# Transferring Technology To Singapore

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*Shrinking globe opens opportunities to small and medium businesses in world trade*

As the world is made ever smaller by technological advances in communications and other fields, and peoples and nations have consequently become increasingly interdependent, the process of technology transfer and its related rights have added new dimensions to business strategy and economic relations.

Technology transfer offers a means of exploiting a company's technology through transferring that technology into new geographic and product markets, thus providing a greater return on the company's research and development investment. It also offers the small or medium companies an opportunity of acquiring essential technology while economizing on research and development expenditure.

On the international plane, the benefits to be reaped from technology transfer are manifest. For the developing nations, many of whom are still grappling with basic economic and social development issues, the cheapest and most expeditious way of acquiring modern technology is to obtain it from those who already have it, without having to repeat the costly technology creation process. For the supplier of technology in the developed nations, the benefits of technology transfer take the form of access to cheap local labor and raw materials as well as a potentially lucrative market in the developing economy (e.g. China). It also provides a means of overcoming high tariff barriers and restrictive local regulations that are strict on import of industrial products but relaxed on investments and joint-venture arrangements.

In relation to Singapore, technology transfer presents a marked contrast with the position in several countries in the Pacific rim region. Here is an open economy, as there are no laws and regulations inhibiting the flow of technology into Singapore. There are no antitrust laws and government agencies scrutinizing terms and conditions on which technology is to be transferred.[1] At this juncture, it is pertinent to review the legal framework in which technology transfer operates in Singapore.

## LEGAL FRAMEWORK

### *Law of Contract*

In Singapore, technology transfer is a matter of contract between the supplier and acquirer of the technology. The law of contract is basically the English common law. Indeed, there is a continuing reception of English commercial law, both case law as well as statute law. Subject to specific restraints contained in the United Kingdom Unfair Contract Terms Act 1977, there is essentially freedom of contract in Singapore. This means that parties are left to make their own arrangements as regards technology transfer, and the role of the court is limited to interpreting the terms and conditions of the transfer agreement in the event of a dispute.

### *Law of Intellectual Property*

The term "intellectual property" refers to a clutch of preventive rights that give to the owner the right to prevent others from doing something. These rights protect ideas and information that have commercial value.[2] In the past, the term was used to refer to the rights conferred by copyright in literary, artistic and musical works. Nowadays, the established regimes of intellectual property include not only copyright but also patents, trademarks, registered designs and trade secrets (or confidential information).

### *Copyright*

Copyright is the right to prevent misappropriation of an author's work by publication, reproduction, performance, broadcast or adaptation of the work. The subject-matter eligible for protection are literary artistic, musical and dramatic works (hereinafter called "works") as well as sound recordings, cinematograph films and television broadcasts (hereinafter called "subject-matter other than works"), all of which represent the result of creative effort. Unlike patent, copyright does not protect ideas and information as such, only the expression of the ideas and information.

Copyright law in Singapore is governed by the Copyright Act of

1. Unlike in Malaysia where detailed policy guidelines on Transfer of Industrial Technology are established by the Ministry of Trade & Industry which will review all agreements signed by Malaysian companies licensed under the Industrial Coordination Act 1985 with foreign partners. See paper entitled "Transfer of Technology: Legal Guidelines and Contractual Practices in Malaysia" presented by Omar Abdul Rahman and Tan Choon Kok at the LES 1988 International Conference held on 18-21 April 1988 in Sydney, Australia.

2. The protection is buttressed by the notions that a person has a proprietary right to the product of his intellectual efforts and that no one shall reap where he has not sown. Hence, in the Universal Declaration of Human Rights, it is stated at Article 27, paragraph 2, as follows: "Everyone has the right to the protection of the moral and material interests resulting from any scientific, literary or artistic production of which he is the author."

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1987. This Act is based on the Australian model and its provisions accord with those of the major copyright laws. Copyright protection is granted to works and subject matter of Singapore citizens and, by reason of bilateral arrangements, of United States and United Kingdom nationals as well. Copyright protection also subsists in Singapore if the work or subject matter is published or made in Singapore.

There is no registration system for obtaining copyright protection. The protection arises upon creation. As copyright is property, it is divisible as to time, place and the class of act or acts protected. Assignments and licenses of copyright may therefore be limited to particular times, place or acts. Thus, it is possible to have different owners of different parts of copyright at any one time.

Assignments and exclusive licenses must be executed in writing, signed by or on behalf of the transferor. There is no special formula of words to be used, although it is advisable to have the transfer document properly drafted as problems have arisen over the issue of determining whether an assignment or a license is intended. Assignment and exclusive licenses can also be made in respect of future copyright, when the work or subject matter is not yet in existence.

*Patents*

A patent is a monopoly right granted to an inventor for him to exploit his invention for a limited period of time (namely, 20 years) to the exclusion of others.

The law governing patents in Singapore is unique. There is no mechanism for original registration of patents in Singapore. The system is closely tied to the patent system in the United Kingdom. This is done through the Registration of United Kingdom Patents Act, which provides for a system of re-registration in Singapore of patents granted in the United Kingdom. The system extends to European patents designating the United Kingdom.[3]

The re-registration must be made within three years of the grant of the patent in the United Kingdom or, in the case of the European patent designating the United Kingdom, in the European Patent Office. Upon re-registration within the period of three years, the patentee is conferred privileges and rights in Singapore similar in all respects to those in the United Kingdom.

There is also a regime for compulsory licenses of patents of Singapore. This is provided for in the Patents (Compulsory Licensing) Act. The Act sets out the grounds for compulsory licenses in respect to specified classes of patented inventions (e.g. metallic products, glass, minerals, textiles and construction materials). The Act further provides that rights conferred by patent shall not be infringed by the government in making or importing any patented medicine or drug for distribution and use in government hospitals or institutions.

*Trademarks*

The protection given under the law on trademarks is the right to prevent others from using a registered mark or a mark that is a colorable imitation of the registered mark. The law on trademarks is governed by the Trade Marks Act. In the context of technology transfers, trademark protection does not feature very prominently.

*Registered Designs*

There is no indigenous registration system in Singapore for designs. Like patents, the system is closely tied to the United Kingdom system. Indeed, pursuant to the United Kingdom Designs (Protection) Act, there is automatic protection in Singapore of a design registered in the United Kingdom.

To be eligible for registration, a design must have aesthetic appeal; its features of shape or configuration must not be dictated solely by functional considerations. The protection is for the maximum period of 15 years during which the proprietor has the exclusive right to make, import, sell, hire and offer for sale or hire any article to which the registered design (or a design substantially similar to the registered design) is applied.

*Trade Secrets (or Confidential Information)*

The law on trade secrets or confidential information is concerned with the prevention of unauthorized disclosure or misuse of information in breach of obligations. To qualify for protection under the law, the information must possess three elements:

1. It must have the necessary quality of confidence about it.
2. It must have been imparted in circumstances importing an obligation of confidence.
3. It must have been used without the authority of and to the detriment of the party owning it.

The development of the law in this area has been based on equitable principles. Notions of fairness and good faith are the guiding lights. In the context of technology transfer, the law on confidential information is relevant not only within the contractual relationship but also where parties negotiate prior to entering into a contract.

## MEANS AND ISSUES

Generally, transfer of technology is effected by way of an agreement entered into between parties[4] having as its principal or accessory objective the transfer of technology in any of the following forms:

1. The licensing of the use or exploitations of trademarks.
2. The assignment or licensing of the use or exploitation of patents for invention, improvements, industrial models and drawings.
3. The furnishing of technical know-how and information by plans, diagrams, models, etc.
4. Technical consultancy services and assistance in whatever form it may be furnished.[5]

Assignment and licensing arrangements constitute the principal means of transferring technology.

An assignment takes place on the

3. Action is being taken to do away with the re-registration system and to establish a Patent Registry which, when established, should promote research and development in Singapore.

4. Often between a foreign or foreign-owned company and its local partner.

5. These guidelines are adopted by the Philippine Technology Transfer Board.

sale of a patent, copyright or other intellectual property or on the sale of a business that owns a patent, copyright or other intellectual property. It passes full legal title to the assignee who is then in a position to sue in his own name.

A license does not confer as comprehensive a right of ownership as an assignment. Specifically, it involves the licensor granting the licensee the mere right to use the former's property, usually for a limited period in return for payment in money or money's worth.

There are several issues involved in these forms of technology transfer between parties. These issues stem from an inherent conflict of interest of, on the one hand, the desire of suppliers of technology to obtain optimal protection and compensation for the use and exploitation of their technology and related rights and, on the other hand, the expectations of acquirers of technology to obtain cheap and ready access to technology. Often, a technology transfer agreement is not between equals and in many instances, the economic power of suppliers of technology is such that they can, and do, dictate terms. In an open economy such as ours, these considerations are especially pertinent as we examine the principal issues that often arise in technology transfer disputes.

*Confidentiality Obligations*

A technology transfer agreement will almost invariably include passing confidential information, coupled with a grant of rights to the transferee both to use that information and to work under relevant statutory intellectual property rights. Often, the information is conveyed to the transferee for him merely to review and to decide whether to enter into the agreement.

For the transferor, this entails the risk that the confidentiality of the information may be compromised. Hence, it is desirable to incorporate fairly detailed provisions regarding the practical steps that the transferee and its employees are required to take to preserve confidentiality of the information. For this reason, confidentiality clauses drafted on behalf of American and English corporations usually cover every contingency that is likely to arise. On the other hand, continental European and Japanese agreements are frequently expressed simply and leave much to be implied and, if necessary, to be negotiated between the parties in the event of difficulty.

*The Grant-Back Millstone*

Suppliers of technology who grant licenses run the risk that the acquirer may turn out eventually to be his competitor in the same field. This would arise if, for instance, the acquirer makes improvements to the technology originally granted or invents new uses for the technology. The dilemma for the supplier is usually solved by requiring the acquirer to assign or grant an exclusive license to the supplier in any improvement made by the acquirer on the technology originally granted. In this manner, the supplier maintains his ability to capitalize his technology and any outgrowth therefrom to the fullest extent.

From the acquirer's viewpoint, such a requirement is objectionable, for it imposes on him an obligation quite alien to the original grant and discourages him from making any improvement on the technology. It is also undesirable from the public policy viewpoint. A compromise measure that is often adopted is to include a right for the acquirer to obtain a license in respect of any improvement made by him on the original technology.

*Field-of-Use Restrictions*

If a technology has a multitude of applications, it is in the interest of the supplier of the technology to grant a nonexclusive rather than an exclusive license in respect of each of the applications. This method assures that the supplier obtains optimal remuneration from his technology as he would not be dependent on a single licensee for the remuneration. Hence, if a patent has claims to different areas of use, the supplier can grant a license under one set of claims but not the other sets. Alternatively, if the scope of the claims permits, he can grant licenses limited to one of the more narrow claims.

*Tie-in Arrangements*

A tie-in arrangement is one that requires the acquirer of the technology to obtain materials from the supplier or from sources designated by the supplier. The arrangement may take one of the following forms:

— A condition obligating the acquirer to obtain materials solely from the supplier even though the materials do not fall within the scope of the patent.

— A restriction prohibiting the acquirer from using materials and services not provided by the supplier.

— A restriction prohibiting the acquirer from obtaining any materials not within the scope of the patent from any specified person.

In the United Kingdom, each of these forms of arrangement will be held void.[6] It is submitted that such an arrangement can also be impugned in Singapore pursuant to the Registration of United Kingdom Patents, which, it will be recalled, provides that a United Kingdom patent confers rights and privileges in Singapore similar in all respects to those in the United Kingdom.

*Due Diligence*

In granting a technology, the transferor usually insists that the transferee does not simply "sit" on the technology granted. Thus, it will be necessary to assure due diligence on the part of the transferee to exploit or commercialize the technology granted. This may be done through clauses such as: "In order to maintain the exclusive rights granted hereunder, the licensee will use his best endeavors to commercise the product using the rights licensed."

Another method is to incorporate a "march-in" clause. This clause gives the transferor the right to terminate the agreement or the exclusive rights if the transferee has not commercialized at least one product under the rights granted. Such a clause is obviously not appealing to the transferee, and if he

6. United Kingdom Patents Act, 1977, Section 44; see also United States Clayton Act, 1914, Section 3.

balks at such a clause, the alternative is to fix a deadline for the first commercialization of the product, and if there is no first commercialization within the deadline, the transferor is free to transfer the right to a third party.

## TAX AND FINANCIAL CONSIDERATIONS

*Income Tax*

Income tax is payable in respect of royalty derived or deemed to be derived from Singapore under our Income Tax Act.

The term "royalty" is not defined in the Act, but in general the term embraces payment received as a consideration for the use or the right to use copyrights, scientific works, patents, designs, plans, secret processes, formulae, trademarks, licenses or other like property or rights.[7]

Royalty is derived, or deemed to be derived, from Singapore if:

— It is borne directly or indirectly by a person resident in Singapore or a permanent establishment in Singapore (except in respect of any business carried on outside Singapore through a permanent establishment outside Singapore); or

— It is deductible against any income accuring in or derived from Singapore.

Hence, if a United States company grants a patent license to a Singapore company to manufacture a product and the agreement stipulates that the Singapore company is to pay the U.S. company a royalty (e.g. based on 10% of the sales receipts), the royalty received by the U.S. company is liable to Singapore income tax, being derived or deemed to be derived from Singapore.

*Withholding Tax*

Section 45A of the Act requires the payer of a royalty (such as the Singapore company abovementioned) to withhold tax[8] where the royalty is deemed as having sourced in Singapore and is paid or payable to a nonresident person. The following rules relating to withholding tax apply:

— Tax at 33% or, where there is a tax treaty applicable, at the rate of tax indicated in such treaty, must be withheld by the payer of the royalty.

— The tax withheld must be paid over to the Comptroller within seven days after the payment is made to the nonresident person. If this is not done, a penalty of 5% will be imposed, followed by a further charge of 1% per month for so long as it continues to remain unpaid. There are provisions for instituting criminal breach of trust proceedings for non-payment of the tax withheld.

*Stamp Duty*

Stamp duty is a charge on instruments (rather than on transactions), and in Singapore, the following instruments are liable to stamp duty:

1. An instrument, mentioned in the Schedule to the Stamp Duties Act, which, not having been previously executed by any person, is executed in Singapore;

2. An instrument, mentioned in the said Schedule, which,

— Is executed outside Singapore;

— Relates to any property situate or to any matter or thing done or to be done in Singapore; and

— Is received in Singapore.

Hence, if a technology transfer agreement is executed by one party abroad and by the other party in Singapore, it attracts stamp duty under category 1 above. Even where the agreement is executed wholly outside Singapore, if it relates to a property situate or to any matter or thing done or to be done in Singapore and is received in Singapore, stamp duty is also leviable: see category 2 above.

Intellectual property rights such as patent and copyright are generally regarded as property. Know-how is not so regarded,[9] but it is submitted that if the agreement relates to any matter or thing about the know-how which is to be done in Singapore, the agreement attracts stamp duty.

Most technology transfers are effected by way of sale, assignment and license. Stamp duty is payable on a sale or assignment and license. The amount of stamp duty on a sale or assignment depends on the consideration payable as is as follows:

1. For every $100/- or any part thereof of the first $90,000 . . . . . . . . . . . . . . . $1.00
2. For every $100/- or any part thereof of the next $62,000 . . . . . . . . . . . . . . . $2.00
3. Thereafter for every $100/- or any part thereof . . . . . . . . . . . . . . . $3.00

A license attracts stamp duty of only $10.

## DISPUTE RESOLUTION

The international flavor of many technology transfer agreements often gives rise to debate as to the choice of law, choice of forum, and the means of settling disputes. The flavor is compounded by the fact that each established legal system has developed its own set of rules for deciding such matters. Parties would be well advised to seek legal counsel before making the selection, as the choice of an inappropriate set of rules may result in undesirable consequences. In general, the following considerations on dispute resolution bear noting:

First, the governing law selected by the parties should have a reasonable or substantial relation to the agreement and to the parties. Normally, the law chosen is that of one of the parties to the contract. The stronger party often insists on its own law, but this may not necessarily be a wise choice. If the forum

7. cf: Economic Expansion Incentives (Relief from Income Tax) Act, Section 3. In Australia, the term is defined to include any amount paid or credited, however described or computed, in consideration for (among other things):

The use of, or the right to use, any copyright, patent, design or model, plan, secret formula or process, trademark or other like property or right;

The supply of scientific, technical, industrial or commercial knowledge or information;

The supply of any assistance that is ancillary and subsidiary to, and is furnished as a means of enabling the application and enjoyment of, any such property or right or knowledge or information.

8. A withholding tax is basically a tax collection mechanism and is enacted primarily to ensure collection of the tax due on specific categories of income derived from a source in Singapore.

9. *Musker v. English Electric Co. Ltd.* (1964) 41 TC at page 585. See also *John & E. Sturge Ltd v Hessel* [1975] STC 573.

is to be a different country from that whose law governs, there is a danger that the foreign forum may misunderstand or misapply the governing law, particularly if different languages are used. In Singapore, foreign law is a question of fact, to be decided by evidence. If there is no evidence about what the foreign law provide, it is assumed to be the same as the law of the forum.

Second, the traditional method of resolving disputes, if the parties cannot so resolve themselves, is litigation before courts of law. In technology transfer agreements, this may not be an attractive proposition as proceedings in courts of law are often costly and time-consuming. Further, if the substance of the dispute relates to a highly technical matter, the costs and the length of trial are likely to be greatly increased. Judges would have to depend on expert witnesses.

Consequently, arbitration by an independent arbitrator is often favored. The major advantages of arbitration over litigation are as follows:

— Arbitration proceedings are held in private and it is possible to agree that the oral and documentary evidence produced by the parties is not open to public scrutiny. This is particularly useful if trade secrets of other confidential information are involved.

— Arbitration is by nature a conciliatory proceeding, as opposed to the adversarial nature of litigation. This is useful if the parties intend to have a continuing relationship after the resolution of the dispute in question.

— Arbitration can be held before a person who has knowledge of the technical or commercial issues involved. This results in savings of costs and time.

— The location and timing of the hearings before the arbitration are flexible as they can be arranged to suit the parties.

On the other side, arbitration has the following disadvantages:

— The law of the relevant jurisdiction may not permit certain issues to be arbitrated. For instance, certain patent validity and antitrust matters cannot be decided by private arbitration in the United States.

— The law of the relevant jurisdiction may not allow arbitration award to be final and binding even if the parties agree to this. English courts have tended to resist any attempt to deprive them the right to review decisions on points of law made by arbitrators.

— The informality of the arbitration hearing means that the rules of evidence may not be strictly observed. This can result in the introduction of unreliable evidence.

— Arbitration proceedings can also be costly and protracted, especially where complicated issues are involved.

If the parties opt for an arbitration clause, it is imperative that the clause must deal with the following issues:

— The mechanism by which arbitration can be invoked.

— Is the arbitration to be discretionary or mandatory.

— Who will conduct the arbitration proceedings; where and under what set of rules.

— In what language is the arbitration to be conducted.

— How will the costs of arbitration be allocated.

— What is the degree of finality, binding effect and enforceability of the arbitral award.

Finally, like choice of law, the choice of forum should bear reasonable relation to the agreement or to the parties. Singapore courts apply this rule.