Canada

Supplying or Acquiring Technology: A Canadian Business Guide to Structuring and Negotiating Technology Transfer Agreements

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Supplying or Acquiring Technology:
A Canadian Business Guide to Structuring and Negotiating Technology Transfer Agreements

Technology Transfer Services
Office of Industrial Innovation
Department of Regional Industrial Expansion
Ottawa, Canada

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FOREWORD

In today's world of rapid technological change, new technologies are the key to economic growth and industrial development. Canada's economic health depends on its ability to improve its productivity and competitiveness through the development, acquisition and successful exploitation of technology and innovation in all sectors of industry. An essential element in the acquisition and exploitation of best practice technology and innovation is technology transfer.

Original innovations can come from firms, government laboratories, educational institutions or independent research organizations in Canada and throughout the world. This publication has been prepared to assist in promoting the concept and process of technology transfer as a commercial transaction. It is meant to provide general information and guidance to anyone who is a newcomer to the methods and processes of technology transfer. It is not intended to provide its readers with instant solutions and answers to all the complexities of the technology transfer process. It will provide basic information and help the reader gain some familiarity with the legal aspects of negotiating and drafting technology transfer agreements. Involving a lawyer/consultant specialized in technology transfer issues is certainly advisable and recommended, but the extent of such valuable yet costly assistance will depend upon, among other factors, the knowledge and experience of the client in the process of technology transfer.

This publication was produced under contract between the Department of Regional Industrial Expansion and A.R. Szibbo, barrister and solicitor, who has extensive experience in the field of technology transfer. Mr. Szibbo is with the firm of Russell & DuMoulin in Vancouver, British Columbia. We fully recognize the considerable effort that made the preparation of this guide possible. The views expressed and suggestions contained in these materials, however, are solely those of the author and are not necessarily endorsed by the Department of Regional Industrial Expansion.

We are interested in knowing what readers think of the utility of this guide and would, therefore, greatly appreciate receiving your views, comments and suggestions. We would also be pleased to hear from you if you need information, advice or

referral to appropriate sources of assistance on topics related to technology transfer. Please address such correspondence and enquiries to:

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INTRODUCTION

What Constitutes the Transfer of Technology?

Try to visualize the following situations and identify the one element that they all have in common:

During negotiations involving 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 that is in the process of buying another organization which produces advanced technology robotics products becomes concerned about whether or not it has taken all the steps it can to acquire the rights to the technology to prevent conflicting claims of ownership by other parties.

A corporation, while establishing franchising operations for heavy equipment leasing, questions whether it can maintain control of the know-how being provided to the franchisees.

An organization is preparing to finance a microcomputer production joint venture in co-operation with two other parties who will be contributing the technology and wishes to assure itself that the resulting joint venture will receive the technology necessary to make it technically viable.

A corporation proposes to manufacture a biotechnology product under a licence agreement, but has difficulty in agreeing with the technology owner on royalty terms.

An organization which is requested to provide engineering and technical consulting services for an atomic energy power plant to a potential competitor, decides to limit opportunities for that customer to actually become a competitor.

A corporation intent on acquiring software to use in controlling its internal accounting operations is concerned that the software will not be supported, maintained and upgraded in the future if the software supplier goes out of business because of its unstable financial position.

A Canadian company that has just been awarded a tender for the supply of a petrochemical plant on a "turnkey" basis in an African country realizes that the technology it is committed to provide to the purchaser has never been distributed outside its own organization, and is not in a form readily available for packaging, delivery or implementation in a foreign country.

All the above scenarios involve a common element -- the transfer of technology. Virtually any technology can be transferred. It can occur to varying degrees, for varying purposes and in many fields of activity. The parties may have differing concerns and their expertise may range from technological sophistication to no prior exposure to this field. The extent of involvement with technology as an item itself may range from almost non-existent (purchase of product), to minimal (supply of equipment with know-how relating to its use), to moderate (transfer of technology with associated manufacturing know-how), to extensive (co-production project), to maximum (joint ventures).

Today, some aspect of technology is present in almost every business transaction. Although technology is obviously a central element of high technology companies, new innovations and developments in technology are increasingly important prerequisites for the well-being of the more traditional industries.

This booklet, consisting of basic introductory material, is directed to the individual, whether vice-president of corporate development, or director of licensing of a corporation or a sole proprietor, who finds it necessary to handle the transfer of technology despite a relative lack of experience and skill in arranging and successfully concluding a technology transfer.

Technology transfer is, in many cases, a complex process which does not lend itself to easy solutions. It is not well understood by most people, including some of those who do have expertise in arranging various other types of agreements. Its legal aspects usually involve laws relating to "industrial and intellectual properties" (industrial design, patents, trademarks and copyright) which, in themselves, ordinarily constitute an esoteric and specialized field. Acquiring a grasp of the legal principles involved in any particular transaction is made even more difficult by the fact that in Canada these laws, as well as the related law of trade secrets, have not kept pace with advances in many high technology fields such as computers, telecommunications and biotechnology. The scope of the application and protection offered by existing laws is uncertain at best, and non-existent otherwise. When the laws finally do change from time to time, a further dimension of their interpretation by the courts arises.

These issues, together with the changing nature of both technology itself and the environment in which it exists,

make it apparent that no standard approach or agreement can be used as a universal guide for the structuring of a successful technology transfer. Unfortunately, in some circumstances the nature of the technology may be difficult to evaluate until after legally binding commitments have been made. Thus, misleading or totally wrong assumptions may be included within an agreement that does not reflect the desired relationship. As added complications, while some governments turn a blind eye to the process of technology transfer, many others regulate it with a vengeance.

The purpose of this booklet is to assist the Canadian business person in effectively structuring a successful technology transfer by providing the basic techniques for dealing with the following components of the technology transfer process:

Laying the groundwork for selecting the other party to the agreement;

Choosing the basic structure of the technology transfer agreement;

Establishing a position on the major business and legal issues in the transfer of technology;

Providing selective references for further information resources.

Apart from the above, there are additional important concerns which must be addressed in technology transfer, but which are not dealt with in this publication, either because of their legal complexity or because the features of these issues are particular to each individual case. Therefore this booklet does not attempt to deal with the following:

Determining the needs and requirements of a party for a particular technology or its exploitation;

Identifying the other parties which have or require the technology;

Evaluating and choosing any particular type of technology for exploitation, adaptation or absorption;

Completing the technology transfer agreement in detail.

CHAPTER I

What is Technology and What is the Transfer of Technology?

"Technology" is a generic word which covers knowledge in most areas of human endeavour including such diverse areas 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 the various users and uses require. One 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. 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 technology needs of the potential recipient;

Acquisition of information on alternative sources of technology by the potential recipient;

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 technology 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.

Why Get Involved in a 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. There are several possible benefits of technology transfer to the supplier of technology:

The supplier is provided with supplementary revenue on its research and development investments.

The supplier obtains the use or benefit of additional facilities and technology for further research and development from the recipient.

The supplier obtains the benefit of the recipient's knowledge of the local market and its existing marketing strength.

Technology transfer establishes the recipient as a market for both the supplier's spare parts and maintenance services for the transferred technology.

The supplier obtains the benefit of the recipient's access to low-cost labour and materials.

The supplier may receive, in return, 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 permits a market to be serviced which is too large for the supplier, or which is not otherwise available due to local government regulation, e.g. requirements to buy domestic products, import restrictions, onerous duties and taxes, or prohibition or restriction of foreign investment.

The supplier obtains a benefit from "old generation" technology which it is not currently utilizing.

Technology transfer reduces the possibility of the supplier becoming subject to local government acquisition.

The transfer eliminates a supplier's need for all or most of the capital investment to build a plant locally.

The technology transfer agreement becomes another key asset which will assist the supplier in the future sale of its business.

Technology transfer permits the supplier to acquire a part-interest in the recipient company in return for supplying the technology, e.g, 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 is increased through the grant of rights to utilize the supplier's trademarks.

The corresponding benefits to a recipient of technology are:

The recipient acquires technology which is market or technically proven, without an unacceptably high degree of risk, on a fast timetable.

The recipient acquires technology which it is otherwise restricted from using by virtue of patent or other laws.

The recipient obtains 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 lead of the supplier's technology.

The supplier loses the opportunity to expand directly in the market served by the recipient.

Control by the supplier over the utilization 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 local 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 in its marketing and policies relating to the licensed products of the technology, e.g. 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.

Other Factors That Influence Technology Transfer Decisions

There are a number of other factors which should be reviewed in order to decide upon an effective technology transfer program. These consist primarily of market-oriented issues and government requirements such as:

The position in the marketplace of the supplier or the recipient for a particular use of the technology product;

The particular stage in the development of the technology as related to market requirements;

Forecast changes 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 local country;

Availability of competitive technology and its position in the market;

Local government policies on technology, e.g. 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 use of the technology and regulation of its industry, in such matters as design, safety and environment;

Restrictions on repatriating payments in certain currencies back to the supplier;

Countertrade policies;

Effectiveness of legal protection in the local market.

CHAPTER II

When to Transfer Technology

Technology generally increases in value in step with its development. This raises the question of whether or not 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.

How to Select the Right Party

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 work together and co-operate for common goals in order to ensure that the technology transfer takes place as contemplated. The choice of the right party is critical in allowing the legal structure within the agreement to result in a long-term harmonious working relationship with results that neither party could achieve independently.

As in every contractual relationship, the qualities of both parties should include 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 indicating a desire to co-operate without withholding anything useful or necessary for the success of the project. Language differences should be dealt with to avoid becoming a major problem.

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. A removal of the ability to use the technology for non-eligible products or territories prevents temptation to do so. The size of the organization of each party is occasionally of concern since business enterprises have differing approaches, views and methods of making decisions which are a reflection of 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 significant discrepancies in size are present.

An investigation of the recipient could be made by the supplier in the following areas:

Ownership of the recipient (competing shareholders, affiliation with a larger group, single proprietorship);

Managerial structure;

Personnel competence, educational level and capacity, technical awareness and knowledge;

Availability of resources, equipment and machinery, level of quality and manufacturing capacity;

Sales organization;

Markets, market share and forecast patterns of change;

Potential for conflicts, e.g. due to serving the same customers;

Financial background;

Research and development 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;

Licences and assignments granted in the past by the supplier and a summary of those terms and conditions which will affect the recipient.

Prospective suppliers and recipients of technology may come in contact through an accidental meeting, but more often this occurs after an extensive search. Offers to supply, or requests for, technology are sometimes received directly by mail or are advertised in newspapers and trade magazines. Embassies and consulates may 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 which 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.

CHAPTER III

Is Legal Advice Necessary?

A seemingly profitable technology transfer arrangement with the right party and the right technology but which is contained in a poorly drafted agreement may succeed, but can be vulnerable to significant problems in the future. Such questions as tax liabilities, future obligations regarding improvements or liabilities to third parties may arise to cause conflicts.

Although this guide offers basic assistance on the legal aspects of negotiating and preparing technology transfer agreements, it cannot address the diverse legal issues which could arise in a transaction. Timely legal advice should 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 be familiar with the relevant industry and the commercial, technological and financial policies of the parties. The extent of assistance provided by such a lawyer will depend upon each party's own experience in dealing with technology transfer, the complexity of the transaction, the use by the other party of legal advisors, the presence of international aspects and the availability of resources within the party's organization to devote to the technology transfer project.

Some of the specific areas in which assistance may be rendered by a lawyer familiar with technology transfer issues are:

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 governs the relationship of the parties, whether or not the final technology transfer agreement is executed;

Preparation of a "heads of agreement", memorandum of understanding or letter of intent which will establish the scope of the technology agreement;

Provision of advice on both domestic and foreign laws which can have an impact on the agreement;

Structuring the technology transfer agreement;

Assistance in negotiating the agreement;

Supplying business advice based on the lawyer's past involvement in other technology transfer projects.

The Process of Negotiating a Technology Transfer Agreement

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

The search for and identification of potential parties to the technology transfer, the technology and technology requirements will be undertaken.

Preparation and presentation of the offer, or request, to supply technology is the usual next stage. This documentation identifies the prospective parties, describes briefly the technology offered or sought, and summarizes the proposed business arrangements and financial structure which are contemplated. Samples of the technology and its products and a comparative review of alternative technologies may also be undertaken.

In conjunction with the second stage, a secrecy or non-disclosure agreement will be entered into which protects not only the technology provided but also any other disclosed information relating to the business activities of both parties. It is very important to have a well-drafted non-disclosure agreement, since it may be the only agreement which governs the status of the protected information if negotiations break down and the transfer agreement is not completed. The non-disclosure agreement generally restricts the use of the information to evaluation purposes for completing 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 agreement is entered into, it will usually contain its own confidentiality provisions which are stipulated to supersede those in the non-disclosure agreement.

After internal review of the preliminary information, further negotiations are conducted either by correspondence, through an agent or by direct meetings. Personal visits may be undertaken between the parties to view sites, existing technology facilities, markets and, most important, to establish a relationship of mutual understanding and respect. During this period there could be ongoing parallel negotiations with several possible partners.

The supplier may grant an "Option Contract" to give the potential recipient time to evaluate the technology and make a decision before the supplier approaches any other party. The option agreement will contain the right to exercise the option, its duration, confidentiality provisions, a payment for the option, the form of option acceptance, the obligation to return the technology if the option is not exercised and an attached draft of the technology agreement and any other applicable agreements which will come into effect upon the exercise of the option.

The negotiation of the technology agreement's terms and conditions, if quite complex, may take several years to conclude. The period of negotiation reflects the number of meetings to deal with legal, commercial, technical and financial aspects between the various parties, their consultants, lawyers, both locally and abroad, as well as with appropriate government officials.

The final agreement may be set out in a single legal document containing all the provisions relating to technology transfer, or in a series of inter-related documents addressing various phases, segments or components of the transaction. Separate agreements may be used for such areas as licensing of copyright, trademark, patent, or the supply of trade secrets and services. The benefit of this approach is that it permits administration of each area on an individual basis. It may also facilitate the separate registration of certain rights, and the evaluation and pre-clearance of the various elements of the transaction by government authorities.

A single document could be drafted to cover all these elements (e.g. patents, trademarks, etc.), but in such case the various basic issues, such as price,

territory, exclusivity and term, should clearly refer to each element which has been set out in the one document.

The final agreement between the parties may consist of the following documents:

The overall transfer of technology agreement;

Licence and assignment of rights agreements (unless they are part of the overall transfer agreement);

Supply of goods and services agreements (unless they are part of the overall transfer agreement);

Constitution and bylaws of any new entity to be established, together with shareholders' agreements;

Financing documentation;

Proposed subcontracts.

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

The Legal Status of Technology Transfer Agreements in Canada

An agreement dealing with technology transfer occurring solely within Canada is less complex to structure and 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 countries.

Some countries, such as Mexico and Brazil, have laws which may either affect the content or substantive provisions of the agreement, or require approval and registration of the agreement (as well as making it available for public inspection), or both. Canada has few provisions affecting the content of the agreement and only a limited approval and registration process.

In general, all technology transfer agreements in Canada, whether entered into as part of the sale of a product, in the guise of a pure licence or assignment, or through a joint venture, are governed primarily by the law of ordinary commercial contracts. The parties are free to create their own terms and conditions. Although such agreements in some cases may be enforceable even if they are oral or implied, it is recommended that all relationships which have a technology component be set out in writing to ensure that no future misunderstandings arise concerning their terms (see Appendix O). Contract law requires that an agreement be clear and unambiguous. The courts will give effect to the ordinary and plain meaning of the agreement, although technical phrases will be given their technical meanings. If some of the provisions of the transfer agreement are ambiguous, the courts will try to determine the intention of the parties, usually by reference to the surrounding circumstances. This may be a long, uncertain and arduous process, undertaken through litigation, which is invariably expensive.

Other Requirements

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

Registration

In some situations it is necessary to register some of the rights granted in technology transfer agreements.

(a) Trademarks: Technology agreements which grant rights to use trademarks require registration of

the licensed recipient under the Trademarks Act as a "registered user" of the registered trademark.

(b) Patents: Technology agreements which include an assignment of, or exclusive licence under, a patent must be registered. A non-exclusive licence under a patent does not have to be registered.

(c) Industrial designs: Technology transfer agreements which include an assignment of, or exclusive licence for, an industrial design must be registered. A non-exclusive licence does not require registration.

(d) Copyright: Technology transfer agreements which contain an assignment, or licence, of an interest in copyright are not required to be registered.

(e) Trade secrets: Technology transfer agreements which contain rights to use trade secrets are not required to be registered.

Writing

A written contract is required in certain cases.

(a) 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 such person as a registered user must be in writing.

(b) Patents: Assignments and exclusive licences under a patent must be in writing.

(c) Industrial designs: An assignment of an industrial design must be in writing.

(d) Copyright: An assignment of copyright must be in writing.

(e) Tradesecrets: An agreement dealing with trade secrets need not be in writing in order to be enforceable.

Compulsory licensing provisions

(a) Trademarks: There is no provision for compulsory licensing of trademarks, although the Trademarks Act does permit an application to remove someone else's trademark from the register for non-use.

(b) Patents: A compulsory licence under a patent is available to anyone when the patented technology has not been worked on a commercial scale in Canada without satisfactory reason as defined by the Patent Act; or when the owner of the invention has failed to meet the demand for the patented invention, but only after three years from the date of issue of the patent.

A more liberal compulsory licence under a patent is available for medicinal and food products, without the necessity of the applicant proving that the patented invention has not been exploited by its owner.

(c) Industrial designs: There are no provisions for compulsory licensing of industrial designs.

(d) Copyright: Three types of compulsory licences are present:

A licence to reproduce a published work after 25 years from the death of its author;

A licence to print and publish a previously published work, if the copyright owner fails to print the work or to supply the market;

A licence to make a contrivance (e.g. record) to reproduce sounds and/or mechanically perform a work such as a musical document where such work was previously recorded.

Provisions relating to anti-competitive behaviour

Canadian laws relating to competition policy and anti-trust concerns in the field of technology transfer are very complex and difficult to analyze. It is clear only that a provision in a technology

agreement allowing the technology supplier to regulate resale prices of articles produced by the recipient using the technology is prohibited. Whether or not the various other provisions in the Combines Investigation Act and in the Canadian Criminal Code also apply, and to what extent, are difficult questions which should be reviewed by legal counsel in the context of a particular technology transfer agreement.

Financial and statistical reporting requirements

The Canadian Corporations and Labour Unions Returns Act requires that most recipients of technology must file a form, on an annual basis, containing information describing transfers of technology into Canada to the recipient from non-resident suppliers. A recipient who has entered into or renewed with a non-resident supplier, licensing agreements valued at more than $5 000 must provide detailed information on a licence-by-licence basis. However, Canada does not impose other reporting requirements, exchange controls or similar financial restrictions on payments made for technology to non-residents (except for withholding taxes on certain services and royalties).

Control of technology exports

The Export and Import Permits Act requires that a permit be obtained before exporting technical data in material forms. These include technical drawings, photographic negatives and prints, recordings, design data and technical and operating manuals that can be used in the design, production, operation or testing of equipment and materials described in certain groups of regulated goods on the Export Control List established by the act.

CHAPTER IV

Putting Together a Technology Transfer Agreement

The following material contains a description of some of the basic subjects of a technology transfer agreement, their legal aspects and possible solutions. The discussion is not intended to be exhaustive, but does illustrate the manner in which some issues arise and may be resolved. It is necessary to understand the principal issues and their inter-relation before any particular approach is incorporated into an agreement.

Standard form agreements, sometimes developed by large organizations and which may be useful for other types of transactions, rarely reflect the complex nature of a technology transfer. Their use is not recommended from the point of view of either a recipient or a supplier. 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 colour the relationship as one-sided and inequitable.

Definitions and Concepts

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

Technology which produces, or is incorporated in whole or in part in, a "licensed product" (see Appendix A);

Technology which relates to a particular process or methodology or system, whether or not a licensed product is involved (see Appendix A);

Technology which relates to a particular apparatus, machine or invention, whether or not a licensed product is involved (see Appendix A);

Technology which meets the recipient's needs in such areas as planning and marketing, design and production activities, start-up, modifications, or research and development (see Appendices B, C and D);

Technology described by reference to what is in the possession of the supplier, such as documentation, research and development results, prototypes and machinery;

Technology having a scope equivalent to 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 less the risk of future disputes occurring concerning the scope of the agreement.

The traditional way of forming technology transfer agreements in Canada has been by referring to grants of rights under patents, trademarks, industrial designs and copyright. It is useful to briefly clarify what is meant by these legal terms.

Patents

Patents are limited monopoly rights, granted by statute upon application, which reward the innovator who discloses the invention with the right to prevent others from making, using or selling the claimed invention. The inventions must be new, useful and unobvious processes, machines, manufactures or compositions of matter, or improvements on such. Patent rights are restricted to the country where the patent is granted. Patents generally reveal concepts, in contrast to technical and engineering detail. A patent protects the physical embodiment of the idea for a period of 17 years, even against someone else who has developed the same invention independently.

By granting a patent licence, the owner of the patent is agreeing not to exercise rights to prevent the licensee from making, using or selling the invention. However, a simple patent licence does not mean that the patent owner is obligated to provide any related technical information which is not described in the patent claim, or technical assistance, or grant any other rights except as stated therein.

Trademarks

Trademarks are limited monopoly rights which permit the trademark owner to distinguish products or services from the products and services of another person, by the exclusive use of the trademark as the symbol of origin and quality of such goods and services. Trademarks consist of designs, words or combinations of both. Although trademarks may be used in Canada by the owner without registration, their registration is necessary in order to validly license a trademark in Canada by an agreement called a "Registered User Agreement". Attempting to license a trademark to others without registering the trademark, or without recording the licensee as a registered user in the Canadian Trademarks Office, will invalidate the trademark. The term of the trademark monopoly is 15 years and may be renewed indefinitely, provided that it is continued to be used.

Industrial design

A registered Industrial Design is also a monopoly right granted for the use of an ornamental or aesthetic, as opposed to functional, design for articles of commerce. The owner has the exclusive right to apply that design to manufactured articles during a five-year term which may be renewed for only a further five-year period.

Copyright

Copyright is a monopoly right which prevents the copying of the form of original artistic, dramatic, musical or literary works, generally for the life of the author of the work plus 50 years. Copyright does

not protect ideas, information, data, or the production of similar or duplicate works arising from independent creation. Licences may be granted under copyright without registration.

The above "industrial and intellectual property" rights all depend upon statutory protection. Most of these statutory rights were established in the early part of this century or earlier, and have not been revised to keep pace with the many new technologies that have been developed. It has become clear that, in almost every transaction, technology cannot be transferred to be viably exploited and commercialized by relying merely on these traditional industrial and intellectual property rights. Various elements such as "show-how" and "know-how" (see below) are now recognized as crucially important to the success of technology transfer. Therefore the technology transfer agreement has fundamentally changed to include provisions dealing with non-statutory proprietary and trade secret rights.

Trade secrets, "know-how", "show-how"

Trade secret law is not fully developed in Canada. Its vague and imprecise principles are to be found only in a relatively few cases in Canadian common law. Statutes have been passed in other jurisdictions, such as California, to protect trade secrets but, although proposed for some provinces such as Alberta, none currently exist in Canada.

A trade secret can be defined as consisting of any secret formula, pattern, device or compilation of information used in one's business which 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 licence of trade secrets is usually set out in a express contract, although it may also arise by virtue of a relationship of trust or confidence established between parties.

In a technology transfer agreement, not only should the rights under industrial and intellectual property statutes be considered, but also trade secret rights should be included. In many agreements there are references to "know-how" and "show-how" being supplied. These are not recognized by law as separate legal categories, but have become a convenient way of describing certain areas of technology.

"Know-how" is any knowledge and experience which relates to technology but is not protected by industrial property statutory rights. "Know-how" can be common knowledge which is non-secret and not eligible for industrial property protection, but is still of value, for example information concerning sources of supply of raw materials and components, trade experience or gimmicks. "Know-how" may also be a blend, relationship, compilation or configuration of technological information which is confidential and protected as a trade secret. It may be eligible for industrial property protection which has either deliberately not been applied for, or for which an application is only pending.

"Show-how" can be defined as 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 the patent and other statutory rights.

Whereas rights under patents, copyright, trademark and industrial design may be enforced against the whole world, trade secret "know-how" and "show-how" rights can only be enforced against the party with which there is an express contract or special relationship such as employer-employee (see Appendix J). Therefore the value of technology based solely on "know-how" and "show-how" is subject to dissipation due to such effects as the gradual but eventual loss of confidentiality through movement of employees and disclosure to agents and sub-contractors.

Other Useful Definitions

To avoid misunderstandings and ambiguity various other terms within a particular agreement should be defined. The use of defined terms will help simplify the structure and complexity of the technology agreement. Some of the more common terms usually defined are "Licensed Product" (the product which is the result of or incorporates the technology), the commencement date, effective date, deliverables (see Appendices L and N), equipment, acceptance procedure, acceptance date, net and gross selling price, territory, training, royalties and market (see Appendix M). As additional assistance for interpreting the contract, published definitions of technical terminology, or technical standards that may be established by an international organization, can be referred to. The same approach of using a standard should also be applied to the interpretation of trade terms for international technology transfer agreements, by reference to publications such as INCOTERMS, published by the International Chamber of Commerce.

The System Approach

It is not enough to review and decide which of the various statutory and non-statutory rights are relevant and deal with them independently. Each technology transfer agreement should take an integrated or "system" approach to the technology the recipient wants to acquire and the supplier is prepared to provide. It should not just deal on an individual basis with the rights under trade secret, patent and the other types of legal and non-legal labels used to describe the technology.

Depending upon the circumstances, it may be desirable to refer to these various labels and break the technology package into its constitute components to satisfy certain requirements such as administration, taxation and registration. However, it should be recognized by both parties that the focus is to be on the value and usefulness of the technology as an integrated and complete unit, rather than on a series of different components which are dealt with independently without regard for their inter-relationship.

CHAPTER V

Different Methods of Transferring Technology

There are only two basic ways in which technology transfer can be achieved. The first is by the purchase of the technology, either on a complete or on 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 length of time. The difference is that the technology supplier can sell the technology only once, as opposed to the licensing approach which could result in many licensees all operating simultaneously.

Purchase

The purchase of technology will require an assignment agreement whereby the technology supplier transfers by assignment to the recipient either the full legal ownership and title to, or an undivided ownership interest in, the technology. This has the effect not only of establishing rights between the recipient and the supplier, but also 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 form, in contrast to assignments of know-how and other trade secret rights.

There are a number of reasons why a purchase by assignment may be the preferred technology transfer form. Tax implications, such as those relating to capital gain treatment, are one reason. Tax planning in this area may be quite complex and care should be taken not to make wrong assumptions concerning the applicable provisions. In some countries where licensing is not permitted or is greatly restricted, technology transfer by purchase using an assignment could be the only reasonable method available. Assignment 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:

A full or absolute assignment covering the whole of the title, rights and interest to all of the technology;

A partial assignment transferring the whole of the title, rights and interest to a part of the technology, or to all of the technology but on a partial basis such as by territory; or,

Transferring an undivided (joint) interest, which is, in effect, a sharing of the ownership of the technology.

Although an assignment will usually operate to transfer all the legal rights described in it leaving nothing to the supplier of the technology, the assignment agreement does not normally defeat the rights of any pre-existing licensees of the technology supplier and will be subject to them.

Licensing

A licence is commonly used to describe situations where:

The owner 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; or

The supplier grants the rights to utilize technological information which is not protected by statute, but which, through the expenditure of skill, effort or knowledge, has been put together into a know-how or show-how form and is protected on a trade secret basis.

A licence transfers no property interest in the technology, although provisions dealing with know-how and show-how licences will normally provide for the delivery of, or the right to access, certain technological information, goods, services, personnel and documentation. In some situations, a licence may grant rights to technology of which the licensor is not the owner but which the licensor has acquired by licence from a third party and is permitted to sub-license.

Since a licence does not convey any property in the technology, the licensee has rights only against the licensor. A licensee does not acquire any rights with respect to any third party which improperly acquires and uses the technology (except for certain limited rights specified in the industrial property statutes).

An exclusive licence is not equivalent to an assignment agreement since it does not transfer any property. It is only the grant of permission to exercise a certain right, together with an agreement on the part of the supplier not to permit anyone else to exercise the same right.

A technology transfer agreement must be based on either a purchase of technology, a licence of rights to technology or a combination of both (see Appendix K). Titles and headings of agreements may not 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 licence rather than a sale.

Although technology can only be transferred by one of these two basic methods, many technology transfers are part of a larger business relationship between the parties and are provided for under agreements called joint ventures, turnkey projects, facilities and resource agreements, etc. Technology transfer provisions common to a large majority of such agreements are set out below.

What Rights are Required?

After the initial crucial steps of defining the nature of the technology in a clear and comprehensive manner and deciding which general vehicle (licence or assignment) will be used, the rights that the recipient will 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 which each party expects to receive. These include:

Rights to the technology which can be granted to the recipient:

The right to receive or acquire access to the technology;

The right to receive or acquire access to "updated" technology or improvements;

The right to use 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 right to grant to other parties some of the rights described above through sub-licence or assignment.

Rights available to the supplier of the technology include:

A return of its technology rights 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 licence 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 that all these rights be dealt with. The parties can decide which technology rights are to be included in the transaction and segregate them from the rest (see Appendices E, F and G). However, for each of the rights

actually transferred by licence or assignment, the following qualifications should be addressed since different considerations apply to each included right (see Appendices H and I).

Territory

Although recipients of technology normally try to acquire the greatest territorial right possible, suppliers usually provide a geographical limitation on the recipient's exercise of the technology rights in order to protect their competitive position and that of other recipients of the same technology rights. Territory can vary in description from worldwide, to a listing of certain territories, to specified territories subject to excluded areas. It can also be defined by reference to those countries which have granted the subject statutory rights. Some agreements limit the territory to only a particular location or site, but most recipients will usually 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 certain duration or term, since each right has its own concerns in this area. There should not be a time period stipulated for the agreement as such, since it must always be in existence to govern any future obligations or disputes between parties. The proper approach is to describe the commencement date for each right (e.g. the date of execution of the agreement, or a "conditional date" which is effective on the occurrence of certain conditions), and an expiry date (a specified future date, the date of occurrence of a particular event such as payment of the final installment of the price, or the date of expiry of the underlying industrial property right such as 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 a reasonable notice by either party.

In some cases, provision is made to renew the initial term of the rights, either through the exercise of an option by the recipient providing advance notice of renewal, or automatically unless, prior to the expiry date, a party gives notice of termination.

Exclusivity

A right granted on a non-exclusive basis permits the supplier to grant it to others on a non-exclusive basis and to use the technology itself. Rights granted on an exclusive basis prohibit the supplier from both using or granting to others the same rights to the technology. Technology granted on a "sole licence" basis will normally mean that the supplier cannot grant to others the same rights granted to the recipient, but can itself exercise those rights. The agreement may also contain provisions which stipulate that the status of rights changes from exclusive to non-exclusive, or vice-versa, upon the occurrence of certain events. Exclusivity should also be related to territory and time periods.

Field of use

Restrictions in the "manner" of use of the technology, (field of use) may be stipulated, such as 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 sale or resale of the licensed products by the recipient to certain market segments, particular types of purchasers or potential customers of the products of the technology.

Re-transferring 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 be on a consent basis which is not to be unreasonably withheld. Assignment or sub-licensing may be permitted for only particular purposes, as in the case of the recipient supplying the technology to its sub-contractor for the production of sub-components.

Pre-emptive rights

Technology agreements sometimes stipulate that, in spite of all the other provisions contained in the agreement, the rights received by the recipient to the technology are further qualified or restricted due to prior agreements entered into by the supplier and other parties. The specific restrictions should be listed rather than just referring to the prior agreements, otherwise the recipient will be unaware of the specific limitations affecting its use of the technology.

Extent of use

Restrictions may be placed on the extent of use of the technology by stipulating the permissible maximum level of production of the licensed goods or services which may be manufactured, sold, used, distributed, or by referring to other measures of using the technology.

Manner of use

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

Reproduction limitations

Restrictions on the number of copies or reproductions of the technical information itself which the recipient is entitled to make are usually insisted upon by the supplier, with reference to back-up and archive copies, and copies for production and related purposes.

Price

Establishing a value for technology as well as putting into effect a price and payment scheme can be very complex. The following is a brief review of some of the ways this can be accomplished.

In some cases technology rights are transferred, but payment is on a non-monetary basis, e.g. transfers resulting from litigation, cross-licensing or grant-backs of rights to improvements to the supplier. Other examples are the granting of equity interests in the recipient's business through options or share transfers in exchange for the technology, or the provision of services or products in return for the technology rights.

Monetary compensation generally falls into the categories of non-royalty and royalty compensation. The simplest form of non-royalty compensation consists of a fixed price payment, paid either "up-front" or in instalments. Other examples of non-royalty compensation are cost and cost-plus fees, and compensation per unit of technical assistance.

Royalties are based upon the extent of use of the technology by the recipient. 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 which are produced or sold. Royalties can also be calculated on the basis of either 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 by referring to their gross selling price, net selling price or the profits resulting from their distribution.

It is important to precisely define the reference terms such as "net selling price" and when the "sale" or "manufacture" occurs. The supplier of technology may sometimes try to establish minimum amounts which are payable regardless of the calculated royalty payment, as well as insist on the right to either terminate the agreement or change its nature (e.g. from exclusive to non-exclusive) if minimum royalties are not reached. The recipient may wish to establish a maximum royalty amount above which the calculated royalties are not payable. If the maximum royalty is reached, the agreement may provide that certain events happen, such as the licence changing to exclusive from non-exclusive, or the complete assignment of the technology rights to the recipient. Sales by the recipient to related or non-arms-length companies should be calculated on the basis of what an arms-length company would have paid for the licensed products.

How to establish the price or value of technology is a question frequently asked. The value is both a reflection of the cost to the supplier in relinquishing the technology rights provided, and the advantages gained by the recipient in entering into a technology transfer agreement with respect to alternate opportunities. 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:

Original investments made by the supplier;

Future costs to be incurred by the supplier (e.g. legal protection, warranty costs, administration costs);

Costs to the recipient in developing the technology independently;

Eventual market for the supplier's technology and the licensed products;

Availability of competitive technology and its ability to be substituted;

Stage of commercial development of the technology;

Extent of legal protection available for the technology;

Form of transfer, whether purchase by assignment or licence, and if on an exclusive or non-exclusive basis;

Potential risks of the recipient in infringing third-party rights by using the technology;

Types of restrictions on the recipient's right to use the technology;

Estimated cost savings and other benefits of the technology in the recipient's operation;

Level of investment required by the recipient to utilize the technology;

Compensation paid by other recipients of the technology;

Relationship of the supplier and recipient, and whether they operate as direct competitors or are in separate markets.

There is no legal requirement for the supplier to charge the same royalty or other compensation to every recipient of its technology. Therefore, in some cases a most-favored licensee status is provided whereby the recipient becomes entitled to pay no more than paid by 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 either customization or special provisions relating to a particular recipient. The recipient's concern is that it will 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 supplier of technology 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, a recipient of rights under a patent could end up continuing to pay for such rights even after the patent lapsed, if the agreement so provided.

Payment

Once pricing has been determined, several payment issues must be resolved. They include the frequency of payment throughout the year, the time and date of such payment, the currency of the payment and an exchange rate formula, the method of payment (e.g. 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 recipient of the technology will want to include a provision that all payments cease and do not apply on 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 the schedule, or some deficiency occurs in the performance or other requirements of the technology. If the technology falls into the public domain and is freely available to others, then the agreement may also provide that payment ceases.

The impact of Canadian laws relating to anti-trust, combines and competition restrictions, particularly with respect to pricing and payment, is uncertain in the majority of technology transfer situations in Canada. The interpretation of such laws and their application to technology transfer agreements is unclear, because almost no cases have addressed these issues. In addition, in the last decade no guidelines or official policy statements have been made by an agency of the Canadian government to clarify this area. Therefore, it is important that parties to a technology transfer agreement have their legal counsel review provisions relating not only solely to pricing restrictions but also to other market restrictions such as exclusivity, territorial allocations, exclusive dealings and the supplier of the technology to fix or influence the price of goods or services provided by the recipient. It is not clear whether the supplier is prohibited from fixing the price which the recipient can charge its sub-licensees for re-transferring the technology.

Obligations of the Supplier

The supplier of the technology may assume varying levels of obligations, each of which may have a different time period associated with it. Some of the more usual ones are listed.

Delivery of the technology consisting of know-how, show-how and other trade secrets, by the provision of:

Technical documentation, appropriately translated and in the specified measurement system;

Consulting services;

Staff exchanges;

Training;

Educational facilities and aids;

Machinery and equipment and/or a list of their approved suppliers;

Raw materials and components and/or a list of their approved suppliers;

The technology products, both for use as prototypes and samples and for distribution as marketable products, to supplement the recipient's production;

Technical assistance.

Where rights under patent, copyright and other statutes are involved, it is usual to require the delivery of copies of certificates of registration, other government-issued documentation, materials filed as part of the registration process, and related registered assignment and licence agreements.

The inclusion of warranties and representations by the supplier which may confirm:

That the statutory basis of the technology rights (e.g. patents) is valid and subsisting;

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 has the right to transfer the technology;

That the supplier has not done any acts or granted any prior rights which will affect the validity, conflict with or restrict the technology transferred 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 favorable as granted to any other party;

That the supplier shall not re-sell or disclose to third parties the technology which it has assigned, or granted an exclusive licence, to the recipient.

An undertaking can be made by the supplier of technology that it will continue protecting the technology by legal means, such as by applying for, maintaining or assisting in maintaining the statutory

protection underlying the technology. The supplier may also agree to protect the technology by continuing or instituting an internal trade secret protection program (particularly where it has granted an exclusive licence or an assignment). In addition, the supplier may be obliged to take all necessary action to monitor and prosecute infringement by third parties of its and the recipient's rights.

The supplier may agree to 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" which fully protects the recipient against all loss, damages and liability.

The supplier may be required to disclose and grant rights to future improvements to the technology developed by the supplier. There is no legal definition of "improvements" and care must be exercised in defining them in order that future misunderstandings do not arise as to the scope of this obligation. Issues similar to those relating to the "base" technology must be addressed, such as the price of the improvements, the term of the rights and responsibility for filing, registering and otherwise protecting the improvements.

A provision limiting future acts of the supplier which would be in conflict with the rights granted to the recipient is sometimes included. It consists of the supplier agreeing to 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 or permit its disclosure or access to third parties in any manner that would result in a conflict with the recipient's rights. Provisions such as this should be mandatory where exclusive rights have been granted to the recipient.

Obligations of the Recipient

The recipient will normally be requested to agree to a number of obligations considered standard by the supplier. The time period for enforcing each obligation should be stipulated.

The recipient will generally have to take certain measures to protect the technology. These may include:

Acknowledging and not contesting the validity and exclusive ownership of the technology by the supplier. This will relate not only to the statutory rights, but also 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 only after they have entered into confidentiality and non-disclosure agreements;

Keeping the technology confidential and not disclosing it to any other parties except in limited circumstances, such as under secrecy and non-disclosure agreements where a sub-contractor is providing components necessary for the technological process, or as necessary for the support and maintenance of the licensed products;

Undertaking to comply with all local laws 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 commitment of the recipient 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 power of the recipient to make the decision to commence legal action and to control the 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 which bear the supplier's trademarks;

Acknowledging that no other rights have been granted to it whether by implication or in any other manner, except as 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 and the grant of rights associated with them to the supplier, as well as payments if any, will normally be described. The recipient is sometimes required to agree that such improvements become the property of the supplier or become available to the supplier on an exclusive, royalty-free basis. An allocation of responsibilities for protecting the improvements both by instituting confidentiality programs and legally (e.g. by registration) is also standard. The area of improvement grant-backs also requires a consideration of the same issues which relate to the grant of the "base" technology, such as term and territory.

Reporting obligations of the recipient fall generally into two categories. One concerns the quality controls uses for the technology and its products. The agreement may require the provision of samples by the recipient on a periodic basis, as well as inspections of the recipient's premises and submission of reports. The second reporting requirement concerns the ability of the supplier to verify the extent to which the technology is used, sales of the recipient's products and royalty calculations. The inspections may be stipulated 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 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 must commercially exploit the technology, for example by investing a minimum amount in research and development facilities or manufacturing facilities, or undertaking 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 will not

insist so strongly on such performance unless other reasons arise. For example, the recipient's domestic legislation may require it to "exploit" the technology 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 anti-trust and competition laws.

The recipient will be 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 behalf of the supplier without the supplier's consent.

The supplier may include a provision that requires the recipient to acquire additional materials, components or technology from the supplier in addition to the base technology as part of the technology transfer. In some cases, this requirement is to the benefit of both parties, providing income to the supplier and establishing a source of supply for the recipient. It may also pose a hardship for the supplier by forcing it to develop and provide future technology or guarantee a source of materials. The recipient may find it onerous to purchase all of its materials, goods and technology from one outlet if alternate suppliers are present. This type of provision is usually closely scrutinized under anti-trust 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. It may also make certain that the recipient does not find itself in a conflict of interest position between the supplier and a third party. This type of provision is also closely reviewed under anti-trust laws.

Termination

It is inappropriate to state that the agreement itself will expire or terminate, since various rights granted may not necessarily have the same term as other rights or obligations. Each right should be provided with its own individual expiration date. The agreement should also specify which rights are subject to early termination on the occurrence of certain stipulated events, such as failure to reach minimum sales. It

is usual to provide for early termination of all of the rights upon the breach of the agreement. In addition, the parties may use 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. An example of two contrasting approaches is an agreement which permits the recipient to continue freely exercising some or all of the rights to the know-how technology upon expiration of the term of the agreement, and an agreement under which the recipient is obliged to cease exercising the rights to the known-how technology and return all physical embodiments of the technology and other materials to the supplier.

A similar approach may be used for the various obligations that are set out in the agreement. An expiration date should be stipulated for each major obligation, together with provisions for its early termination upon the occurrence of certain events. It should also be considered whether any obligations survive upon termination of the agreement, such as those of confidentiality and non-disclosure.

Limitation of Legal Liability

Suppliers usually disclaim and limit their liability in one or more of the following ways:

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 that the stipulated remedies for breach of contract by the supplier are the sole recourse of the recipient;

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 agreement.

Comparable limitations to protect the recipient may consist of:

A limitation on the maximum amount of any indemnities the recipient must provide;

Placing a maximum on the recipient's liability generally under the agreement by reference to some stated amount or a percentage of the agreement;

A limitation on the liability of the recipient 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 due to the form and method of compensation, they must be reviewed very carefully. The scope of this booklet does not permit an examination of all taxation issues.

Characterizing the payments as capital gains instead of income receipts is the major concern of the supplier, due to the lower tax rate involved. The recipient may have a conflicting position since its tax deductions will be greater if the payments are considered income rather than capital accounts.

Tax treatment depends upon the form of payments. For example, 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 royalty, then it will probably be treated as income receipts to the supplier. Even royalty payments for an assignment or exclusive licence would likely be an income receipt, whereas a lump sum payment for the same technology rights would ordinarily result in a capital receipt.

In some situations, due to the particular provisions of the Canadian Income Tax Act, the same payments for technology which are characterized as income of the supplier may be characterized as capital for the recipient, resulting in both parties receiving less favorable tax treatment.

Royalty payments made for the assignment or licensing of technology rights relating to patents and trademarks and based upon use of the technology, will be characterized as income even if the patent or trademark is disposed of 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, then it will be a capital receipt.

Payments for assignments or licences 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 which 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 no matter how the technology agreement is structured, the know-how 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 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 per cent 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 of a capital or income nature.

International Provisions

Canada has adhered to several international conventions regarding industrial property rights -- 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 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 of significance only to the extent that its provisions are reflected in the Canadian Patent Act, the Industrial Design Act and the Trademarks Act. 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, it is advisable to address certain additional issues such as:

Approval of the transaction by government authorities of the country of the technology recipient;

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.

Miscellaneous Common Provisions

Various other provisions are usually found in technology transfer agreements. They relate to 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 which is not to be unreasonably withheld, and to permitted assignments without consent in limited circumstances (such as to subsidiaries or certain affiliates);

Official notices, their method of delivery (e.g. telegram, 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 point;

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 is permitted from it;

Manner of executing the agreement and whether it requires certification or legalization, witnesses or corporate seals.

Attachments

Attachments to the technology agreement, also called appendices, exhibits or schedules, are means of eliminating

details, whether technical, financial or complex administrative provisions, 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 the agreement be entered into or the negotiations concluded if all the schedules have not been completed, it is a normal and acceptable practice to complete negotiations of the body of the agreement, subject to the schedules being finalized to the satisfaction of both parties.

Attachments may consist of the following:

Lists of trademark registrations and applications;

Lists of patents and applications;

Lists of copyrights and applications;

Lists of industrial designs and applications;

Lists of assignments, licences or other grants relating to the rights to the technology;

A description of the scope of the technology such as whether it relates 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 part of the technology and improvements which are excluded;

A list of the documentation such as manufacturing, drawings, materials specifications, vendor data, manufacturing procedures and facilities, tooling, production planning, quality assurance;

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;

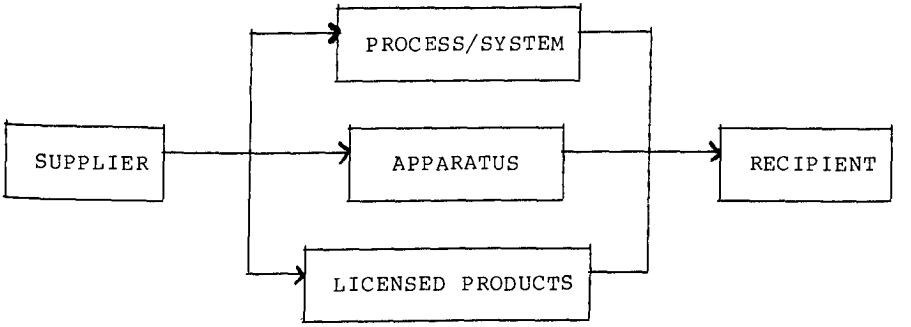
Supply and performance bonds;

Licensed product specifications, tolerances, quality assurance and acceptance testing procedures.

APPENDICES

APPENDIX A

TECHNOLOGY - VIEWED AS RELATING TO ONE OR MORE OF THREE GENERAL CATEGORIES



APPENDIX B

IDENTIFYING THE SCOPE OF THE TECHNOLOGY

Industry-Specific

I. Included Technology

Industry	Basic Research	Design	Develop-ment	Engineer-ing	Manu-facturing	Construc-tion	Manage-ment	Market-eting

II. Excluded Technology

IDENTIFYING THE SCOPE OF THE TECHNOLOGY

Process/System-Specific

I. Included Technology

Industry	Basic Research	Design	Development	Engineering	Manufacturing	Construction	Management	Marketing

II. Excluded Technology

APPENDIX D

IDENTIFYING THE SCOPE OF THE TECHNOLOGY

Product-Specific

I. Included Technology

Industry	Basic Research	Design	Develop-ment	Engineer-ing	Manu-facturing	Construc-tion	Manage-ment	Market-eting

II. Excluded Technology

APPENDIX E

IDENTIFYING THE SCOPE OF THE TECHNOLOGY RIGHTS

Industry-Specific

Industry - _____

Technology Stage	Rights to Technology					
	To Receive	To Use	To Reproduce Documentation	To Modify	To Improve	To Re-Transfer
Basic Research						
Design						
Development						
Engineering						
Manufacturing						
Construction						
Management						

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

APPENDIX F

IDENTIFYING THE SCOPE OF THE TECHNOLOGY RIGHTS

Process/System-Specific

Process/System - _____

Technology Stage	Rights to Technology					
	To Receive	To Use	To Reproduce Documentation	To Modify	To Improve	To Re-Transfer
Basic Research						
Design						
Development						
Engineering						
Manufacturing						
Construction						
Management						

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

APPENDIX G

IDENTIFYING THE SCOPE OF THE TECHNOLOGY RIGHTS

Product-Specific

Product - _____

Technology Stage	Rights to Technology					
	To Receive	To Use	To Reproduce Documentation	To Modify	To Improve	To Re-Transfer
Basic Research						
Design						
Development						
Engineering						
Manufacturing						
Construction						
Management						

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

APPENDIX H

IDENTIFYING THE QUALIFICATIONS AND RESTRICTIONS

Qualifications/ Restrictions	Rights to Technologies					
	To Receive	To Use	To Reproduce Documentation	To Modify	To Improve	To Re-Transfer
Territories						
Time period						
Exclusivity						
Field of Use						
Market Restrictions						
Extent of Use						
Manner of Use						

APPENDIX I

IDENTIFYING THE QUALIFICATIONS AND RESTRICTIONS

Qualifications/ Restrictions	Rights to the Products of the Technology			
	To Manufacture	To Sell	To Distribute	To Import
Territories				
Time period				
Exclusivity				
Field of Use				
Market Restrictions				
Extent of Use				
Manner of Use				

APPENDIX J

LEVELS OF PROTECTION

FOR TECHNOLOGY

HIGHEST

I. STATUTORY LAW

- PATENTS
- TRADEMARKS
- INDUSTRIAL DESIGNS
- COPYRIGHTS

II. NON-STATUTORY LAW (TRADE SECRETS)

KNOW-HOW

(a) Eligible for Statutory Protection (e.g. Patent Pending)

(b) Not Eligible for Staturoty Protection

III. NON-LEGAL PROTECTION

KNOW-HOW

Compiled information from readity available basic sources

LOWEST

APPENDIX K

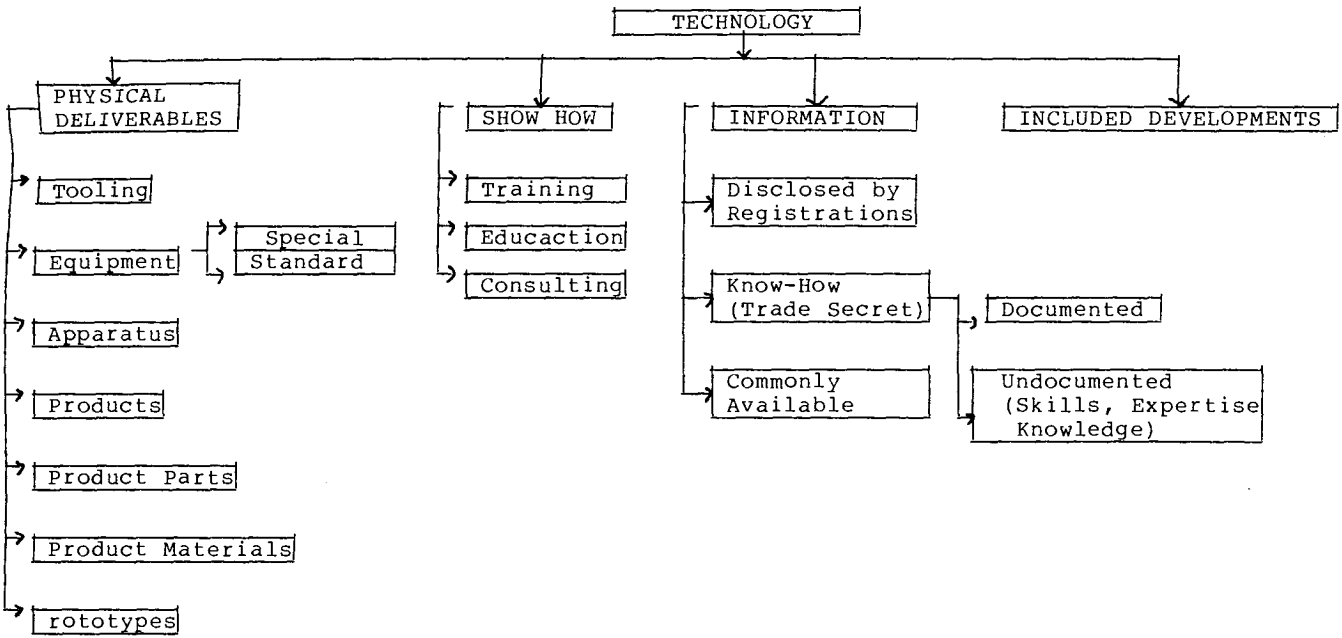
IDENTIFYING THE NECESSARY DOCUMENTATION

Rights to Technology	Manner in which Technology Protected				
	Patents	Industrial Designs	Trademarks	Copyrights	Trade Secrets
To Receive	N/A	N/A	N/A	By Contract (if published)	By Contract
To Use	Assign./ Licence	Assign./ Licence	Registered User Agreement	Assign./ Licence	By Contract
To Reproduce Documentation	N/A	N/A	N/A	Assign./ Licence	By Contract
To Modify	Assign./ Licence	Assign./ Licence	N/A	Assign Licence	By Contract
To Improve	Assign./ Licence	Assign./ Licence	N/A	N/A Licence	By Contract
To Re-transfer	Assign./ Licence	Assign./ Licence	N/A	Assign./ Licence	By Contract
Rights to Products of Technology					
To Manufacture	Assign./ Licence	Assign./ Licence	N/A	N/A	By Contract
To Sell	Assign./ Licence	Assign./ Licence	N/A	N/A	By Contract
To Distribute	Assign./ Licence	Assign./ Licence	N/A	N/A	By Contract
To Import	Assign./ Licence	Assign./ Licence	N/A	N/A	By Contract

NOTE: "Contract" refers to both an assignment or a licence in the context of trade secrets.

APPENDIX L

TECHNOLOGY DELIVERABLES



APPENDIX M

USEFUL DEFINITIONS

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 contained in Section 2 of the Canada Business Corporations Act.
Agreement:	This agreement comprising Sections ___ to ___ , 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 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 the agreement.
Control:	The control exercised over a body corporate within the meaning of the definition of control 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 supplier to recipient pursuant to this agreement and 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 or 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, by photography, stored electronically or in any other manner, and more particularly described in attachment ___ hereto.
$:	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 that the exploitation of the technology by recipient is restricted to, as described in attachment ____ hereto.
Fiscal Year:	A period of 12 consecutive calendar months commencing on ____ .
Included Developments:	The developments which 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 or not documented information, 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 re-issues, 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 proporietary to the supplier.
Quality Assurance:	Those procedures uses 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.
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 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 import taxes, and duties and any 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 supplier as a trade secret, as further described in attachment hereto.

Training:	The training and education program, disclosure of know-how, 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.

APPENDIX N

EXAMPLE OF A DESCRIPTION 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 on good quality machine reproduceable 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 plus [ ] 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. In order to permit the recipient to purchase fully manufactured items normally purchased by the supplier from selected vendors to integrate into the products, and/or to assist the recipient to make its own arrangements with vendors recommended by the supplier to obtain manufacturing licenses for the manufacture in [ ] of such normally purchased items, the supplier will provide a description of such items, appropriate vendors' catalogue data and a list of recommended

and approved material vendors. Such vendors shall be able to supply the following items:

In instances where materials specifications may be unavailable to the supplier or if vendors of supplier-approved materials may be unwilling or unable to service the recipient, the supplier undertakes to provide its best efforts to assist the recipient in identifying alternative material and/or sources of supply therefor.

B. Manufacturing Procedures

The supplier shall furnish the following procedures used in the manufacture of products:

These procedures will be as called for on the manufacturing drawings, planning sheets, quality assurance manual and inspection plan.

Planning sheets referenced to manufacturing drawings, outlining each step of manufacture for each component, shall be supplied in microfiche form. The planning sheets include anticipated or estimated labour times for each operation plus the necessary skill code (qualification) of the operator.

A description of qualification for each operator code shown on the planning sheets shall also be supplied.

C. Manufacturing Facilities

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

This will include such tooling as:

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 specialist personnel of the supplier familiar with production control of products and 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 manufacture 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 manufacture 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:

4. Non-destructive test procedures and acceptance criteria for all tests carried out on products, such as:

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
(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 manufacture 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 into 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 O

SUMMARY OF A CASE STUDY

Two inventors, A and B, during the period of their employment by Employer, commenced development of 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 developmental stage, A and B 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. A left the Employer and, together with B who continued to work for the Employer, proceeded to develop a first-generation prototype of the device.

Subsequently B left the Employer and, together with A, established a company, Newco, through which they continued to work on the device to produce a second-generation model. Newco commenced marketing the device and was fairly successful in sales, although it was realized that additional investment was needed to further refine the device as well as to expand marketing and distribution facilities.

Venco, a capital venture company, invested in Newco as an equity participant after reviewing the device technology. With the additional capital received from Venco, Newco commenced a more aggressive development and marketing program of its third-generation of the device.

In order to meet the growing market demand in Canada, Newco orally sub-contracted the production of the device to Sub-contractor, with the right to purchase all the devices manufactured by the Sub-contractor.

Newco decided that the European market could not be practically serviced by it 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 United States. By now B had left Newco after disposing of B's shareholding, and could not be located, having taken up residence in Southeast Asia.

Employer, realizing the significant profits to be made from the device, approached Newco and Venco, and claimed that the device technology belonged to it. Both Sub-contractor 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 A and Venco.

Missing Technology Agreements

The timely establishment of technology agreements which 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 A, as well as Employer and B.

2. Assignment agreement transferring rights to the device technology from each of A and B to Employer.

3. Confidentiality and invention ownership agreement between A and Newco, as well as B and Newco.

4. Assignment agreement transferring rights to the device technology from each of A and B 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. Licence provisions included as part of the written subcontract between Newco and Sub-contractor.

7. Licence 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.

APPENDIX P

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