Introduction to

PATENT CLAUSES IN INDUSTRIAL RESEARCH AGREEMENTS

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Other such agreements have some or all of the elements described in 10.1.d. above, so that the University retains some of the same rights it would have had by retaining ownership and granting the sponsor a royalty-bearing, exclusive license with due diligence requirements and march-in rights. This type of agreement is reflected in the following clauses:

"1. UNIVERSITY shall be responsible for ensuring disclosure to SPONSOR of any and all inventions within thirty (30) days of discovery, conceiving, or finding of an invention by any investigator engaged in research activity funded by SPONSOR under this Agreement.

"2. SPONSOR shall have an additional ___-month period from the U.S. filing date in which to file counterpart patent applications covering said invention in countries foreign to the United States. SPONSOR shall provide UNIVERSITY with copies of all U.S. patent applications, Patent Office actions and amendments at the time they are filed or received by SPONSOR, and shall provide UNIVERSITY with serial number and filing date information for foreign-filed applications and with copies of all foreign patents which issue thereon.

"3. Within ninety (90) days after the filing of a patent application by SPONSOR as provided in Section 2, UNIVERSITY shall make assignment to SPONSOR of the entire right, title and interest in and to said patent application and in and to the invention or inventions described in said patent application without further compensation. In order that UNIVERSITY may accomplish said assignment, UNIVERSITY shall require each investigator engaged in research under this Agreement to execute an "Invention and Patent Assignment Agreement" form, attached hereto and made a part hereof as Appendix "B".

"4. In the event SPONSOR fails to file foreign patent applications within the periods set forth in Section 2, or having filed an application elects to discontinue prosecution of such application, SPONSOR shall upon request from UNIVERSITY assign back to UNIVERSITY all patent rights for each of those countries in which no application is filed or prosecution is discontinued. Any assignment back to UNIVERSITY from SPONSOR will be subject to a right in SPONSOR of an irrevocable, nonexclusive, royalty-free license to make and use within SPONSOR for purposes of research and development, but not for production or sale, any subject matter assigned back to UNIVERSITY.

"5. In the event of issuance to SPONSOR of a U.S. or foreign patent which issues from a patent application assigned to SPONSOR from UNIVERSITY, SPONSOR shall grant to UNIVERSITY an irrevocable, nonexclusive, royalty-free, non-transferable license to make and use the subject matter of any such patent, said license being limited to research, teaching and development activities practiced at UNIVERSITY.

1. INTRODUCTION

Of all the clauses contained in research agreements with industrial sponsors, those relating to patent rights are likely to require the most time consuming negotiations. In addition, where patents are an important consideration, clauses relating to the dissemination of research results may also be essential, since publication has a direct impact on patent rights.

Most university patent policies provide that the ownership of inventions made in the performance of a research agreement will normally vest in the university. The rationale for this and some typical implementing clauses are set forth in Part 4 of this paper.

The rationale and clauses applicable to situations in which an industrial sponsor acquires ownership to inventions are set forth in Part 10.

Before addressing these, however, the question of conflicts and commingling should be considered and this is addressed in Part 2. The discussion of commingling in Part 2 assumes that the reader is familiar with material on commingling which is contained in Unit 2 of this series, "Patent Rights under Government Contracts".

10. TITLE IN THE SPONSOR

As noted in Item 23 of the NACUBO Survey included in Unit 3 of this series, 27 universities indicated that they would permit a research sponsor to acquire ownership in inventions. In practice this occurs in a variety of ways. The sponsor may acquire title in specific inventions resulting from the research under specified circumstances, as, for example, when the university elects not to pursue an invention and the sponsor is permitted to do so in its own name. On the other hand, the research agreement may provide the sponsor with ownership to all resulting inventions. Such agreements may be an exception to the university's normal patent policy and permitted only under unusual circumstances, or it may simply be one of the alternatives which the university normally makes available where no Federal rights apply.

10.1 Rationale for sponsor acquiring title

One industrial sponsor which seeks title to inventions resulting from the research which it sponsors, argues that:

a. The company is interested in emerging technologies that will provide the basis for new products in an intermediate time frame. The best way to achieve this objective is for the company to draft and apply for any patents which evolve from the supported research and for the company to hold title to any issued patents.

b. The company, as opposed to the university, is in a better position to judge the commercial merit of an invention and to interpret this judgement into a sound enforceable patent.

c. Holding title to the patent is necessary in order to justify the very large expenditures which are required to develop and commercialize the invention.

d. When the company acquires title, the interests of the university and the public can be protected by contract provisions such as the following:

1. Limits are placed on the time which the Sponsor has to file U.S. and foreign patents. Rights to inventions on which the Sponsor does not wish to file are returned to the University.

2. The Sponsor agrees to commercialize patented inventions resulting from the sponsored research through internal development or through licenses within a specified time. If it fails to do so title will revert to the university.

the question of possible Federal rights in any of those inventions be thoroughly reviewed since Federal rights in an invention will preclude the granting of title. In that event, the contract should define the nature of the license rights which the sponsor will acquire when title cannot be granted.

2.2 Potential Federal rights

Some industrial sponsors are quite willing to fund research which is also being supported by a Federal sponsor and to accept the licensing constraints imposed by P.L. 96-517. In such cases the contract clauses cited above are appropriate.

Other sponsors, however, may wish to preclude the possibility of any Federal rights in inventions arising from the research, and may wish to include a clause under which the university agrees not to accept any Federal support which would constitute "commingling" and which will thereby give the Federal government an interest.

It is more common, however, for the sponsor to seek contract assurances that the University will take steps to avoid or minimize the acquisition by any other sponsor, Federal or private, of patent rights which limit or are in conflict with those acquired by the Sponsor. This is the subject of the next section.

9.2 Publication

The University's right to publish is frequently preserved by a clause of the following type:

> "University is free to publish the results of this research after providing a copy of the proposed publication to the sponsor."

Where a sponsor is not particularly interested in patents or is satisfied with a license to whatever patents the university itself chooses to acquire, this clause may be adequate.

Where, however, the sponsor is interested in patents and may wish itself to pursue those which the university does not, it will usually request that the clause be modified to provide for a delay in publication to protect patent rights.

a. Delay in publication

Where sponsors wish an opportunity to review publications in order to ensure that patentable inventions are not overlooked, it is not unusual for a university to agree to delay publication for this purpose. (In addition, in situations where the university has accepted proprietary data of the sponsor as background information, this also gives the sponsor an opportunity to identify any such data which has been inadvertently included in the publication.) A typical clause might read as follows:

> "The University is free to publish the results of this research after giving a copy of the proposed publication to the sponsor at least 30 days prior to the intended publication date, to allow the sponsor to review for patentable subject matter (or to ensure against the disclosure of any proprietary data of the sponsor)."

Where publication delay is long enough in practice, as is often the case with publications in professional journals, it is assumed that the parties will have time to conduct the review and do whatever is appropriate to protect patent rights.

b. Delay in publication plus extension

Because foreign patent is such that any publication of any nature prior to filing, whether oral or written, in any part of the world, may eliminate the possibility of foreign patent protection, some industrial sponsors are concerned not only that patentable subject matter be identified, but that the university secures patent protection by filing prior to publication, or allows the sponsor time to obtain such protection.

For one thing, it will avoid the conflict which could arise where rights are acquired by the sponsor on the basis of reduction to practice only. If the same research, or closely related research, involving the same personnel, had previously been funded by others, then the current sponsor may acquire rights based on reduction to practice, but a prior sponsor may already have acquired rights based solely on conception.

On the other hand, if an industrial sponsor acquires rights to an invention solely by reason of conception, and then does nothing with it, this could destroy the opportunity to get another industrial sponsor interested in sponsoring further research necessary to reduce the invention to practice.

These points notwithstanding, if it is agreed that an industrial sponsor will acquire rights based on either conception or reduction to practice, the parties will have to negotiate provisions which will deal with preexisting rights or help to avoid future conflicts, as noted in the following sections.

3.3 Limitations on rights

In order to deal with preexisting rights in third parties, a university may use the clauses already cited under Section 2.1, which provide that whatever patent rights are granted will be "subject to the rights of third parties" or to inventions made in the performance of the research "to the extent that the university has the right to do so."

As noted earlier, however, a sponsor may not wish to accept these open ended clauses without a careful review of what may be covered, and may wish to adopt some mechanisms for ensuring that third parties do not acquire such rights in the first place.

3.4 Restrictions on other funding

Some sponsors request a statement in the contract that the university will not accept support from other industrial sponsors (or any sponsor), for the specific work to be performed under the agreement. Universities generally have accepted such clauses on the theory that a sponsor should be entitled to be the sole sponsor of the particular research project once it is defined except where it is understood at the outset that the program is multiple sponsored and the funds will, in fact, be commingled.

Some industrial sponsors request the inclusion of contract language to the effect that the university will not undertake work in related areas for other sponsors, (or that the principal investigator and his research team will not do so), or that related work will not be performed for the sponsor's competitors, or that no research will be undertaken by the university (or research team) which will create a conflict in obligations.

Although provisions of the latter type undoubtedly help to reduce patent conflicts, they raise other questions of policy with which most universities have great difficulty and should be approached cautiously.

8. LICENSE TERMS AND CONDITIONS

Research contracts with industrial sponsors deal with the terms and conditions of license grants in a variety of ways.

In some cases, the contract simply states that the sponsor shall be entitled to certain licensing rights as set forth in a separate agreement. The separate agreement spells out the sponsor's license rights and/or the options it may elect. This agreement, sometimes referred to as a License Option Agreement, is then executed in conjunction with the research contract. It resembles a license agreement but the royalty rates and certain other specifics may be left for subsequent negotiation once an invention is identified.

In other cases, the sponsor's options are spelled out in the contract at a level of detail comparable to that in the option agreement. The legal effect is the same in either case, but some universities which make research contracts available as public documents, except for the business and financial details, prefer to have these details in a separate option agreement so that the research contract can be made available without editing and deletions.

In the majority of cases, however, it appears that research contracts take the middle ground and contain clauses which cover the most important rights to be granted but leave the rest of the license agreement to be negotiated when the invention is identified. In general, such research contracts will at least cover the following:

Ownership of inventions
Right to non-exclusive or exclusive licenses
Exclusive License terms: length, sublicensing obligations, performance requirements, applicability of PL 96-517, etc.

In conjunction with such contracts, the sponsor may wish to study the university's standard licensing agreement in order to anticipate whether any problems could arise later which might best be addressed at the outset.

4. TITLE IN THE UNIVERSITY - A RATIONALE

While the patent policies of educational institutions differ in a number of respects, most university policies provide that the ownership of inventions made in the performance of a research agreement will normally vest in the university. Question 23 of the NACUBO Survey reproduced in Unit 3 of this series gives some feeling for the practices of those surveyed in 1978.

4.1 Rationale for university retaining title

Universities which retain title to such inventions assert that by doing so they are in a better position to:

a. Fulfill their obligation as a university to serve the public interest by ensuring that inventions arising from university research are developed to the point of maximum utilization and availability to the public and will not be used to the detriment of the public interest by the unnecessary exclusion of any qualified user or by any other means.

b. Share with inventors the proceeds of royalty-bearing licenses in recognition of their inventorship and as an incentive to spend the time and effort necessary to properly disclose the invention, participate in its evaluation, assist attorneys involved in filing patent applications, and advise potential licensees.

c. Provide the University with a share of the royalties not only to help pay the costs of the patent program, but also to support selected education and research programs in recognition of the university's investment in facilities and personnel without which such inventions would not have been possible.

d. Minimize or facilitate the resolution of conflicts in patent rights and obligations between industrial sponsors, and between industrial and Federal sponsors where research sponsored by industry may lead to the reduction to practice of inventions conceived under Federal sponsorship. Conflicts can be minimized and the equities of the parties more effectively recognized, through licensing mechanisms, when title to the inventions is not at issue.

e. Ensure that the university can pursue with third party licensees those applications which are of no interest to the sponsor and which might not otherwise be developed to the point of commercial availability.

ownership. Where title is in the name of the sponsor, the joining of the university in the suit is less likely to occur, unless the university is "an indispensable party" in the legal sense.

7.2 Filing by sponsor

It may, of course, be agreed from the outset that all filing of patent applications will be done by the sponsor. In some industries, companies prefer to have this done by their own lawyers whom they consider more specialized and expert in their field. Whether such lawyers will give attention to claims and fields of use not specifically within the company's area of interest can be argued.

Where it is agreed that the company will do the filing, a clause such as the following might be used; or any clause which simply reverses the approach in Section 7.1 above.

> "The Company may, at its own expense and in consultation with the University, file and prosecute a patent application(s) on the invention in the United States. The Company will also select countries for the international filing of such application(s), and all filing, prosecution and maintenance costs will be the responsibility of the Company. In the event the Company elects not to take a license under such patent(s), the responsibility for such filing, prosecution and maintenance costs shall revert to the University. The University may supplement the list of countries for international filing but, unless the Company agrees to pay for the filing and prosecution in any of these additional countries, these costs will be paid by the University."

Another approach to filing by the Sponsor is reflected in the following provisions:

> "1. When Sponsor has indicated its interest in a license under prospective Patent rights to an invention it shall promptly cause its patent attorneys to file and prosecute in good faith a United States Patent application on such invention. Sponsor shall also effect the filing and good faith prosecution of foreign Patent applications corresponding to the United States application in whatever countries Sponsor by written notice to the University indicates its interest in a license under prospective Patent rights.
>
> "2. Until such time as Sponsor notifies the University in writing that it no longer has an interest in a license, or until the expiration of the time specified in Paragraph ___ during which time Sponsor has not given notice of its election to take a license, Sponsor agrees to bear the cost for filing and prosecution of Patent applicatons under Paragraph 1 and the issuance and maintenance of Patents thereon. Sponsor shall not be required to prosecute any such Patent application beyond the point of final rejection by the assigned Primary Examiner in the United States Patent and Trademark Office or the equivalent stage of prosecution if a foreign application. The University, at no cost or obligation or liability

b. Royalty-free or royalty-bearing

Although non-exclusive licenses granted to research sponsors have at many universities been granted royalty-free, an increasing number of universities are seeking royalty-bearing non-exclusive licenses since the non-exclusive license in the sponsor is a disincentive for other industrial companies to invest funds in developing a marketable product. This is particularly true where the sponsor has acquired license rights based solely on the conception of the invention, so that further investment would be required to reduce it to practice and develop its commercial potential, and where the sponsor is sufficiently large to capture a significant portion of the market if it entered the market on a royalty-free basis.

In addition, some universities which might normally grant a royalty-free, non-exclusive license, prefer royalty-bearing, non-exclusive licenses in situations where the sponsor is dominant in the field, or is an industrial association comprised of companies which are, in the aggregate, dominant in the field. Where a royalty-free license might aid a sponsor in maintaining market dominance, anti-trust considerations might also apply. In any event, the opportunity for granting royalty-bearing licenses to third parties may be so limited that the income to the university may be inadequate to offset the expense of seeking and maintaining patent protection and sharing royalties with the inventors.

c. Sublicensing

Under a non-exclusive license, the right to sublicense is not usually provided since it may put the university in competition with the licensee in offering attractive sublicensing terms to potential sublicensees.

5.3 Exclusive, limited-term license to sponsor

In recent years, universities which retain title to inventions resulting from sponsored research appear to be more willing than previously to provide industrial sponsors with exclusive patent licenses, where requested, and to view them as an appropriate vehicle for the effective transfer of the technology.

In most cases, the rights granted are a limited-term (less than the life of the patent), exclusive license (or an option to acquire such a license). The following clause is typical:

"Title to any invention conceived and/or reduced to practice in the performance of this research shall remain with the University, provided, however, that the University shall grant to the sponsor an irrevocable, royalty-free, (royalty-bearing) non-exclusive license to make, use and sell such invention, but without the right to sublicense, for the term of any patent thereon.

7. RESPONSIBILITY FOR FILING AND ALLOCATION OF COSTS

7.1 Filing by the university

In Sections 5.2 and 5.3, we noted that sponsors interested in exclusive licenses may also wish assurances that the university will be active in identifying inventions and pursuing patent protection on all those in which the sponsor is interested. A typical clause to this effect is the following:

> "Title to inventions conceived and/or reduced to practice in the performance of this research shall vest in the university, which shall take steps to file patent applications in the United States at its expense on all patentable developments. Upon issue of any patent on any such invention, the University shall grant to the Sponsor...."

The university, however, may not wish to commit itself in advance to seeking patent protection at its own expense by filing on all inventions, whether or not they appear to have commercial potential. For that reason, it may be necessary to consider other options, such as permitting filing by the sponsor when the university elects not to, and/or providing that the sponsor share the costs. A sample clause addressing this option is as follows:

> "1. University shall file or have filed in a timely manner at its own expense a United States patent application or applications on all inventions arising out of the performancce of this research and shall diligently prosecute such applications. Sponsor may make a written request to the University to file a United States patent application on any invention identified to the University by the Sponsor.
>
> "2. Where the University for any reason elects not to file such a patent application in the United States or in a foreign country, University shall notify the sponsor promptly and the Sponsor shall have the right to file such application at its own expense in the name of the University."

The foregoing clause provides that the university pays the cost when it files, whether at its own initiative or at the request of the sponsor, and the sponsor pays only for the filing which the university elects not to pursue. A somewhat different approach is reflected in the following clause, which provides that the sponsor only gets rights to inventions on which it recommends filing and for which it pays half the filing and related costs, except that if the university fails to follow the sponsor's recommendation, the sponsor may pursue patent rights at its own expense in the university's name.

discovery, whichever occurs first, and at reasonable royalty rates to be negotiated at the time of the license agreement, but such rate not to be less than ___ nor more than ___ percent of the net sales price of the invention."

c. Sublicensing and performance criteria

An exclusive license usually gives the Sponsor the right to sublicense others at reasonable royalty rates. Apparently most universities do not make such sublicensing mandatory under exclusive limited-term licenses, but do require (1) performance milestones and/or minimum annual payments as incentives for the licensee to develop the technology and ensure that it becomes available for the benefit of the public, or (2) other forms of assurance that commercialization will be diligently pursued.

The initial period of exclusivity is sometimes extended under special circumstances or with contractual assurances that licensing will be pursued as diligently as it would be by the university. These contractual assurances may include mandatory sublicensing, performance milestones, arbitration procedures, etc.

Any exclusive licensing subject to P. L. 96-517 because of Federal rights in the invention must, of course, meet the requirements of OMB Circular A-124, as set forth in Unit 2 of this series.

5.4 Exclusive, full-term license to sponsor

Universities which adopt the philosophy that they have an obligation to ensure the transfer of technology through patents in the public interest tend to resist the granting of exclusive licenses for the life of the patent except under special circumstances, such as settlement of a possible litigation claim, settlement of an interference action, or as a possible alternative to assigning title or granting joint ownership, etc.

Where universities do grant a life of the patent exclusive to an industrial research sponsor, they may require assurances such as mandatory sublicensing on a non-discriminatory basis to all qualified parties and an arbitration procedure for any appeals.

A sample clause is as follows:

"Title to any invention or discovery conceived or first reduced to practice in the performance of this research shall remain with the University; provided, however, that the University shall grant to the Sponsor an irrevocable, exclusive license with mandatory sublicensing at reasonable terms on a non-discriminatory basis to all qualified parties for the term of any patent thereon, to make, have made, use and sell such invention or discovery, such license to be at reasonable royalty rates to be negotiated at the time the invention or discovery is made."

reasonable royalty basis. The royalty income earned on the licensing of patent applications/patents hereunder, whether licensed by Sponsor or the University, shall be equally apportioned between the Sponsor and the University."

Whether this approach is preferable may depend on the nature of the market, the nature of the sponsors marketing capability, and other factors.

As an alternative or modification to the coordinated approach reflected in the foregoing clause, the parties may agree that one of them will act as the sole agent of both with respect to patent licensing, and receive back from the other party an exclusive license to that party's joint rights.

6.2 Joint research programs

Joint title is most frequently granted in situations in which the sponsor and the university are engaged in joint research, and the first problem is to define what this means. Joint research may be variously defined to include the sponsor and the university conducting portions of the same project, or conducting separate but closely related projects in parallel. It may involve sponsor personnel participating in the University research and/or University personnel spending time in the Sponsor's laboratories.

There are a variety of approaches to defining ownership of inventions on joint research. Allocation of ownership rights may depend on the affiliation of the inventor, the location of the research, the definition of what is "in the performance of research under this agreement," etc. The complications of these different approaches are beyond the scope of this section. The following sample clauses, therefore, deal with the relatively simpler case of research performed solely at the University with Sponsor personnel participating.

a. Ownership based on affiliation

One of the simplest arrangements, based on the inventor's affiliation, is the following:

1. "Title to any invention made solely by a Sponsor employee shall vest in Sponsor. University shall have the right to use any such invention internally for its own purposes.

2. "Title to any Invention made solely by a University employee shall vest in the University, Sponsor shall have the license rights defined elsewhere in this agreement.

3. "Title to any inventions made jointly by employees of Sponsor and University shall be jointly owned."

Where ownership is joint the parties may wish to agree on a coordinated approach to the licensing and sharing of royalties as discussed in 6.1 above.