

The Licensing and Commercializing of Intellectual Property

H. Roger Hart and Daniel R. Bereskin of Bereskin & Parr

© 2007 Bereskin & Parr

Bereskin & Parr
40 King Street West, 40th Floor,
Toronto, Ontario, Canada M5H 3Y2

Phone: 416-364-7311
Fax: 416-361-1398

www.bereskinparr.com

I. INTRODUCTION

Three common forms of technology transfer are licensing agreements, direct investments and joint ventures. Each of these has its own advantages and disadvantages, as well as special considerations which must be addressed when determining which type of transfer is most appropriate. This paper discusses these three forms of technology transfer, and highlights some of the more important considerations which should be kept in mind when contemplating these arrangements. Focus will rest on licensing and joint ventures.

II. LICENSING AGREEMENTS

1. Introduction

Licenses involving technology rights have a number of common features; however, individual terms of such licenses vary depending on the nature of the right and the intentions and interests of the parties.

As with any business arrangement, negotiation of a satisfactory licence agreement requires familiarity with the subject matter. This part of the paper will survey the basic principles involved in technology related licensing in Canada. Although this review is of a cursory nature, it is hoped that the following discussion will highlight some of the more important considerations which should be kept in mind when contemplating technology related licensing arrangements.

2. Defining the Licensed Property

It is not uncommon for a licence agreement to include a number of distinct intellectual property rights. The licensor should therefore determine the nature of the subject matter to be licensed, and ensure that each type of property is adequately described. A licence agreement may also include services in the nature of technical consultation and training. In all such cases, it is important to keep in mind the separate facets of the licensed property and the extent of the licensor's rights in each of them.

a. Know-How

In this section the term "know-how" includes any useful commercial information that is not protected by a patent and that is known to the licensor but not to the licensee. Know-how, which is the subject of a licence agreement, is usually confidential information, or information that is not easily and readily available elsewhere. Typically, know-how is knowledge of or expertise in the performance of some function in an efficient manner. For example, in a know-how licence, the licensor will disclose to the licensee such things as descriptions of manufacturing techniques, chemical formulas, plant designs, etc. Additionally, information which at the time of licensing is subject matter of a pending patent application may also be considered as know-how until such time as the patent issues.

A licence agreement for know-how will have as its main function the actual disclosure of the information licensed. A licensor's right to control the use of know-how is limited to the extent to which the information can be protected as

confidential information. The common law will protect a person's confidential information which has been ascertained illegally by another or which has been disclosed to another under circumstances which impart a duty of confidence.¹ Information can be protected against unauthorized disclosure even if it is not absolutely secret, but information that is easily available through public sources, cannot.² Know-how that is essentially a compilation of information that is publicly available may be transferred for consideration since the licensee still may obtain value for the know-how by getting a head start over his competitors. This is because the more difficult it is to acquire the know-how, in terms of time and money, the more significant the competitive advantage, and hence the more valuable and protectable the information.

b. Patents

A patent is a grant of exclusionary rights to make, have made, sell and use an invention for the term of the patent.³ Patents are granted by governments upon an application by the inventor or someone claiming under the inventor. Patent protection is restricted to those inventions in the nature of new and useful arts, processes, machines, manufacturers or compositions of matter.⁴ To be patentable, an invention must fulfil certain criteria; it must be useful and comprise proper subject matter, and it must be novel and not obvious to a person skilled in the art.⁵

The owner of a patent can be reasonably confident that his exclusive rights will endure for the full term of the patent. A licensor of patented subject matter has a relatively certain and enduring remedy; an action for patent infringement. This allows a licensor to stop any unauthorized use by a licensee of the licensed subject matter, quite separate from and in addition to any remedy provided by the licence agreement. If a licensee of patented subject matter violates any term of the licence agreement, the licensor may sue for patent infringement, as well as for breach of contract.

Once a patent has issued, there is a presumption of validity.⁶ However, the patent subsequently may be held by a court to be invalid. It is essential to realize this, and to understand that there may be continuing obligations for the licensee of patented technology even after a finding that the patent is invalid, depending on how the agreement is drafted, and depending on whether know-how is included.

¹ *LAC Minerals Ltd. v. Int. Corona Resources Ltd.* (1989), 62 D.L.R. (4th) 14 at 20.

² *Schauenberg Industries Ltd. v. Borowski* (1979), 101 D.L.R. (3d) 701 at 706.

³ *Patent Act*, R.S.C. 1985, c. P-4, section 42.

⁴ *Ibid.*, section 1, definition of "invention".

⁵ *Ibid.*, sections 1, 28.2 and 28.3.

⁶ *Ibid.*, subsection 43(2).

3. The Granting of a License

a. General Concept of Licence

Essentially, a licence is a grant of a right to do something which a licensee could not otherwise do legally. In the case of know-how, a licensee obtains access to valuable commercial information, which, apart from the licence agreement, could not have been obtained so easily or economically. In the case of a licence containing subject matter protected by a patent, the right granted is the right to do something that otherwise would be infringement.

While all licenses have common characteristics, licenses can vary considerably in many respects. Practitioners and licensing executives often refer to three basic types of voluntary licenses: non-exclusive, sole, and exclusive.

b. Non-Exclusive Licence

A non-exclusive licence allows the licensor to retain the right to use the licensed property and the right to grant additional licenses to third parties. Therefore, the licensee must expect to compete with the licensor, as well as with other licensees, in the utilization of the licensed property. Typically, this is the type of licence granted amongst competitors within an industry. Such licenses often have a "most favoured" clause, providing that, if the licensor later licenses another party on more favourable terms, he must extend these terms to the prior licensees.

c. Sole Licence

Under a sole licence, a licensor agrees not to grant licenses to third parties; however, a licensor does retain the right to utilize the licensed right. Here, a licensee can expect to compete only with the licensor in the use of the licensed property.

Sole licenses are not very common in practice. Nevertheless, because they are usually recognized under this term, care must be taken to avoid use of the phrase "sole and exclusive licence" in the granting clause of what is intended to be an exclusive licence. Misuse of these terms adds uncertainty to the licence, making it unclear whether the licence being granted is intended to be a sole licence or an exclusive licence.

d. Exclusive Licence

Under an exclusive licence, a licensor may not use the licensed property, nor can the licensor grant licenses to third parties. Exclusive licenses of patented subject matter are required to be registered in the Patent Office⁷; failure to register an exclusive licence may in theory lead to another person obtaining superior rights, although this is very unlikely to happen. Usually, exclusive licensees do not bother to record their licenses because they perceive the risk of a fraudulent grant by the licensor to a third party to be small, and because they would have an action against the licensor in any such event.

⁷ *Ibid.*, section 50(2).

Exclusive licenses often are used where the licensee would have to incur substantial expense, effort and risk to exploit the licensed property. Exclusivity ensures no competition if, and when, commercial success is obtained. Because the licensor has given up the right to use the licensed property, it is essential that the licensor require some sort of guarantee of performance. This guarantee is typically a minimum royalty, or a mechanism by which the licensor can terminate or convert the licence. Sometimes the exclusivity is granted for only the first few years; in other cases, the exclusivity may last as long as the licensee meets the minimum royalty provisions of the agreement.

4. Scope of License

a. Subject Matter Licensed

One of the most important considerations in granting a license is to properly define the subject matter of the license. Defining the subject matter of the licence will have impact on many other clauses of the agreement, including: royalties, improvements, non-competition clauses, rights on early termination, indemnifications, warranties or representations, and the like.

Regardless of what the licensed property is, the scope of the specific license granted must be defined, not only in respect of the subject matter, but also in respect of a licensee's field of use. Licenses sometimes are termed either "limited" or "general", depending on whether a licensee's right to use the intellectual property is restricted in any way.

As previously noted, a patent gives the patent owner an exclusionary right to make, have made, use and sell the patented invention. A licensee may receive a grant of all or only some of these rights. For example, where the patented invention is an apparatus for use in a production method, the licensor may wish to grant the licensee only the right to make the apparatus and to use it in the licensee's own plant. The licensor may not wish to give the licensee the right to sell the apparatus to others.

One important aspect of limiting the scope of a licensee's right to use the licensed property is that such limitations and conditions should not be seen as having as their purpose or effect the undue lessening of competition in the marketplace. Such restrictive conditions could include stipulating a licensee's selling price (price maintenance), requiring the licensee to deal with the licensor for other matters (tie ins), or prohibiting the licensee from dealing with others (tie-

outs).⁸ When drafting limitations, care should be taken to avoid violations of competition legislation.⁹

b. Territory

Territorial restrictions are among the most common which are imposed on licensees of intellectual property, especially in the case of foreign licensees. For example, a licensor who has obtained patents in a number of different countries may wish to grant an exclusive licence to a different licensee in each of the countries. Such exclusive licenses in any particular territory involve the licensee's desire to be the only person in the territory to use the patented subject matter. However, it is often expected by the licensee that it also will be the only person in the territory selling the product produced by the technology.

If there are licensees in several countries, there arises the question of whether all the licensees can be restricted under agreements which limit the right to export. Licenses containing a prohibition on export may be against competition legislation and must be scrutinized carefully by local counsel. There are very few countries that permit anti-export provisions in technology licenses in the absence of patent protection. Where the parties wish to have no competition from foreign manufactured goods, the licenses should expressly state that the licensee has no right to export the patented product. Such a provision is acceptable in a few countries, including Canada and the United States.¹⁰

In addition, the licence may stipulate that the licensee has no right to sell a licensed product within its licensed country to someone who will, in turn, export the product. Since the licensee normally would be given the right to make and sell the product within its country, that right otherwise would include the right to sell to an exporter unless the right was expressly restricted. The licensor may have limited effective remedies to prevent the exporter from exporting to any other particular country.

Similar considerations apply to licenses which are territorially limited within a particular country. If, for example, it is intended that a licensee's right to sell a particular product in Canada is to be limited to a single province, the license might specify that the licensee's right to sell is restricted to sales of the product for use within the province. Typically this is considered such dangerous territory from a competition policy viewpoint, that all that is done is to provide an exclusive

⁸ For further discussion of this issue see Howard Wetston, "The Treatment of Intellectual Property Rights under Canadian Competition Law" in Gordon F. Henderson, ed., *Patent Law of Canada* (Toronto: Carswell, 1994).

⁹ For example, the *Competition Act* R.S.C. 1985, c. c-34. See especially s. 32, which expressly authorizes the Federal Court to set aside license agreements that unduly restrict trade or competition.

¹⁰ In Canada, see *Rhone-Poulenc SA v. Micro Chemicals Ltd.*, [1964] Ex. C.R. 819, affd [1965] S.C.R. 284. In the United States, see *Brownell v. Ketcham Wire & Mfg. Co.*, 211 F.2d 121 (9th Cir. 1954)

territory for location of the licensee. For example, no other licensee will be located within 5 miles or within the province, but all licensees can sell anywhere. Servicing of "national accounts" means there will be competition among licensees.

c. Improvements

When new technology is being licensed by a company engaged in ongoing research and development, one of the most difficult areas relates to improvements. Improvements are simply an extension of the scope of the licence, but to an extent not ascertained when the licence is negotiated.

Since both the licensor and the licensee could develop improvements in the technology subsequent to the execution of the licence agreement, it is quite common to: (1) include terms in the agreement providing for prompt disclosure of such improvements to the other party; (2) provide for the ownership of any rights in the improvement of technology; (3) provide for the obligations with respect to seeking patent protection; and (4) provide obligations with respect to granting further licenses or grant back licenses.

An initial practical problem which arises in drafting provisions dealing with improvements to licensed technology is defining the scope of new developments which are to be included. Some practitioners prefer simply to use the word "improvements", thereby leaving the scope of the word to be interpreted at a later time, if required. However, other practitioners consider this to be too uncertain to be appropriate.

For patented subject matter, the term "improvements" may be defined as any improvements which fall within the scope of the licensed patent claims, or alternatively, as any improvement relating to the same field of technology. Obviously, in the case of know-how the difficulty in defining what is to be included as an improvement is even greater since there are no patent claims to use as a convenient reference point.

These and other factors must be considered together when attempting to deal with improvements. Each party to the agreement will make a judgment as to which party is more likely to develop significant improvements. A party who believes that the other party will develop more significant improvements would prefer a wide definition of improvements and would want the right to use the improvements to be included in the licence at no extra cost. A party who believes that it will likely make the more significant improvements, itself, would want either a restrictive definition of improvement or at least an assurance that it will be compensated adequately for any improvements. The key question to consider is what happens to improvements at the conclusion of the original term.

5. Royalties

a. Definition of A Royalty Base

Under most licence agreements, the main consideration from the licensor's perspective is the receipt of royalties in exchange for the use of the licensed property. Royalties may be calculated in various ways. The simplest form of royalty is the lump sum payment, which completely pays for the full period of the licence. These are most frequently used in licenses of know-how. Annual fixed sum payments also are simple to administer. In either case, both the licensor and the licensee know with certainty the total of royalty which will be due, regardless of the extent to which the licensed property is used.

Usually, however, both the licensor and the licensee wish the royalty payment to reflect the extent of the licensee's use of the licensed property. Typically, the royalty is based on either a fixed sum per unit or a percentage of the selling price of the product produced by the licensee using the licensed property. Of these, the method based on a fixed sum per unit of product is simpler to administer; however, it fails to recognize inflation and marketplace fluctuations. Also, it may not be appropriate where the licensee produces more than one type of product using the licensed property and these products have widely varying prices.

The most common form of royalty is one based on a percentage of the selling price of the product. Although the actual percentage can vary considerably, the level of royalty theoretically should reflect the relative contributions of the licensor's property and the licensee's time, effort, capital and risk. Since this method of calculating the royalty is based on the net selling price of the product, it is advisable to include a definition of the net selling pricing in the licence agreement. Normally, the net selling price is defined to exclude discounts, refunds, and taxes, and to exclude the price paid in a non-arms length transaction.

Often the royalty will include an upfront payment. On the other hand, licence agreements sometimes provide that during the first part of the period of a licence, the rate of royalties is lower or the royalties are deferred altogether; this is to allow the licensee to recover initial development costs before having to pay royalties. Sometimes, the actual percentage of the royalty will vary on a sliding scale, according to sales volume levels.

When licensing both patents and know-how, a major aspect of royalty payments is often overlooked. The sales percentage scheme must very carefully define a product that attracts the royalty. This is because over the period of the licence, the licensee may re-engineer the product to meet local conditions or markets, or might make significant improvements which, by negotiation, are not assigned to the licensor. In such a situation, the question that would arise is whether the re-engineered product still attracts a royalty. Licensees are of course obliged to pay royalties while the product remains covered by an existing patent claim, even if the product evolves to a different form than the original. However, if the product

is no longer covered by one or more claims of the patent, the licensee will not be obliged to pay royalties unless there was a know-how licence, and the scope of the know-how licence is wide enough to catch the improved or modified product.

b. Minimums

On occasion, a licence agreement will provide that the licensee will use his "best efforts" to exploit the licensed property. However, as a matter of contract interpretation, this is too vague to be of much assistance to a court.¹¹ Typically, therefore, (and almost invariably in exclusive licenses) to guard against the situation where the licensee does not commercially exploit the licensed property as enthusiastically or successfully as expected, the licensor will require the licensee to agree to some sort of minimum royalty payment. Where the licensee's percentage royalties do not meet or exceed the minimum, the licensee will have to make up the difference. Again, in recognition of a licensee's higher initial cost to develop a new product and to penetrate a market, the minimum royalties provided may be lower in the first years of the licence agreement.

c. Duration of Obligation to Pay

In a know-how licence agreement, in which there is no patent involved, there is a question as to how long the licensee should be expected to pay royalties. In cases where there is an enduring trade secret, a licensee legitimately may be expected to pay royalties for as long as the trade secret is utilized.

Non-patented subject matter has a comparatively short life span. Most licensees are willing to pay for a moderate period, for example five years, after which time the licensee wishes to have the right to continue to use the information without further payment or restriction. Typically, licensors suggest ten years before achieving a so called "paid-up" licence. Whatever the period finally agreed upon, the licensee will have to pay royalties even if the know-how becomes freely available to others, unless express relief is provided in the licence agreement.

As previously discussed, a licence agreement containing patented subject matter does not carry any implied warranty by the licensor that the patent is valid¹², or that it will be enforced against others.¹³ It must be understood that, in the absence of express provisions in the licence agreement to the contrary, the licensee must continue to comply with the obligation to pay royalties during the term of the agreement, even if the patent were to be held invalid or third parties were to start using the patented subject matter freely. For this reason licensees often wish to be able to terminate the licence upon specified notice, or upon each anniversary, while locking in the licensor for the full term of the agreement.

¹¹ See, for example, *C.A.E. Industries Ltd. v. Canada* [1983] 2 F.C. 616 at 619 (FCTD), where the phrase was interpreted as "leave no stone unturned".

¹² *Trubenizing Process Corp. v. John Forsyth Ltd.* (1943), 3 C.P.R. 1 (SCC); *Rymland et al. v. Regal Bedding Co. Ltd et al.* (1966), 51 C.P.R. 137 (MB CA).

¹³ *Anderson v. E.J. Shepard Ltd.* (1930), 66 OLR 105 (OCA).

Similarly, a licence carries no implied warranty by the licensor that the licensee's use of the licensed subject matter will not infringe any other party's intellectual property rights.¹⁴ In most cases, the licensor will be reluctant to give any type of absolute warranty or indemnification. Where the licensor does not agree to indemnify the licensee, the licensor often requires that the licensee share the costs of defending any action and share the liability for any award of damages. In other cases, the licensor may restrict his indemnification to the amount of the royalty actually paid by the licensee; otherwise, the licensor assumes a potential liability greater than his potential profit.

It is more common for the licensor to grant the licensee the right to terminate the licence agreement upon a finding that the patent is invalid or that the licensee's continued use of the licence subject matter would infringe a third party's rights.

d. Termination Rights

Licence agreements for know-how commonly have terms of several months to several years, often renewable on the agreement of both parties for further specified periods. It must be noted that certain rights and obligations survive the end of the licence agreement. Typically, the licensee has a continuing right to use the disclosed know-how after the expiry of the period of the licence unless the know-how disclosed during the period of the licence becomes the subject matter of a patent.¹⁵ Also, in most cases, the licensee has a continuing obligation to maintain the disclosed know-how in confidence after the expiry of the period of the licence agreement.¹⁶ However, there is no obligation pertaining to information that has become generally known to the public.¹⁷

Licence agreements commonly provide that either party has the right to terminate the agreement prior to its expiry in the event of any breach by the other party. Licence agreements for specified periods which do not have express termination provisions also can be terminated prematurely, but only for breach of a term of the contract. It is typical to provide that, in the event of early termination the licensee must cease to use the confidential know-how and must return any

¹⁴ Unlike in most other countries, in Canada licensees may bring an action for patent infringement. Section 55 of the Patent Act states that an infringer is liable to the patentee and "and all persons claiming under the patentee". The case law has made it clear that licensees are persons claiming under the patentee (*Fiberglas Canada Ltd. v. Spun Rock Wools Ltd.* (1947), 6 C.P.R. 57 (Privy Council)).

¹⁵ This arises from the fact that a license for know-how is not a true license in the sense of being permission to do something that the licensee would otherwise be prohibited from doing. Rather it is an agreement whereby information possessed by the licensor is transferred to the licensee for consideration. It is generally assumed that when the term of the agreement has expired the information has been paid for. See "Technical Information Licensing Agreements" by Gareth E. Maybee, 42 C.P.R. 99.

¹⁶ This results from the fact that the agreement will typically provide for the use of the confidential information but not the disclosure of that information.

¹⁷ See for example *Robin-Nodwell Mfg. Ltd. v. Foremost Developments Ltd.* (1966), 52 C.P.R. 244 (Alta. S.C.).

instructional manuals, engineering drawings or other materials provided by the licensor during the course of the licence.

Where the licence covers patented subject matter, it is possible for the licence to last for the entire period of the patent or longer if there are any improvements. Alternatively, the period of the licence of patented subject matter is less than the remaining life of the patent, but is renewable at the option of the licensee for further periods, until the expiry of the patent.

6. Additional Matters

a. Enforcing Rights Against Third Parties

Where the licence concerns know-how, usually there is no action available to either licensor or licensee against third parties who honestly come into possession of information originally the subject matter of a know-how agreement.¹⁸ One possible cause of action is based upon the allegation that the third party wrongfully acquired this confidential information directly or indirectly from the licensor. If such an action exists, it is unlikely that a licensee can bring such an action on its own. At the very least, the licensor would have to be a party to the action.

In most licensing arrangements, it is provided that the licensor has the first right to bring an infringement action, since any action would often put the validity of the intellectual property right into issue. It is also common to provide that, if the licensor fails to take action within a specified period following notice of the infringement, the licensee may then do so. It must be noted that, normally, the party that proceeds with the action is responsible for the conduct of the action, and that party would be entitled to any award of damages or be liable for any award of costs.

b. Right to Challenge By Licensee

A licence agreement has an implied covenant by the licensee not to dispute the validity of any patent relating to licensed subject matter during the term of the licence, absent an express warranty of the patent's validity.¹⁹ This estoppel arises because it is seemingly unfair for a licensee to receive information and other benefits from a licensor and then subsequently challenge the validity of the licensor's patent when the royalty payments become due. The licensee, by agreeing to take the licence, is therefore deemed to have accepted the licensor's patent. On the other hand, a licensor is also stopped from denying the validity of his own patent.²⁰ Thus, a licensor who is granted an exclusive licence cannot subsequently compete with the licensee, arguing that the licensee's exclusive rights are invalid.

¹⁸ Such third parties would owe no obligation of confidence to the licensor or licensee.

¹⁹ *Coyle v. Sproule* (1941), 2 C.P.R. 125 (Ont. H.C.) at 127.

²⁰ The estoppel that arises between a licensor and licensee is mutual and reciprocal. See discussion in "Patent Licensing" by Gordon F. Henderson, 63 C.P.R. 99 at p. 124.

III. JOINT VENTURES

1. Introduction

Joint ventures are popular vehicles for developing and exploiting technology worldwide. The basis for their popularity is that they are relatively simple to set up, can be focused quite sharply on a specific project or undertaking, and enable the parties effectively to pool their technical and financial resources while sharing the risks. In an ideal joint venture, the contribution of each party nicely balances the rewards, and the resources of both parties combined together to produce a result which neither party likely could have produced alone.

For example, a joint venture formed by a small high-tech firm with a large, well financed multi-national corporation, could provide significant benefits to both. To the small high-tech firm, a well-financed co-venturer may provide financial stability, a possible market for the product of the technology, and access to global markets which may be impractical for the small high-tech firm to reach. To the well financed co-venturer, the joint venture provides access to interesting new technology and possible access to future technology of the high-tech firm.

Another common purpose of a joint venture is to enable one party to reach a market which, for cultural or linguistic reasons, is difficult without the assistance of the local co-venturer. For example, some companies who are desirous of exploiting technology in Japan have found it advantageous to form a joint venture with a Japanese company for the purposes of marketing in Japan the technology developed elsewhere: one party puts up the technology; the other, its marketing connections and the credibility of its name in the target market.

In an international joint venture, one co-venturer typically is a relatively small, chronically under-capitalized, but brilliant Canadian high technology firm. The other co-venturer is often a multi-national corporation, who feels it might have a need for the technology, or who can see global business opportunities for the technology. While in many cases the foreign firm could easily acquire the small high-tech firm, often it realizes the to do so might kill the creativity of the small firm. Thus, a joint venture enables the high technology firm to remain relatively independent while assuring fiscal control to the party putting up the money.

Throughout the following discussion, one co-venturer is a small entity called "HiTechCo"; the other co-venturer who contributes the required funds and possibly marketing expertise and other resources is called "InvestCo". There are many ways in which a relationship between HiTechCo and InvestCo may be structured, and a few of these are discussed below. The principal variants are: (1) formation of a new corporation ("Newco") jointly owned by HiTechCo and InvestCo; (2) formation of a simple joint venture; and (3) formation of a limited partnership.

In all cases, it is assumed that the rights to the technology, whether patented or unpatented, are vested exclusively in HiTechCo prior to commencement of negotiations with InvestCo.

2. Organization of the Joint Venture

a. Structural Variants

i. Jointly Owned Corporation ("Newco")

In this case, the parties agreed to form a new corporation, "Newco", for the purpose of owning and exploiting the new technology. HiTechCo receives common stock in Newco in consideration for transferring either the legal title to the technology to Newco, or else a license, (usually exclusive) covering a specified field of use. InvestCo takes down stock in consideration for a direct investment in Newco, or else, in consideration for lending the necessary funds to Newco to enable it to complete the development of the technology. From the point of view of HiTechCo, it is better to grant Newco a license than to grant the legal title to the technology, because not infrequently, there may be other fields of use for the technology but such other potential uses are so speculative that they would have no material, beneficial effect to HiTechCo in the negotiations with InvestCo. From the point of view of InvestCo, it is usually better that Newco should have the legal title to the technology. An exclusive license is often an acceptable alternative, and while theoretically it might be better to acquire all rights to all uses of the technology, it is not bad psychology to allow HiTechCo to retain something.

Some arrangements of this kind are structured on the basis that InvestCo takes down a certain amount of equity in consideration for a certain amount of money. Although this is superficially more favourable to HiTechCo, such a scheme has the disadvantage of being somewhat inflexible. It is very difficult to predict the amount of time or money that is needed for perfecting the invention. Conversely, if HiTechCo had been very realistic about estimating the amount of time and money required, it might have succeeded in discouraging InvestCo to the point where the deal was not made.

Recognizing that this is so, InvestCo must appreciate that it may be called upon to contribute cash to the venture which is substantially in excess of the amount originally estimated by HiTechCo. For these reasons and others, it is often fair for the necessary money to be made available to Newco by way of debt financing, so that the consideration or the stock that is taken down by InvestCo is the loan of high risk money. Such an arrangement is somewhat more flexible than the arrangement where a specified amount of stock is acquired for a specified amount of money, because InvestCo knows that if the project is successful, it will get its loan money back plus interest and as well, will have a share of the profits through its ownership of the common stock of Newco. If it costs a little more money to develop the technology than had been originally estimated, InvestCo will not be too concerned. Where the amount of additional cost required reaches large proportions, this will, of course, lead to a revision of the equity.

Also, whether HiTechCo grants legal title in the technology or an exclusive license to Newco, HiTechCo can negotiate with InvestCo a reasonable value to be attributed to the rights as they exist at the date of the agreement. Newco will pay HiTechCo for its rights by a lump sum payment upon execution of the agreement, or more wisely, by a series of payments in the first year or two.

ii. Joint Venture

A simple joint venture does not require the incorporation of a company; instead, the parties simply enter into a joint venture agreement. It is very difficult to define in legal terms exactly what a joint venture is. There is no one accepted definition, as is clear from the leading case on joint ventures²¹. One working definition that has been proposed and cited by Canadian courts is found in *Williston on Contracts*:²²

A joint venture is an association of persons, natural or corporate, who agree by contract to engage in some common, usually ad hoc undertaking for joint profit by combining their respective resources, without, however, forming a partnership in the legal sense (of creating that status) or corporation; their agreement also provides for a community of interest among the joint ventures each of whom is both principal and agent as to the others within the scope of the venture over which each venturer exercises some degree of control.

Courts, in deciding whether a joint venture exists, may look for the presence of the following factors:²³

- (a) a contribution by the parties of money, property, effort, knowledge, skill or other asset to the common undertaking;
- (b) a joint property interest in the subject matter of the venture;
- (c) a right of mutual control or management of the enterprises;
- (d) expectation of profit, or the presence of "adventure";
- (e) a right to participate in the profits; and
- (f) usually, a limitation of the objective to a single undertaking or ad hoc enterprise.

iii. Limited Partnership

Limited partnerships for research and development, often termed "R & D Partnerships", have in recent years become recognized in the United States as an effective means for raising capital to fund research and development. Briefly, a limited partnership, like any partnership, provides the investor with the ability to deduct, for income tax purposes, most of the partnerships' expenditures on a current basis.

²¹ *C.M.H.C. v. Graham* (1973), 43 D.L.R. (3d) 686.

²² 3rd Ed., Vol. 2 (New York: Baker, Voorhis & Co. Inc., 1959) at 555-56. Cited in *C.M.H.C. v. Graham*, *supra* note 21.

²³ *Ibid.*

The key distinction of a limited partnership over other partnerships is that the limited partners have liability which is limited to the amount of the property or money contributed to the limited partnership.²⁴

The limited partnership must consist of one or more general partners and one or more limited partners²⁵. A partner can be an individual, a sole proprietorship, a partnership, an association, a trust or a corporation²⁶. A limited partner contributes money or property, but not services, to the partnership²⁷. Limited partners have the same rights as the general partners to inspect the records and receive full disclosures of the affairs of the limited partnership²⁸. While limited partners may investigate the business, give advice about management or act as a contractor, agent or employee of the limited partnership²⁹, it may not take part in the control of the business without losing the limited liability privilege³⁰. Limited partners can also use their limited liability if a distinctive part of their name is allowed to appear in the name of the limited partnership³¹; this loss of limited liability only occurs when the creditor has no actual knowledge that the limited partner is not a general partner.

The result of the above provisions is that the limited partners are passive investors who contribute risk capital to the operation, and the general partner, which will be the company or individuals contributing the technology, manage the limited partnership.

Key distinctions between the joint venture and the limited partnership are the ability of the joint venture investors to participate in the control or management of the project, and in most circumstances, the absence of the limited liability.

An R & D contract is put in place between the R & D limited partnership and a research facility. The research facility is typically an affiliate of the general partners; that is, the high-tech company. Pursuant to this agreement, the research affiliate performs the actual research and development. Technology created under this agreement is generally owned by the R & D limited partnership. Once the technology has been developed to a commercial stage, the technology is usually licensed to a manufacturer in return for royalty payments.

²⁴ *Limited Partnership Act*, R.S.O. 1990, c. L.16, S.9.

²⁵ *Ibid.*, s.2(2).

²⁶ *Ibid.* s.1, definition of "person".

²⁷ *Ibid.* s.7(1).

²⁸ *Ibid.* s.10.

²⁹ *Ibid.* s.12(2).

³⁰ *Ibid.* s.13; see *Elevated Construction Limited v. Nixon*, [1970] 1 O.R. 650 (Ont. H.C.); and L. Hepburn, *Limited Partnerships* (Toronto: Carswell, 2000) for a discussion of what constitutes "control".

³¹ *Ibid.* s.6(2).

b. Rights of the Joint Venture to Intellectual Property

As in the case of any license involving intellectual property rights, the nature of the grant may range from an outright assignment of all legal and beneficial ownership in any technology, to a simple, non-exclusive license. The appropriate scope of a license, therefore, must be determined on a case-by-case basis. The following examples are illustrative. Licenses of technology in general were discussed more fully in the previous section.

Where the technology is to be exploited through a corporation ("Newco") jointly owned by HiTechCo and InvestCo, it is common for HiTechCo to grant to Newco the exclusive right, title and interest for Canada and all other countries in respect of the technology. In the event that HiTechCo was in possession of any relevant technology prior to the date of the agreement with InvestCo ("background technology"), and such technology is a necessary basis for the technology to be developed and exploited, or in the event that HiTechCo has any patents or patent applications as of the date of such agreement with InvestCo, and such patent or patent applications carry the proposed technology, it is important that Newco acquire the rights to such background technology and patents. Foreground technology is technology that is created by or for the benefit of Newco. Usually the foreground technology is owned by Newco, rather than being merely licensed to it. The background technology could either be assigned or exclusively licensed to Newco.

There may be instances where the technology has an immediate application to a specific field, and InvestCo has "been sold" on the basis of the potential of the technology in that field. There may be other potential uses in unrelated fields, and which would require a separate R & D project to perfect. In such circumstances, HiTechCo may be able to restrict the rights granted to Newco to an exclusive license limited to the specific field of interest. In this way, HiTechCo would retain to itself the possibility of being able to exploit the technology in those other fields, either by itself or jointly with others.

It is not usual for HiTechCo to grant to the joint company a mere, non-exclusive license. Usually, InvestCo will insist upon at least full measure of exclusivity in consideration for the investment. As in the case of any license involving an exclusive grant, HiTechCo ought to protect itself as to the diligence of Newco in exploiting the technology. However, in many cases, it is not necessary to insist upon minimum royalties which are usual in standard exclusive license agreements, because InvestCo must normally put up sizeable sums of money for the research and development work. Such investment often assures that Newco will have sufficient incentive to exploit the licensed rights, so that minimum royalties may be inappropriate in many cases.

In the case where InvestCo obtains a license to the use of the technology, usually InvestCo will wish to have at least some limited exclusivity, or exclusivity

for a limited period of time. Often this exclusivity is subject to HiTechCo having the same right to exploit the technology as InvestCo, so that the rights of each party might better be characterized as "semi-exclusive". Particularly in cases where the risks are high, InvestCo will need to have an adequate incentive to back the project. On the other hand, quite often where the financial strength of InvestCo is great compared to that of HiTechCo, InvestCo is not too concerned about HiTechCo retaining any license to use the technology, so long as that license is not transferable to third parties, such as competitors of InvestCo.

In other cases, InvestCo may consider that a lead of one year or two is adequate protection over its competitors, and that in practice, a lengthy period of exclusivity is of no benefit as the technology may be expected to change radically even within a period of a few years. In such circumstances, the exclusivity granted to InvestCo might be limited appropriately.

Further, InvestCo might be willing to take a non-exclusive license, that is either royalty-free or which carries a relatively small royalty, on the further condition that HiTechCo will pay back InvestCo for all sums that are advanced against the cost of the foreground technology. That is, InvestCo's reward for advancing the required funds for developing the foreground technology is a royalty-free license, which includes a license under any required background technology which is necessary to successfully exploit the foreground technology.

3. Operation of the Joint Venture

It is desirable to set out in the agreement, with reasonable precision, the purpose of the venture, listing the work that is proposed to be done. There may also be provisions for dealing with the rights of the parties to operate independently of each other in areas outside of the scope of the venture. In some cases, provision may be made for permitting the parties to operate independently of each other, even within the field of the joint venture, where, for example, the activity that is contemplated is not directly competitive with the work of the venture and the other party has been offered an opportunity to joint venture with the other in respect of the specified project and has declined to do so.

In a typical joint venture, management is provided by an executive board. Usually if only one joint venture partner puts up the money, they will insist upon financial control. Thus, the executive board might consist for example, of five directors, three of whom may be appointed by InvestCo and two by HiTechCo. There may also be a smaller, executive committee, which could be made to be responsible for the supervision of all technical aspects of the joint venture and make recommendations to the executive board from time to time with respect to existing and proposed work. In order to give HiTechCo a measure of control over the technical direction of the joint venture, it may be provided that no recommendations shall be made to the executive board by the executive committee unless they are unanimous, and the executive board cannot change

the direction of the technical work of the joint venture except upon the recommendation of the executive committee.

In a successful joint enterprise, whether structured as a true joint venture, limited partnership or with the incorporation of a Newco, it is desirable to give HiTechCo a substantial voice in the direction of the research and development work because this is the field of expertise of HiTechCo, and moreover, because HiTechCo's co operation surely be lost if HiTechCo came to the conclusion that it was being forced to do things against its better judgement. On the other hand, it is very important for InvestCo not to be forced to back work that is considered to be too remote from the purpose of the joint venture, or to be too speculative. The object, therefore, is to structure the management of the joint venture in such a way that HiTechCo has the primary responsibility for defining the work to be done, and InvestCo has the right to approve each incremental amount of work before it is done, but not the right to allocate different work without the consent of HiTechCo.

It is common in any joint venture research and development contract for HiTechCo to commit itself to providing technical support to the joint venture. The technical support agreement would provide, inter alia, a license under any background patents or patent applications to HiTechCo and a license in respect of any background know-how. As indicated above, the field of use, territory, and duration all need to be specified. Research and development companies which badly need cash should consider carefully every possible source of funds and whereas InvestCo may not expect an early return on the investment, in general, HiTechCo should try to build in as many sources of income from the joint venture as possible, which are independent of bottom line profits. Conversely, InvestCo will insist that the real bonanza for HiTechCo must come out of real profits or from a capital gain in the sale of Newco stock, and not from advances from InvestCo or the cash flow of the joint venture.

4. Funding of the Joint Venture

The obligations of InvestCo must be defined accurately, in terms of the maximum financial obligation and in addition, the timing of payments. Initially, the joint venture must be funded to enable the joint venture to pay for any underlying technology or licenses being acquired from HiTechCo, equipment required for furtherance of the research and development work, and for the additional development work required. The payments for research and development work are paid on a monthly basis in accordance with approved monthly work descriptions. In addition, InvestCo will be responsible for advancing additional money (limited as to amount) as may be required for day-to-day operations of the joint venture during a specified period of time.

It is virtually impossible to predict with exactitude the cost of developing any new technology to the point of commercial production. It is equally difficult to predict the time that is required to complete such development work. Given the fact that

most people who engage in research and development as a full time profession and many people who invest in such research and development are optimists by nature, and given the nature of the inventive process, it is probably inevitable that miscalculations will occur. The wise financier will therefore allow for considerable overrun in terms of time and money, in structuring the basic agreement. Nevertheless, in many cases, circumstances will change to the point where the magnitude of the investment required is such that the respective contributions of the parties no longer are balanced. In such circumstances, it is obvious that there will need to be some adjustment of the respective equities of the parties. It is possible that this process might continue until the equity of HiTechCo has dipped to such a low level that there is little incentive for HiTechCo to remain interested in the project. At the same time, the technology may have real merit and InvestCo may have a strong incentive to continue to invest.

It is therefore not uncommon for disputes to arise between InvestCo and HiTechCo as to the direction of the recent research and development effort, and as to the commercial exploitation of the invention. In extreme cases, it might be necessary for InvestCo to take steps to prevent HiTechCo from having any real say in the direction of the commercial realisation of the invention, or even in completing the research and development work. It might even be necessary to replace HiTechCo with another person or firm for completion of the project.

However, usually the technology remains in the brains of employees of HiTechCo even though it may have been legally transferred. Therefore, unless Newco acquires employees of its own who are sufficiently technically qualified to understand both the background and foreground know-how, it would be extremely difficult in practice for InvestCo to replace HiTechCo with another. This fact gives HiTechCo considerable leverage.

5. Distribution of Net Cash Flow

In the preceding discussion, it has been assumed that the monies advanced by InvestCo would be in the nature of a loan. Generally, InvestCo will wish the loan to be paid back ahead of any other distribution. However, it may be reasonable to consider the loan as a series of separate loans for different purposes with different priorities to the different portions. For example, where the inventor was paid a certain sum of money at the beginning of the joint venture, in consideration for the transfer of rights to the joint venture in background know-how, it would be reasonable for InvestCo to be paid back the money needed for funding this payment plus accrued interest, ahead of all other payments. In any case, where monies are being paid by the joint venture to both parties, the monies would be repaid pro rata to the aggregate monies owing to the respective parties. It may also be appropriate for the joint venture to set aside a certain portion of the aggregate of any net cash flow as a reserve for the purpose of financing further research and development work.

Finally, any remaining net cash flow is available for the payment of dividends to the common shareholders of Newco, or in the case of a true joint venture or a limited partnership, to be distributed among the joint venturers or partners.

6. Termination

In the event InvestCo fails to advance any monies to the joint venture, pursuant to the agreement, and the default is not cured within a reasonable period of time such as 30 days, HiTechCo should have the right to terminate the agreement and all rights, (as well as obligations) of InvestCo will terminate. If HiTechCo has succeeded in negotiating a front end payment, such as that discussed above, in consideration for the grant of technology to the joint venture, this will assure HiTechCo that InvestCo is not likely to back out precipitously. It is not easy for a research and development company to suddenly switch the research and development team from one project to another. Therefore, sudden termination of the funding by InvestCo could have very adverse consequences for HiTechCo. It would, therefore, be desirable for HiTechCo to try to negotiate some minimum notice required for cessation of the funding. This could be done, for example, by specifying that InvestCo would be obligated for, say, three months funding of the joint venture at the average rate of expenditure, upon giving notice of termination. In the event that the agreement is terminated as a result of cessation of funding by InvestCo before the work contemplated under the agreement has been completed, all right, title and interest in and to the background and foreground technology, and in any patent rights licensed to the joint venture should be transferred back to HiTechCo without any additional consideration of than nominal consideration.

IV. DIRECT INVESTMENT

1. Introduction

One of the simplest and most effective ways in which to acquire technology in a field of interest is through direct investment in a high technology firm. Many small high technology companies are under-capitalized. Their intellectual property assets are not considered, in general, to be "bankable assets" and therefore banks are unwilling to lend money on the strength of such assets however valuable they may be. An investor, though, may see the potential and be willing to invest accordingly. This is particularly so if the investor has a need for the technology. Typically, in such a transaction, the investor would acquire a certain amount of common stock in return for a certain amount of money paid to the company. The stock should come out of "treasury stock", and not from the sale of stock by any individual shareholder, so that the funds immediately benefit the company.

There are several considerations which must be examined in such an acquisition. Among these are the dilution of the common stock held by other investors, and financial and day to day control of the company. Control is usually the most significant problem.

2. Control

Usually, small, start-up companies having a large research and development focus are not run by business people; they are run by scientists. These people tend to be intellectually gifted people, often lacking in business expertise. As people who have had the courage to start something from scratch, they tend to have strong views, not only about the science in which they specialize, but about the business which they have worked very hard to establish. Some scientists admit their shortcomings as business people, and welcome help from outsiders, but others are very reluctant to allow any outsider to influence let alone control the future direction of the company. As a result, it is common for such companies to be driven to the brink of financial ruin before outside investment is sought. Often, it is too late, with unfortunate results for the founders and employees alike.

It is therefore suggested that people who direct such companies should think about receiving an investment from outsiders well before they face an irreversible financial crisis. Ideally, the outside investor should be an individual, group or company that has more to offer than mere money: e.g. business savvy, business contacts, and possibly a market for the company's product. Even giving up control might be worth it to the small company, if the amount of money and other intangibles combine to make it the right thing to do. Even with the relinquishment of control, the small firm may be ahead in the long run; if the technology is developed and successfully marketed under the investor's guidance, the return on the original shareholders' investment could be much greater than otherwise.

While the investor will certainly wish to obtain equity that is commensurate with the amount of the investment and the nature of the risk, often intangibles such as business contacts, savvy, etc. are not valued though they may be of real value to the company.

The investor may be willing to invest without having absolute control in a corporate sense, but may insist on having the right to approve how the money is spent, to reduce the risk of expensive R & D "adventures" that the investor does not approve.

While the investor may be an expert in business management, the investor may know little or nothing about research and development, or the particular technology. Consequently, it is prudent for the investor to allow the high technology firm to maintain a substantial voice, at least in terms of the direction the research and development takes, even if the investor gains corporate control.

The investor must realize that by making the investment, it may be committing itself, practically if not legally, to further infusions of cash into the company. In

some situations, it is very difficult to accurately estimate the cost of bringing the technology to a marketable state. The investor should therefore recognize the practical necessity of advancing further funds to the project if necessary. Whether any further advances should be treated as an additional purchase of equity or as a debt instrument, or as a combination of the two, is something which must be determined at the time of the original investment. From the company's point of view, if money is borrowed, it should be on the basis that the money is paid back out of profits at a specific rate, e.g. 25% of the profits are directed to paying off the debt plus the agreed interest. It may be years before there is any profit, so with an arrangement of this kind, the loan would not have to be serviced while the company is struggling to perfect its product. Some investors may insist on a certain percentage of the equity in the company in consideration for such a loan. Depending on the circumstances, it may be best to have the money advanced only as equity, only as a loan, or an appropriate combination of the two.

3. Dilution

In addition to the issue of control, there is also the issue of dilution which must be considered. That is to say, by the corporation's issuance of stock, the voting power of the other shareholders will diminish.

This problem may be addressed by providing appropriate safeguards in the shareholders agreement with the outside investor, especially in relation to issues such as the election of the officers and directors of the company. Minority shareholders should be assured at least some representation on the board. The negotiation of a shareholder's agreement is beyond the scope of this paper, but anyone shareholder should be sure to have competent advice from a corporate law expert before concluding any deal involving direct investment in the firm in which he or she has equity.

V. CONCLUSION

It can be seen that each of these forms of technology transfer are unique, although there are many considerations involved in each which are similar. As with any business arrangement, reaching an agreement requires careful consideration of many factors, and a substantial amount of negotiation. It is hoped that this paper will provide insight into a few of the more important factors.