"6. SPONSOR recognizes that an important objective of UNIVERSITY is to make available to the public the fruits of research. SPONSOR agrees to use reasonable efforts in commercializing an invention or in identifying and securing one or more licensees capable of commercializing an invention described in a patent application assigned to SPONSOR by UNIVERSITY. In the event said invention is not commercialized either by SPONSOR or through its licensees within a period of five (5) years from the filing date of said patent application, SPONSOR will assign all rights to said patent or patent application to UNIVERSITY upon request subject to an irrevocable, nonexclusive, royalty-free license to SPONSOR to make and use within SPONSOR for purposes of research and development, but not for production or sale, the subject matter of said patent or patent application."

3. The Sponsor agrees to pay the university a royalty for monetary benefits arising from the practice of the invention, with the rate to be negotiated in good faith when the invention is known.

4. The Sponsor will review contemplated oral or written publications prior to their release so as not to jeopardize either U.S. or foreign patent applications, but promises a tight timetable for this review to prevent any possible suppression of the information or unreasonable delay in publication.

Where the contract contains provisions such as the foregoing, it may in many respects have the same net effect as if the University retained title and provided an exclusive, long-term license to the Sponsor. The issue, then, is which party should control the patent in the public interest and which party must take the initiative to resolve disagreements through arbitration or other legal steps.

## 10.2 Other considerations

Universities which are willing as a matter of policy to assign title to industrial sponsors under appropriate terms, however, consider a number of additional factors before doing so in particular situations, such as:

a. Whether there is any possibility of past or future support that might result in subjecting inventions to Public Law 96-517.

b. Whether the proposed research has been supported by other commercial sponsors or is related to other projects in such a way that rights in resulting inventions might be claimed by more than one party, particularly if the research involves the reduction to practice of inventions previously conceived under other sponsorship.

c. Whether the proposed research is likely to result in inventions which have significant applications outside the sponsor's field of interest and whether these applications will be pursued.

d. Whether the University already has a patent position in the technology involved.

## 10.3 Patent clauses -- Title in sponsor

In practice, where sponsors acquire title, the terms can vary widely. A simple clause granting the sponsor title without any consideration or control by the university might be used as follows:

"Title to any invention or discovery made or conceived in the performance of this research shall vest in the Sponsor, provided, however, that Sponsor shall grant to the University an irrevocable, royalty-free, non-exclusive license for the use of such invention or discovery for the term of any patent thereon."

Consequently, a number of universities contractually agree to an additional delay or deferral for this purpose, through a clause such as the following:

> "The University is free to publish the results of this research after giving a copy to the sponsor at least 30 days prior to the intended publication, except that the University agrees that it will defer the intended publication for an additional 60 days, upon the request of the Sponsor during the initial 30 day review period, in order to provide adequate time for the filing of a patent application."

c. Delay in submission

The foregoing clauses provide a delay period based on the intended date of publication, but some sponsors are uncomfortable with this since the publication date may not be in the university's control and for other reasons. In such cases, some universities are willing to state the delay in terms of "30 days prior to submission to the publisher" rather than prior to the intended date of publication.

## 9.0 DISCLOSURE AND PUBLICATION

Where patents are an important consideration in contracts sponsored by industry, emphasis is also placed on the filing of patent applications before patent rights are defeated by publication, as discussed in Part I of this course.

### 9.1 Monitoring and disclosure of inventions

Some contracts seek to protect patent rights by establishing mechanisms for (1) monitoring or reviewing the research on an on-going basis to identify inventions at an early stage and (2) prompt disclosure to the sponsor.

A sample three-part clause reflecting this approach is as follows:

> "1. The Sponsor shall monitor progress of the Project through its representative on the Advisory Committee, the Program Director, and the Project Investigator, as appropriate. The primary purpose of such monitoring is to detect potentially patentable inventions as early as possible, which shall be a responsibility of the Sponsor."
>
> "2. When in the judgment of the University a Project first reaches the stage where it has produced technical developments of apparent commercial utility and the University believes that such technical developments may be patentable and have not been identified by the Sponsor through the monitoring of progress on the research, the University shall report such potentially patentable inventions to the Sponsor. Thereupon the Sponsor shall make the evaluation, exercise its election and report to the University as specified above.
>
> "3. University shall make periodic reports to Sponsor of the results of the research and shall notify Sponsor of its intentions with respect to all patentable inventions conceived or first reduced to practice in performing the research hereunder, including its intention to file or not to file for patents and the countries to be filed in, to terminate prosecution of pending patent applications, or to discontinue the maintenance of any issued patents."

Whether or not a research project is such as to warrant this type of monitoring depends on the facts, and it may not be appropriate in some cases. In any event, where some such a mechanism is in place, the emphasis on the review of publications and journal articles as the means of disclosing patentable inventions is less and the likelihood of publication delays of the type contemplated in the following section is reduced.

to Sponsor, may take action to file or prosecute any Patent application or have issued or maintain any Patent on which Sponsor elects not to take such action. Any such election by Sponsor shall be promptly communicated to the University and in adequate time to allow the University to take such action if it so desires. Sponsor's right to a license thereunder shall not thereby be diminished.

"3. With respect to Patent applications filed and prosecuted and Patents issued or maintained by Sponsor under Paragraphs 1 and 2, the University at its own expense may designate and retain patent counsel of its own who shall be permitted to review such Patent applications and proposed responses to Patent Office actions thereon and issuance and maintenance of Patents and to consult with Sponsor's patent attorneys before Sponsor takes action thereon. However, the control of such filings, prosecutions, issuances and maintenances shall rest with Sponsor unless it elects to relinquish such control to the University under Paragraph 2 by timely written notice. The University may at any time elect by notice in writing to Sponsor to assume at University's cost those activities undertaken by Sponsor under Paragraphs 1, 2 and 3 on behalf of the University in regard to any Patent application or Patent, and Sponsor's right to a license thereunder shall not thereby be diminished."

"1. Sponsor agrees to provide university with non-binding recommendations regarding the filing, prosecution, issuance, reissuance and maintenance of all University patent rights. University shall have the sole right, in its discretion, to follow or not to follow Sponsor's recommendations. To enable Sponsor to provide its recommendations, University agrees to advise Sponsor at least 30 calendar days prior to the due date for taking any action affecting the filing, substantive amendments, issuance, reissuance and maintenance of all University patent rights.

"2. Sponsor agrees to reimburse University for one-half of its reasonable out-of-pocket patent costs (including outside patent counsel fees, search costs, filing and issue fees, and maintenance taxes) associated with the filing, prosecution, issuance, reissuance and maintenance of those Contract Patent Rights which Sponsor recommends should be filed, prosecuted, issued, reissued and maintained.

"3. If Sponsor specifically declines in writing to recommend that University file an application to obtain any Contract Patent Rights, University shall be free to proceed at its own expense and any contract patent rights obtained shall not be subject to the licenses granted to the Sponsor elsewhere in this agreement.

"4. In the event that University elects not to follow any Sponsor recommendation in favor of the filing, prosecution, issuance, reissuance and maintenance of any patent application or patent within University Patent Rights, University shall so inform Sponsor in writing at least 60 days (to the extent feasible) in advance of any statutory bar, including foreign statutory bars, or response date or the proposed date of abandonment, and Sponsor may, at its option, pursue said patent rights in the name of University. Thenceforth, Sponor shall bear all expenses associated with obtaining such patent rights."

Where the sponsor files as contemplated above on inventions which the university elects not to pursue, there are various ways to recognize its contribution. The sponsor might be given a credit against royalties due the university from the licensing of the patent up to the total of sponsor's prosecution and maintenance costs, or royalties might be shared on a basis more favorable to the sponsor, or waived entirely. In such cases, it is also somewhat more likely that the sponsor would be given the exclusive license for the life of the patent rather than for a limited term.

In some cases where the university elects not to file, the sponsor is allowed to file in the sponsor's name, and the university would normally retain a royalty-free, non-exclusive irrevocable license to practice such invention for research purposes only. Royalties might or might not be shared. Some universities prefer this approach rather than allowing the sponsor to file in the name of the university. In the latter case, control is essentially in the sponsor, but the university might well be joined as a party to any infringement or other litigation since it retains legal

b. University ownership

The following clause reflects the philosophy that unless the university takes title to all inventions made in the performance of the research, regardless of by whom made, it could create undesirable conflicts and fragmenting of ownership. The equities and contribution of the sponsor, however, can be reflected in the setting of royalties and other licensing provisions:

> "Title to any inventions made by sponsor and/or University personnel solely or jointly in the performance of the research or through the use of any facilities or resources of the University shall vest in the University, but due consideration will be given to the Sponsor's contribution in negotiating the terms of the licenses granted elsewhere under this agreement."

## 6. JOINT TITLE

Although most universities resist the fragmenting of ownership, some recognize a few situations in which a research sponsor might be granted joint title to inventions resulting from the research.

### 6.1 As an alternative to sole title

Some universities negotiate joint title as an alternative to granting the research sponsor sole title, using a clause such as the following:

> "Title to any invention or discovery conceived or first reduced to practice in the performance of this research shall be jointly owned, with each party having the right to license others without accounting."

Although this may be preferable to surrendering sole title, it should be recalled, as stated in Unit 1 of this series, that each holder of joint title in an invention can do anything a sole owner could, i.e., sell or assign its joint interest to others, license others on whatever terms and conditions the joint owner deems appropriate, and do so without any responsibility to account for its actions or for its royalty income to the other joint owner.

Joint owners, however, may also agree to a coordinated approach to filing, licensing, and the treatment of royalties, and some universities, where joint title is agreed to, prefer this from the standpoint of good business and licensing practice. This type of arrangement is reflected in the sample clause which follows:

> "a. Title to any invention or discovery conceived or first reduced to practice during the performance of the work under this agreement shall be jointly owned by Sponsor and the University, and each shall receive an equal undivided partial interest in such invention or discovery, and resulting foreign or U.S. patent applications thereon, and any foreign or U.S. patents issued thereon.
>
> "b. Sponsor and the University as joint owners shall be free to grant non-exclusive licenses hereunder to anyone. Any such patent/patent applications jointly owned by the University and Sponsor shall be applied for at the joint expense of both parties, provided that each party concurs in the acquisition of such patent. If either party elects not to contribute to such expense, the other party shall receive the whole interest in such patent application/patent.
>
> "c. Patent applications and/or patents obtained hereunder on jointly owned inventions may be licensed by the University or the Sponsor on any appropriate terms, including royalty free or on a

"And provided further that the University shall grant to the Sponsor (an option to acquire) an exclusive license to make, , have made, use and sell such invention or discovery, with the right to sublicense, at reasonable royalty rates, the term of exclusivity and the royalty rates to be negotiated at the time the invention or discovery is made (provided further, however, that this option must be exercised by Sponsor by notice in writing to the University within ___ months from the date the invention or discovery is first disclosed to the Sponsor). The parties agree that all of the terms and conditions of any such license shall be reasonable in light of then existing industry practice."

There is apparently some difference of opinion as to whether an exclusive license (or an option for one) should be granted under the research contract or negotiated only after an invention has, in fact, been identified. The more common practice is probably the granting of the exclusive license (or option) at the time the contract is negotiated, assuming that the research project, the research team, and other pertinent information is known, including any potential for conflicts in patent rights. Under umbrella agreements, where the individual projects are not known at the time the overall agreement is negotiated, the decision is more likely to be deferred. A number of other comments should be made:

a. Discretionary filing

Although not as emphatically stated as the clause in Section 5.2 above, the university is under no obligation to file on all patentable inventions, but only to grant a license for the term of "any patent thereon." Sponsors who are interested in exclusive licensing, however, are more likely to want a firmer commitment with respect to patent filing, and this is explored in Part 7.

b. Length of exclusivity and royalty rates

The sample clause above states that the term of exclusivity and the royalty rates will be negotiated at the time the invention or discovery is identified. The rationale for this approach is that only after the making of the invention can its value and potential market be ascertained.

If there are compelling reasons, however, for specifying these in advance, some universities may agree to setting the length of exclusivity and the minimum and maximum royalty rates in the contract at the outset. This can be done for example, by modifying the foregoing clause as follows:

"And provided further that the University shall grant to the Sponsor a limited term, exclusive license to make, use and sell such invention or discovery, with the right to sublicense, the term of exclusivity to be ___ years from the date of execution of the license agreement or ___ years from the date of the first commercial sale of said invention or

## 5. LICENSING OPTIONS

The clauses and commentary which follow cover the license rights and other options most frequently granted to industrial research sponsors by universities which retain title to resulting inventions

### 5.1 Disposition at university discretion

Some industrial sponsors either do not wish to acquire any patent rights, or are willing to let the university determine disposition. In such cases, a clause such as the following can be used:

> "Title to inventions conceived and/or reduced to practice in the performance of this research shall vest in the University, which shall have the sole right to determine the disposition of any patents or other rights resulting therefrom in whatever manner it deems appropriate to protect the public interest and the equities of the parties."

### 5.2 Non-exclusive license to sponsor

For institutions which normally retain title to inventions made in the performance of industrially sponsored research, the right most frequently granted to the sponsor is an irrevocable, non-exclusive license for the life of the patent. It may be the only right granted, or it may be granted in conjunction with a limited term, exclusive license, or with an option to acquire an exclusive license. The non-exclusive license may be royalty-free, or royalty-bearing as discussed below.

A representative clause granting a non-exclusive license follows:

> "Title to inventions conceived and/or reduced to practice in the performance of this research shall vest in the university, which shall have the sole right to determine the disposition of any patents or other rights resulting therefrom, provided that upon issue of any patent on any such invention, 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 such invention."

There are a number of comments which should be made in connection with this type of clause.

#### a. Discretionary filing

As this sample clause is written, the university is under no obligation to file patent applications on resulting patents and is in a position to evaluate inventions and determine which it wishes to pursue. However, some sponsors are sufficiently concerned with patents that they would wish a firmer commitment with respect to identifying inventions and ensuring that all inventions in which either party is interested are pursued. This is covered in Part 7.

### 3.5 Statement of Work

Broadly defined, flexible research support is highly desirable to a university. Nonetheless, the statement of work should, insofar as possible, define in specific terms the area of research and the elements, tasks or objectives whenever patents are an important consideration. General work statements without specificity give rise to unpredictable conflicts in patent rights and obligations.

Some umbrella or institutional agreements define broad areas within which specific projects will be agreed on by the parties. In such cases, some universities avoid conflicts by including in the umbrella agreement a statement that patent rights will be negotiated in good faith once an individual project has been identified, or by agreeing that certain defined rights in inventions made in the performance of the research will be granted, but "subject to third party rights" or "to the extent the university is able to do so."

### 3.6 Review for potential patent conflicts

It is, of course, desirable to identify conflicts before they arise and some sponsors ask that they be informed in advance of any potential conflict. This is reasonable to a point, but is difficult where it is stated in such broad terms as "University will not enter any contracts which create any conflict in obligations" as cited above in Section 3.4.

A more manageable approach used in some major institutional research agreements is as follows:

> "University's Administrative Representatives shall, prior to the execution of any and all Project Authorizations and periodically thereafter, review with the Principal Investigators the current and proposed assignments of Personnel performing research under this Agreement to determine whether said Personnel are also performing, or propose to perform, related research under any other agreement between University and a third party. University's Administrative Representatives shall discuss their findings with Sponsor's Administrative Representatives. If in the opinion of Sponsor's Administrative Representatives it is warranted, the Commmittee for Administration will request that University's Patent Counsel review the situation to determine whether any potential conflict exists between the obligations undertaken or proposed to be undertaken by University with respect to patentable inventions under Articles VI through IX of this Agreement, and those obligations undertaken by University with respect to such other agreement. If a potential conflict does exist, University's Patent Counsel will so report to the Committee for Administration, which will request such University Personnel to elect which of the potentially conflicting projects they choose to participate in."

## 3. CONFLICTING PATENT OBLIGATIONS

In negotiating patent clauses, industrial research sponsors may seek assurance that the rights they acquire are not subordinate to or in conflict with rights acquired by other sponsors in the same inventions. They may, as discussed under commingling in the previous section, wish to avoid any Federal rights which would subject the inventions to the requirements of Public Law 96-517. Whatever they may feel about Federal rights, it is quite likely that they will wish to ensure that other industrial sponsors have not already, or do not thereafter, acquire rights from partial support of the same or closely related research by the same investigators.

In order to minimize conflicts in patent obligations to industrial sponsors there are a number of matters which should be carefully considered:

### 3.1 Terminology

There are a variety of terms used in contracts to define the inventions to which an industrial sponsor acquires rights. These include inventions:

resulting from
arising from
made
made and conceived
conceived and reduced to practice
conceived and/or reduced to practice.

The most precise terms, which are words of art under patent law, are "conception" and "reduction to practice." Whether rights are based on the invention being "conceived and reduced to practice," or "conceived and/or reduced to practice," can have significantly different results, as discussed in Section 3.2.

Whichever is used, it is desirable to refer to inventions conceived or reduced to practice "in the performance of research under this agreement," or "in accordance with this agreement," or "in performance of the research set forth in the statement of work," etc. This will avoid the ambiguity of phrases such as "during the period of this agreement," "in connection with this agreement," "as a result of this agreement," etc.

### 3.2 Conception vs. reduction to practice

From the standpoint of the university, there are some advantages to giving an industrial sponsor rights only to inventions conceived and reduced to practice in the performance of the research contract.

## 2. COMMINGLING: THE CREATION OF FEDERAL RIGHTS

In Unit 2 of this series we reviewed the Public Law 96-517, and discussed the question of commingling, i.e., the acquisition of Federal rights in an invention where the conception and/or reduction to practice was supported in part from Federal funds.

It becomes important, therefore, in negotiating industrial agreements, to determine at the outset whether the contract is likely to result in inventions in which the Federal government may already have, or may in the future acquire rights.

### 2.1 Federal rights already acquired

It is not unusual for an industrial sponsor to support research which may involve the reduction to practice of inventions conceived under Federal sponsorship.

Where that may be the case, the industrial sponsor should be made aware of any such inventions and the nature of the Federal rights to the extent such inventions and rights have already been identified. The likelihood that there may be others not yet identified should also be evaluated. Finally, the contract should contain provisions preserving the university's right and ability to fulfill its obligations to the Federal government.

Assuming that the university is to retain title in all inventions resulting from the industrially sponsored research, Federal rights can be preserved in a number of ways:

a. By a clause providing that "All rights granted hereunder shall be subject to Public Law 96-517 and to the constraints set forth therein."

These constraints, as discussed in Unit 2 of this series, relate to the terms of exclusive licenses, march-in rights, limits on the assignment of title, preference for domestic manufacturers, royalty-free licenses to the Federal government for government purposes, etc.

b. By a clause providing that whatever patent rights are granted will be granted "subject to the rights of third parties," or "to the extent the University has the right to do so."

Where the university and industrial sponsor agree that the sponsor will acquire title to inventions, it is doubly important that