renting business								
Leather & leather products								
Manpower office								
Data processing systems and analysis								
Dynamic Compaction								
Wood & wood products							–	
Metal Ore								
Other Chemical Products		–			–	–	–	
Inorganic Chemical Pro.			3				–	
Photographic & Optical Goods					–		–	
Iron & Steel					1			
TOTAL	4	5	31	5	25	4	49	16