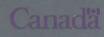
# SUPPLYING OR ACQUIRING TECHNOLOGY: IC

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# Supplying or Acquiring Technology:

## A Canadian Business Guide

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Preface

T his guide was first published by the Department of Regional Industrial Expansion in 1986 under the title Supplying or Acquiring Technology: A Canadian Business Guide to Structuring and Negotiating Technology Transfer Agreements.

To keep up with events that affect the process, policies, guidelines and practices related to technology transfer through licensing, joint ventures and other contractual and non-contractual arrangements, this updated version has been produced by Industry, Science and Technology Canada (ISTC).

The updated guide takes into consideration the implications of the *Canada-U.S. Free Trade Agreement*, changes that have occurred in Patent Laws and practices in European Community countries, and possible consequences of Europe 1992. It also deals with the recent changes in Canadian patent and copyright legislation.

The author of both the original and updated guides, under contract with the Government of Canada, is Alec R. Szibbo, barrister and solicitor, who is an expert in the field of technology transfer (Telephone: (604) 688-3411).

The views and suggestions contained in these materials are those of the author and are not necessarily endorsed by ISTC.

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### Foreword

**I** dentify the one element that the following situations all have in common:

- During negotiations for the sale of telecommunications equipment, the supplier is asked to provide the technology necessary for the buyer to maintain the equipment and to manufacture spares.
- A company is in the process of buying another organization that produces robotics products. The buyer becomes concerned about whether all possible steps have been taken to prevent conflicting claims of ownership by another party in acquiring the rights to the robotics technology.
- A corporation that is establishing franchises in the field of heavy equipment leasing wonders how it can maintain control of the know-how provided to its franchisees.
- An organization is preparing to finance a microcomputer production venture with two other parties who will be contributing the technology. The organization wants to allocate the rights to the technologies, present and future.
- A corporation proposes to manufacture a biotechnology product under a license agreement, but has difficulty in agreeing on royalty terms with the technology owner.
- A company asked to provide a customer with engineering and technical consulting services for a power plant, decides to limit that customer's opportunities to actually become a competitor.

• A Canadian company has just been awarded a contract to supply a petrochemical plant in an African country, on a turnkey basis. The company realizes that the technology it is committed to provide to the purchaser has never been distributed outside its own organization, nor is it in a form readily available for packaging, delivery or implementation in a developing country.

The common element in all these situations is the transfer of technology. Virtually any technology can be transferred, to varying degrees, for varying purposes and in many fields of activity. The participants usually have differing concerns and attitudes reflecting their levels of technological sophistication.

In today's world, there is some aspect of technology present in almost every business transaction. While technology is obviously central in high technology companies, new technological innovations and developments are increasingly important for more traditional industries.

This booklet of basic introductory material is for any individual (whether vice-president of corporate development, director of licensing or sole proprietor) who needs to deal with the transfer of technology, but has limited experience in this type of negotiation.

In many cases, technology transfer is a complex process that does not lend itself to easy solutions. Most people do not understand it well, even those who are expert with other complex types of agreements. Its legal aspects require some understanding of laws relating to "industrial and intellectual properties" (industrial design, patents, trademarks and copyright) which, in themselves, constitute a highly specialized field.

There is another factor that makes acquiring a grasp of the legal principles involved in any particular transaction even more difficult. This is the fact that in Canada these laws, as well as the related laws of trade secrets, have not

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kept pace with advances in many fields such as computers, telecommunications and biotechnology. The scope of protection offered by existing laws may be uncertain or nonexistent. When the laws finally do change, further questions of interpretation will need to be answered.

In some circumstances, the nature of the technology may be difficult to evaluate until after the completion of legally binding commitments. Misleading or completely wrong assumptions can lead to an agreement that does not reflect the intended relationship. As an added complication, some governments turn a blind eye to the technology transfer activities, while many others regulate them to a significant degree.

These issues, together with the constantly changing nature of technology and its environment, mean that no standard approach or agreement can be used as a universal guide for structuring a successful technology transfer.

The purpose of this guide is to help the Canadian businessperson effectively structure and participate in a successful technology transfer. It provides some basic information for dealing with the following components of the transfer process:

- Laying the groundwork for selecting the other party to the agreement.
- Choosing the basic structure of the technology transfer agreement.
- Identifying and resolving the major business and legal issues in the transfer of technology.

Several selected references for further in-depth review are found in Appendix U.

There are other concerns that must be addressed in any technology transfer process. This publication does not deal with them, however, because of their legal complexity, their uniqueness to a particular transaction, or the fields they fall into (i.e. purely technical). This booklet therefore does not attempt to deal in any detail with the following:

- Determining a party's requirements for a particular technology or its exploitation.
- Identifying the other parties that have or require the technology.
- Evaluating the suitability of a particular type of technology for exploitation, adaptation or absorption.
- Drafting the final technology transfer agreement.

The first edition of this booklet was published in 1986. Since then, various suggestions have been made about its content. Although it has not been possible in this short format to incorporate them all, a number of the recommendations are reflected in this revision. Because of significant changes in Canadian laws since 1986, portions of the booklet have had to be completely or substantially rewritten. The information provided was current as of January 1990.

# 1

## Introduction to the Transfer of Technology

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#### What is Technology Transfer?

"Technology" is a general word that covers knowledge in such diverse areas of human endeavour as computers, industrial processes, business trade secrets, consumer goods and natural resource exploitation. The definition of "technology" can be as encompassing or as narrow as its users and uses require. The definition, used by the World Intellectual Property Organization in its Licensing Guide For Developing Countries (WIPO Publication No. 620(E), 1977) states that "technology" means:

Systematic knowledge for the manufacture of a product, the application of a process, or the rendering of a service, whether that knowledge be reflected in an invention, an industrial design, a utility model or a new plant variety, or in technical information or skills, or in the services and assistance provided by experts for the design, installation, operation or maintenance of an industrial plant, or for the management of an industrial or commercial enterprise or its activities.

"Technology transfer" is the transmission, and occasionally the creation, of such knowledge with or without the concurrent transfer of goods and services (see Appendix A). The effect of technology transfer can be revolutionary or it can be non-existent, depending upon the incentives of both parties in the transfer to succeed, the methods of the transfer and the obstacles to the technology dispersal. The technology transfer process consists of several stages which blend imperceptibly into each other, and includes:

- Identification of the potential recipient's technology needs.
- Acquisition of information on alternative sources of technology by the potential recipient.

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- Packaging and dissemination of information on technology by its owner to potential users, in order to find the right recipient.
- Evaluation and selection of the most appropriate technology and the most appropriate supplier.
- Preparation of offers to participate in a technology transfer, and negotiation of the appropriate concepts and approaches in the transfer.
- Completion of the contractual details, execution of the final legal documentation and acquisition of government approvals required.
- Adaptation of the technology to the recipient's local needs.
- Absorption of the technology by the recipient.
- Exploitation of the technology to its optimum in the recipient's environment.

#### **Benefits of Technology Transfer**

Companies sometimes question whether they should make their technology available to others, and may insist upon retaining it for their own use and exploitation. Here are several possible benefits of technology transfer, for the technology supplier:

- The supplier may receive supplementary revenue from its research and development investments.
- The supplier may obtain from the recipient, the use or benefit of additional facilities and technology for further R&D.
- The supplier may obtain the benefit of the recipient's knowledge of its local market, and its established marketing strength there.

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- The recipient may become established as a market for both the supplier's spare parts and maintenance services for the transferred technology.
- The supplier may obtain the benefit of the recipient's access to low-cost labour and materials.
- The supplier may receive the recipient's technology which is an improvement on, or is complementary to, the original technology.
- The transfer may allow the testing of a market with less risk than direct local sales by the supplier.
- Technology transfer may permit servicing of a market which is too large for the supplier, or which is not otherwise available due to local government regulation, (i.e. requirements to buy domestic products, import restrictions, onerous duties and taxes, or prohibition or restriction of foreign investment).
- The supplier may obtain a benefit from selling "oldgeneration" technology that it is not currently utilizing.
- Technology transfer may reduce the possibility of the supplier becoming subject to foreign government acquisition (in the case of a foreign recipient).
- The transfer may eliminate a supplier's need for all or most of the capital investment to build a plant (in the location of the recipient).

- The technology transfer agreement becomes another key asset which may assist the supplier in the future sale of its business.
- Technology transfer may permit the supplier to acquire a part-interest in the recipient company in return for supplying the technology (i.e. a joint-venture project).
- Technology transfer may provide that the recipient undertake the adaptation of the technology to the local market.
- Claims of infringement of proprietary rights by either the supplier or the recipient may be settled or eliminated by the use of a technology transfer agreement.
- The technology transfer agreement may facilitate compliance with local patent and trademark use requirements.
- Technology transfer establishes the recipient as a market for supplementary or ancillary goods which complement, or are necessary for, the technology of its product.
- The goodwill and reputation of the supplier may be enhanced through the granting of rights to utilize its trademarks.

Similarly, several corresponding benefits are possible for the recipient of a technology transfer:

- The recipient may acquire technology which is market or technically proven, on a fast timetable and without an unacceptably high degree of risk.
- The recipient may acquire technology from which it is otherwise restricted by patent or other laws.
- The recipient may obtain the established goodwill that the technology has generated.
- The recipient can supplement its own development programs, acquire spare parts, components, raw • • materials, maintenance and services.

Of course, there are reasons why a technology owner may choose not to supply its technology, or particular portions of it, such as:

- The recipient could become a competitor and threaten the market position of the supplier's technology.
- The supplier loses the opportunity to expand directly in the market served by the recipient.
- The supplier's control over the use and exploitation of the technology will be less uniform.
- The supplier assumes additional financial and administrative burdens in order to provide continuing support to the recipient.
- The supplier may lose the opportunity to continue developing and improving new generations of the technology.
- The supplier will receive a smaller share of the profits in the recipient's market, in proportion to its lesser risk.

Disadvantages in becoming a recipient of technology are:

- The recipient may lose the capacity to develop the technology internally.
- The recipient could become locked into a particular technology.
- As part of the price of acquiring the supplier's technology, the recipient may be committed to providing its own improvements or supplementary technology to the supplier at no or nominal cost.
- The recipient may assume the obligation to purchase tied-in products, such as spare parts, raw materials and associated products, while utilizing the technology.
- In some cases, the recipient is required to pay for and protect technology which, in the absence of such agreement, would eventually become freely available to the recipient.

• The recipient can be forced to accept restrictions to its marketing and policies relating to the technology's licensed products (i.e. specified distribution channels, restrictions on exports, specified levels of production of the goods, territorial limitations and the restriction of sales of products to only the supplier of the technology).

#### Factors Influencing Technology Transfer

There are several other factors that should be reviewed, particularly by the recipient, in order to decide upon an effective technology transfer program. These are primarily market-oriented issues and government requirements such as:

- The supplier or the recipient's position in the marketplace for a particular use of the technology product.
- The particular stage in the technology's development as related to market requirements.
- Changes forecast in both the market structure and the parties' positions in the market.
- Distribution requirements as dictated by cost and availability of various sales structures.
- Timetable for implementation and initiation of the project.
- Capital requirements and local availability of capital.
- Local availability of raw materials and product components.
- Availability of an educated and trained local labour force, and the policies of union organizations.
- The cultural appropriateness of the technology products in the recipient's country.
- Availability of competitive technology and its position in the market.

- Local government policies on technology (i.e. licensing restrictions and restrictions on equity ownership and on local asset ownership by foreigners).
- Taxation laws.
- Local product liability laws.
- Local government standards for the technology's use and regulation of its industry, in such matters as design, safety and environment.
- Restrictions on repatriating payments in certain currencies to the supplier.
- Countertrade policies.
- Effectiveness of legal protection in the local market.

Technology generally increases in value in proportion to its development. This raises the question of whether technology should be transferred prior to it or its products becoming commercially marketable. It may be appropriate to supply technology even at the earliest stages of its innovation or development. The needs of potential recipients, and the ability of the supplier to secure adequate protection for the technology to prevent loss of its rights, are the two most common factors in determining when a transfer should occur.

#### **Choosing a Strategic Partner**

It is fundamentally important to choose the right party to participate in a technology transfer. A well-drafted contract with a poorly-chosen contracting party is doomed to failure even if the technology is appropriate. Although there may be no such thing as a standard or prototype agreement, an element common to all successful technology transfer transactions is the compatibility of the parties. Parties must co-operate on common goals to ensure that the technology transfer takes place as contemplated. The choice of the right party is critical if the legal structure within the agreement is to lead to a long-term harmonious working relationship with results that neither party could achieve independently.

As in every contractual relationship, both parties should have a willingness to act in good faith, a perception of a "win-win" situation, the ability to recognize each other's viewpoint and concerns, and a desire to have a formal agreement setting out specifics for a long-term relationship. The parties should be complementary, seeking mutual objectives and showing a desire to co-operate without withholding anything useful or necessary for the project's success. To avoid major problems caused by language differences, the parties should agree on a single recognized language for the agreement and correspondence.

There should be no conflicting interests. This will usually require a provision in the agreement eliminating direct competition between the parties or their affiliated organizations. Restriction of the technology's use for noneligible products or territories prevents temptation to do so.

The actual size of each party's organization is occasionally of concern since business enterprises have differing approaches, views and decision-making methods depending on their size. In addition, trappings of superiority or lack of mutual confidence and respect, together with a natural tendency to use pressure to achieve goals, may occur where one organization is much larger than the other.

The supplier could investigate the recipient in the following areas:

- Ownership of the recipient (competing shareholders, affiliation with a larger group, single proprietorship).
- Managerial structure.
- Personnel competence, education level and capacity, technical awareness and knowledge.
- Availability of resources, equipment and machinery, level of quality and manufacturing capacity.
- Sales organization.
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- Markets, market share and forecast patterns of change.
- Potential for conflicts (i.e. due to serving the same customers).
- Financial background.
- R&D capacity.
- Local availability to the recipient of educational and vocational training.
- Additional resources that the recipient will require in order to establish itself as a viable user of the technology.
- Internal product development time utilizing the technology, and costs to be incurred by the recipient as required by technical and market considerations.

A review of the supplier's background could be made in the following areas:

- Ownership of the supplier.
- Managerial structure.
- Inherent value of the technology.
- Prestige and reputation of the supplier, its technology and products.
- Margin of the supplier's lead in the development of the technology, marketing, development time and costs, and its manufacturing techniques and costs.
- Availability of support from the supplier for providing translated documentation, meeting local requirements, complying with the stipulated technical standards and methodologies, providing future technology improvements, merchandising and sales assistance, consulting services and managerial assistance.
- Potential conflict over the same customers.
- Financial background.
- Comparison of alternative technology and goods and their costs.

- Legal status of the ownership of the technology, particularly any underlying statutory protection and its exposure to allegations of infringement of others' rights or to attack on other legal grounds.
- Licenses and assignments granted in the past by the supplier, along with a summary of those terms and conditions that will affect the recipient.

Prospective suppliers and/or recipients of technology may be among your business associates or you may come into contact with them through a chance meeting. More often, suppliers and recipients come together after an extensive search. Offers to supply, or requests for technology are sometimes advertised in newspapers and business or professional magazines. Some government and privatesector publications may contain information on various sources or requests for technology. An example is the Technology Networking Guide published by Industry, Science and Technology Canada. This publication aims to help the Canadian business community develop networks and contacts that provide information on new technological developments, or requests for new technologies in Canada and several foreign countries. A copy can be obtained, free of charge, from:

Technology Transfer Services Industry, Science and Technology Canada 235 Queen Street, 10th Floor East OTTAWA, Ont. K1A 0H5 Tel.: (613) 954-5256 Fax: (613) 954-1894

Embassies and consulates may also provide information on prospective suppliers or recipients. Financial institutions and banks have access to information concerning their customers' technology projects. Various government bodies have trade promotion offices or bodies devoted to innovation, research, development or industrial promotion, that act as focal points for technology offers and requests. Specific trade and industry associations may also be approached for assistance in arranging a technology transfer.

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# **Technology Rights**

What Rights can be Obtained?

In order to supply or acquire technology it is essential to understand the rights with which we are dealing. What follows is a brief description of the rights that can be obtained in Canada to protect technology. These rights fall into five categories, collectively referred to as industrial or intellectual property rights, which consist of patents, trademarks, registered industrial designs (design patents in the U.S.), copyright and trade secrets.

With the exception of trade secrets, these intellectual property rights depend largely upon statutory protection. Many of these statutory rights were established in the early part of this century, and some have not yet been revised or expanded sufficiently to keep pace with the many new technologies that have been developed.

All intellectual property rights acquired in Canada apply only in Canada, or within specific areas of Canada. If the technology transfer is international in scope, then great care must be taken to review the existence and effectiveness of corresponding technology rights in the other country.

#### Patents

Patents are limited monopoly rights granted under the federal *Patent Act* to an inventor who discloses any new and useful art (knowledge), process (method), machine, manufacture or composition of matter, or any new and useful improvement in any of those items. The monopoly right allows the inventor to prevent others, even persons who have developed the same invention independently, from making, using or selling an invention.

An invention must satisfy certain criteria before a patent right will be granted. It must be novel (i.e. it must not have been used, sold, offered for sale or described in any patent or publication before applying for a patent, subject to one exception). It must be useful (i.e. of industrial value). There must be an element of inventiveness (i.e. the invention cannot be obvious). The invention must be properly specified in the patent documentation, so that other persons skilled in the same field will know what the patent covers and be able to manufacture the invention when the patent expires.

Some things not normally patentable are: an improvement to a known device that would be obvious to a person who is skilled in that art; a simple change in size, shape or degree from a previous device or material; a device that has no use or is inoperative; a mere idea or suggestion or scientific principle (as opposed to a physical embodiment of an idea); a design; or a method of doing business. Patents generally reveal concepts, in contrast to technical and engineering detail.

An inventor may sell all or part of an interest in a patent or patent application, by assignment. Similarly, an inventor may license any or all rights to a patent.

It is up to the patent holder to protect any rights provided by the patent. Anyone found to be infringing the patent may be subject to an injunction preventing further infringement, as well as an award to the rightful owner of the profits made. Damages awarded can take into account both the loss of the profits that would have been made through manufacturing and the profits lost from unpaid royalties. If the infringer does not manufacture or sell, but only uses the invention, damages may be limited to what the infringer would have had to pay for a license to use the invented object or process.

The *Patent Act*, which had not been significantly amended since 1935, received major changes in a Bill passed on November 19, 1987. On that date, patent marking requirements for patented inventions were eliminated.

However, the major changes relating to technology transfer issues only came into effect on October 1, 1989, and are summarized below.

- Previously, if two inventors applied for a patent for the same invention, it would be granted to the "first to invent", after costly and lengthy conflict proceedings. Now the Canadian patent is granted to the inventor who is the "first-to-file" the patent application in Canada or in a "Convention country" (provided the foreign Convention filing is not more than a year prior to the Canadian filing). All the industrialized nations are on a first-to-file system, except for the Philippines and the U.S. (which appears to be moving towards such a system). The new system makes it imperative to file for protection as early as possible, even before prototypes are developed.
- In the past, a patent would be granted only if the invention had not been described in any publication, sold or shown, by anyone, more than two years before the patent application was filed. The new provisions ("modified absolute novelty") prevent a Canadian patent from issuing if the invention is disclosed to the public anywhere in the world, before the. Canadian or Convention country filing date, unless the disclosure was no more than one year before such date and was made by the applicant or a person who obtained information about the invention from the applicant.

- Previously, Canadian patent applications were held by the Patent Office in secrecy until the patent was granted and made public. Now the application, and all prosecution documentation, will be published for inspection by the public ("laid open") within 18 months of the Canadian or Convention country filing date (unless previously withdrawn by the applicant).
- Whereas in the past all Canadian applications were automatically processed upon filing, under the new provisions, examination of the application is "deferred" until a request to examine the application is filed (no later than seven years from the application's filing, after which it is deemed abandoned). This allows an applicant to defer additional fees and expenses until the applicant decides if the invention is commercially viable. In addition, any other person can now become involved in the examination process, by asking for the examination after the application has been "laid open" and/or by filing "prior art" to challenge the application.
- Canada was one of the few countries that did not have "maintenance fees" to maintain patent applications or patents in force. The new provisions require annual maintenance fees to be paid starting on the second anniversary date of both the application filing date and the patent grant date. Individuals or businesses with less than \$2 million in gross revenues ("Small Entities") are eligible for a 50 percent fee discount. Failure to pay will cause the patent to lapse or the application to be abandoned.
- The term of the patent in the past was 17 years from the date of grant; before such grant, the applicant had no protection against infringement. Now, the patent's life runs for 20 years from the date of filing. As before, the patentee is entitled to damages for infringement only after the patent is granted, but in addition, the patent.

holder is now able to obtain reasonable compensation for any loss suffered due to misappropriation of the invention between the date of being "laid open" and the date of grant.

On January 2, 1990 the Patent Cooperation Treaty (PCT) came into effect in Canada. This is an optional alternative patent filing system of advantage to those seeking patent protection in up to 43 member countries. Instead of filing separate applications directly in every country where protection is required, Canadian applicants now only have to file one application in the Canadian Patent Office. designating in which countries the applicant wishes patent protection. The Canadian filing date is deemed to be the filing date in each designated country. The applicant can defer selecting which designated countries to proceed in, for up to 20 months, during which time the applicant receives an international search report. If the applicant requests a "preliminary international examination" (PIE), the selection of countries to proceed in can be deferred for 30 months. As part of the PIE phase, the applicant receives a patentability opinion, in response to which the application can be amended.

Upon selecting the designated countries, the PCT process enters into the "national phase", where each selected designated country examines the application based on its own laws. The advantages of the PCT applications are savings or deferment of foreign filing fees, foreign agents fees and translation costs. No protection is available in any nation during its examination, until a patent is granted in such country.

Significant changes were also made in November 1987 to patent law as it relates to medicines and foods. Previously, only the process for producing food or pharmaceuticals could be patented, not the food or medicine itself. The new provisions allow patents for food and medicines themselves, except for food and medicines derived from a microbiological process which can be so protected only after November 19, 1991.

In the past, Canada allowed generic drug companies to obtain at any time, compulsory licenses for patented foods and medicines, either to import them into, or manufacture them in Canada, at a nominal royalty rate (i.e. four percent). The following is a very brief and general summary of new provisions that became effective June 1986:

- Compulsory licenses to import non-Canadian invented medicines into Canada will be available or effective only after seven, eight or 10 years of exclusivity of the patent owner (depending on various factors).
- Compulsory licenses to manufacture non-Canadian medicines in Canada are available only after seven years of exclusivity.
- For medicines invented in Canada, if the patent owner is manufacturing in Canada and satisfying the Canadian market, then no compulsory license will be granted up to the expiry of the patent; otherwise, a compulsory license will be granted only to make medicine for Canadian consumption and only after seven years of exclusivity.

In exchange, a medicines patent owner now has to satisfy the Patented Medicines Prices Review Board that during the period of exclusivity, the medicines are being sold at fair market value.

#### Trademarks

A trademark is a word, symbol or design (i.e. logo), or a combination of these, used to distinguish the goods or services of a person or organization from the products or services of others in the marketplace, by indicating the origin and quality of the goods and services with which it is associated.

A trademark may be protected by having it registered • under the federal *Trade Marks Act* or it may also be protected by provincial civil or common law. Trademark monopoly rights prevent any party from marketing its goods or services in association with a trademark so as to become confused with the goods or services of another party, who owns that or a similar trademark.

A word that is descriptive, or gives a false description cannot be registered. This is to prevent people from appropriating to themselves a common word that any individuals should be able to use to describe their own goods and services.

Similarly, words that are the name, in any language, of the goods or services with which the mark is to be used, cannot be registered. In addition, there are other restrictions on what can be used as a trademark, or what can be registered as a trademark.

Registration of a mark may be obtained for an initial term of 15 years and may be renewed thereafter indefinitely for 15-year periods, provided that the mark's use continues. Registration is advantageous because it permits a trademark owner to claim rights to the mark throughout Canada. Registration therefore allows a lawsuit for infringement of a trademark anywhere in Canada. Upon registration, there is a presumption of validity of the trademark. Registering a mark in Canada may make it easier to obtain corresponding trademark registration in many foreign (Convention) countries. Registration of the trademark is also required in order to validly license the use of the trademark.

Anyone infringing a validly registered trademark may be prevented under the *Trade Marks Act* from continuing to use it, and may be liable for damages as well. Since the Trademark Office will not take action against any trademark infringement, the registered owner must police and enforce its rights under the registered mark.

In addition, the Criminal Code provides for the possibility of a fine or imprisonment for the forgery or unauthorized use of a trademark, where the intent is to deceive or defraud the public. In addition to a trademark being protected under the federal *Trade Marks Act* if it is registered, other protection is also available under the common law action of "passing off". This common law right prevents others from misappropriating an unregistered trademark, so that they cannot pass off their goods or services in the same geographical region as the goods or services of the original user of the trademark (whether registered or not).

#### **Industrial Design**

"Industrial design" means features of shape, configuration, pattern or ornament and any combination of those features that appeal to, and are judged solely by, the eye and which are reproduced in most cases more than 50 times. Examples are the shape of a table or the pattern of a fabric. This design may either be applied to the surface of an article or involve the shape of the article itself or both, and must be an original design as of the date of creation. The originality requires no high degree of ingenuity.

A design for an article that is wholly functional, and that is the only design through which that function can be performed, is not registrable as an industrial design. In addition, if features are applied to an article having a utilitarian function and such features are dictated solely by that function, they cannot be protected as can an industrial design. A method of manufacture or construction is also not protectible under the *Industrial Design Act*.

Protection in the form of monopoly rights is only available on registration of the industrial design under the federal *Industrial Design Act*. Registration may be gained only by the owner of the design or owner's agent, and must be completed within one year from the date of the first offering or availability of the design to the public in Canada. Making available sample designs or prototypes would not be included in this prohibition. Industrial design rights are such circumstances, provided they are disclosed only on a limited and confidential basis to parties under a carefully controlled program. Because their value depends so greatly on maintaining their secrecy, any technology transfer program should try to prevent the lessening of secrecy below the legally required level of confidentiality not only with respect to the technology recipient, but also the technology supplier and any third parties accessing the technology under the agreement.

Recent decisions of Canadian courts have clarified that confidential information is not property under Canadian criminal law concepts, and therefore cannot be "stolen". This is one more reason to ensure that trade secrets are the subject of properly prepared agreements between all parties who are proposed to receive or have access to the confidential information.

#### Who Owns Technology Rights?

It is particularly important that the potential recipient of technology receive confirmation that the supplier either owns all the rights to the technology, or has legitimately acquired enough rights to allow it to transfer the technology to the recipient, in complete fulfilment of its obligations under the agreement. This topic requires some discussion of the ownership of technology rights.

#### Patents

An inventor, who is not an employee, is the first owner of the invention and has the right to obtain the patent.

If the inventor is an employee and discovers the invention within the scope of his or her work, where the terms of employment include responsibility to use the employee's inventive faculties, then the employer is the owner of the invention. This ownership test is determined either expressly or impliedly from the terms of the employment agreement. Of course, the employer will not be the owner if there is an agreement that the invention will belong to the employee.

If an employee discovers an invention in circumstances where or when he or she is not expected to invent under the terms of employment, then the employee is the owner and not the employer.

If an employee of a government discovers an invention within the scope of his or her duties, or while using government facilities, then the government is the invention owner.

A person can subsequently acquire patent rights at various stages. The inventor may assign his or her rights in the invention prior to filing an application for a patent. The inventor or the current owner/assignee may assign his/her patent application or issued patent. This assignment must be in writing, witnessed and registered.

Transfer of the physical possession of an invention does not transfer the patent rights to the new possessor. Sale of the tangible invention similarly does not transfer any patent rights to the purchaser, although it may grant the purchaser an implied license to use the invention.

A patent owner may assign part of a patent to a subsequent owner, so that there is more than one owner, differentiated by territory, time and type of rights.

An owner may expressly grant a license under a patent to use, sell or make the invention, in accordance with the terms of the agreement. Under certain circumstances, a license will be implied, thereby giving a non-owner third party rights under the patent (i.e. either to use, sell and/or make the invention).

#### Trademarks

The person entitled to be the registered owner of a particular trademark for all of Canada is generally the person who is the earliest by: virtue of a relationship of trust or confidence established between parties.

In a technology transfer agreement, not only the rights under industrial and intellectual property statutes should be considered, but, in addition, a determination of the applicability of trade secret rights. In many agreements there are references to know-how and show-how being supplied as a trade secret. These are not recognized by law as separate legal categories of protection, but are only common industry terms used to describe certain forms of technology.

Know-how is any knowledge and experience that relates to technology, but is not yet protected by industrial property statutory rights. Know-how can be common knowledge that is not a trade secret and not eligible for industrial property protection, but is still of value, such as information concerning sources of supply of raw materials and components.

Know-how may also be a blend, relationship, compilation or configuration of technological information that is confidential and protected as a trade secret. Its value comes from the fact that someone spent the necessary time, effort and monies to collect, reorganize and compile this information. Know-how may be eligible for industrial property protection, which has either deliberately not been applied for, or which has not yet been granted under a pending application.

Show-how can be defined as any kind of training and technical assistance, instruction, supervision, consulting and related ongoing support services to assist the recipient in using efficiently and profitably, either the common knowledge know-how, trade secret know-how, or patent and other statutory rights.

Whereas rights under patent, copyright, trademark and industrial design may be enforced against the whole world, trade secret, know-how and show-how rights can be enforced only against the party with which there is an

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express contract ("breach of contract") or a relationship of confidence such as employer-employee ("breach of confidence").

In many cases it is difficult to show that a situation exists that serves as a breach of confidence remedy in the courts. This is because it is necessary to show that the information was confidential, and that it was improperly used without the disclosing party's authorization to its detriment; and also that it was disclosed originally in circumstances imparting a legal obligation of confidence on the receiving party. A recently pronounced legal test revolves around the parties' expectations as to the nature of the information and its possible use, in the context of the customs of the trade or industry in which they operated. It now appears that the party receiving the information must ask what use of the information is permitted — not what use is prohibited. However, these guidelines provided recently by the courts have not sufficiently clarified this area and it is still a difficult question to deal with. For this reason, it is recommended that trade secrets and other confidential information be dealt with by written agreements expressly defining the parties' rights and obligations.

Once trade secret information, whether know-now or show-how, becomes known to the general public (i.e. a patent application is "laid open") or to the industry to which the information relates (i.e. a readily analyzable product is offered for sale), it is usually no longer protectible under trade secret law. Obviously the value of technology based solely or largely on know-how and show-how is subject to dispersion due to the gradual but eventual loss of confidentiality, through movement of employees and disclosure to consultants, agents and subcontractors (see Appendix A).

Trade secrets, like other intellectual property, may be sold or licensed to others in order to exploit them. However, . trade secrets will not necessarily lose their protection in The intent of the new provisions was to update the law to reflect more realistically and protect developments in technology, and to align Canada's practices more closely with those of its major trading partners. Of particular interest to technology transactions are the following new provisions:

- Computer programs in any medium are expressly protected for the life of their creator plus 50 years, provided that purchasers of copies may make a single copy for back-up purposes or may adapt the program for compatibility with a particular computer.
- Designs that are protectible under the *Industrial Design* Act can now, in some cases, also be protected by copyright (which was not previously the case).

It is not an infringement of copyright under the new provisions to do any of the following:

- Use any method or principle of manufacture.
- Apply to a Useful Article (defined as anything made by hand, tool or machine, having a utilitarian function other than acting as a carrier or medium) features dictated solely by the utilitarian function of the Useful Article.
- Reproduce utilitarian features of a Useful Article.
- Reproduce a Useful Article, or drawings of it, if it has previously been reproduced more than 50 times (except for trademarks or graphic representations on the face of the Useful Article and certain other exemptions).

Note that such activities, although not constituting copyright infringement, could be an infringement of other intellectual property rights such as registered Industrial Designs, Patents, etc.

#### Trade Secrets, Know-How and Show-How

By granting a license, such as a patent license, the owner of the patent is agreeing not to exercise its rights to prevent the licensee from making, using or selling the invention that is the subject of the technology. However, a simple license (patent or otherwise) does not mean that the patent owner is obligated to provide any related technical information that is not described in the patent claims, or offer technical assistance or training, or grant any other rights.

That is why technology cannot usually be transferred and viably exploited and commercialized by relying merely on traditional industrial and intellectual property rights. Various elements such as show-how and know-how are now recognized as being crucially important to technology transfer's success. Generally, a technology transfer agreement must include provisions dealing with what are called trade secret rights.

Trade secret law is not fully developed in Canada. Its vague and imprecise principles are to be found only in a few cases in Canadian common law. Statutes have been passed in other jurisdictions, such as California and Washington State, to protect trade secrets; however, although proposed for some provinces such as Alberta, no legislation dealing with trade secrets currently exists in Canada.

A trade secret can be defined as consisting of any secret formula, pattern, device or compilation of information that is used in business, and that can obtain an advantage over competitors who do not know or use it. It may be a formula, manufacturing process or design for a machine, information relating to the marketing and sale of goods, or office management or business processes involving customer lists or methods of bookkeeping. A person's rights and obligations with respect to trade secrets are usually set out in a written contract, although they may also arise by granted for an initial period of five years and may be renewed for one further five-year period, for a total of 10 years maximum.

A sale of registered industrial design rights may be made by an assignment of the registration, in writing. The use of an industrial design may be licensed to others during the term of its registration.

The owner of the registered industrial design may, within one year of infringement, bring an action in court for damages against any person who applies or imitates the design, with knowledge that the owner has not given consent. The test that is used to determine infringement consists of whether one design would be confused with the other, and whether the defending party's design would have any existence were it not for the registered owner's design.

If infringement is found to have occurred, the court may award damages, an injunction to prevent further infringement, delivery of the infringing articles to the wronged party, and an accounting of any profits that were made during the infringement.

#### Copyrights

Copyrights are granted under the federal *Copyright Act*. Copyright or the right to copy, generally means that the owner of copyright in a work is the only person who may copy the work or permit someone else to do so, and generally includes the sole right to publish, produce, reproduce and to perform such a work in public.

Copyright protection exists, generally, for the life of the author of the work, plus 50 years following the author's death. A number of exceptions to this general rule limit the term of protection to 50 years from the date of a specified event.

The primary right under copyright law is that of the copyright owner to prevent others from copying the work.

This right is not as broad as the monopoly provided under the *Patent Act* since the copyright owner cannot prevent the independent production or creation of the same work.

Copyright applies to all original literary, dramatic, musical and artistic works, including designs, books, writings, musical works, sculptures, paintings, photographs, motion picture films, dictionaries, encyclopedias, etc. It also applies to "mechanical contrivances" such as records, cassettes, computer disks and tapes.

Ideas, information and pure data may not be protected by copyright. Also not protectible under copyright are themes, mere titles, names, catch phrases and other short combinations of no real substance.

Copyright protection comes into being automatically on creation of the work and does not depend on registration. Although registration is not required to gain protection under copyright, it provides several advantages. A certificate of registration is preliminary evidence that copyright applies to and protects the work and that the registered person is the owner of the copyright. Registration also allows recovery of damages for copyright infringement in addition to an injunction.

The owner of the copyright in the work may sell all the copyrights that he or she may have to another person by assignment. The owner may also license another person to use the work.

There are certain instances where a person other than the owner of the copyright may legally reproduce a part of, or the whole work in public, without the owner's explicit permission. As an example, reproduction of minor excerpts of a work in which copyright exists, for reasons of private study, research, criticism, review or newspaper summary are classified generally as "fair dealing" and do not constitute copyright infringement.

On June 8, 1988, the first set of major revisions to the *Copyright Act* came into being, since its enactment in 1924.

- Reviewing copies of standard forms for quotation, sales agreements and invoices, used by the supplier and/or the inventor in connection with the sale of the products.
- Undertaking a patent, copyright, industrial design and trademark search to confirm that the technology and/or products have not been patented or otherwise registered or applied for protection, by any third party in the granted markets.
- Obtaining a list of all trademarks, patents, industrial designs and copyrights whether registered or unregistered, and copies of all such registrations and applications for registration of any of the above, that have been applied for by the supplier with respect to the technology and/or the products.
- Reviewing all filings, reports, registration statements, correspondence, complaints, licenses, permits, approvals, orders, etc. relating to federal, provincial, state and local regulatory agencies in the areas of environmental protection, health and safety, as related to the products.
- Obtaining a Statutory Declaration by senior officers of the supplier and/or the key inventors relating to the status of the technology, the products and the proprietary rights relating thereto.
- Obtaining a review of any product liability insurance previously established for the products.
- Checking the security arrangements instituted for visitors at the premises where the technology was used or the products were manufactured/ distributed (i.e. sign-in procedure, pass cards, etc.).

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- Confirming that the product descriptions, claims and qualities (referenced above) are sufficient in detail and scope for purposes of disclosure materials required by law or by regulatory agencies (i.e. prospectus), for marketing purposes and for meeting the enquiries of investors and third party financing institutions.
- Obtaining sufficient samples, prototypes, technical documentation and information relating to the products, to the extent necessary to allow the recipient to evaluate the technology and products.
- 2. Valuing the technology assets by such steps as:
  - Evaluation of the technology's technical merits and its products by independent consultants, relating specifically to the qualities and claims of the products.
  - Evaluation of the products as an asset from the marketability perspective, including customer references, customer lists, market evaluation studies, trade literature, competitive analysis by industry experts and marketing plans.
  - Verifying existing purchasers or possible purchasers of the products, the terms of any outstanding purchase orders and the status of any existing or proposed agreements.
  - Reviewing customer (end-user) acceptance of the products, and their comments concerning product utility, application and performance.
- 3. Confirming ownership rights through:
  - Acquiring information concerning all places, persons or corporations that the technology inventor/ developer has worked with or for as employee, associate, partner, consultant or joint venturer, during the period when the technology and related products were being developed.

- Verifying the dates and terms of engagements referred to above.
- Reviewing copies of all agreements (including confidentiality, invention, ownership and non-competition agreement provisions) between the inventor and his or her current employer.
- Reviewing copies of all employment agreements (including confidentiality, invention, ownership and non-competition agreement provisions) between the inventor and his or her prior employers, covering the period when the technology and related products were being developed.
- Obtaining copies of all assignments executed by the inventor, of rights and title in inventions and discoveries comprising the technology and its products (i.e. patents, patent applications, trade secrets).
- Reviewing copies of all consulting or services agreements entered into by the supplier and/or the inventor whereby they provided any services to third parties relating to the technology or the products.
- Reviewing copies of all consulting or services agreements whereby the supplier retained any third parties to assist in the development of the technology or the products.
- Reviewing copies of all licensing agreements entered into between the supplier and/or the inventor, relating to the licensing of the technology and/or products for manufacture, use or sale by third parties.
- Reviewing all existing supply, manufacturing, distribution, franchise, and agency agreements entered into between the supplier and/or the inventor with respect to the technology and/or products.

the prior owner. A residual gift in a will can also transfer the copyright. The trustee of a bankrupt's estate may assign the copyright owned by the estate.

Transfer of the physical possession of the work does not transfer copyright. Similarly, sale of the tangible copyrighted work by itself does not transfer the copyright.

By law, the last 25 years of the copyright term are automatically assigned back to the author's estate 25 years after the author's death. This automatic assignment cannot be given away by the author or his or her estate.

The copyright owner may assign part of the copyright to a subsequent owner, so that there is more than one owner, differentiated by territory, time and type of rights.

Even if the author of a work assigns all his or her copyright in a work to someone else, the author always retains a "Moral Right" to claim ownership of the work and to restrain any distortion of it prejudicial to his or her reputation. This "Moral Right" cannot be sold or given away by the author to another party, although it may be waived.

An owner may grant an interest in copyright by license, to the extent expressly set out in the agreement. Under certain circumstances, a license will be implied by law, thereby giving a person certain copyrights.

#### Trade Secrets

The person who expends the time, effort and resources to develop the trade secret is the owner. Therefore, several persons who independently develop the same trade secret may be independent owners of such trade secret without liability to each other. If an employee discovers or develops a trade secret, then the employee is a trustee of the trade secret for the employer, both before and after the term of employment. However, an employee can continue to use skills and experience gained during one employment in a subsequent job with another employer. A trade secret owner can transfer the ownership of the trade secret to a third party. This normally requires an agreement containing the following obligations of the former owner:

- To provide the trade secret to the new owner.
- To cease using the trade secret (and to destroy all documentation relating to the technology).
- Not to disclose the trade secret to any other parties.
- To ensure that no other licensees or other parties have access to the trade secret.

An owner of a trade secret may grant a license to another party to use the trade secret, with restrictions that can be based on many factors such as territory, time, manner of use, exclusivity, etc.

## **Due Diligence**

At an early stage, it will be necessary to identify specifically, appraise, and confirm the ownership of the technology assets being dealt with. It is usual to require the recipient to sign a non-disclosure or confidentiality agreement, prior to disclosing any of the proprietary technology to the recipient. Such agreements are discussed at greater length in Chapter 4. Much due diligence can be exercised by the recipient at this stage, and set out below are examples of the types of activities that can be undertaken prior to, or at the same time as the negotiation of the technology transfer deal.

- 1. Undertaking an inventory of the technology, its products and related business information, such as:
  - Obtaining a complete description of the major products, their stage of development, additional developmental work required (if any), product claims and the extent of each product's commercialization to date.

- Date of first actual use of such trademark in Canada.
- Date of first making such trademark well known in Canada.
- Date of filing of a foreign application (which is ultimately granted) for the same trademark, if the corresponding application in Canada is filed within the following six months.
- Date of filing an application in Canada where the application is based on the proposed future use of such trademark.

A distributor or representative of goods provided by a party which uses a trademark on such goods, acquires no rights to the trademark, even if actual use of the trademark is through the distributor or representative.

The registered owner may sell its interest in the trademark by assigning it. The registered owner may also license others to use the trademark provided that this licensed user is registered in the Trademarks Office as a "Registered User".

A person who uses an unregistered trademark within a geographical area may, in some instances, acquire a limited right to prevent others from using the same mark within the same trading area. Such a common law trademark cannot be licensed to third parties under Canada's trademark laws.

#### **Industrial Design**

The "proprietor" of a design is the only person entitled to apply for and secure registration of an industrial design. This usually means the author (creator) of the design. The proprietor is the person who creates the general nature of the design, not the artist who makes the actual rendering. If the author is an employee who created the design in the normal course of employment, then the employer is the proprietor of the design and is entitled to apply for registration. If the author (non-employee) created the design at the request of another person, then the commissioning person is the proprietor and is entitled to apply for registration.

An exclusive license to use the design and sell products incorporating the design may be granted by the owner of the registered design, allocated by time, territory, and type of rights, provided it is under a written license which is registered in the Copyright Industrial Design Office. A nonexclusive license to use the design, and sell products incorporating it, may be granted by the design owner by time, territory, and type of rights. This also requires a written license, but no registration is necessary.

#### Copyrights

The author or the designer of a work, who is not an employee, is the first owner of the copyright. The owner is not the person who is merely a scribe, ghost writer, person who draws detailed sketches from the rough sketches given by the creative designer, or the person exercising merely a mechanical skill to finish a work. Nor is the owner the person who only made suggestions or gave ideas incorporated into an author's or designer's work.

If an employee makes a work in the course of his or her employment, then the employer is the first owner, unless there is agreement to the contrary regarding ownership.

If a photograph, film or similar work was ordered by a person for renumeration or other benefits, then the person ordering is the first owner (not the photographer or producer) unless there is agreement otherwise concerning copyright ownership or license.

If a work is prepared by, or under the direction of, a government body, the government is the first owner, unless there is agreement of ownership.

Copyright can be acquired to make a person a subsequent owner by an assignment which must be in writing, signed by An exclusive license is not equivalent to an assignment agreement since it does not transfer any property. It only grants permission to exercise a certain right, together with the supplier's agreement not to permit anyone else to exercise the same right.

#### The Required Licensing Rights

After the initial crucial steps of defining the nature of the technology in a clear and comprehensive manner, and deciding to use a license as the technology transfer vehicle, the rights that the recipient expects to receive must be delineated. There are no implied rights granted to a recipient under a transfer agreement and it is necessary to specify expressly every right that each party expects to receive or reserve.

The kinds of technology rights that can be granted to the recipient include:

- The right to use the technology or the products of the technology.
- The right to make or produce licensed products.
- The right to sell, lease, import or otherwise distribute licensed products.
- The right to institute legal action against infringers of the technology.
- The same or similar rights with respect to technology improvements developed by the supplier.
- The right to grant to other parties some of the rights described above through sub-license or assignment.

The types of rights available to the supplier of the technology include:

• The right to a return of its technology upon termination or expiration of the agreement.

- The right to receive notice from the recipient, of improvements and developments to the technology, together with a right by "grant-back" (by license or assignment) of a portion of such developments.
- The right to take certain steps to ensure that the recipient properly exploits the technology.

It is not necessary to deal with all these rights: the parties can decide which technology rights are to be included in the transaction and segregate them (see Appendices J, K and L). However, for each of the rights actually transferred by license, some or all of the following qualifications should be addressed, since different considerations apply to each right (see Appendices M and N).

## Territory

Technology recipients normally try to acquire the most extensive territorial right possible. However, suppliers usually provide a geographical limitation on the recipient's exercise of the technology rights in order to protect their own competitive position, and that of other recipients of the same rights. A description can vary from worldwide, to a listing of included and/or excluded territories. It can also be defined by reference to those countries which have granted the statutory rights held by the supplier. Although some agreements limit the territory to a particular location or site, most recipients will find such a provision too onerous to accept.

## Time Period for Each of the Rights

It is wrong to state simply that the agreement, as a whole, will have a particular duration or term, since each right may have its own duration. A time period should not be stipulated for the agreement as such, since it must always be in existence to govern future obligations or disputes between parties. The proper approach is to describe a form. In contrast, the purchase of rights to know-how and other trade secrets requires the agreement of the technology owner to supply the technology, as well as negative covenants barring use or disclosure of such knowledge to other parties (see Appendix H).

There are several reasons why a purchase may be the preferred form of technology transfer. Tax implications, such as those relating to capital gains treatment, are one reason. Tax planning in this area may be quite complex and care should be taken not to make the wrong assumptions concerning the applicable provision. In some countries where licensing is not permitted or is greatly restricted, purchase could be the only viable method available. Purchase agreements are usual where technology is being provided to subsidiaries, affiliates, joint-venture subsidiaries or as part of a sale of an organization's business activities.

Technology can be purchased in one of several ways:

- Full or absolute assignment covering the whole of the title, rights and interest to all of the technology.
- Partial assignment transferring the whole of the title, rights and interest to a part of the technology (or to all of the technology on a partial basis such as territory).
- Transfer of an interest so that it results in an undivided (joint) interest which is, in effect, a sharing of the ownership of the technology.

An assignment agreement will usually transfer all of the legal rights it describes and leave nothing to the supplier of the technology. However, it will not normally defeat, and will be subject to, the rights in any license previously granted by the technology supplier.

## Acquiring Rights by License

As stated above, a technology transfer agreement must be based on either a purchase of technology rights, a license of rights to technology or a combination of both (see Appendix K). Titles and headings of agreements may not clearly indicate what type of technology transfer is occurring in the agreement. Even the use of terminology in the agreement itself, such as "sell", may not necessarily be determinative, if the features of the agreement all point to the granting of a license rather than a sale.

A license is commonly used to describe situations where:

- The owner (licensor) of certain statutory rights in the technology (i.e. patent, trademark, industrial design or copyright) grants permission to another party to exercise some of those exclusive rights held by the owner of the technology.
- The supplier (licensor) grants the rights to use technological information that is not protected by statute, but which, through the expenditure of skill, effort or knowledge, has been assembled into a know-how or show-how form, and is protected as a trade secret. The supplier also undertakes to keep the trade secrets confidential and to take positive steps to protect such rights (see Appendix I).

A license does not transfer property interest in the technology, although provisions dealing with know-how and show-how licenses will normally provide for the delivery of, or access to, certain technological information, goods, services, personnel and documentation. In some situations, a license may grant technology rights that are not owned by the licensor, but which the licensor has acquired by license from a third party and is permitted to sub-license.

Since a license does not convey any property in the technology, the licensee normally has rights only against the licensor. A licensee does not acquire any rights with respect to any third party that improperly acquires and uses the technology (except for certain limited rights specified in the industrial property statutes). cases have held that the provisions of a technology agreement should be very clear; otherwise, the courts may refuse to enforce such a contract.

To avoid misunderstandings and ambiguity, various other terms within a particular agreement should also be defined. The use of such defined terms will help simplify the structure and complexity of the technology agreement. Some of the more commonly defined terms are "licensed product" (the product which is the result of, or incorporates the technology), the "commencement date", "effective date", "deliverables", "equipment", "acceptance procedure", "acceptance date", "net and gross selling price", "territory", "training", "royalties" and "market" (see Appendix T).

As additional assistance for interpreting the contract, participants can refer to published definitions of technical terminology, or technical standards that may be established by an international organization. The same approach of using a standard may also be applied to the interpretation of commercial trade terms (i.e. FOB) for international technology transfer agreements, by reference to publications such as INCOTERMS, published by the International Chamber of Commerce.

It is not enough to review and decide which of the various statutory and non-statutory rights are relevant, and then deal with them independently. Each technology transfer agreement should take an integrated or "system" approach to the technology involved. It should not just deal individually with the rights under trade secret, patent and the other legal and non-legal labels. Of course, it may be desirable to break the technology package into its constituent components to satisfy requirements such as administration, taxation and registration. However, both parties should recognize that the focus is to be on the value and usefulness of the technology as an integrated unit, rather than on a series of components that are dealt with independently, without regard for their interrelationship. The system approach to technology transfer requires that three concepts be implemented in the agreement: rights to the technology, accessing the technology and acquiring the ability to use the technology. Failure to deal adequately with any of these three components will severely diminish the probability of a successful transfer actually occurring. Appendix F reflects this approach to technology transfer. These three concepts are explored in greater detail in the following sections.

## Acquiring Rights by Purchase

There are only two commonly used methods for acquiring technology rights. The first is the purchase of the proprietary rights to technology, on a complete or a limited basis. This results in the recipient acquiring a legal interest in the technology. The second is by the licensing of limited rights to the technology, usually for a fixed period of time (see Appendix G). The key difference is that the technology supplier can sell the technology only once; whereas, unless an exclusive license has been granted, the second approach could result in many licensees operating simultaneously. Although technology can normally or usually be transferred by one of these two basic methods, many technology transfers are part of larger business relationships and are provided for under agreements called joint ventures, turnkey projects, facilities and resource agreements.

The purchase of technology may require an assignment agreement whereby the technology supplier transfers, by assignment to the recipient, either the legal title to, or an undivided ownership interest in, the statutory technology rights. This has the effect not only of establishing rights between the recipient and the supplier, but also of establishing rights between the recipient and the general public. Assignment agreements of industrial property rights are usually also required to be registered using a standard

# Structuring the Agreement

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The Structure in General

The following material describes some of the basic components of a technology transfer agreement, their legal aspects, problem areas and possible solutions. The discussion is not intended to be exhaustive, but does illustrate the nature of some of the issues that arise and have to be resolved. The participants must understand the principal issues and their interrelationships before incorporating any particular approach into an agreement.

Standard form agreements, sometimes developed by large organizations, and which may be useful for other types of transactions, rarely address the complex nature of a technology transfer. It is not recommended that either a recipient or a supplier use them. It is impossible for such a document to deal precisely and adequately with the many factors making up a technology transfer, the local legal requirements, differing technologies, changing circumstances and the interests of the parties. All too often, standard form agreements tend to depict the relationship as inequitable and are potentially difficult to enforce.

One of the first things to do in structuring an agreement is to define adequately the technology that the parties propose to deal with. Since "technology" can mean systematic knowledge of many kinds as related to a variety of activities, it may be defined in many different ways in agreements, according to how it is perceived by the parties involved and their particular environments and legal systems. The following are some ways in which technology may be conceptualized:

- Technology that produces, or is incorporated in whole or in part in a defined or a "licensed product" (see Appendix B).
- Technology that relates to a particular process, methodology or system, whether or not a product is involved (see Appendix B).
- Technology that relates to a particular apparatus, machine or invention, whether or not a product is involved (see Appendix B).
- Technology that meets the recipient's specified needs in such areas as planning and marketing, design and production activities, start-up, modifications or R&D (see Appendices C, D and E).
- Technology based on documentation, R&D results, prototypes and machinery, etc., held by the supplier.
- Technology covered by the statutory protection that the supplier has received under patent, copyright, trademark and industrial design laws.
- Technology described by reference to that information not generally available to the general public which is kept as a trade secret, and other proprietary information of the supplier.

Any one or more of the above approaches to conceptualizing technology should be considered as a basis for a workable definition. The more ways that it is characterized and specified, the smaller the risk of future disputes occurring concerning the scope of the agreement. Recent

## Price

Establishing a value for technology, and putting a price and payment scheme into effect, can be very complex. There are several ways of doing this, some examples of which follow.

In some cases technology rights are transferred but payment is non-monetary, such as a transfer resulting from litigation, cross-licensing or a grant-back to the supplier of rights to improvements made by the recipient. Other examples are the granting of equity interests in the recipient's business through options or share transfers, or the provision of services or products.

Monetary compensation generally falls into two categories: non-royalty and royalty compensation. The simplest form of non-royalty compensation is a fixed price payment, which may be paid "up-front" or in instalments. Other examples of non-royalty compensation are cost and cost plus fees, and payment per unit of technical assistance. Non-royalty compensation is used almost exclusively when dealing with the purchase of technology rights. Licensing of rights usually involves royalties, and sometimes nonroyalty payments.

Generally, royalties are based on the extent to which the recipient uses the technology. They may be calculated as a fixed amount with reference to a measure of technology use, such as the amount of materials used in the technology process, or the number of licensed products produced or sold. Royalties can also be calculated on variable or fixed percentage rates, sometimes subject to maximum or minimum royalties and sliding-scale factors. They are applied to either the materials or components used in the technology process, or to the value of the licensed products based on their gross selling price, net selling price or the profits resulting from their distribution. It is important to define precisely the reference terms such as "net selling price" and the time that the "sale" or "manufacture" occurs.

The technology supplier may sometimes try to establish minimum amounts that are payable regardless of the calculated royalty payment. The supplier may also insist on the right to terminate the agreement or to change its nature (i.e. from exclusive to non-exclusive) if specified minimum royalty levels are not reached. The recipient may wish to establish a maximum amount of royalty above which the calculated royalties are not payable. If the maximum royalty is reached, the agreement may provide that certain events occur, such as a change in the license to exclusive from nonexclusive, or complete assignment of the technology rights to the recipient. Sales by the recipient to related or nonarms-length companies should be calculated on the basis of what an arms-length company would have paid for the licensed products, or some other measure of fair market value. Alternatively, the selling price could be deemed to be the price at which the affiliated company resells the products to an arms-length third party.

A frequent question is the method of establishing the price to be paid for technology rights. The value involved reflects both the cost to the supplier in relinquishing the technology rights, and the advantages gained by the recipient. Although it is difficult for either party to have all the market information necessary for a precise determination of the value of the technology, some of the considerations that can be taken into account include:

- The reputation of the supplier.
- The original investments made by the supplier.
- The future costs to be incurred by the supplier (i.e. legal protection, warranty costs, administration costs).
- The cost to the recipient of developing similar technology independently.
- The eventual market for the supplier's technology and the licensed products.

production or development equipment (tooling, equipment, parts, materials) and/or information as to their specifications and sources; the licensed products themselves (at least until the recipient can itself supply its market); and related business information (customer lists, supplier lists, marketing information). These rights should also apply to technology improvements, in the appropriate circumstances (see Appendix 0).

Failing to define the format and contents of the items to be supplied can cause problems. The number of copies, the size and the language should be clearly set out in the documentation. Non-documentary forms of information should list the media (photos, blueprints), the number of originals to be supplied and size. In all cases, unit references must be clearly defined. Other information of assistance to the recipient will be lists of drawings, materials and product specifications, marketing procedures, production facility requirements, equipment and tooling lists and production planning information.

Finally, the recipient will want to receive representations and/or warranties from the supplier that it can currently supply technology in accordance with the contract requirements, sufficient to meet the recipient's needs; or that it will be developing or acquiring it within a stipulated period. It is of little value to the recipient to have a welldrafted license or purchase agreement, if the provisions dealing with the supply of the technology and related information are not well conceived. If they are, the recipient will have good prospects of effectively using the supplier's know-how and the benefits of its technology.

# Acquiring the Ability to Use the Technology

Another major problem in dealing with the transfer of technology is the failure to ensure that the recipient has acquired the "ability to use" the technology. Going to great lengths to identify, and to obtain, the technology rights (whether by purchase or license) and making adequate provision for the supply and receipt of the technology and its related information, are not enough to guarantee a successful technology transfer program.

For the recipient to use the technology effectively, the supplier should provide show-how in at least one, if not more forms. This is a relatively easy concept to deal with in principle, but much harder to put into practice. As a guide, the recipient should realize that it can receive show-how through such means as training programs, formal education, staff exchanges, consulting services and ongoing maintenance or support. These programs must be well conceived in scope (i.e. level of the trainees, technicians, engineers, etc.); location (site of the recipient, supplier or third party); length and schedule; number of recipient's personnel involved; language; cost; required facilities and aids (i.e. laboratory or testing equipment, special protective clothing) (see Appendix P).

On the supplier's side, there is a reluctance to provide any guarantees to the recipient and its personnel that they will be able to absorb the technology, and effectively use it for their intended purposes in a particular environment. The supplier may be concerned that the recipient's personnel have an appropriate level of education and skills, and willingness to diligently follow instructions; that the recipient's tools, equipment and materials meet the supplier's standards, and that the recipient's facilities and the production environment are suitable for the technology.

If the participants identify such issues applicable to a particular technology transfer, and arrive at a mutually agreed resolution, this will not necessarily guarantee that the recipient is successful in acquiring the ability to use the technology. However, such an approach will certainly decrease the potential for major problems. unreasonably withheld or delayed. Or, sub-licensing may be permitted only for particular purposes, as in the case of the recipient supplying the technology to a subcontractor or an affiliate.

#### **Pre-emptive Rights**

Technology agreements sometimes stipulate that, despite provisions contained in the agreement, the rights the recipient receives are qualified or restricted by prior agreements that have been entered into by the supplier and other parties. These specific restrictions should be specific listings rather than references to the prior agreements so that the recipient may be fully aware of the specific limitations affecting the recipient's use of the technology.

#### Extent of Use

Restrictions may be placed on the extent or volume use of the technology by specifying the maximum number of the licensed goods or services that may be manufactured, sold, used, distributed, by other measures of use of the technology.

#### Manner of Use

Restrictions may apply to the form in which the recipient can use the technology, and prevent the recipient from converting the technology to, or using it in, another form. An example of this provision is the requirement that software be used only in its object code (machine language) form rather than in its source code (high-level programming language).

#### **Reproduction Limitations**

It is usual for the supplier to restrict the number of copies of the technical information that the recipient is entitled to use. This is usually accompanied by allowing specific exceptions for back-up and archive copies, as well as copies for production and related purposes.

## Accessing Technology

One of the major errors in technology transfer transactions is omitting, or dealing in a cursory way with, the concept of "accessing the technology".

From the recipient's point of view, effective and comprehensive means of access to the technology should be a crucial consideration. The technology supplier, on the other hand, will not want to undertake what it views as overly onerous supply obligations for which it is not sufficiently compensated.

Accessing the technology is not a major concern with patent and industrial design rights, since the technology is usually adequately disclosed in the registrations that are freely available. Nevertheless, when rights under patent, industrial design and other registration status are involved, it is usual to require the delivery of copies of certificates of registration, materials filed as part of the registration process and related registered assignment and license agreements.

However, when the technology is primarily or even partially the subject of trade secrets (or rights to unfiled works such as copyrights), it becomes imperative to provide for the supply of, and access to, technology in a detailed manner. In particular, the recipient should obtain the right to acquire copies of documentation describing the trade secrets, know-how and copyrighted works; certain physical embodiments of the technology (prototypes, samples); commencement date for each right (i.e. the date of execution of the agreement, or a "conditional date" which is effective on the occurrence of certain conditions), and an expiry date for each right (i.e. a specified future date, the date of payment of the final instalment, or the date of expiry of a patent). An expiry date need not be used for any particular right, if the term is described as being perpetual for that right. If there is no expiry date and no reference to a term for any particular rights, a grant of rights may be revocable on reasonable notice by either party.

In some cases, provision is made to renew the initial term of the rights, through the exercise of an option by the recipient with prior notice, or automatically, unless one of the parties gives notice of termination prior to expiry.

It is usual to provide for early termination of all rights should the agreement be breached. In addition, the agreement may include a provision permitting early termination "for convenience" or at the option of one of the parties. If a general phrase is used stating that the agreement itself terminates, then the parties must consider which rights are to continue and survive. For an example of contrasting approaches, an agreement might permit the recipient to continue exercising some or all of the rights to know-how technology upon the agreement's expiration, while another agreement might oblige the recipient to cease exercising the rights to the know-how technology and return all physical embodiments of the technology to the supplier.

A similar approach may be used for other obligations that are set out in the agreement. An expiration date, together with provisions for early termination, can be stipulated for each major obligation. Another important consideration is the survival after termination of obligations such as confidentiality and nondisclosure.

## Exclusivity

The granting of rights on a non-exclusive basis permits the supplier to grant such rights to others, and to use the technology itself. Exclusivity prohibits the supplier both from using the same rights to the technology and/or from granting them to others. Granting a "sole license" to a technology will normally mean that the supplier cannot grant to others the same rights granted to the recipient, but that the supplier can, itself, exercise those rights. The agreement may also contain provisions stipulating that the status of rights changes from exclusive to non-exclusive, or vice versa, upon the occurrence of certain events. Exclusivity should also be defined with respect to territory, time periods and different compensation levels.

## Field of Use

Restrictions in the manner or field of use of the technology, may be stipulated (i.e. use only in connection with the production of certain specified products, or for the recipient's own internal purposes).

## **Market Restrictions**

The agreement may limit the recipient's right to sell or resell the licensed products to certain market segments, particular types of purchasers or potential customers.

## **Retransferring the Technology**

Restrictions normally apply to the recipient's ability to transfer its acquired technology to third parties, whether through assignment or sub-licensing. This may consist of an absolute prohibition, or of the right to transfer the technology on the basis of consent which is not to be

- The availability of competitive technology, and its ability to be used as a substitute.
- The average price payable for competitive technology.
- The stage of commercial development of the technology.
- The extent of legal protection available for the technology.
- The form of transfer (purchase, exclusive or nonexclusive license).
- The potential risks to the recipient of infringing thirdparty rights by using the technology.
- The types of restrictions on the recipient's right to use the technology.
- The estimated cost savings and other benefits of the technology in the recipient's operation.
- The level of investment required by the recipient to protect (i.e. patent/trade secret program) and to utilize the technology.
- The compensation paid by other recipients of the technology.
- The relationship of the supplier and recipient (i.e. whether they operate as direct competitors or are in separate markets).

There is no legal requirement that the supplier receive the same royalty or other compensation from every recipient of its technology. Therefore, in some cases the recipient requests a "most-favoured licensee" status so that it becomes entitled to pay no more than other recipients of comparable rights to the same technology. This provision is normally only applicable in cases where the technology is provided on a standard basis without customization or special provisions for a particular recipient. The recipient's concern is that it be able to compete on an equal basis with other recipients. The supplier's concern is not to be involved in a situation of constantly administering the pricing provisions, and justifying its price on the basis of this clause.

In Canada, a technology supplier has the right to enter into and enforce an agreement providing for payment for technology over a period greater than the monopoly term granted by the applicable industrial property statutes. For example, even after a patent lapse, a recipient of patented rights could be obliged to pay for those rights and carry out other obligations under the technology agreement, if the agreement so provided.

#### Payment

Once pricing has been determined, several payment issues must be resolved. They include the frequency of payments throughout the year, the time and date of such payments, the currency in which the payments are to be made, an exchange rate formula, the method of payment (i.e. letter of credit, bank drafts), the place of payment and ways of dealing with any present or future currency repatriation restrictions or similar impediments.

The actual time over which payments are made should be defined by reference to the payment commencement date, the date upon which the payments are to be escalated or de-escalated and the date on which the final payment is to be made. In some cases, the technology recipient will want to include a provision that all payments cease and do not apply after the occurrence of certain events, such as the recipient being sued by a third party claiming infringement of its rights through use of the technology. In addition, the cessation of payment may be stipulated where the technology is not delivered in accordance with a schedule, where some deficiency occurs in the supplier's performance or where the technology is otherwise deficient. The agreement may also provide that payment cease, if the technology falls into the public domain and is freely available to others.

If an underlying intellectual property right such as a patent, is held to be invalid, the patent licensee will be liable to continue paying royalties in accordance with the technology agreement, unless the licensor had expressly warranted the validity of the patent. To protect recipients, the agreement should always contain a warranty by the supplier of the validity of the intellectual property right, or provide that payment cease should the acquired rights be invalid.

The impact of Canadian laws relating to antitrust and competition restrictions, particularly with respect to pricing and payment, is uncertain in many technology transfer situations in Canada. The interpretation of such laws. and their application to technology transfer agreements. are unclear, because very few cases have addressed these issues. In addition, in the last decade no guidelines or official policy statements have been made by a Canadian government agency to clarify this area. Therefore, it is important that parties to a technology transfer agreement have their legal counsel review provisions relating not only to pricing restrictions, but also to other market restrictions such as exclusivity, territorial allocations, exclusive dealings and the ability of the technology supplier to fix or otherwise influence the price of technology and related goods or services provided by the recipient. As an example, it is currently not clear whether the supplier is prohibited from fixing the price that the recipient can charge its sublicensees for a technology.

## Supplier's Representations

The inclusion of warranties and representations by the supplier is usual, although the precise wording will vary greatly between different agreements. Examples of provisions include the following:

- That the statutory basis of the technology rights (i.e. patents) is valid and subsisting and that the supplier is the owner of, or licensee (with right to sub-license) such rights.
- That the appropriate applications for statutory protection are currently pending.
- That the technology does not, to the best of the supplier's knowledge, infringe any third-party rights.
- That the supplier is the sole owner of, and has the right to transfer the technology to the recipient to the extent required.
- That the supplier has not licensed, assigned, charged, encumbered or granted an option for the technology, and has not agreed to do so; nor has the supplier committed any other acts or granted any other prior rights, that will affect the validity, conflict with or restrict the technology transfer under the agreement.
- That the supplier possesses the technology, and that it is capable of producing a certain specified result.
- That the rights have been granted to the recipient on terms and conditions as favourable as granted to any other party.
- That the supplier shall not resell or license to third parties, the technology for which it has assigned, or granted an exclusive license to the recipient.
- That the supplier has been granted, and is the sole and exclusive beneficiary and owner of all the rights, title and interest in and to, certain regulatory approvals relating to the technology and/or the products, consisting of those approvals as specifically set out, all of which are valid, in effect and in good standing and whose validity will not be affected by the technology transfer.
- That neither the supplier nor its affiliates are a party to, or threatened with, any legal proceedings or inquiries

relating to the technology and/or products, and that the supplier is not aware of any circumstances that would give rise to any such legal proceedings or inquiries against it or its affiliates.

- That the supplier does not believe, nor is it aware of any circumstances that would lead it to believe, that any unauthorized use of the technology is occurring.
- That the supplier has entered into written agreements with all of its employees, affiliates, consultants, licensees and subcontractors who had access to the technology, whereby they have agreed to maintain the technology as confidential, not to disclose it to any other party, and to use the technology only for limited purposes as required by, and for the benefit of, the supplier.
- That all present and former employees, affiliates, consultants and subcontractors of the supplier, who have participated in developing the technology, have by written agreement and for adequate consideration, assigned all of their rights and interests therein to the supplier.
- That the supplier has made full and complete disclosure to the recipient of all information in its possession concerning any circumstances that could adversely affect the effective transfer of the technology to the recipient.
- That the technology supplier will continue protecting the technology by all applicable legal means, such as by applying for, maintaining or assisting in maintaining the statutory protection underlying the technology.
- That the supplier has maintained the confidentiality and trade secret nature of both the trade secrets and the subject matter of all patent applications, and that the supplier will continue to protect the technology through an internal trade secret protection program (particularly important where it has granted an exclusive license or an assignment of rights).

- That the supplier will be obliged to take all necessary action to monitor and prosecute infringement by third parties of its rights and those of the recipient.
- That the supplier will protect the recipient against any legal action taken by a third party who claims that the rights granted to the recipient infringe the third party's proprietary rights. This provision may range from the lesser obligation to defend the recipient and pay damages awarded, to a "hold-harmless indemnity" that fully protects the recipient against all loss, damages and liability.
- That the supplier will disclose and grant rights to future improvements to the technology developed by the supplier; (because there is no legal definition of "improvements", care must be exercised in defining them so that future misunderstandings do not arise as to the scope of this obligation. Issues similar to those relating to the "base" technology must also be addressed for improvements, such as the price of the improvements, the term of the rights and responsibility for filing, registering and otherwise protecting the improvements).
- That the supplier will take no action or inaction that would conflict with, or restrict the rights granted to the recipient under the technology agreement, or use the technology in any manner that would result in a conflict with the recipient's rights.

Several of the provisions set out above apply only to a licensing situation, whereas others are limited to the purchase of technology.

## Licensing Obligations of the Recipient

In a licensing situation, the recipient will normally be requested to agree to a number of obligations that the supplier considers to be standard. Most of these do not apply to a technology purchase. The recipient will generally have to take certain measures to protect the technology. These may include:

- Acknowledging and not contesting the supplier's exclusive ownership of the technology. This will relate to both the statutory rights, and the trade secret information held by the supplier.
- Protecting the technology through legal means, by assisting in, or being fully responsible for, applications and maintenance of the statutory rights in the technology.
- Protecting the technology by physical means, such as restricting the distribution of the technology to the recipient's employees or subcontractor until after they have entered into confidentiality and non-disclosure agreements.
- Keeping the technology confidential and not disclosing it to other parties, except in limited circumstances such as subcontractors or others supporting and maintaining the licensed products.
- Undertaking to comply with all laws in the jurisdiction in which the recipient operates, relating to the use of the technology in manufacturing, testing, sales and advertising.
- Assuming responsibility for the costs (and perhaps the conduct) of legal actions against third parties who have misappropriated the technology. The critical issues will be the level of the recipient's commitment to a program of protection, the manner of sharing the costs of such a program, the allocation between the recipient and the supplier of any damages won by the recipient from third parties, and the extent of the recipient's ability to make the decision to commence legal action and to control the prosecution and settlement of proceedings against third parties if the supplier is unwilling or unable to do so.

- Indemnifying the supplier against any claims based on misuse of the technology by the recipient, or on deficient products made by the recipient that bear the supplier's trademarks.
- Acknowledging that no other rights have been granted except those expressly set out.

The recipient may be obligated to provide a minimum level of resources and undertake certain activities to improve, or contribute to the improvement, of the technology. The extent of disclosure of these improvements, the granting of associated rights, and any payments to the supplier, should normally be covered. The recipient may sometimes be required to agree that such improvements become the property of the supplier or become available to the supplier on a royalty-free basis. Also standard is an allocation of responsibilities for protecting the improvements both by instituting confidentiality programs, and by seeking such legal protections as registration. As with the granting of the "base technology", the area of improvement grant-backs requires consideration of such issues as term and territory.

The recipient's general reporting obligations fall into two categories. The first concerns the quality controls used for the technology and its products. The agreement may require the recipient to provide samples on a periodic basis, as well as inspections of the recipient's premises and submission of reports. The second reporting requirement concerns the supplier's ability to verify the extent to which the technology is used, sales of the recipient's products and royalty calculations. It may be stipulated that inspection(s) is to be done either by the supplier or an independent third party under an obligation of confidentiality. Responsibility for the costs of record keeping, inspections and verifications must be set out in the agreement.

In most cases, both the supplier and the recipient have the same interest in maintaining and enhancing the reputation of the technology and the licensed products. A provision usually requires that the recipient comply with the supplier's instructions, specifications and quality controls for use of the technology and its products, particularly where the recipient is also acquiring the right to use the trademark or trading name of the supplier, or is providing the licensed products back to the supplier for distribution.

Where the compensation to the supplier is based on royalties, particularly in exclusive licensing arrangements. the recipient will have to commit itself to commercially exploiting the technology. To illustrate, the recipient could invest a minimum amount in manufacturing or R&D facilities, or undertake a specific marketing and sales promotion campaign. In some cases, the obligation is phrased very generally in terms of the recipient using "its best efforts" to exploit the technology commercially and meet certain sales objectives. If the supplier is to receive a minimum royalty or similar payment, it may not insist so strongly on such performance criteria, unless other reasons arise. For example, the domestic legislation in the recipient's territory may require it to "exploit" the technology (either directly or through third-party licensees) in order that the supplier's rights to the technology are preserved.

Suppliers sometimes attempt to include a restrictive provision preventing the recipient from competing with the supplier in the same technology field, both during and after the expiration or termination of the rights in the agreement. The scope of such a provision and its duration are often matters of much negotiation and dispute, and may be subject to antitrust and competition laws in the applicable territories.

The recipient is generally requested to acknowledge that no agency relationship exists between the parties, and undertake that it shall not enter into any agreements or incur any obligation on the supplier's behalf without the supplier's consent.

As part of the technology transfer, the supplier may require a provision that compels the recipient to acquire additional materials, components or technology from the supplier, in addition to the base technology. In some cases, this requirement benefits both parties by giving the supplier income and establishing a source of supply for the recipient. On the other hand, it may also pose a hardship for the supplier by forcing it to commit itself to develop and provide future technology, or to guarantee a source of materials. Similarly, the recipient may find it onerous to purchase all of its materials, goods and technology from one outlet, if other suppliers exist. This type of provision is usually closely scrutinized under antitrust and competition laws.

Some suppliers insist that the recipient not obtain any rights to competing technologies, thereby preventing the use of other processes, inventions and know-how. The objective may be to ensure that a particular standard of production is met, and quality control maintained. This provision is also used so that the recipient does not find itself in a conflict of interest position between the supplier and a third party. As expected, provisions of this type are also closely reviewed under antitrust laws.

#### Limitation of Legal Liability

Suppliers usually try to disclaim and limit their liability in one or more of the following ways (some of which may apply only to transfer by licensing):

- Excluding consequential, incidental, indirect and special damages.
- Limiting the supplier's overall liability to some stated amount or percentage of the value of the agreement.

- Providing certain limited remedies for breach by the supplier, and specifying that these are the recipient's sole recourse.
- Disclaiming responsibility for the recipient's manner of use of the technology and the resulting licensed products and services.
- Excluding all warranties and conditions except as expressly provided in the transfer of agreement.

Comparable limitations to protect the recipient may consist of:

- Limiting the maximum amount of any indemnities the recipient must provide.
- Capping the recipient's total liability under the agreement by reference to some stated amount, or a percentage of the agreement.
- Limiting the recipient's liability for negligently disclosing any trade secret elements of the technology.

#### Taxation

Taxation aspects of technology transfer agreements may be complex. Because the impact of tax laws changes significantly with the form and method of exploitation and compensation, they must be reviewed very carefully. The scope of this booklet does not permit an examination of all taxation issues or an in-depth review of any particular issue.

Tax treatment may depend upon the form of payments. If know-how is transferred in return for a lump sum payment, the supplier may be in a position to treat it as a capital receipt. If payment is made as a periodic royalty, it may be treated as income receipts to the supplier. Even royalty payments for an assignment or exclusive license would likely be an income receipt, whereas a lump sum payment for the same technology rights would ordinarily result in a capital receipt. Successfully characterizing the payments as capital gains, instead of income, is a major concern of the supplier, due to the lower tax rate involved. However, the recipient may have a conflicting position since its tax deductions may be greater if the payments are considered income rather than capital accounts.

In some situations, due to the particular provisions of the Canadian *Income Tax Act*, the same payments for technology that are characterized as payment in the nature of income of the supplier, may also be characterized as capital for the recipient. This results in both parties receiving less favourable tax treatment.

#### The Recipient

The technology recipient as payer for patent purchases or licenses may generally claim tax depreciation in the form of capital cost allowance; such depreciation is not available for acquiring patent applications. Trademarks may be deductible on a specified basis as "eligible capital expenditures". Payments for acquiring know-how are deductible expenditures in most cases.

The Goods and Services Tax is structured to apply to technology transactions. The paying recipient of the technology must pay the tax to the supplier (as remitting agent for the federal government) at a rate of seven percent of any consideration paid or payable for supply of technology in Canada. This tax is not applicable to technology transferred from Canada for use exclusively outside Canada. The tax also does not apply to the Canadian recipient of foreign technology if the recipient is in the business of making tax-exempt supplies; otherwise, the Canadian recipient must pay the tax directly to the federal government.

#### The Supplier

If the supplier carries on the "trading of technology rights" as its ordinary business, all payments received by the supplier, no matter what their form or the structure of the technology agreement, will likely be normal business income which is fully taxable. In contrast, a supplier of technology who undertakes the transfer as an isolated transaction, may receive more favourable tax treatment.

Any licensing or sale of technology rights, where the payments are based on the amount of "use or production from" technology property, will make such payments fully taxable as income in the supplier's hands.

Royalty payments made for the assignment or licensing of technology rights relating to patents and trademarks, and based upon the extent of use of the technology, will be characterized as income even if the patent or trademark, is sold outright. If the payment is a lump sum not based on use of the technology but as compensation for an interest, as in the case of the supplier giving up its rights to use the technology in a particular market (i.e. exclusive license or sale of patent rights), then it will be characterized as a capital receipt of the supplier.

Payments for assignments or licenses under copyright are rarely considered as capital receipts, unless it can be shown that the supplier of the rights is not engaged in a profession or trade that involves the creation of, or dealing in, such copyrighted works.

Canadian tax law generally does not treat know-how as property in the ordinary sense. The view is that a "sale" of know-how means that it is ultimately not disposed of, but only "disclosed", and therefore remains with the supplier for its use after such disclosure. Payments for know-how will only be treated as capital receipts if the supplier of the know-how is itself precluded in the future from using such technology in a certain market (i.e. exclusive license) in return for a lump sum payment not based upon use. A non-resident supplier of technology may be subject to withholding tax on payments made by a Canadian recipient to the non-resident, at a rate of 25 percent as reduced by the applicable tax treaty. The withholding tax applies to two general categories: management or administration fees, and rents, royalties or similar payments for certain types of information and services. In most cases, the withholding tax will apply whether the payment is a capital gain or income.

#### **International Provisions**

Canada adheres to several international conventions regarding industrial property rights; e.g. the Berne Convention and the Universal Copyright Convention, when dealing with copyright issues. Since these two copyright conventions do not form part of the domestic law of Canada, except to the extent that they are included in the Canadian *Copyright Act*, parties to technology transfer agreements that have effect only in Canada, do not need to review the conventions.

Similarly, Canada's membership in the International (Paris) Convention for the Protection of Industrial Property, which relates to patents, industrial designs and trademarks, is significant only to the extent that its provisions are reflected in the Canadian *Patent Act*, the *Industrial Design Act* and the *Trade Marks Act*. With Canada's recent ratification of the Patent Cooperation Treaty, important new provisions came into being to assist Canadian technology owners in protecting their inventions internationally (see Chapter 2).

There are no international treaties or conventions of which Canada is a member, that deal with trade secrets.

In a technology agreement that is international in scope, in that part or all of the technology is being received from, or will be used in, a foreign country, it is advisable to address certain additional issues such as:

- Approval of the transaction by government authorities of the technology recipient's country.
- The applicable law for interpreting the agreement.
- The process and forum for dispute resolution.
- Applicable language for interpretation and notices.
- Provisions relating to currency, rate of exchange and currency repatriation restrictions.

Some of these international issues are quite complex and it is essential that they be reviewed with counsel familiar with the laws and requirements of the foreign jurisdiction.

#### **Miscellaneous Provisions**

Various other provisions (sometimes called "boilerplate") are usually found in technology transfer agreements. Among them are clauses dealing with the following matters:

- Whether the supplier or recipient may freely transfer any of its rights or obligations to another party. (The restrictions range from a general prohibition, to a prohibition subject to consent that is not to be unreasonably withheld or delayed, and to permitted assignments without consent in limited circumstances, such as to subsidiaries or certain affiliates).
- Official notices, their method of delivery (i.e. telegram, facsimile, personal delivery, mail), the address and name of the individual to receive the notices, as well as when they are deemed to have been received after sending.
- Force majeure or events beyond the control of either party, which prevent or delay one or both of the parties from carrying out their obligations, the types of events which will excuse such delay, the length of time to which such delay will be excused, and whether ultimately the agreement will be terminated if the force majeure event continues beyond a certain date.

- Whether arbitration will be an optional alternative to the courts or an attempt to exclude review by the courts, a description of the arbitration body, its location, procedures and whether an appeal from it is permitted.
- The manner of executing the agreement and whether it requires certification or legalization, witnesses or corporate seals.

#### Attachments

Normally, various attachments also called appendices, exhibits or schedules, follow the main body of the technology agreement containing the legal provisions. They are used as a means of eliminating technical, financial or complex administrative details from the body of the agreement in order to simplify it. Attachments also permit the agreement to be concluded even though some of the material in the schedules is not available. Although it is not recommended that parties enter into an agreement or the concluded negotiations if all the schedules have not yet been completed, they sometimes complete negotiations on the body of the agreement, subject to the schedules being finalized to both parties' satisfaction at a later time.

Attachments may consist of the following:

- Particulars of trademarks, registrations and applications.
- Particulars of patents, registrations and applications.
- Particulars of copyrights, registrations and applications.
- Particulars of industrial designs, registrations and applications.
- Particulars of assignments, licenses or other grants relating to the rights to the technology.
- A description of the scope of the technology, as related to design, engineering, manufacturing, management, marketing, and a description of the licensed products.

- A description of the improvements included in the transaction.
- A description of the parts of the technology and improvements that are excluded, if any.
- Lists of the documentation such as manufacturing, drawings, materials specifications, vendor data, manufacturing procedures and facilities, tooling, production planning, quality assurance (see Appendix Q).
- A description of the technical assistance.
- An outline of the training program, the various disciplines and estimated training periods.
- Pricing and payment terms, escalation provisions and tax treatment.
- Supply and performance bonds.
- Licensed product specifications, tolerances, quality assurance and acceptance testing procedures.

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## Undertaking and Completing the Transfer

#### **Obtaining Legal Advice**

A seemingly profitable technology transfer arrangement, with the right party and the right technology, which is contained in a poorly drafted agreement, may be partially successful. It can, however, be vulnerable to significant problems in the future. Such unanswered questions as tax liabilities, future obligations\_regarding improvements, or liability to third parties, will subsequently arise to strain the relationship.

This guide offers basic assistance on various aspects of negotiating and preparing technology transfer agreements in Canada. But in this format, it cannot address the diverse legal issues that could arise in every transaction (see Appendix U for further reference). It is most important that timely legal advice be obtained from a lawyer who is knowledgeable both in the negotiation, and preparation of technology transfer agreements.

A person with a combination of legal training and knowledge of the peculiarities of technology transfer has a role to play, whether acting as a lawyer or as a business counsellor. As well as being an expert in technology transfer transactions, this counsellor should become familiar with the relevant industry, as well as the commercial, technological and financial concerns of the party being represented. The extent of assistance the counsellor should provide will depend upon the experience of both the supplier and the recipient in dealing with technology transfer, the complexity of the transaction, the presence of international considerations and the availability of resources within the two organization to devote to the technology transfer project.

Following are some of the specific areas in which a lawyer familiar with technology transfer issues may give assistance:

- Preparation of a "Request for a Proposal" to acquire or supply technology, and the proposal itself. Both documents can ultimately form a "mini-contract" which could govern the parties' relationship, if a formal technology transfer agreement was not executed.
- Preparation of a "heads of agreement", memorandum of understanding or letter of intent, which will establish the scope of the technology agreement.
- Advice on both domestic and foreign laws which could affect the agreement.
- Structuring the formal technology transfer agreement.
- Assistance in negotiating the agreement.
- Business advice based on the lawyer's past involvement in other technology transfer projects.

#### The Process of Negotiation

There are various stages in the negotiation of a technology transfer agreement. The following is a brief outline of the more important phases in chronological order:

• First, the technology requirements are established, together with the search for, and identification of, a suitable party to the technology transfer and the technology itself.

- Next is usually the preparation and presentation of the offer, or request for a proposal to supply technology. This document identifies the prospective parties, briefly describes the technology offered or sought, and summarizes the proposed business arrangements and financial consideration contemplated. Samples of the technology and its products and a comparative review of alternative technologies may also be provided or requested.
- In conjunction with this second stage, the parties enter into a secrecy or nondisclosure agreement that protects both the technology and any other business information disclosed by either party. It is very important to have a well-drafted nondisclosure agreement, since it may be the only agreement that governs the status of the protected information if negotiations break down and the transfer agreement is not completed. The cost of such an agreement is relatively nominal, but its value can be enormous if the parties have a falling out. The nondisclosure agreement generally restricts the use of the information to evaluations necessary to complete negotiations. It prohibits duplication or dissemination of the information to third parties, requires that it be returned upon breakdown of negotiations to the party supplying it, and provides that the party who obtains it acquires no rights except as specifically described in the agreement.

If a technology transfer agreement is entered into, it will usually contain its own confidentiality provisions which will be stipulated as superseding those in the nondisclosure agreement (see Appendix R for a summary of the provisions of such a confidentiality agreement).

• After internal reviews of the preliminary information, further negotiations are conducted either by correspondence, through an agent or by direct meetings. Visits between the parties may take place to view sites, existing technology facilities and markets and, most importantly, to establish a relationship of mutual understanding and respect. During this period, there could be ongoing parallel negotiations with several potential partners.

- The supplier may grant an "Option Contract" to give the potential recipient the time necessary to evaluate the technology and make a decision before the supplier approaches any other party. The option contract governs the right to exercise the option. It details duration and confidentiality provisions, any payment for the option, the form for acceptance of the option, the obligation to return all technology materials disclosed if the option is not exercised, drafts of the technology transfer agreement and any other applicable agreements that will come into effect upon the exercise of the option.
- The negotiation of the terms and conditions of a complex technology agreement may take several months to conclude. The period of negotiation reflects the number of meetings necessary to deal with legal, commercial, technical and financial matters and can involve the parties, their consultants, as well as lawyers, and government officials in the jurisdiction involved in the agreement.
- The final agreement may be set out in a single legal document containing all the provisions relating to technology transfer, or it may be set out in a series of interrelated documents addressing various phases, segments or components of the transaction. The benefit of using separate agreements governing such areas as the licensing of copyright, trademark, or patents, or for the supply of trade secrets and services, is that it permits individual administration of each area. It may also facilitate the separate registration of certain rights, and government authorities' evaluation and preclearance of the various elements of the transaction. The difficulty

with this method is that the highly desirable integrated approach to the transfer of technology may be threatened by the independent documents. This can be alleviated to some extent by having the documents cross-referenced to each other, such as by crosstermination provisions (reciprocal) and clauses incorporating external materials by reference.

The final agreement between the parties may contain some or all of the following components:

- The overall transfer of technology agreement.
- Licensing and assignment of rights agreements (unless they are part of the overall transfer agreement).
- Agreements governing the supply of goods and services (unless they are part of the overall transfer agreement).
- The constitution and bylaws of any new entity to be established, together with shareholders' agreements.
- Financing documentation.
- Proposed subcontracts.

(See Appendix S for a case study of technology transfer situations.)

Technology transfer agreements that are international in scope will require the negotiation of various items not normally present in a domestic agreement. They include stipulations as to the controlling language, applicable currency and rate of exchange, governing law, various government approval processes and the procedure and forum for dispute resolution.

#### Complying with Canadian Legal Requirements

Agreements dealing with technology transfer occurring solely within Canada are less complex to structure and to

implement than agreements to transfer technology into many other countries. Canada has no regulatory scheme governing technology transfer agreements, as is the case in other jurisdictions.

Some countries, such as Mexico, Brazil and Argentina have laws that may affect either the content or substantive provisions of the agreement and/or require approval and registration of the agreement (as well as making it available for public inspection). Canada has few provisions affecting the agreement's content, and only a very limited approval and registration process for certain specific components of it.

In general, any technology transfer agreement in Canada, whether expressly described as a technology transfer transaction or as part of the sale of a product, joint venture or other transaction, is governed primarily by the law of ordinary commercial contracts. As a result, the parties are generally free to create their own terms and conditions. Although technology transfer agreements may in some cases be enforceable even if they are oral, it is recommended that all relationships having a technology transfer component be set out in writing to ensure that no future misunderstandings arise concerning their terms (see Appendix 0).

Contract law requires that an agreement be clear and unambiguous. The courts will uphold and enforce the ordinary and plain meaning of the agreement, although technical phrases will be given their technical meanings. If some of transfer agreement's provisions are ambiguous, the courts may try to determine the parties' intention, usually by reference to the surrounding circumstances. This may be a long, uncertain and arduous process, undertaken through litigation, which is invariably expensive. In a number of recent cases dealing with technology transactions, the courts have refused to enforce agreements because of their ambiguity.

The major provisions of those few laws that do have a direct impact on technology transfer agreements in Canada, can be discussed under the following categories:

#### Registration

In some situations it is a requirement to register some of the rights granted in technology transactions, but not necessarily the technology transfer agreements as a whole.

- **Trademarks:** Technology transfer agreements that grant rights to use trademarks require registration of the licensed recipient under the *Trade Marks Act* as a "registered user" of the registered trademark.
- **Patents:** Technology transfer agreements which include an assignment of, or exclusive license rights under a patent, must have the assignment or exclusive rights registered. A non-exclusive license under a patent does not have to be registered.
- Industrial designs: Technology transfer agreements which include an assignment of, or exclusive license for a registered industrial design, must have the assignment or exclusive rights registered. A non-exclusive license does not require registration.
- **Copyrights:** Technology transfer agreements which contain only an assignment, or license of an interest in copyright, are not required to be registered.
- **Trade secrets:** Technology transfer agreements that deal only with rights to use trade secrets are not required to be registered.

#### Writing

A written contract is required in certain cases. As pointed out above, however, documenting the agreement is very important, even if not legally required in all circumstances.

• **Trademarks:** Although an agreement granting someone the right to use a trademark is not specifically required to be in writing, the mandatory application for registration of that person as a registered user must be in writing.

- **Patents:** Assignments and exclusive licenses under a patent must be in writing. The assignment must be attested to by an affidavit of a subscribing witness.
- **Industrial designs:** An assignment of, and exclusive license for an industrial design registration, must be in writing.
- **Copyrights:** An assignment of copyright must be in writing.
- **Trade secrets:** An agreement dealing with trade secrets need not be in writing in order to be enforceable.

#### **Compulsory Licensing**

- **Trademarks:** There is no provision for compulsory licensing of trademarks, although the *Trade Marks Act* does permit an application to remove a registered owner's trademark from the register for non-use.
- **Patents:** If after three years from the date of issue of a patent, the patented technology has not been commercially exploited and the patent owner cannot offer reasons deemed satisfactory under the *Patent Act*, anyone can request a compulsory license (except in patents related to pharmaceuticals and food products).

A more liberal compulsory license under a patent is available, in some cases for medicinal and food products. It does not require the applicant to prove that the patented invention has not been exploited by its owner. However, the availability and scope of such licenses have been curtailed in recent years by the *Patent Act* amendments in 1987, which were discussed earlier.

- Industrial designs: There are no provisions for compulsory licensing of industrial designs.
- **Copyrights:** There are two main types of compulsory licenses. The first is a license to reproduce a published work after 25 years from the death of its author. The second is a license to print and publish a previously

published work, if the copyright owner fails to print the work or to adequately supply the market.

The previously available compulsory license to make a contrivance (i.e. record or tape) to reproduce sounds and/or mechanically perform a work where such work has been previously recorded, was eliminated by the *Copyright Act* amendments in 1988.

 Trade secrets: There appear to be no legal provisions for the compulsory licensing of trade secrets.

#### Anti-Competitive Behaviour

Canadian laws relating to competition policy and antitrust concerns in technology transfers are very complex and in some cases difficult to analyze. It is clear that a provision allowing the technology supplier to regulate resale prices of articles produced by the recipient using the technology, is prohibited. Recent amendments to the *Competition Act* allow the courts to declare license agreements void if the intellectual property owner uses its exclusive rights to lessen competition. Whether, and to what extent, the various provisions in the Canadian *Competition Act* and in the Canadian Criminal Code apply, are difficult questions that should be reviewed by legal counsel in the context of a particular technology transfer agreement.

#### **Financial and Statistical Reporting Requirements**

The Canada Corporations and Labour Unions Returns Act requires that Canadian companies who are recipients of technology must file on an annual basis, a form signed by two officers, containing information describing transfers of technology into Canada to such companies, from non-resident suppliers. Previously, a recipient who in any one year had entered into or renewed licensing agreements with a non-resident supplier that were valued at more than \$5 000 had to provide detailed information on a license-bylicense basis. Since April 11, 1986, this requirement is no longer applicable. A disclosure of the aggregate annual technology transfer fees paid for scientific R&D, patent royalties, know-how licenses, industrial design fees and all other payments must, however, be disclosed. Software license fees are excluded from reporting requirements.

Canada does not impose other reporting requirements, exchange controls or similar financial restrictions on payments made to non-residents for technology (except for withholding taxes on certain services and royalties).

#### **Control of Technology Exports**

The Canadian Export and Import Permits Act requires that a permit be obtained from the Export Controls Division of External Affairs and International Trade Canada before technical data can be exported from Canada. The Act controls exports by regulating geographical areas of destination (Area Control List) and by specifying certain goods on an Export Control List (ECL). The ECL, which is exceedingly technical in its descriptions, lists products under five groupings: Industrial Goods, Munitions, Atomic Energy, Technology and Miscellaneous Goods.

"Technology" is defined to mean "technical data. including technical drawings, photographic imagery, models, formulas, engineering designs and specifications, technical and operating manuals, whether in written form or recorded on disk, tape, ROM or other medium." Group 4 (Technology) contains a list of specific technologies that are controlled (i.e. technology for metal working manufacturing processes). Of greater significance is that Group 4 also controls technology described by the catch-all phrase of "technology for use in the development, production, installation, operation or maintenance of equipment and materials in Groups 1, 2 and 3." Excluded from this catch-all clause is technology that is either described in sales literature, is generally available to the public or is essential for the installation, operation and maintenance of any product that has received or is eligible for an export permit.

## Appendices

Appendix A

## Levels of Protection for Technology Rights

#### Highest



Lowest

#### Statutory Rights

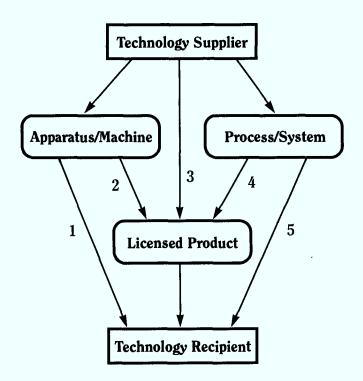
- Patents
- Trademarks
- Industrial Design
- Copyright

#### Common Law/ Trade Secret Rights

- Know-How Eligible for Statutory Protection
- Know-How Not Eligible for Statutory Protection

#### Publicly Available Know-How

## Technology as One of Five General Categories



#### Scope of the Technology Industry Specific

#### 1. Included Technology

Industry	Basic Research	Design	Development	Engineering	Manufacturing	Construction	Management	Marketing
						1		ļ

#### 2. Excluded Technology

Industry	Basic Research	Design	Development	Engineering	Manufacturing	Construction	Management	Marketing
		:						

#### **Scope of the Technology** Process/System Specific

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#### 1. Included Technology

Process	Basic Research	Design	Development	Engineering	Manufacturing	Construction	Management	Marketing

#### 2. Excluded Technology

Process	Basic Research	Design	Development	Engineering	Manufacturing	Construction	Management	Marketing
			_					

#### Scope of the Technology Product Specific

#### 1. Included Technology

Product	Basic Research	Design	Development	Engineering	Manufacturing	Construction	Management	Marketing

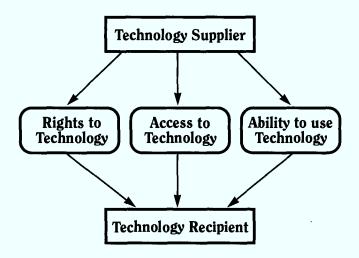
#### 2. Excluded Technology

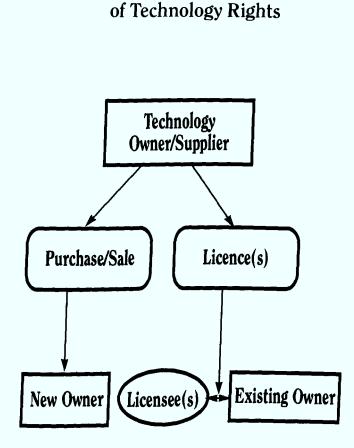
Product	Basic Research	Design	Development	Engineering	Manufacturing	Construction	Management	Marketing

Appendix E

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## Three Essential Components of Technology Transfer

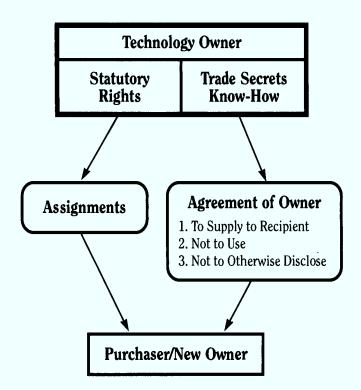




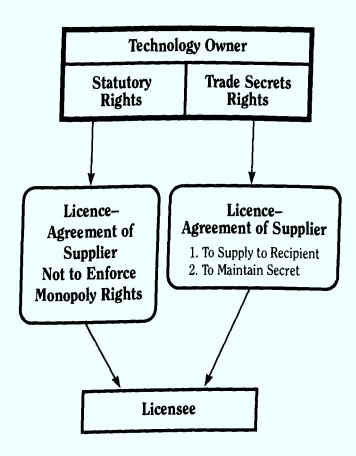
Purchase vs. Licence

87

## Purchase/Sale of Technology Rights



## Licensing Technology Rights



### Scope of the Technology Rights Industry Specific

# Appendix J

#### **Rights to Technology** Industry-To To Reproduce To То To То **Technology Stage** Receive Modify Retransfer Use Documentation Improve Basic Research Design Development Engineering Manufacturing Construction Management

#### **Rights to Products of Technology**

Products of	To	To	To	To Use with Trade
Technology	Sell	Distribute	Import	Names/Goodwill
,				

## Scope of the Technology Rights

Process/System Specific

#### **Rights to Technology**

Technology Stage	To	To	To Reproduce	To	To	To
	Receive	Use	Documentation	Modify	Improve	Retransfer
Basic Research Design Development Engineering Manufacturing Construction Management						

#### **Rights to Products of Technology**

Products of	To	To	To	To Use with Trade
Technology	Sell	Distribute	Import	Names/Goodwill

Appendix K

Process/System

## Scope of the Technology Rights Product Specific

#### **Rights to Technology**

Technology Stage	To	To	To Reproduce	To	To	To
	Receive	Use	Documentation	Modify	Improve	Retransfer
Basic Research Design Development Engineering Manufacturing Construction Management						

#### **Rights to Products of Technology**

Products of	To	To	To	To Use with Trade
Technology	Sell	Distribute	Import	Names/Goodwill
		·		

Product\_

#### **Qualifying and Restricting** Process/Machine Rights

#### **Rights to Process/Machine Technologies**

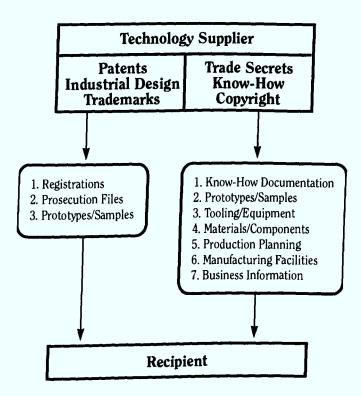
Qualifications/ Restrictions	To Receive	To Use	To Reproduce Documentation	To Modify	To Improve	To Retransfer
Territories						
Time Period						
Exclusivity						
Field of Use						
Market Restrictions						
Extent of Use						
Manner of Use						

## **Qualifying and Restricting** Product Rights

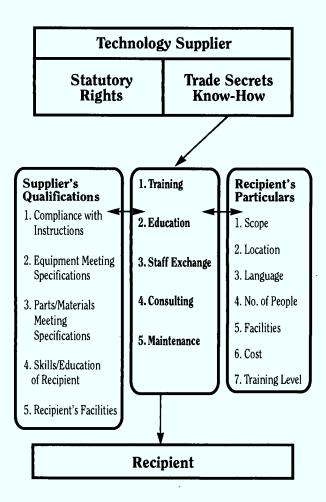
#### **Rights to the Products**

Product	To Manufacture	To Sell	To Distribute	To Import
Territories				
Time Period				
Exclusivity				
Field of Use				
Market Restrictions				
Extent of Use				
Manner of Use				

## Accessing the Technology



## Acquiring the Ability to Use Technology



# Example of a Deliverable Documentation

The supplier shall provide the documentation specified below in accordance with the following:

- 1. Unless noted otherwise, [] copies of all technical information in documentary form shall be provided in good-quality machine-reproducible form, size 8-1/2" x 11" [or the metric equivalent]. Items not readily duplicated such as photographs and vendor catalogue bulletins, shall be provided in [] copies.
- 2. Drawings will each be provided as a single mylar reproducible and [] prints. All manufacturing drawings will use the [] system of measurement and will be provided in increment sizes of 8-1/2" x 11" [or the metric equivalent]. The documentation delivery destination shall be to the appropriate recipient office in [] if by registered mail, or free of charge unloaded at the [] airport if by air express.

# A. Manufacturing Drawings, Materials Specifications

The supplier will provide the recipient with:

- 1. All manufacturing drawings, each having a parts list showing the material used, produced, and used in its manufacturing function by the supplier, for each of the products.
- 2. Materials specifications and data sheets outlining the materials specifications and procurement tests required (if any).
- 3. The recipient may decide to integrate into its final product, fully manufactured items similar to those used by the supplier. Furthermore, the recipient may select to make its own arrangements to purchase such items from vendors recommended by the supplier. On the other

hand, the recipient may choose to obtain manufacturing licenses for the manufacturer in [recipient's territory] of such normally purchased items. In either case, the supplier will provide a full description of the items, appropriate vendor catalogue data and a list of approved vendors.

In instances where materials specifications are unavailable to the supplier or where vendors of supplierapproved materials are unwilling or unable to service the recipient, the supplier undertakes to use its best efforts to assist the recipient in identifying alternative material and/or sources of supply.

# **B.** Manufacturing Procedures

The supplier shall furnish procedures as called for on the manufacturing drawings, planning sheets, quality assurance manual and inspection plan. The following procedures used in the manufacture of products shall be supplied:

- 1. Planning sheets which are referenced to manufacturing drawings, and which outline each step in the manufacturing for each component in microfiche form. (The planning sheets include anticipated or estimated labour times for each operation plus the necessary skill code (qualification) of the operator.)
- 2. A description of qualification for each operator code shown on the planning sheets.

# C. Manufacturing Facilities

The supplier shall provide technical information in documentary form describing the facilities necessary for the manufacturing of products. The supplier's role in the provision of such information shall be advisory and shall consist of reviewing and giving opinions and recommendations on the recipient's plans, based on the supplier's experience in the manufacturing of the products. The supplier shall provide the recipient with a complete description of the facilities used by the supplier in its [] plant including major dimensions, capabilities, and the names of its material-suppliers. Such facilities may include:

# D. Tooling

The supplier shall provide to the recipient, the descriptions and drawings (where they exist) of all special tooling used by the supplier in this manufacturing of products. This will include such tooling as: (to be listed as required).

# **E.** Production Planning

The supplier shall provide the recipient with copies of the production schedules used by the supplier in the manufacture of the initial products being supplied for the [] system proposed for []. Technical specialists on the supplier's staff familiar with production control of products in all their facets (scheduling, material ordering, material flow) will be made available to the recipient in [] to consult with their recipient counterparts in the production control methods and systems used by the supplier, and proposed to be used by the recipient. From these consultations, the recipient will implement whatever control system it deems necessary to ensure adequate control in the manufacturing of the products.

# F. Quality Assurance (QA)

The supplier shall provide the recipient with all QA procedures, instructions and documentation as used by the supplier in the manufacturing of products at the supplier's plant. This will include such documentation as:

- 1. Quality Assurance Manual.
- 2. Individual inspection plans for each product, which outline the manufacturing sequence, material acceptance, inspections and hold points for customer inspection.
- 3. Quality control process instructions outlining the procedures for such items as recipient's product lines.
- Non-destructive test procedures and acceptance criteria for all tests carried out on products, such as recipient's product lines.
- 5. All quality control system instructions such as:
  - a. control of drawings;
  - b. control of paper flow from marketing to engineering, to drafting, to the work station;
  - c. approval of vendors;
  - d. control, handling and identification of incoming materials;
  - e. sampling procedures; and
  - f. reporting of manufacturing errors.
- 6. Auditing of vendors and all supplier operations from marketing to shipping, inclusive.
- 7. All inspection records for each of the products built by the supplier for use at [].
- 8. List of gauges, instruments and tooling necessary to carry out the inspection procedures.
- 9. Test procedures and test reports for each of the products built by the supplier for use at [ ].

All the QA documentation supplied to the recipient will be the same as used by the supplier during the manufacturing of products being supplied for [].

To complement the provision of this documentation, the supplier's QA engineers will conduct training programs in

[] to enable the recipient to become completely familiar with all aspects of the supplier's quality assurance system, and the supplier will assist in the implementation of such a system at the recipient's facility at [].

The QA program used by the supplier at its [] plant has been qualified as meeting the [] Standards Association requirements.

Upon implementation by the recipient of a QA program into its facility, the supplier will review the system and make a formal report of the supplier's opinion on the suitability of the program.

The recipient has sole responsibility for obtaining any certification or approval of the recipient's QA system that may be required from the [] agency. If applicable, the recipient is entitled to use the supplier's report as a part of the approval process.

Appendix R

# **Elements of a Non-disclosure Agreement**

### Supplier's Concerns

### **Recipient's Concerns**

#### **Confidential Information Definition**

- business information
- technical information
- written/verbal
- owned by supplier/ affiliates/third parties

#### Term

- disclosures prior to agreement
- indefinite term of secrecy

### **Return of Information**

- on request required
- on termination

- marked confidential
- verbal only if confirmed in writing

- specify what prior disclosures covered
- definite/short term
- copy kept as legally
- copy kept for evidentiary purposes

#### Non-use

- use only as specified
- not as springboard for new products

#### No Reproduction

- copies only as specified
- authorized copies to have proprietary notices

- new similar products can be independently developed
- copies for internal use
- copies as legally required

#### **No Disclosure**

- disclosure to employees on need-to-know basis
- employees to sign non-disclosure agreement

#### **Exclude Warranties/Representations**

- non-infringement of others' rights
- administrative problems of employees signing
- guaranteed confidentiality (use only best/reasonable efforts)
- utility/value of info
- completeness/correctness

### Relationship

- no licensing (except for purpose)
- no contract for services/products
- no commitment re future contracts

#### **Application of Agreement to Information**

Applies if :

No application if :

in public domain

- unique format/ compilation even if information is public knowledge
- public through breach
- recipient didn't disclose its prior knowledge
- no clear evidence of independent development
- third parties info if received supplier originally provided
- becomes public domain
- already held by recipient
- independently developed by recipient
- received from third party
- required by law to be disclosed

# Summary of a Case Study

During the period of their employment by Employer, Andrew and Barbara began to develop a silicon chip testing device. The Employer was operating in the field of electronics, but was not producing such testing devices. While the device was still in the development stage, Andrew and Barbara approached Employer for permission to spend additional company time, resources and funds on such development and commercialization. The Employer, after analyzing its marketing strategy, declined to provide such assistance. Andrew left the Employer and, together with Barbara who continued to work for the Employer, proceeded to develop a first-generation prototype of the device.

Subsequently Barbara left the Employer and, together with Andrew, established a company, Newco, through which they continued to work on the device to produce a secondgeneration model. Newco began marketing the device and was fairly successful in selling it. Newco realized, however, that additional investment was needed to further refine the device and to expand its marketing and distribution.

After reviewing the technology used in the device, Venco, a venture capital company, invested in Newco as an equity participant. With the additional capital from Venco, Newco entered a more aggressive development and marketing program for the third generation of its product.

In order to meet the growing market demand in Canada, Newco orally subcontracted the production of the device to Subcontractor, with the right to purchase all the devices manufactured by the Subcontractor.

Newco decided that it could not practically service the European market due to various business considerations and therefore orally licensed a company, Licensee, to produce and distribute the device in Europe.

At this stage Newco decided to file a patent application in Canada for the device, as well as in the U.S. By now Barbara had left Newco after disposing of her shareholding, and could not be located, having taken up residence in Southeast Asia.

Employer realized that there were significant profits to be made from the device. The company approached Newco and Venco, and claimed that the device technology belonged to it. Both Subcontractor and Licensee became concerned that their rights might be threatened. After much negotiation it was agreed that the Employer would provide additional equity funds to Newco and become a joint shareholder with Andrew and Venco.

## **Missing Technology Agreements**

The timely establishment of technology agreements that fully addressed the questions of ownership and related issues would have decreased, if not fully prevented the number of disputes and concerns that occurred. Some of the ways that this could have been done are:

- 1. Confidentiality and ownership of inventions agreement between Employer and Andrew, as well as Employer and Barbara.
- 2. Assignment agreement transferring rights to the device technology from each Andrew and Barbara to Employer.
- 3. Confidentiality and invention ownership agreement between Andrew and Newco, as well as Barbara and Newco.
- 4. Assignment agreement transferring rights to the device technology from each of Andrew and Barbara to Newco.
- 5. Warranties and representations of Newco concerning ownership and rights to the device technology, included as part of the equity participation agreement between Venco and Newco.
- 6. License provisions included as part of the written subcontract between Newco and Sub-contractor.

- 7. License agreement in writing between Newco and Licensee.
- 8. Waiver by the Employer of all claims to the device technology included as part of the equity participation agreement between Employer and Newco.

# Terminology or Wording that may Be Useful in Documentation

### Acceptance Date:

The date on which the technology transfer has been substantially completed as determined by the acceptance procedure.

### **Acceptance Procedure:**

The procedure to be used to determine that the technology transfer has been substantially completed as further described in the agreement.

### Affiliate:

An affiliated body corporate within the meaning of the definition of "affiliate" which is contained in Section 2 of the *Canada Business Corporations Act*.

### Agreement:

This agreement comprising Sections \_\_\_\_\_\_, together with attachments \_\_\_\_\_\_\_ to \_\_\_\_\_\_ inclusive attached hereto, together with all supplemental, amending and confirming documents as provided for in this agreement.

### **Apparatus:**

The apparatus and equipment that is devised for, and used to create the products in conjunction with the process, which is the subject of and is described in the Patents, patent applications, documented information, and in attachment \_\_\_\_\_ hereto.

### Associate:

A person falling within the relationship described in the definition of "associate" which is contained in Section 2 of the *Canada Business Corporations Act*.

### **Business** Day:

Each of Monday, Tuesday, Wednesday, Thursday and Friday, except when such day is a statutory holiday observed in \_\_\_\_.

### Commencement Date:

The date from which the royalties are calculated as further described in Section \_\_\_\_\_ of this agreement.

### **Control:**

The control exercised over a body corporate within the meaning of the definition of "control" which is contained in Section 2 of the *Canada Business Corporations Act*.

## **Copyright:**

The copyrights relating to the copyrighted or copyrightable material contained in the technology, short particulars of which are set out in attachment hereto.

### **Deliverables:**

Those items which are to be provided by the supplier to the Recipient pursuant to this agreement, which may include tooling, special equipment, standard equipment, apparatus, products, product parts, materials and prototypes, as more particularly described in attachment hereto, but which do not include the information of show-how.

### **Development:**

Any new and significant or material improvement, development or change in the technology and which meets the test set out in attachment hereto.

### **Documented Information:**

All information physically recorded whether in print, photographically, electronically or in any other manner, and more particularly described in attachment \_\_\_\_ hereto.

## Dollars (\$):

Dollars in the lawful currency of Canada.

### **Effective Date:**

The date upon which this agreement becomes effective after all conditions precedent set out in Section \_\_\_\_ have either been fulfilled or waived.

### **Equipment:**

The special equipment and the standard equipment.

### Field of Use:

The use or activity to which the recipient's exploitation of the technology is restricted, as described in attachment \_\_\_\_\_ hereto.

#### **Fiscal Year:**

A period of 12 consecutive calendar months commencing on  $\_$ .

#### **Included Developments:**

The developments that meet the test set out in attachment hereto, and which are to be provided to Recipient by supplier as part of the technology, but only to the extent described in Section \_\_\_.

#### **Industrial Designs:**

Those industrial designs relating to the product, short particulars of which are set out in attachment \_\_\_\_\_ hereto, together with all renewals, extensions, divisions and replacements.

#### Information:

All information relating to the technology, including but not limited to documented information, the subject matter of the patents and industrial designs and the know-how information, but which does not include show-how or deliverables.

#### Know-how:

(a) All information relating to the technology whether documented or not, including without limitation the subject matter of the patent applications, but excluding the subject matter of the patents and Industrial designs, and (b)those skills and expertise relating to exploitation of the technology as possessed by the Supplier's personnel.

#### License:

The grant of certain rights relating to the technology as described in Section \_\_\_.

### Market:

The market to which product distribution by the recipient is restricted as described in attachment \_\_\_\_ hereto.

# **Net Selling Price:**

The Recipient's invoice price of the products sold, leased or otherwise disposed of by the Recipient to any third person in an arm's-length transaction and not returned for credit, excluding normal discounts actually granted by the Recipient as well as the value of raw materials, intermediate goods, parts or other components supplied directly or indirectly by the supplier, insurance fees, packing and transportation charges, duties and taxes actually incurred and paid by the recipient in connection with the supply of the product.

## Party:

The supplier or the recipient.

# Patents:

The letters patent covering inventions embodied in the processes/apparatus/products, short particulars of which are set out in attachment \_\_ hereto, together with all reissues, renewals, extensions, divisions, modifications and replacements.

## Patent Applications:

The applications for letters patent covering inventions embodied in the process/apparatus/products, short particulars of which are set out in attachment \_\_\_\_ hereto, together with all other applications for letters patent relating to the process/apparatus/products made by the Supplier during the term of this agreement.

# Person:

An individual person, a firm, partnership, corporation, or any other legal entity, but excluding the parties.

# **Process:**

The processes and methods that are devised for, and utilized to produce the products, in conjunction with the apparatus, as described in the patents, patent applications and other documented information and in attachment \_\_\_\_ hereto.

### Product:

That which is produced/used/sold/otherwise disposed utilizing the technology, and which meets the specifications described in attachment \_\_ hereto, and which is/is not considered proprietary to the Supplier.

#### **Quality Assurance:**

Those procedures used to assure the achievement of predetermined engineering and related standards of quality established or utilized by Supplier.

#### **Royalty:**

Those amounts set out in this agreement.

### Show-how:

The advisory and consultation services, assistance and training relating to the technology as described in attachment \_\_\_\_ hereto, but not including the information or deliverables. (see "Deliverables")

### **Special Equipment:**

Equipment devised for and utilized to produce the products, which itself is not the subject of the technology and is not generally commercially available, and which is further described in attachment \_\_\_\_ hereto.

#### Standard Equipment:

Equipment utilized to produce the products which itself is not the subject of the technology but is generally commercially available, and which is further described in attachment \_\_\_\_ hereto.

#### Subsidiary:

A body corporate that is controlled by another body corporate within the meaning of the definition of "subsidiary" which is contained in Section 2 of the *Canada Business Corporations Act.* 

### Taxes:

All taxes, levies, assessments and charges of any kind whatsoever resulting directly or indirectly from this agreement and imposed by any subdivision thereof or any public or other body or authority therein, which taxes shall include but not be limited to exchange, income, excise, sales, use and other charges (including administration, penalty and interest charges) relating thereto.

### Technology:

The technology relating to the process/apparatus/product and consisting of the information, the know-how not contained in the information, show-how, deliverables and included developments.

### Territory:

The area covered by the countries listed hereafter, as they are now known or as they may hereafter become known.

### **Tooling:**

The tooling as further described in attachment \_\_\_\_\_\_ hereto, but does not include standard equipment or special equipment.

### Trademarks:

The trademarks relating to this agreement, short particulars of which are set out in attachment \_\_\_\_ hereto, together with all renewals and extensions.

### Trade Secrets:

Information, know-how and show-how held in confidence by the Supplier as a trade secret, as further described in attachment \_\_\_\_ hereto.

### Training:

The training and education program, disclosure of knowhow, skills and expertise, and associated services relating to this agreement, all of which are part of the show-how, as further described in attachment \_\_\_\_ hereto.

# Selected Bibliography

- BELL, Paul B. and Jay SIMON. *The Law and Business of Licensing: Licensing in the 1990s*. New York, Clark Boardman Company Limited, 1990.
- ECKSTROM, Lawrence J. Licensing in Foreign and Domestic Operations. New York, Clark Boardman Company Limited, 1972.
- FINNEGAN, Marcus B. *Licensing Law Handbook*. New York, Clark Boardman Company Limited, 1979.
- GOLDSCHEIDER, Robert and Michel DE HASS. Arbitration and the Licensing Process. New York, Clark Boardman Company Limited, 1981.
- GOLDSCHEIDER, Robert. Eckstrom's Licensing in Foreign and Domestic Operations: the Forms and Substance of Licensing. New York, Clark Boardman Company Limited, 1978.
- GOLDSCHEIDER, Robert. *Technology Management Handbook*. New York, Clark Boardman Company Limited, 1979.
- LICENSING LAW AND BUSINESS REPORT. New York, Clark Boardman Company Limited, 1978.
- MELVILLE, L. Forms and Agreements on Intellectual Property and International Licensing. New York, Clark Boardman Company Limited, 1979.
- SOOKMAN, Barry B. Computer Law: Acquiring and Protecting Information Technology. Toronto, Carswell, 1989.

- UNITED NATIONS. INDUSTRIAL DEVELOPMENT ORGANI-ZATION. *Guidelines for Evaluation of Transfer of Technology Agreements*. Development and Transfer of Technology Series, No. 12, New York, United Nations, 1979.
- WORLD INTELLECTUAL PROPERTY ORGANIZATION (WIPO). Licensing Guide for Developing Countries. WIPO Publication No. 620 (E), Geneva, 1977.
- WORLD INTELLECTUAL PROPERTY ORGANIZATION. Model Law for Developing Countries on Inventions. WIPO Publication No. 840 (E), Geneva, 1979.

# Articles

- ALLEN, Clive V. International Licensing: A Practitioner s Overview, Part One. 1 Trade Law Topics #4, 5, 1986.
- ALLEN, Clive V. International Licensing: Negotiating the License, Part Two. 1 Trade Law Topics #5, 5, 1986.
- ALLEN, Clive V. International Licensing: Negotiating the License, Part Three. 1 Trade Law Topics #6, 9, 1986.
- BELL, G.R. Protecting and Licensing Trade Secrets and Know-how under Canadian Law. 4 Licensing Law and Business Report, 205, 1982.
- BERESKIN, Daniel R. Trademark Licensing and Registered Users in Canada. 11 Canadian Patent Reporter (2e) 244, 1973.
- BEYOND THE BASICS: TECHNOLOGY TRANSFER AGREEMENTS (Conference materials), Toronto, Insight Press, 1986.

- BURSHTEIN, S. Developments in Canada Licensing Law. 83 Les Nouvelles, Journal of the Licensing Executives Society, 1989.
- CONTINUING LEGAL EDUCATION SOCIETY OF BRITISH COLUMBIA. *Technology Agreements*. (Conference materials), A.R. Szibbo, Co-ordinator, Vancouver, 1985.
- GOODERHAM, William G. International Licensing Issues: Part One. 5 Canadian Computer Law Reporter, 25, 1988.
- GOODERHAM, William G. International Licensing Issues: Part Two. 5 Canadian Computer Law Reporter. 37, 1988.
- LAW SOCIETY OF UPPER CANADA. Technology Transfer and the Canadian Business Enterprise: Current Laws and Evolving Policies Affecting Technology Transfer. (Conference materials), A.R. Szibbo, Chairman, Toronto, 1984.
- LEGER, Georges. *Transfer of Technology: a Commentary*. 14 Canadian Council on International Law, 270, 1986.
- MAYBEE, Gareth E. Technical Information Licensing Agreements. 42 Canadian Patent Reporter, 99, 1965.
- NEW GROWTH OPPORTUNITIES THROUGH TECHNO-LOGY TRANSFERS (Conference materials), Toronto, Insight Press, 1989.
- PENNY, P.W., Income Tax Aspects of Technology Transfers. 1 Canadian Intellectual Property Review #2, 156, 1985.
- POTTER, Richard B. *Canada and Technology Transfer to Less Developed Countries*. 15 Canadian Council on International Law, 270, 1986.

- POTTER, Richard B. Canadian Technology Transfers in North America and the Third World. New Developments in the Law of Export Sales: Meredith Memorial Lectures, 245-265, New York, Practising Law Institute. Technology Licensing (Annual conference), 1982.
- PRIMAK, George J. Technology Licensing in Canada. 38 Canadian Patent Reporter (2e), 113, 1979.
- RAMSAY, John T. Drafting Confidentiality Agreements in Canada. 4 Intellectual Property Journal, 157, 1989.
- TECHNOLOGY TRANSFER AGREEMENTS. (Conference materials), A.R. Szibbo, Chairman, Toronto, Insight Press, 1984.

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