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SOCIETY OF UNIVERSITY PATENT ADMINISTRATORS

SURVEY OF UNIVERSITY PATENT POLICIES
AND PATENT ADMINISTRATION

Early in 1977 a survey was made of the patent policies of universities having individuals as members of the Society of University Patent Administrators. As far as is known this is the first such survey since the publication in 1962 by the National Academy of Sciences--National Research Council of "University Research and Patent Policies, Practices and Procedures." The latter document was primarily a compilation of the patent policies exactly as furnished by the institutions surveyed, although there was some analysis of particular aspects.

The present survey, for which forty eight (48) major research institutions provided data, was designed quite differently. It was based on a carefully constructed questionnaire that was tested at six institutions and further refined before distribution. A copy of the questionnaire is included as Appendix A. The institutions responding are listed in Appendix B.

The analysis of completed questionnaires has been reasonably simple for many questions. However, the wide divergencies in university organizations and practices have resulted in a large variety of different answers to some questions. Sometimes there were multiple answers to the same question by the same institution. In the remainder of this paper the answers to the various questions are tabulated, and the results and their implications are discussed. In questions involving titles where there are so many variations, answers have been grouped by what seemed to be reasonably equivalent titles. Generally, where only one institution responded in a particular way to a particular question, such answers have been grouped as "other."

1. Name of Institution - See Appendix B

2. Who authorized your Patent Policy?

Trustees or Regents (or equivalent)	37
Presidents or Chancellor (or equivalent)	5
Faculty	2
Other (state law or agency etc.)	<u>4</u>
	48

Some institutions checked more than one answer, which has been interpreted to mean that more than one acted upon the policy. In such cases, only the highest ranked body has been counted.

3. What office administers the patent policy?

(Answers)	Research Administration Office	18
	Vice President or Dean of Research	10
	Research Foundation	8
	Vice President Administration	3
	Patent Committee	3
	Patent Office	3
	Other	<u>3</u>
		48

4. To whom is that office (in 3 above) responsible?

(Answers)	Vice Chancellor, Vice President, or Provost etc.	24
	President	12
	Trustees	3
	Director of Foundation	3
	Dean	3
	Other	<u>3</u>
		48

5. Is there a Patent Committee?

Yes	34
No	<u>14</u>
	48

6. What is the composition (of the Patent Committee)?

(Answers)	Faculty and administration	23
	Faculty only	7
	Faculty, administration and students	<u>4</u>
		34

It is interesting to note that four institutions have patent committees which include students (presumably graduate students).

7. What are the functions of the Patent Committee?

(Answers)	Formulate patent policy	22
	Determine royalty distributions	16
	Decide on patenting inventions	26
	Negotiate license arrangements	2
	Other	<u>5</u>
		71

This question had multiple answers and it is not clear that all functions were described. For example, some patent committees may be involved in arbitration (see 16 below) but this item was only mentioned once.

8. Does the Patent Policy cover?

(a)	Faculty	47
(b)	Professional staff	47
(c)	Non-professional staff	43
(d)	Graduate students employed by university	46
(e)	Graduate students not employed by university	25
(f)	Undergraduates employed by university	42
(g)	Undergraduates not employed by university	21

One institution has not finally adopted a patent policy which accounts for the fact that the maximum number is 47 rather than 48. The significant

decrease in coverage for both graduate and undergraduate students not employed by the institution undoubtedly relates to the fact that employment and the payment of salary is used in many cases as the basis for a university claim to equity in inventions, rather than the provisions of funds or facilities as the basis of the claim. This is discussed more thoroughly at 15 below.

9. Does your institution control the disposition of patent rights by either (it is understood that a sponsor may subsequently take control)?
- (a) Taking title to inventions 36
 - (b) or Directing or approving disposition by inventors 11
 - (c) or is The referral of an invention to the university
voluntary if there is no sponsor requirement $\frac{11}{58}$

Of the above, eight institutions checked both of the above first two categories (a) and (b) which is hard to understand unless it means that the policy is covered by (b) but in some or many cases the inventor is required or elects to give title to the institution as provided for under (a). However, two of those same eight also checked (c), which is even harder to understand unless the responders were endeavoring to cover both inventions in which the institution has an equity and those in which it does not (see 15 below). The remaining nine in category (c) constitutes a surprisingly large number in which the institution exercises no control at all (unless there is a sponsor requirement).

On balance, although the number in (b) is less than one third that in (a), a policy as in (b) of directing or approving disposition by inventors provides much greater flexibility in actual practice. Title can be directed to the institution if desired, to a patent management firm if desired, to the Government or another sponsor if necessary, etc., without

having in the latter instances the necessity of title first going to the institution.

10. Do you enter into agreements with possible inventors (see 8 above) to establish patent rights (complete only one response).

- | | |
|--|----------|
| (a) For all possible inventors | 16 |
| (b) For all possible inventors who <u>participate</u>
in sponsored research | 8 |
| (c) For all possible inventors who are employed | 14 |
| (d) For all possible inventors who are employed
<u>just</u> in sponsored research | 6 |
| (e) No agreements with any personnel | <u>4</u> |
| | 48 |

The twenty four institutions who responded affirmatively to (a) or (b) are well covered insofar as the requirements of sponsored research, particularly Government sponsored, are concerned. Institutions covered by (c) and (d) are not fully covering the obligations of sponsored research, since these obligations extend to all personnel who participate in or perform part of the work, not only those who are employed and paid from a grant or contract. The four institutions answering yes to (e) are not complying unless the terms of the applicable patent policy can be held to be as legally binding as an individual agreement.

For inventions which result from research which is not sponsored, the thirty institutions designating (a), or (c) are all reasonably well covered, except that (c) would not apply, for example, to graduate students who make an invention but are not employed. The other seventeen have a gap part of whose explanation is the eleven who responded to 9(c) where referral of an invention to the university is entirely voluntary (unless there are sponsored research requirements).

11. Do you use or have you considered using a single agreement to cover

both patents and copyrights?

(Answers)	Yes	13
	No	<u>35</u>
		48

12. Is one or more patent management firm used and if so give names?

(Answers)	Yes	40
	No	<u>8</u>
		48

Research Corporation was predominant, followed at a distance by Battelle, University Patents Inc etc.

13. If the institution (not a patent management firm) decides to make a patent application, what office makes this decision?

(Answers)	Patent Committee	11
	Research Administration	9
	Assoc. Provost, V.P., or Dean for Research	9
	Research Foundation	4
	President	3
	V.P. Business or Finance	2
	Patent Office	2
	Other (State, Bd. of Regents, Inventor, etc)	5
	No Answer (presumably don't)	<u>3</u>
		48

14. Does your patent policy require reporting by those covered by the policy (see 8) of:

(a)	<u>All</u> inventions made even if there is no institutional or sponsor equity	19
(b)	All inventions made on which patents are applied for, even though there is no institutional or sponsor equity	5
(c)	All inventions made where there is some institutional or sponsor equity	19
(d)	Only those inventions made which must be reported to a sponsor	<u>5</u>
		48

The institutions which are most diligent in pursuing technology transfers and use by the public of their inventions are most likely to fall in Group (a). Group (d) appear to have little interest, with the rest of the institutions falling in (b) or (c).

15. What is the basis of the institution's claim for institutional equity in an invention, i.e. what is the legal consideration for the university to obtain rights

(a) Payment of salary or stipend	29
(b) Provision of funds or facilities	34
(c) Other (patent services furnished to inventor, state legal requirement etc)	7
	<hr/> 70

There were twenty two institutions that answered yes to more than one of the above questions. Twenty one of these answered yes to both (a) and (b). In actual fact, there is a real question as to whether the citation of salary or stipend (covered by (a)) as a consideration for patent rights is reasonable or possibly even legally enforceable.* Faculty are not employed to develop patentable inventions, their salaries and promotions are not based upon the value of inventions they do make, and where they have tenure, according to Blackwell*, "the agreement by the college to continue to employ them would not, so far as they are concerned, constitute consideration."

A single consideration, the provision of funds and facilities for research, does not have the above handicap and can be used for both employed and not employed inventors (such as students). It also means that the institution would have no equity (unless the inventor elects to handle it through the institution) in an invention whose conception or reduction to practice

*See College Law, by T.E. Blackwell, pgs. 175-180, American Council on Education, 1961

does not involve university funds or facilities.

16. Is arbitration or some other form of decision-making provided for in the event of a disagreement as to the institution's equity or rights in an invention?

(Answers)	Yes	27
	No	<u>21</u>
		48

The absence of arbitration provisions in twenty one institutions is somewhat surprising.

17. Does the university ever relinquish its rights to an invention back to the inventor?

(Answers)	Yes	40
	No	<u>8</u>
		48

If so, under what circumstances?

(Answers) Miscellaneous, mostly where sponsor and university elect not to patent.

18. Does the institution ever handle inventions for inventors in which it has no equity?

(Answers)	Yes	22
	No	<u>26</u>
		48

If yes, what are the conditions?

(Answers) Miscellaneous, often paying more than normal royalties to the inventor, etc.

19. If the institution retains patent rights for inventions, what share of royalties is paid to inventor(s)? Net or gross?

(Answers)Maximum possible	1
Net 80% scaling down to 25% as total royalty increases	2
Gross 50% plus first \$3,000, then 25% to \$13,000, then 15%	2

Net 60% 0-\$25K, 50% \$25-50K, 40% \$50-75K, 30% above	1
Net 50% plus first \$1,000 of university net	1
Gross 15% plus 50% of additional net	1
Net 50%	6
Net 50% or gross 25%	1
Net 50% maximum, 20% minimum by arbitration	1
Net 50% after first \$5,000 net	1
Net 50% until expenses, then 20% of gross	1
Net 42.5%	1
Net 40%	1
Net 40% 0-\$50K, 30% \$50-100K, 15% above	2
Gross 15% until costs recovered, then 40% net	1
Net 33%	1
Gross 28%	1
Net 25%	5
Gross 20%	1
Gross 15%	9
Net 15%	4
Case by case	3
No answer	<u>1</u>
	48

Although the difference between gross and net royalties vary widely from patent to patent, the attempt has been made to list the answers to this question in such a way that the amounts to inventors in proportion to total royalties decrease as one reads downward. The median answer is an amount of 33% of net royalty income for the inventor. Although exact comparisons with the 1962 National Academy report referred to earlier are not possible, it appears that royalty shares to inventors have increased considerably. Also, the sliding scale giving the inventor a

large initial share but then scaling downward (evidenced in five of the answers above) seems to be a relatively new development. There is something to be said for this arrangement because cooperation among researchers will be less jeopardized if the potential rewards to one who is legally named as inventor are not too large.

20. What disposition is made of institution's share of royalties?

(Answers)	Research	26
	General funds of institution	10
	Research and patent costs	6
	Education and research	3
	Patent costs	2
	Other	<u>1</u>
		48

21. What steps if any are taken to assure that all inventions are properly disclosed?

(Answers)	None (although patent policy may require)	23
	Regulations	11
	Periodic reminders	8
	Periodic meetings	5
	Special educational program	4
	Annual invention statement	3
	Other	<u>2</u>
		56

As is evident, eight institutions used more than one method of obtaining invention disclosures. In fact it is more than likely that a greater number used more than one method but did not report as such.

22. Does your institution have any institutional patent agreements (IPAs) with federal agencies? If so list agencies.

(Answers)	Both HEW and NSF	10
	HEW only	11
	NSF only	<u>3</u>
		24

It is somewhat surprising that more than half of the institutions responding have no IPAs.

23. In negotiating sponsored research agreements with industry, do you accept requirements for sponsor to obtain:

(a) Title to all inventions	27
(b) Exclusive license	26
(c) Exclusive license for limited period	26
(d) Exclusive license for limited period with march-in rights for lack of diligence	28
(e) Non-exclusive license.	31
(f) Other	7
	<u>145</u>

Obviously many institutions gave more than one reply in the affirmative, and the average institution answered three questions in this way. The number of affirmative answers to (a) and (b) may raise some questions about the diligence of institutional endeavors for protection of the public interest. Where title to inventions is given to a sponsor as in (a), the inventor's normal share of royalties under a patent policy presumably disappears.

24. Under the arrangements described in 23 above, is there any provision for royalties or other reimbursements to the university, such as increased indirect costs?

(Answers)	Royalties	21
	Increased indirect costs	17
	None	<u>10</u>
		48

As in 23(a) above, where the compensation to the university for patent rights consists of increased indirect costs or is non-existent, the inventor's share of royalties presumably disappears.

25. For inventions owned or controlled by the institution and not assigned to a patent management organization, which of the categories of 23 above best describe the institution's policies for assignment or licensing.

(a) Title to inventions	3
(b) Exclusive license	11
(c) Exclusive license for limited period	8
(d) Exclusive license for limited period with march-in rights for lack of diligence	19
(e) Non-exclusive license	13
(f) Other	<u>5</u>
	59

Only eleven institutions indicated more than one answer. It is interesting to note that many more institutions are willing to give greater rights to a research sponsor (question 23) than they are to a licensee or assignee.

26. How many patents were applied for on your institution's inventions during the last ten years by:

(a) Inventor	165 (known)
(b) Institution	889
(c) Patent management organization	554
(d) Industrial sponsor	119
(e) Government sponsor	<u>60 (known)</u>
	1787

Although the number for any one institution varies from 1 to 150 for the total of categories (a) through (e) combined, the average is 37 per institution, or about 4 per year per institution. 4 per year per institution does not sound like a large number, but over a ten year period the total for all institutions of 1787 is a sizable sum.

27. How many of the above patents issued - 937

28. How many of the patents in 27 were licensed - 469

A 50% ratio of patents licensed to patents issued is remarkably high. Unfortunately, the question was not asked as to how many were used or paid royalties.

The above analysis of the survey results provides some very interesting and hopefully helpful information. Despite the fact that a number of institutions did not reply (a few with large patent portfolios), the data provided and analyzed should be reasonably representative of the general community of research universities.

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