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INDUSTRY, SCIENCE AND TECHNOLOGY CANADA
CONSUMER AND CORPORATE AFFAIRS CANADA
SCIENCE COUNCIL OF CANADA
APPENDICES FOR THE
SURVEY OF INTELLECTUAL PROPERTY RIGHTS IN CANADA
FINAL REPORT

MARCH, 1989

Price Waterhouse



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INDUSTRY, SCIENCE AND TECHNOLOGY CANADA
SURVEY OF INTELLECTUAL PROPERTY RIGHTS IN CANADA

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APPENDIX A
DEFINITION OF INTELLECTUAL PROPERTY RIGHTS

APPENDIX A

DESCRIPTION OF INTELLECTUAL PROPERTY RIGHTS

Patents - A Canadian patent is a document, issued by the government, which describes an innovation and creates a legal situation whereby the inventor or patent owner has the right to prevent others from making, using and selling the invention within Canada for seventeen years. Patents are granted for articles, machines, chemical compositions and processes that are deemed novel, useful and unobvious.

The first Canadian Patent Act was passed by parliament in 1869 and, until the passing of Bill C-22 in 1987, had not been substantially amended in over fifty years. The need for a revised Patent Act became more urgent when the number of patents granted annually had more than doubled and Canadian law had become out of date relative to the rest of the industrial world.

The Act, which was given Royal Assent on November 19, 1987, had two distinct objectives. First, it recognized that Canadian firms need early access to patent files in order to keep abreast of recent developments. Second, it provided better market protection for patented drugs, encouraged pharmaceutical research in Canada, and protected consumers against excessive drug prices.

The new Patent Act allows Canada to ratify the international Patent Cooperation Treaty, which it signed in 1970.

Trade Marks - A trade mark is a sign which serves to distinguish the wares or services of an industrial or commercial enterprise from those of others. Trade marks cover anything visible including words, symbols or pictures. No one other than the owner of the trade mark may use it or any similar mark that would lead to confusion in the mind of the public.

An applicant seeking to register a trade mark, under the Trade Marks Act, R.S.C. ch. T-10 (1970), may do so on several bases:

- that the mark has been used by him/her in Canada;
- that the mark has been "made known by him/her in Canada;
- that he/she had duly registered the mark in his/her country of origin, which country is a "convention country"; or
- that he/she "proposes" to use the mark in Canada.

To be registered the mark must not be a surname, geographical name, name of the wares, or too descriptive. The protection for a trade mark is generally not limited in time, provided that its use continues. Registration subsists for a period of 15 years and may be renewed indefinitely for further 15 year periods.

The scope of federal power over trade marks has been interpreted restrictively in recent years. The provinces now appear to have jurisdiction on matters of "unfair competition", which may include imitation of unregistered trade marks. Since provinces have not yet enacted legislation addressing trade marks, it is up to common law to determine how matters in this area are dealt with and enforced.

Copyrights - A copyright is a form of protection, provided by a federal statute, given to authors and creators of original works, such as cultural and informational products (books, records, films, and works of art) against a variety of unauthorized uses (e.g., reproduction or public performance of a musical work). It does not prevent others from using or copying ideas embodied in the work. The copyright protection generally lasts for the life of the creator plus fifty years. A work does not need to be registered to be given copyright protection.

The Canadian Copyright Act was amended June 8, 1988. The new Act changed a law in existence for more than sixty years. The 1924 Copyright Act was generally believed to be the intellectual property law in the greatest need for revision primarily because of the introduction of new products and processes incorporating new technologies. When the Act was drafted, computers, photocopiers, satellites, cable television and video cassette recorders were non-existent. The development of these technologies created ambiguities and uncertainties and, in some cases, left Canadian copyright owners with less protection or compensation that would be available to them in other countries which had more modern copyright laws.

The new Act extends copyright protection to computer programs, strengthens the right of artists to control who uses their work, and establishes systems for creators to collect copyright fees more easily.

The new Act also has increased penalties for infringement of copyright. The fine for unauthorized reproductions (piracy) has been increased from \$10-\$200 to \$25,000 with a maximum of \$1 million, with prison terms ranging from six months to five years.

The Act is still under review. Issues not yet dealt with by the Act include home copying of records and videotapes, whether artists should

collect royalties on video rentals, and whether cable companies should pay fees for programs they retransmit.

Industrial Designs - The Industrial Design Act, which is currently under review by the government, gives protection to designers of ornamental aspects of useful articles. The ornamental aspect may be three dimensional (the shape or configuration of the article) or two dimensional (designs, lines, colour). The function of the object cannot dictate the industrial design.

To be eligible for protection under the Act, industrial designs must be original or novel. Protection means that it may not be copied or imitated without the owner's authorization. The term of protection lasts up to ten years.

Trade Secrets - In addition to the four statutory forms of protection (patents, industrial designs, trademarks and copyright), there exists common law protection for trade secrets in respect of confidential commercially valuable information. Obligations of trade secrecy can apply to such things as concepts, ideas, factual information, etc. It applies to persons who have acquired confidential information. It does not apply to third parties who have no relationship to the person holding the trade secret.

The use of trade secrecy to restrict the movement of personnel from one rival company to another is increasingly being viewed as a muddled area of the law that needs clarification. The need for some type of control on post-employment activities of "knowledge workers" is growing considerably in importance as hundreds of millions of dollars are being invested in high-technology industries, involving information that is often a company's most valuable asset.

Labour representatives, however, have indicated that controls would create a new class of indentured labourers. Moreover, highly specialized knowledge workers may have few options but to work for a competing firm. Long-term restrictions on their employment may prevent them from working in their specialty area. It has also been noted that spin-offs of existing, more established firms are often created when employees leave to open their own company. Such spin-offs can have positive benefits for the economy.

A report on trade secrets released by the federal Justice Department in February, 1987 called for the provinces to enact a new Trade Secrets Protection Act that defines a trade secret as information that has an economic value from not being known, that can be used commercially and that is subject to efforts to maintain its secrecy. The report stated that there

still must be leeway for information to flow freely and for employees to be able to move from job to job.

Plant Breeders' Rights (Plant Variety) - Plant Breeders' Rights, which is not yet law in Canada, protect the seeds or other propagating material and requires the use of a distinct generic name when selling the propagating material. The issue of plant breeders' rights is growing in importance. Questions have been raised on the appropriateness of intellectual property protection for living matter.

While several national patent offices do not permit the patenting of plant or animal varieties, the U.S. patented a transformed mouse as a test case for patenting higher life forms, a key concern of firms conducting genetic engineering work. The researchers envisioned the possibility of producing drugs from genetically engineered animals or plants. Canada has introduced Bill C-107, Plant Breeders Rights, into the House of Commons in 1988. It would protect seeds or other propagating material.

Integrated Circuit Designs Protection - This would protect the original three-dimensional pattern on layout design embodied in an integrated circuit.

Integrated circuit design protection is currently not available in Canada although legislation is being prepared. In November, 1984, the United States passed the Semiconductor Chip Protection Act, as a separate chapter of its Copyright Act, to prevent the unauthorized reproduction and distribution of chips. The law requires counterpart Canadian legislation in order for Canadian chip designers and producers to be protected in the United States.

APPENDIX B
SURVEY INSTRUMENT

SURVEY OF BUSINESSES ON INTELLECTUAL PROPERTY

Instructions to Interviewer - The following section should be read to each respondent. Respondents will be asked in the initial questions which Intellectual Property Rights they use or could use. You will record the IPRs that are appropriate on the coding form. After this you will ask all questions but only on those intellectual property rights that were identified.

Hello. My name is _____ and I'm calling from Price Waterhouse. We are conducting a study for the federal government (Industry, Science and Technology Canada and Consumer and Corporate Affairs Canada) and the Science Council of Canada on intellectual property rights as derived from copyrights, patents, trade marks, trade secrets, industrial designs, integrated circuit designs and plant breeders' rights.

The purpose of the study is to obtain information on the impact that intellectual property rights have on the economic and trade performance of Canadian companies as well as on their investment and other business decisions. The results of the study will be used to determine the appropriateness of current Canadian legislation, to assist the federal government in drafting a strategy on intellectual property rights and to assist the government in preparing for the General Agreement on Tariffs and Trade (GATT).

We ask that you give us approximately 30 minutes of your time to answer some questions. There is no obligation to participate in the survey and responses provided are on a voluntary basis.

Price Waterhouse will not reveal the responses of specific individuals in any report. When we analyze the results and prepare a report, your responses will be part of the totals. Sensitive third party information is protected under the provision of section 20 of the Access to Information Act. Any information contained in this survey, which cannot be disclosed because of the provisions of section 20 of the Access to Information Act, will be treated as strictly confidential.

NO: _____

SURVEY OF INDUSTRY ON INTELLECTUAL PROPERTY RIGHTS

BACKGROUND INFORMATION ON FIRMS

- 1. Please identify the industry sectors into which the activities of your firm fall. If you conduct business in more than one sector, please provide the percentage of sales received from each in 1987. (Note to Interviewer: get as much detail as necessary to describe the firms' sectors)

Percentage of Worldwide Sales	Sector(s) (Please record all comments)
_____ %	_____
_____ %	_____
_____ %	_____
_____ %	_____
_____ %	_____
_____ %	_____

NOTE TO INTERVIEWER: READ THE FOLLOWING

In order to assist us in attributing comments to the appropriate industries we are asking respondents to confine their comments to the sector where intellectual property issues are the most significant.
--

- 2. Please state the sector your comments will refer to.

3. Please list your major products or product lines in the sector identified in Question 2 and the percentage of sales the products represented in 1987.

	Product	Percentage of Total Sales
1.	_____	_____ %
2.	_____	_____ %
3.	_____	_____ %

NOTE TO INTERVIEWER: READ THE FOLLOWING

The questions are divided into three parts. The first set of questions refer to intellectual property rights used to protect a creation\innovation. The next set of questions refer to intellectual property rights used by firms to obtain information on other firms' intellectual property rights. The third set of questions refer to licensing agreements with other firms in order to use their intellectual property rights.

USE OF INTELLECTUAL PROPERTY RIGHTS TO PROTECT INNOVATIONS/CREATIONS

4. Does your firm use the following Canadian intellectual property laws to protect its own innovations/creations? (Read all).

	Yes	No	DNK
■ Copyrights	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
■ Patents	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
■ Industrial Designs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
■ Trade Secrets	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
■ Trade Marks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
■ Other (please specify) _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

↓

GO TO QUESTION 12 FOR THOSE IPRs THAT ARE NO OR DNK.

FOR YESs CONTINUE TO QUESTION 5

NOTE TO INTERVIEWER:

Answers to the above question will determine which IPRs are focussed on in the questionnaire (use your code sheet to know which IPRs to ask about for the remaining questions)

5. Please indicate the activity in Canada over the last three years on ... (Read those identified in Question 4).

Intellectual Property Rights	In Last 3 Years In Canada	Amount Spent (considering government, legal and administrative costs (Cdn \$000s)
Registering Copyrights	_____	\$ _____
Obtaining Patents	_____	\$ _____
Registering Industrial Designs	_____	\$ _____
Protecting Trade Secrets	_____	\$ _____
Registering Trade Marks	_____	\$ _____
Other (please specify) _____	_____	\$ _____

6. Have you allowed other firms to obtain a license over the last three years on/for ... (Read those identified in Q 4).

	Yes	No	If <u>yes</u> how many over the past 3 years?	
			Canada	Abroad
Copyrights	<input type="checkbox"/>	<input type="checkbox"/>	_____	_____
Patents	<input type="checkbox"/>	<input type="checkbox"/>	_____	_____
Industrial Designs	<input type="checkbox"/>	<input type="checkbox"/>	_____	_____
Trade Secrets/Know How	<input type="checkbox"/>	<input type="checkbox"/>	_____	_____
Trade Marks	<input type="checkbox"/>	<input type="checkbox"/>	_____	_____
Other (please specify) _____	<input type="checkbox"/>	<input type="checkbox"/>	_____	_____

IF NO TO ALL, GO TO QUESTION 8

7. Approximately how much have you earned during the last three years from licensing agreements with firms in Canada and abroad?

Canadian Rights (Cdn \$000s)	Foreign Rights (Cdn \$000s)	Total (Cdn \$000s)
\$ _____	\$ _____	\$ _____

The next question as well as several more throughout the survey, use a scale of 1 to 5, where 1 means "not at all", 3 means neutral and 5 mean "a great deal". Please write this down for use during the questionnaire.

8. To what extent are you satisfied with the protection given by Canadian intellectual property laws?

1	2	3	4	5
Extremely Unsatisfied		Neither Satisfied Nor Dissatisfied		Extremely Satisfied

Go to Question 10

9. Indicate all reasons you may be dissatisfied with particular intellectual property laws? (Record all answers).

Intellectual Property Right(s)	Reason(s) Dissatisfied (Be specific)
_____	1. _____
	2. _____
	3. _____
_____	1. _____
	2. _____
	3. _____
_____	1. _____
	2. _____
	3. _____

GO TO QUESTION 11

10. To what extent have the following factors contributed to your satisfaction with Canadian intellectual property rights?

	Not at All		Somewhat		A Great Deal
Term of protection given	1	2	3	4	5
Subject matter	1	2	3	4	5
Manner of enforcement	1	2	3	4	5
Remedies\penalties	1	2	3	4	5

11. Are the following corporate goals of your company?

If yes, to what extent do existing Canadian intellectual property laws facilitate or help achieve these goals?

	Yes	No	No. Help				
			At All	Somewhat	Help A Great Deal		
Maintaining/increasing your domestic market share	<input type="checkbox"/>	<input type="checkbox"/>	1	2	3	4	5
Acquiring exclusivity in a product or service	<input type="checkbox"/>	<input type="checkbox"/>	1	2	3	4	5
Encouraging in-house creative and/or innovative activity	<input type="checkbox"/>	<input type="checkbox"/>	1	2	3	4	5
Raising Capital	<input type="checkbox"/>	<input type="checkbox"/>	1	2	3	4	5
Obtaining adequate return on investments	<input type="checkbox"/>	<input type="checkbox"/>	1	2	3	4	5
Acquiring domestic technologies from other companies	<input type="checkbox"/>	<input type="checkbox"/>	1	2	3	4	5
Acquiring foreign technologies	<input type="checkbox"/>	<input type="checkbox"/>	1	2	3	4	5
Establishing joint ventures in Canada	<input type="checkbox"/>	<input type="checkbox"/>	1	2	3	4	5
Establishing joint ventures in other countries	<input type="checkbox"/>	<input type="checkbox"/>	1	2	3	4	5
Hiring of highly qualified personnel	<input type="checkbox"/>	<input type="checkbox"/>	1	2	3	4	5
Other (please specify) _____	<input type="checkbox"/>	<input type="checkbox"/>	1	2	3	4	5

12. Are there intellectual property rights that your firm would like to use to protect its innovations/creations but do not use for some reason(s) (e.g., firm is not aware of existing intellectual property rights, laws needed currently do not exist, current laws do not meet the needs of you firm, etc.)?

Yes

No → GO TO QUESTION 14 (IF QUESTIONS 4 AND 12 WERE ALL NOs, GO TO QUESTION 16)

13. If yes, indicate the intellectual property right(s) and the reason it is (they are) not used.

Intellectual Property Right(s)	Reason(s) (Be Specific)
_____	1. _____
	2. _____
	3. _____
_____	1. _____
	2. _____
	3. _____
_____	1. _____
	2. _____
	3. _____

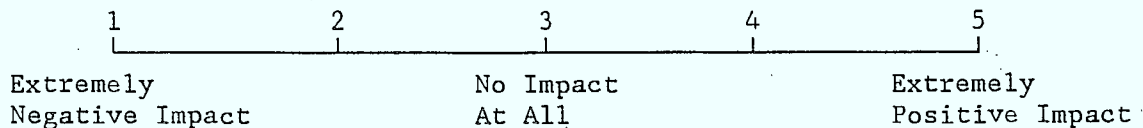
14. Do you believe measures are needed to facilitate freer movement of products protected by intellectual property rights in international trade?

Yes

No

Do Not Know → GO TO QUESTION 16

15. To what extent would adopting measures to facilitate freer movement of products affect your company's sales/revenues?



USE OF INTELLECTUAL PROPERTY RIGHTS TO OBTAIN INFORMATION

16. In addition to protecting an innovation/creation, intellectual property rights are also used to acquire information. Have you obtained information contained in other firms' intellectual property rights to improve your company's products/services?

Yes

No → GO TO QUESTION 18

17. If yes, to what extent in the following areas? (Read all).

	Not at All	Some- What		A Great Deal		Was the material examined Canadian or foreign? (check <u>all</u> mentioned).	
						Canada	Foreign
Informal source							
▪ Discussing information with other firms	1	2	3	4	5	<input type="checkbox"/>	<input type="checkbox"/>
▪ Other (please specify) _____	1	2	3	4	5	<input type="checkbox"/>	<input type="checkbox"/>
Formal sources (registries\ systems)							
▪ Examining copyrighted materials	1	2	3	4	5	<input type="checkbox"/>	<input type="checkbox"/>
▪ Examining patents	1	2	3	4	5	<input type="checkbox"/>	<input type="checkbox"/>
▪ Examining industrial designs	1	2	3	4	5	<input type="checkbox"/>	<input type="checkbox"/>
▪ For reverse engineering	1	2	3	4	5	<input type="checkbox"/>	<input type="checkbox"/>
▪ Examining integrated circuit designs (semi-conductor chips)	1	2	3	4	5	<input type="checkbox"/>	<input type="checkbox"/>
▪ Examining plant breeders' rights (plant variety)	1	2	3	4	5	<input type="checkbox"/>	<input type="checkbox"/>
▪ Other (please specify) _____	1	2	3	4	5	<input type="checkbox"/>	<input type="checkbox"/>

OBTAINING LICENSING AGREEMENTS

NOTE TO INTERVIEWER: READ THE FOLLOWING:

The next section focuses on whether your firm has been a licensee (i.e., has acquired a license from another firm).

18. Has your firm entered into any licensing agreements as the licensee over the last three years?

Yes —> GO TO QUESTION 21

No

19. Have you attempted to enter into licensing agreements as the licensee?

Yes

No —> GO TO QUESTION 32

20. Did you encounter difficulties in your attempt to enter into licensing agreements as the licensee?

Yes —> GO TO QUESTION 27

No —> GO TO QUESTION 32

21. How many licensing agreements were signed in the following areas during the last three years? (Read list).

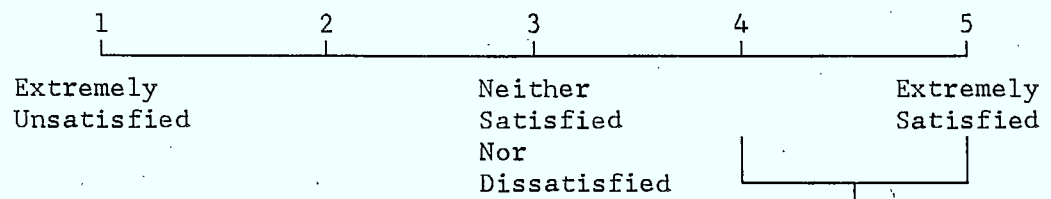
INDICATE NUMBER

	Canadian Product\ Service	Foreign Product\ Service	Canadian Technology	Foreign Technology	Total
Copyrights	_____	_____	_____	_____	_____
Patents	_____	_____	_____	_____	_____
Industrial Designs	_____	_____	_____	_____	_____
Trade Secrets\ Know How	_____	_____	_____	_____	_____
Integrated Circuit Designs	_____	_____	_____	_____	_____
Plant Breeders' Rights	_____	_____	_____	_____	_____
Other (please specify)	_____	_____	_____	_____	_____

22. Approximately how much have you spent in royalty payments over the last three years in Canada and outside Canada as the licensee?

Canada (Cdn \$000s)	Outside Canada (Cdn \$000s)	Total (Cdn \$000s)
_____	_____	_____

23. To what extent are you satisfied with the conditions of the licensing agreements you have entered as the licensee?



GO TO QUESTION 25

24. Indicate any reasons why you may not have been satisfied?

Intellectual Property Right(s)

Reason(s) (Be specific)

1. _____

2. _____

3. _____

1. _____

2. _____

3. _____

1. _____

2. _____

3. _____

25. Have the licensing agreements to which your firm has been the licensee been subject to excessive restrictions or encountered difficulties?

Yes

No —> GO TO QUESTION 28

26. To what extent have the restrictions or difficulties affected the profitability of your firm?

1. 2 3 4 5

Not At All

Somewhat

A Great Deal

27. If yes, what type of restrictions or difficulties were encountered as the licensee?

SOURCE OF RESTRICTIONS\DIFFICULTIES

Intellectual Property Right(s)	Restriction(s)\ Difficulty (s)	Cdn. Firm	Fgn. Firm	Cdn. Gov't	Fgn. Gov't	(specify)
_____	1. _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____

	2. _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
_____	_____					
	3. _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____

_____	1. _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____

	2. _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
_____	_____					
	3. _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____

_____	1. _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____

	2. _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
_____	_____					
	3. _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____

Questions 28-31 only to be asked
to firms using patents.

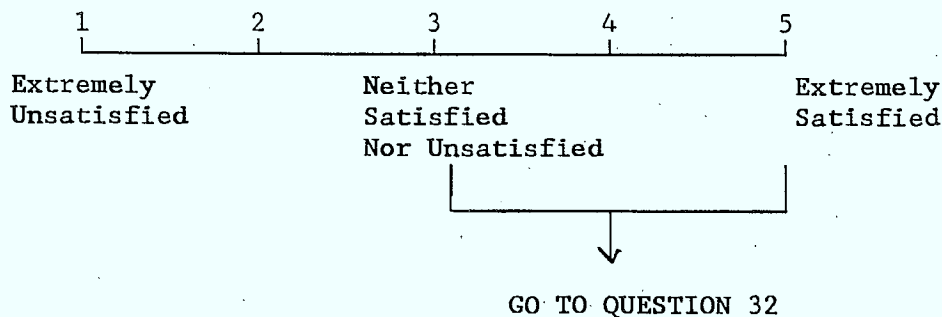
28. Did you obtain a compulsory license in Canada under the Canadian Patent Act in the last ten years?

- Yes
- No → GO TO QUESTION 32

29. If yes, for what purpose? (check all mentioned).

- Medicines
- Food
- Other (please specify) _____

30. To what extent, were you satisfied with the process?



31. If you were not satisfied, why not? (check all mentioned).

- Denied
- Procedures Took Too Much Time
- Cost
- Royalty Rate
- Terms and Conditions
- Other (please specify) _____

COUNTERFEIT OR DISPLACEMENT IN CANADA

NOTE TO INTERVIEWER:

Firms not using IPRs or needing any IPRs (answering No to all in Questions 4 and Question 12, should go to Question 61).

32. To your knowledge, have your firm's intellectual property rights been infringed or violated in the past three years in Canada?

Yes

No ———> GO TO QUESTION 37

33. If yes, indicate the seriousness of the infringement/violation in Canada in ... (Read those identified in Q. 4 and 12).

	Not At All Serious		Somewhat		Extremely Serious
■ Copyrights	1	2	3	4	5
■ Patents	1	2	3	4	5
■ Industrial Designs	1	2	3	4	5
■ Trade Secrets\Know How	1	2	3	4	5
■ Trade Marks	1	2	3	4	5
■ Other (please specify)	1	2	3	4	5

YES

NO

34. Do you believe your Canadian sales have decreased due to counterfeiting or other infringements?

IF ANSWER NO
TO BOTH GO TO
QUESTION 37

35. Has counterfeiting or other infringements depressed the domestic price for your product?

36. Please estimate how much **income/revenue** was lost domestically in 1987 due to counterfeiting or other infringements?

\$ _____ (Cdn \$000s)

IMPORTATION

37. Do you currently import or have you attempted to import components\materials, machinery\equipment and\or technology embodying intellectual property rights for your Canadian production or other commercial activities?

	Yes	No	
Components\Materials	<input type="checkbox"/>	<input type="checkbox"/>	If no to <u>ALL</u> , GO TO QUESTION 41
Machinery\Equipment	<input type="checkbox"/>	<input type="checkbox"/>	
Technology	<input type="checkbox"/>	<input type="checkbox"/>	

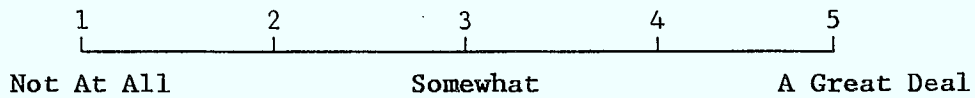
38. Have you been hindered or prevented from importing components\materials, machinery\equipment and\or technology for your Canadian production or other commercial activities?

	Yes	No	
Components\ Materials	<input type="checkbox"/>	<input type="checkbox"/>	GO TO QUESTION 41
Machinery\ Equipment	<input type="checkbox"/>	<input type="checkbox"/>	
Technology	<input type="checkbox"/>	<input type="checkbox"/>	

39. Please elaborate on the difficulties you experienced in importing components\materials, machinery\equipment or technology embodying intellectual property rights. (Note: include intellectual property right(s), difficulty(ies) and country(ies) problem was encountered).

Intellectual Property Right(s)	Difficulty(ies)	Country(s)
_____	1. _____	_____
	2. _____	_____
	3. _____	_____
_____	1. _____	_____
	2. _____	_____
	3. _____	_____
_____	1. _____	_____
	2. _____	_____
	3. _____	_____

40. To what extent did your difficulties in importing components\materials, machinery\equipment and\or technology embodying intellectual property rights affect the profitability of your company?



LITIGATION

41. Have you ever been involved in a court case revolving around intellectual property rights?

- Yes ———> GO TO QUESTION 45
- No

42. Have you considered launching or been threatened with legal action regarding intellectual property rights over the last ten years?

- Yes
- No ———> GO TO QUESTION 51

43. If yes. (Read those identified in Qs 4, 12, 17 and 21).

	Did you Consider Legal Action for the following?	Country (specify)	Have you Been Threatened With Action?	Country (specify)
Copyrights	<input type="checkbox"/>	_____	<input type="checkbox"/>	_____
Patents	<input type="checkbox"/>	_____	<input type="checkbox"/>	_____
Industrial Designs	<input type="checkbox"/>	_____	<input type="checkbox"/>	_____
Trade Secrets\ Know How	<input type="checkbox"/>	_____	<input type="checkbox"/>	_____
Trade Marks	<input type="checkbox"/>	_____	<input type="checkbox"/>	_____
Integrated Chip Designs	<input type="checkbox"/>	_____	<input type="checkbox"/>	_____
Plant Breeders' Rights	<input type="checkbox"/>	_____	<input type="checkbox"/>	_____

GO TO QUESTION 51

44. Why was action considered but not taken? (Do not read. Check all that are mentioned).

- High cost
- Not certain would win case
- Time involved
- Inability to have result enforced
- Complex or onerous requirements to bring evidence before the court
- Other (Please specify) _____

GO TO QUESTION 51

45. If you have been involved in a court case, in your most recent case, which intellectual property right was involved and in which country?

	Yes	No	Country (specify)
Copyrights	<input type="checkbox"/>	<input type="checkbox"/>	_____
Patents	<input type="checkbox"/>	<input type="checkbox"/>	_____
Industrial Designs	<input type="checkbox"/>	<input type="checkbox"/>	_____
Trade Secrets\ Know How	<input type="checkbox"/>	<input type="checkbox"/>	_____
Trade Marks	<input type="checkbox"/>	<input type="checkbox"/>	_____
Integrated Chip Designs	<input type="checkbox"/>	<input type="checkbox"/>	_____
Plant Breeders' Rights	<input type="checkbox"/>	<input type="checkbox"/>	_____

46. In your most recent case, did you claim to own or control the intellectual property right at issue or were you alleged to have infringed the right?

- Claimed to own or control the intellectual property right at issue
- Alleged to have infringed the intellectual property right at issue

47. If yes, what was the nature of your most recent case? (Read probes. Check only one).

- Civil - Appealing Administrative Decision
- Civil - Infringement Suit
- Civil - Contractual Problem
- Criminal
- Other (please specify) _____

48. What were the total expenses related to your most recent litigation concerning intellectual property rights?

\$ _____ (Cdn \$000s)

49. To what extent were you satisfied with the court case? (If more than one, the most recent).

1	2	3	4	5
----- ----- ----- ----- -----				
Extremely Unsatisfied		Neither Satisfied Nor Unsatisfied		Extremely Satisfied

		↓		
		GO TO QUESTION 51		

50. Indicate any reasons why you may not have been satisfied. (Do not read. Check all that are mentioned).

- High costs
- Time involved
- Complex or onerous requirements to bring evidence before courts
- Outcome/result of litigation
- Ability to enforce the ruling
- Other (please specify) _____

INTELLECTUAL PROPERTY RIGHTS ABROAD

51. Do you currently hold intellectual property rights abroad?

- Yes
- No —> GO TO QUESTION 53

52. Please indicate the activity abroad over the last three years on ... (Read those identified in Qs. 4, 12, 17 and 21)

Intellectual Property Rights	Number In Last 3 Years Abroad	If yes, amount spent considering government, legal and administrative costs (Cdn \$000s)
Registering Copyrights	_____	\$ _____
Obtaining Patents	_____	\$ _____
Registering Industrial Designs	_____	\$ _____
Protecting Trade Secrets/Know How Agreements	_____	\$ _____
Registering Trade Marks	_____	\$ _____
Protecting Integrated Circuit Designs (semi conductor chips)	_____	\$ _____
Protecting Plant Breeders' Rights (plant variety rights)	_____	\$ _____
Other (please specify) _____	_____	\$ _____

53. Do you currently export?

- Yes —> GO TO QUESTION 55
- No

54. Have you attempted or considered exporting in the past but did not because of problems or disincentives with respect to intellectual property rights?

- Yes —> GO TO QUESTION 60
- No —> GO TO QUESTION 61

55. What percentage did exports contribute to your total worldwide sales in 1987?

_____ %

56. What were your three most important international markets in 1987, in terms of revenue? What percentage of export sales did each represent?

Country	% of Export Sales
1. _____	_____ %
2. _____	_____ %
3. _____	_____ %

57. Have you encountered problems or disincentives related to intellectual property protection in your attempts to extend your business to foreign countries?

Yes

No —> GO TO QUESTION 61

58. Have foreign markets been lost or sales affected because of problems or disincentives with respect to intellectual property rights abroad?

Yes

No —> GO TO QUESTION 60

59. Estimate your company's 1987 loss in revenue because of problems or disincentives faced abroad involving intellectual property rights?

\$ _____ (Cdn \$000s)

60. What type of problems or disincentives have you encountered?

Intellectual Property Right(s)	Problem(s)\ Disincentives(s)	Country(s)
_____	1. _____	_____
	2. _____	_____
	3. _____	_____
_____	1. _____	_____
	2. _____	_____
	3. _____	_____
_____	1. _____	_____
	2. _____	_____
	3. _____	_____

OVERVIEW OF THE FIRM

61. To what extent is there expertise or knowledge available to your firm (considering internal and external resources) on intellectual property rights?

1	2	3	4	5
Not At All		Somewhat	A Great Deal	

The remainder of this section refers to your total worldwide operations, not just the sector referred to in the previous questions.

62. What were your total worldwide sales in 1987? (if a subsidiary get its sales, not the parent company)

- Under \$1 Million
- \$1 to \$5 Million
- \$5.1 to \$25 Million
- \$25.1 to \$100 Million
- \$100.1 to \$500 Million
- Over \$500 Million

63. How many employees do you have working for you company? (full time employees).

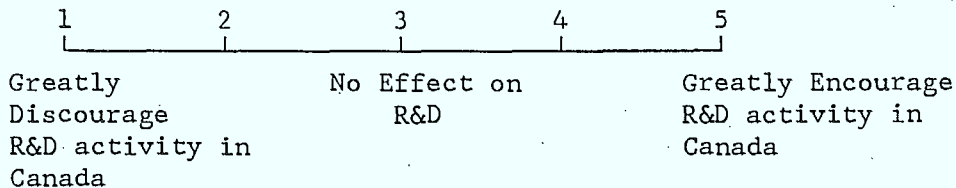
64. Is your company over 50 percent Canadian-owned?

- Yes —> GO TO QUESTION 66
- No

65. If not, where is your parent company located?

- United States
- United Kingdom
- Japan
- Other (please elaborate) _____

66. To what extent do existing Canadian intellectual property laws encourage your firm to conduct research and development in Canada?



67. Did you conduct research and development in 1987?

- Yes
- No ———> END QUESTIONNAIRE

68. In 1987, how much did you spend on research and development worldwide?

\$ _____ (Cdn \$000s)

Note to Interviewer: Ask the following:

69. Are there other sectors where the issues with respect to intellectual property are different?

- Yes ———> Identify the sector _____
- No

70. Would you like us to repeat the questionnaire for these industry sectors?

- Yes ———> (If convenient you will call again or contact another individual in the organization. Name of person who will answer for additional sector _____).
- No

Thank you for taking your time to answer these questions

APPENDIX C
LIST OF TOP 100 R&D PERFORMERS

LIST OF TOP 100 R&D FIRMS

Alberta Government Telephones
Alcan Aluminum Limited
Algoma Steel
Allelix
Allied Signal of Canada
Allied Automotive - Canadian Fram Limited
Amdahl Canada
Astra Pharma
Atomic Energy of Canada Limited
BC Hydro
BP Canada
Bell Canada Enterprises*
Bendix Awelex
Bio-Research Laboratories
Boeing of Canada
Bombardier*
Bow Valley Industries
British Aerospace
British Columbia Telephones
CAE Industries
CCL Industries
CIBA-GEIGY AG
C-I-L Inc.
Cableshare Inc.
Canada Packers
Canada Systems Group
Canadair
Canadian Astronautics Limited
Canadian Marconi Company
Canadian National Railway
Cognos
Cominco Ltd.
Computing Devices Company
Connaught Laboratories Ltd.
Control Data Canada Limited
Cyanamid Canada Inc.
Diffracto
Digital Equipment of Canada
Domtar
Dow Chemical Canada Inc.
DuPont Canada
Falconbridge Limited
Fiberglass Canada
Gandalf Technologies
Garrett Manufacturing Limited

Garrett Manufacturing Limited
Gaz Metropolitan
Geac Computers International Inc.
General Electric of Canada
Glaxo Canada
Glenayre Electronics
Hammond*
Hewlett Packard Canada
Honeywell
Hydro Quebec
IBM Canada
Imperial Oil
Inco
Indal Technologies
Johnson and Johnson
Linear Technology
Litton Systems Canada Ltd.
Lumonics
MacDonald Dettwiler and Associates
MacMillan Bloedel
Manitoba Hydro
Matrox Electronic Systems
Menasco Aerospace Ltd..
Meridian Technologies
Microtel Limited
Miles Canada
Mitel
Molson
National Sea Products
Noranda Incorporated
Northern Telecom Limited
Nova/Husky Research Group
Novatel Communications Ltd.
Onex Packaging Inc.
Ontario Hydro
Petro Canada
Philips Information Systems Ltd.
Polysar Limited
Pratt & Whitney Canada
QIT-Fer et Titane
Reichhold
SNC Group
Sandoz Canada
Saskatchewan Power
Scott Paper
Scintrex Limited
Shell Canada Limited
Sherritt Gordon Mines Limited
Spar Aerospace
Stelco

Syncrude Canada
Syntex
Telesat Canada
Versatile Farm Equipment
Westinghouse Canada
Xerox Canada

Source: Financial Post Survey of Top R&D Performers (1987 and 1988) which included 74 companies. The remaining 26 companies were obtained based on the number of personnel involved in R&D, as listed in Statistics Canada, "Directory of Industrial Research and Development Facilities in Canada, 1986" (Catalogue 88-205E Annual), the Advanced Industrial Materials 1988 Canadian Sourcebook and the 1988 Canadian Biotechnology Industry Sourcebook.

* These replaced three companies that were deleted from the survey: Bell Northern Research was going to answer with Northern Telecom; Gulf Canada Limited is now part of Petro Canada; and Trillium Telephone Systems was going to respond with Mitel.

APPENDIX D
DETAILED METHODOLOGY

**SURVEY ON INTELLECTUAL PROPERTY RIGHTS IN CANADA
DETAILED METHODOLOGY**

1. Introduction

This appendix presents the methodology that was used for the survey of IPRs in Canada. It includes a discussion on each of the three data collection methods, namely:

- literature search;
- personal interviews with key officials; and
- telephone survey of selected sectors in the Canadian economy.

In addition, this appendix includes a discussion of our approach to the analysis of the data that was collected.

2. Literature Search

We reviewed literature, studies, documents and statistics on IPRs. The material was obtained from various sources, including:

- Industry, Science and Technology Canada;
- Consumer and Corporate Affairs Canada;
- Science Council of Canada;
- expert advisors; and
- literature search of relevant articles.

The data collected in the literature search was useful for two reasons. First, it was essential that the development of the questionnaire be preceded by a sound review of the area and identification of pertinent

issues. The literature review helped to achieve this objective. Second, it was useful for the interpretation of the findings of the study.

The bibliography of data sources is presented at the end of this appendix.

3. Interviews of Key Officials

We have conducted in-person interviews with officials from Industry, Science and Technology Canada and Consumer and Corporate Affairs Canada. The purpose of the interviews were to discuss the sectors to be included in the survey, determine key issue areas to be addressed and formulate the sampling plan.

4. Telephone Survey

The primary data collection approach was a telephone survey of selected sectors of the Canadian economy. In total, 900 firms operating in Canada were contacted. These firms represented four groups: the Top 100 R&D Performers, a sample of High Technology firms; a sample of Medium and Low Technology firms and a sample of Major Copyright Users.

The following section provides more information on the methodology concerning the telephone survey.

Questionnaire Design - Following the review of the literature, a questionnaire was developed to address the study objectives discussed in the first chapter. The questionnaire was designed based on a list of questions prepared by the Steering Committee.

In order to have comparable data between the four groups and between firms, we designed one survey instrument. Since we realized that there would be much variance in firms' type and use of IPRs, we designed the questionnaire

so that respondents would only be asked questions on the IPRs that they expressed a need for or that they used a great deal. We also included skip logic in the design of the questionnaire. As a result, respondents were not asked questions in areas that were not relevant to their particular situation.

Pre-test - The questionnaire was pre-tested with 21 firms from different sectors selected for the study. We reviewed firms' responses to the pre-test and obtained their views, feedback, etc. Appropriate changes were made on the basis of the results and the discussions.

A French version of the questionnaire was then developed and all copies were checked for consistency. A copy of the questionnaire is presented in Appendix B.

Sampling Frame and Sample Selection - The questionnaire was administered to firms in high, medium and low technology industries as well as major users of copyrights. The Steering Committee proposed that a quota sample of 900 firms be broken down into the following groups:

▪ Top 100 R&D Performers	100
▪ High Technology	300*
▪ Medium and Low Technology	400
▪ Major Copyright Users	100

"High Technology" firms consisted of two groups: the Top 100 R&D Performers in Canada and a sample of High Technology firms.

* 20 firms in the Top 100 R&D Performers' list were selected for the High Technology survey

The list of the top one hundred firms involved in R&D in Canada was compiled using the results of a survey conducted annually by the Financial Post, as well as a number of personnel involved in R&D as listed in Statistics Canada "Directory of Industrial Research and Development Facilities in Canada, 1986", the Advanced Industrial Materials 1988 Canadian Sourcebook and the 1988 Canadian Biotechnology Industry Sourcebook.

The sample of high technology firms was selected from a list derived from a number of sources. The sources were selected if their list included firms that would fall within Standard Industrial Classification (SIC) codes that are normally considered to include high technology firms, (i.e., the electrical and electronic products and the chemical and chemical products industries), major users and creators of advanced technologies or major performers of R&D. The sampling frame was obtained from the following sources.

- 1988 Canadian Biotechnology Industry Sourcebook;
- Advanced Industrial Materials Sourcebook;
- Aerospace Industry Association;
- British Columbia Software Association;
- Canadian Chemical Producers Association;
- Canadian Drug Manufacturers' Association;
- Canadian Manufacturers Association (Canadian Advanced Industrial Materials Forum);
- Canadian Semiconductor Design Association;
- Canadian University-Industry Council of Advanced Ceramics;
- Electrical and Electronics Manufacturers Association of Canada;
- Industrial Biotechnology Association of Canada;
- the list of the top 100 research and development firms;
- Machinery and Equipment Manufacturers' Association of Canada;
- Non-Prescription Drug Manufacturers' Association of Canada;
- Ontario Government listing of software manufacturers;
- Pharmaceutical Manufacturers' Association of Canada;
- Quebec Government listing of software manufacturers;
- Science Council listing of industries; and
- York Technology Association.

All firms obtained from the lists of these sources were combined and alphabetized. Initially, we drew a random sample of 300 firms from the 1,850 firms in the sampling frame. After we randomly sampled the 300 firms, we reviewed the list and determined that 20 firms of the "Top 100 R&D Performers" were selected. To ensure that we had 400 high technology firms in total, we randomly selected 20 additional firms.

The sample of 320 of the 1,850 firms in the population frame ensures the findings are accurate within two percentage points 99 percent of the time.

"Medium and Low Technology" firms were drawn from a sample of firms in various sectors of the Canadian economy. The list of sectors to be included in this category was determined based on discussions with the Steering Committee and interviews at Consumer and Corporate Affairs Canada. The list was based on these sectors' use or potential use of IPRs. The sectors included in the study were:

- clothing;
- food processing;
- breweries, wineries and distilleries;
- dairy industry;
- furniture;
- metal fabrication;
- agricultural implements;
- motor vehicles and parts;
- jewellery manufacturers; and
- sporting goods and toys.

The sampling frame for the medium and low technology industries was obtained from industry associations. Where industry associations did not exist or were not willing or able to cooperate with the study, we obtained the list from the relevant divisions within Industry, Science and Technology Canada. The sources used are presented as follows.

Clothing	Clothing Division, ISTC Ontario Apparel Manufacturers' Association Manitoba Apparel Manufacturers' Association
Food processing	Canadian Frozen Food Association Canadian Specialty Food Association Grocery Manufacturers' Association
Breweries	Brewers' Association of Canada
Wineries	Canadian Wine Institute
Distilleries	Association of Canadian Distillers
Dairy industry	National Dairy Council
Furniture	Furniture Division, ISTC
Metal fabrication	Metal Industries, ISTC
Agricultural implements	Prairie Implement Manufacturers Association Canadian Farm and Industrial Equipment Institute
Motor vehicles and parts	Automotive Industries Association Automotive Parts Manufacturers' Association of Canada
Jewellery companies	Jewellery Division, ISTC
Sporting goods and toys	"Sporting Goods for World Markets" Canadian Sporting Goods Annual Convention Canadian Sporting Goods Association Canadian Toy Manufacturers' Association

Four hundred firms were surveyed in this category. The distribution of the sample size for the medium and low technology sectors was based on the number of firms in each sector. A minimum of 30 firms was included for each sector. The distribution of firms was as follows:

<u>Industry Sector</u>	<u>Population</u>	<u>Sample</u>
■ clothing	4283	70
■ food processing	285	30
■ breweries, wineries and distilleries	102	30
■ dairy industry	67	30
■ furniture	604	48
■ metal fabrication	77	30
■ agricultural implements	206	30
■ motor vehicles and parts	495	40
■ jewellery manufacturers	304	30
■ sporting goods and toys	765	62

The sample size was selected to determine whether there are issues in particular sectors, not to provide statistically significant information.

"Major Copyright Users" included firms from cultural/entertainment sectors and business services sectors. The list of sectors to be included in the study was proposed by Consumer and Corporate Affairs Canada and agreed upon by the Steering Committee. The list, which was based on firms believed to use or that could potentially use IPRs, included the following sectors:

Entertainment/cultural sectors

- sound recording and music publishers;
- film producers; and
- book publishers.

Business services sectors

- architects;
- advertising; and
- consulting engineers.

The sampling frame was prepared by using lists of firms obtained from associations and a list obtained from the Department of Communications. The sources used for each sector are listed below:

Sound recording,
film producers, music
publishers, book
publishers

Canadian Association of Motion Picture and
Electronic Recording Artists
Canadian Independent Record Production
Association
Canadian Music Publishers' Association
Canadian Book Publishers' Council
National list of cultural firms prepared by
the Department of Communications

Advertising

The National Lists of Advertisers, 1988

Architectural,
engineering
and scientific
services

Royal Architectural Institute of Canada
Association of Consulting Engineers of
Canada

A sample of 100 was drawn from the 5,873 firms. The sample was split equally between firms in the entertainment/cultural and business service sectors. A maximum of 25 was placed for any sector.

<u>Industry Sector</u>	<u>Population</u>	<u>Sample</u>
entertainment/cultural	1760	50
- sound recording, music	208	8
- film producers	1078	25
- book publishers	474	17
business services	4113	50
- architects	2887	25
- advertising	451	9
- consulting engineers	775	16

The sample size was designed for issue identification, not to provide statistically significant findings.

Data Collection Procedures - An introductory letter was sent to each firm in the sample one week before the start of the interviews. The letter, which was addressed to a senior official (i.e., the president or, if applicable, the director of R&D) of the firm, served three purposes:

- It enabled us to introduce the purpose and importance of the study to senior personnel and, hopefully, obtain their support.
- It enabled us to contact the best individual to conduct the survey. While the senior person who received the questionnaire may not have been the best person to respond to the survey, he/she was able to direct us to the right individual.
- It gave the interviewee time to prepare for the interview, since we had included in our letter a list of the areas to be covered in the questionnaire and a description of some of the terms.

Industry, Science and Technology Canada also sent a letter to the selected firms informing them of the study and asking their participation.

The 900 interviews were conducted from Price Waterhouse offices in Ottawa. The interviewers used were experienced and employed by the firm. To prepare for this study they participated in a training session. The session covered the following topics:

- Purpose and Design of the Study.
- Proper Introduction. This discussion stressed the importance of the initial impression made by the interviewer and outlined areas to be emphasized in an introduction, such as the purpose and importance of the study, assuring confidentiality, arranging a convenient time for the interview and giving an indication of the approximate length of the interview.

- Responding to Common Queries. The interviewers received instructions on how to respond to common questions and comments such as:
 - how the data will be used;
 - respondent dislikes surveys; and
 - respondent is too busy to answer questions.

- Instrument Design and Content. We reviewed the instrument in detail. We discussed the rationale and provided necessary background information on each question. We stressed the confidential nature of some of the questions.

- Instrument Completion. We gave instructions on how to properly fill out and complete the form.

Role playing was also a major part of the sessions. This allowed the interviewers to become familiar with the format of the questions and the flow of the document.

5. Analysis Approach

Data from the telephone surveys was coded and entered on Price Waterhouse's Compaq Deskpro 286 micro computer. A computerized data base was prepared for use with SPSSPC+ (Statistical Package for the Social Sciences). We prepared a data analysis plan to ensure that the analysis conducted best serves the interests of the Steering Committee.

The data was entered and verified. Verification of the data included the following:

- reviewing frequencies;
- comparing sales, number of employees;
- comparing number of IPRs to costs.

The Analysis Plan for the study is outlined following the Bibliography.

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ANALYSIS PLAN

1. Frequencies on the following variables (recoded where applicable):

- all respondents
- Top 100 R&D firms
- 320 High Technology firms
- Medium and Low Technology firms
- each sector of Medium and Low
- copyright users
- entertainment/cultural users
- service industries

2. High Technology

For both R&D 100 and
320 R&D firms

a) Use of IPRs

Q4 by sector (Q2), 4 by size (Q62), 4
by # of employees (Q63), 4 by Cdn-
owned (Q64), 4 by R&D (Q67)

Q12 by 2, 12 by 62, 12 by 63, 12 by 64

Q13 by 2

Q16 by 2, 16 by 62, 16 by 63, 16 by 64

Q17 by 2

b) Satisfaction

Q8 by 2, 8 by 62, 8 by 63, 8 by 64, 8
by 4, 8 by 67

Q9 by 2

Q10 by 2, 10 by 4

c) Obtaining Licensing Agreements

Q18 by 2, 18 by 62, 18 by 63, 18 by 64

Q19 by 2, 19 by 62, 19 by 63, 19 by 64

Q20 by 2

Q21 by 2, 21(total) by 62

Q23 by 2, 23 by 62, 23 by 63, 23 by 64, 23 by 21(1+)

Q24 by 2

Q25 by 2, 25 by 62, 25 by 63, 25 by 64

Q26 by 2, 26 by 21(1+)

Q27 by 2

d) Compulsory Licensing

Q28 by 2, 28 by 62, 28 by 63, 28 by 64

Q30 by 2, 30 by 62, 30 by 63, 30 by 64

e) Counterfeit or Displacement

Q32 by 2, 32 by 62, 32 by 63, 32 by 64

Q33 by 2, 33 by 62,

Q34 by 2, 34 by 62, 34 by 63

Q35 by 2, 35 by 62, 35 by 63

f) Importation

Q37 by 2

Q38 by 2, 38 by 62, 38 by 63

Q39 by 2

Q40 by 2, 40 by 62, 40 by 63

g) Litigation

Q41 by 2, 41 by 62, 41 by 63

Q42 by 2, 42 by 62, 42 by 63

Q43 by 2, 43 by 62, 43 by 63

Q49 by 46, 49 by 47, 49 by 48, 49 by 45, 49 by 2, 49 by 62, 49 by 63

h) IPRs Abroad

Q51 by 2, 51 by 62, 51 by 63, 51 by 64

Q52 by 2

Q53 by 2, 53 by 62, 53 by 63

Q54 by 2, 54 by 62, 54 by 63

Q57 by 2, 57 by 62, 57 by 63

Q58 by 2, 58 by 62, 58 by 63

Q60 by 2

i) Overview of Firms

Q61 by 2, 61 by 62, 61 by 63

Q66 by 2, 66 by 62, 66 by 63 66 by 67

j) Exhaustion

Q14 by 2, 14 by 62, 14 by 63

Q15 by 2, 15 by 62, 15 by 63

3. Medium and Low Technology

a) Use of IPRs

Q4 by 2, 12 by 2, 13 by 2, 16 by 2, 17
by 2

b) Satisfaction

Q8 by 2, 9 by 2, 10 by 2

c) Obtaining Licensing Agreements

Q18 by 2, 19 by 2, 20 by 2, 21 by 2,
23 by 2, 24 by 2, 25 by 2, 26 by 2, 27
by 2

d) Compulsory Licensing

Q28 by 2, 29 by 2, 30 by 2, 31 by 2

e) Counterfeit or Displacement

Q32 by 2, 33 by 2, 34 by 2, 35 by 2

f) Importation

Q37 by 2, 38 by 2, 39 by 2, 40 by 2,

- g) Litigation
Q41 by 2, 42 by 2, 43 by 2, 49 by 2
- h) IPRs Abroad
Q51 by 2, 52 by 2, 53 by 2, 57 by 2,
58 by 2, 60 by 2
- i) Overview of Firms
Q61 by 2, 66 by 2, 62 by 2, 63 by 3
- j) Exhaustion
Q14 by 2, 15 by 2
4. Copyright Users
- a) Use of IPRs
Q4 by 2, 12 by 2, 13 by 2, 16 by 2, 17
by 2
- b) Satisfaction
Q8 by 2, 9 by 2, 10 by 2
- c) Obtaining Licensing Agreements
Q18 by 2, 19 by 2, 20 by 2, 21 by 2,
23 by 2, 24 by 2, 25 by 2, 26 by 2, 27
by 2
- d) Compulsory Licensing
Q28 by 2, 29 by 2, 30 by 2, 31 by 2
- e) Counterfeit or Displacement
Q32 by 2, 33 by 2, 34 by 2, 35 by 2
- f) Importation
Q37 by 2, 38 by 2, 39 by 2, 40 by 2,
- g) Litigation
Q41 by 2, 42 by 2, 43 by 2, 49 by 2
- h) IPRs Abroad
Q51 by 2, 52 by 2, 53 by 2, 57 by 2,
58 by 2, 60 by 2
- i) Overview of Firms
Q61 by 2, 66 by 2, 62 by 2, 63 by 3
- j) Exhaustion
Q14 by 2, 15 by 2

APPENDIX E
EXHIBITS

The following exhibits are referred to in the report. They are numbered to coincide with the five finding sections: overall, top R&D 100, high technology, medium and low and major copyright users. The same exhibits do not appear in each section as only the most relevant or interesting exhibits are displayed.

TOP R&D PERFORMERS'
EXPENDITURES ON RESEARCH AND DEVELOPMENT

R&D EXPENDITURES (IN MILLION \$s)	PERCENTAGE OF RESPONDING FIRMS (n=77)
Under \$1	5 %
\$1.1 to 5	34 %
\$5.1 to 25	42 %
\$25.1 +	19 %

Missing: 8

Do Not Know: 8

NUMBER OF INTELLECTUAL PROPERTY RIGHTS
REGISTERED/OBTAINED IN CANADA BY THE TOP R&D PERFORMERS

INTELLECTUAL PROPERTY RIGHTS	NUMBER OF FIRMS REGISTERING AN IPR IN CANADA	NUMBER OF IPRs REGISTERED IN CANADA IN THE LAST 3 YEARS
Copyrights (n=33)	15	160
Patents (n=68)	59	3,069
Industrial Designs (n=27)	16	96
Trade Marks (n=65)	46	814

**AVERAGE COST OF REGISTERING/OBTAINING INTELLECTUAL
PROPERTY RIGHTS FOR THE TOP R & D PERFORMERS**

INTELLECTUAL PROPERTY RIGHTS REGISTERED/OBTAINED	AVERAGE COST PER FIRM (CONSIDERING GOVERNMENT, LEGAL, AND ADMINISTRATIVE COSTS)*
Register Copyrights	\$ 789
Obtain Patents	\$ 3,581
Register Industrial Designs	\$ 1,346
Register Trade Marks	\$ 1,776

* Only firms that indicated the number and amount of IPRs were included.

SOURCES USED BY THE TOP R&D PERFORMERS TO OBTAIN INFORMATION

SOURCE	FIRMS INDICATING THE FOLLOWING SOURCES WERE USED "QUITE A BIT"	
	Number of Firms	Percentage of Responding Firms
<u>Questions Asked to Firms</u>		
Discuss Information with Other Firms	34	47 %
Examine Copyrighted Material	14	19 %
Examine Patents	28	38 %
Examine Industrial Designs	6	8 %
For Reverse Engineering	7	10 %
Examine Integrated Circuit Designs	6	8 %
Examine Plant Breeders' Rights	1	1 %
<u>Answers Volunteered by Firms when Asked for Other Sources</u>		
Literature, Magazines	17	81 %
Trade shows, Symposiums, Conferences	13	72 %
Information from Parent/Subsidiary	11	79 %

REASONS THE TOP R&D PERFORMERS
ARE DISSATISFIED WITH CANADIAN INTELLECTUAL PROPERTY RIGHTS

REASONS	NUMBER OF TIMES MENTIONED*						Percentage of Total Mentions (n = 68)
	Copy- rights	Patents	Indust- rial Designs	Trade Secrets	Trade Marks	Other	
Insufficient/Incomplete Protection	9	4	2	-	-	-	22 %
Protection Is Too Long/Expensive/Tedious To Acquire	1	7	2	-	3	-	19 %
Legislation Is Needed	1	-	1	5	-	2	13 %
Enforcement Is Not Sufficient	2	3	1	1	1	-	12 %
International Registry/ Protection Is Needed	-	4	-	-	-	-	6 %
Courts/Lawyers Are Expensive	-	4	-	-	-	-	6 %
Length of Protection Is Not Sufficient	-	3	-	-	-	-	4 %
Other	2	7	-	1	-	2	18 %

* Firms were able to list three IPRs they are dissatisfied with and three reasons related to each IPR.

REASON GIVEN BY THE TOP R&D PERFORMERS FOR NOT USING
INTELLECTUAL PROPERTY RIGHTS

REASONS	PERCENTAGE OF TOTAL MENTIONS* (n = 25)
There is No Existing Appropriate Canadian IPR but One is Needed	32 %
It Takes Too Much Time/Expense to Register IPRs	16 %
Too Much Information Has to be Revealed to get Registered/Protected	16 %
The Protection Given by the IPR is Insufficient/Incomplete	8 %
The Protection is Too Broad	4 %
Other	24 %

* Firms were able to list up to three IPRs and three reasons for each. The above are the total reasons given.

**REASONS THAT THE TOP R & D PERFORMERS WERE
DISSATISFIED WITH LICENSING AGREEMENTS**

REASONS	NUMBER OF TIMES MENTIONED*
Cost	4
Licensing Agreement Too Rigid	4
Given Insufficient/Incomplete Protection	2
Difficult to Deal with Companies/Owners	2
Too Much Red Tape	2
Other	1

* Firms were able to list up to three IPRs and three reasons for each. The above are the total reasons given, although most firms only gave one reason.

THE TOP R&D PERFORMERS' COMMENTS ON THE RESTRICTIONS OR DIFFICULTIES INVOLVED WITH LICENSING AGREEMENTS

REASONS	NUMBER OF TIMES MENTIONED*
Conditions of Licensing Agreement	4
Restrictions From Foreign Government	3
Cost	3
Not Given Complete Protection	2
Lack of Communication/Cooperation with Licensor	1

* Firms were able to list up to three IPRs and three reasons for each. The above are the total reasons given, although most firms gave only one reason.

NUMBER OF INTELLECTUAL PROPERTY RIGHTS REGISTERED
ABROAD OVER THE LAST THREE YEARS
BY TOP R&D PERFORMERS

INTELLECTUAL PROPERTY RIGHTS	NUMBER OF FIRMS REGISTERING AN IPR ABROAD	NUMBER OF IPRs REGISTERED ABROAD IN THE LAST 3 YEARS
Copyrights (n=17)	4	45
Patents (n=52)	50	4,508
Industrial Designs (n=14)	4	107
Trade Marks (n=38)	31	1,187

AVERAGE COST FOR THE TOP R & D
PERFORMERS OF REGISTERING
INTELLECTUAL PROPERTY RIGHTS

INTELLECTUAL PROPERTY RIGHTS REGISTERED/OBTAINED	AVERAGE COST PER FIRM (CONSIDERING GOVERNMENT, LEGAL, AND ADMINISTRATIVE COSTS)*
Register Copyrights	\$ 467
Obtain Patents	\$4,092
Register Industrial Designs	\$3,500
Register Trade Marks	\$1,598

* Only those firms indicating the number of IPRs and the cost were included.

PERCENTAGE OF THE TOP R&D PERFORMERS
HINDERED OR PREVENTED FROM IMPORTING

TYPE OF IMPORT	HINDERED OR PREVENTED FROM IMPORTING?	
	YES	NO
Component/Materials (n = 52)	12%	89%*
Machinery/Equipment (n = 56)	5%	95%
Technology (n = 57)	5%	95%

* Does not add up due to rounding

DIFFICULTIES TOP R&D PERFORMERS
HAD IN IMPORTING

DIFFICULTIES	NUMBER OF MENTIONS*
Problems with Respect to Re-exports	9**
Foreign Customs/Export Restrictions	3
Conditions of IPR/ Licensing Agreement	1

* Firms were able to list up to three IPRs and three reasons for each. The above are the total reasons given.

** Six of these are from one firm which had 3 problems with 2 IPRs.

PERCENTAGE DISTRIBUTION OF EMPLOYEES IN
THE HIGH TECHNOLOGY GROUP BY SECTOR

SECTORS	PERCENTAGE DISTRIBUTION OF EMPLOYEES			
	Under 50	50 to 100	101 to 250	251 or more
Communication and Other Electronic Equipment (n = 10)	30 %	-	50 %	20 %
Biotechnology (n = 18)	61 %	11 %	6 %	22 %
Electrical & Electronic Products Industries (n = 33)	49 %	9 %	30 %	12 %
Software Development (n = 78)	83 %	9 %	4 %	4 %
Power Generation (n = 10)	40 %	-	20 %	40 %
Chemical and Chemical Products Industries (n=28)	32 %	25 %	11 %	32 %
Aircraft and Aircraft Parts Industries (n = 19)*	21 %	16 %	11 %	53 %
Semi-Refined Materials (n = 16)	50 %	6 %	13 %	31 %
Primary Resource Industries (n = 9)	11 %	11 %	22 %	56 %
Metal Manufacturing (n = 53)	42 %	12 %	27 %	19 %
Other (n = 15)	40 %	7 %	20 %	33 %
Total	53 %	11 %	15 %	21 %

* Does Not Add Up Due to Rounding.

Missing: 7

Statistical Test: Chi-Square

Significance Level: .0000

NUMBER AND AVERAGE COST OF INTELLECTUAL
PROPERTY RIGHTS REGISTERED/OBTAINED IN CANADA BY
HIGH TECHNOLOGY FIRMS

INTELLECTUAL PROPERTY RIGHTS	NUMBER OF FIRMS REGISTERING AN IPR IN CANADA	NUMBER OF IPRs REGISTERED IN CANADA IN LAST 3 YEARS	AVERAGE COST PER FIRM (CONSIDERING GOVERNMENT, LEGAL AND ADMINISTRATIVE COSTS)*
Registered Copyrights (n=71)	39	322	\$ 2,409
Obtained Patents (n=111)	37	4,832	\$ 5,204
Registered Industrial Designs (n=37)	15	61	\$ 3,955
Registered Trade Marks (n=140)	89	1,015	\$ 1,441

* Only includes firms that indicated the number and the amount of IPRs

**SOURCES USED BY HIGH TECHNOLOGY FIRMS TO
OBTAIN INFORMATION**

SOURCES	FIRMS INDICATING THE FOLLOWING SOURCES WERE USED "QUITE A BIT"	
	Number of Firms	Percentage of Responding Firms
<u>Questions Asked to firms</u>		
Discuss Information With Other Firms	47	32%
Examine Copyrighted Material	18	3%
Examine Patents	40	2%
Examine Industrial Designs	5	3%
Reverse Engineering	11	8%
Examine Integrated Circuit Designs	3	2%
Examine Plant Breeders' Rights	4	3%
<u>Answers Volunteered by Firms When Asked for Other Sources</u>		
Literature, Magazines	25	68%
Trade Shows, Symposiums, Conferences	9	70%
Information from Parent/Subsidiary	20	71%

**REASONS GIVEN BY HIGH TECHNOLOGY FIRMS FOR NOT
USING INTELLECTUAL PROPERTY RIGHTS**

REASONS	PERCENTAGE OF TOTAL MENTIONS** (n = 113)
The Protection Given by the IPR is Insufficient/Incomplete	34 %
More Information is Needed on IPRs	17 %
There is no Existing Appropriate Canadian IPR But One is Needed	13 %
IPRs Are Not Enforced	12 %
It Takes Too Much Time/Expense to Register IP	9 %
Too Much Information Has to be Revealed to Get Registered/Protected	5 %
Cost/Time Involved with Courts	4 %
Length of Protection	2 %
Other	5 %

* Firms were able to list three IPRs they were dissatisfied with and three reasons related to each IPR. The above are the total reasons listed, although most firms gave only one reason.

** Does Not Add Up Due to Rounding.

NUMBER OF LICENSING AGREEMENTS HELD BY
HIGH TECHNOLOGY FIRMS IN THE LAST THREE YEARS

INTELLECTUAL PROPERTY RIGHTS	NUMBER OF LICENSING AGREEMENTS IN LAST THREE YEARS	NUMBER OF FIRMS
Copyrights	264	37
Patents	267	58
Industrial Designs	24	8
Trade Secrets/Know How Agreements	482	23
Integrated Circuit Design	6	8
Plant Breeders' Rights	34	4

REASONS THAT HIGH TECHNOLOGY FIRMS WERE
DISSATISFIED WITH LICENSING
AGREEMENTS

REASONS	NUMBER OF TIMES MENTIONED*
Licensing Agreement Too Rigid	8
Given Insufficient/Incomplete Protection	6
Difficult to Deal with Companies/Owners	4
Cost	4
Did Not Get Exclusivity	4
Too Much Red Tape	2
International Standards Needed	2
License Did Not Provide What Was Anticipated	1
Other	2

* Firms were able to list three IPRs they were dissatisfied with and three reasons related to each IPR. The above are the total reasons listed, although most firms gave only one reason.

**HIGH TECHNOLOGY FIRMS' COMMENTS
ON THE RESTRICTIONS OR DIFFICULTIES
INVOLVED WITH LICENSING AGREEMENTS**

REASONS	NUMBER OF TIMES MENTIONED*
Cost	7
Not Given Complete Protection	2
Lack of Communication/Cooperation With Licensor	2
No Exclusivity	2
Restrictions From Foreign Government	1
Other	1

* Firms were able to list three IPRs they were dissatisfied with and three reasons related to each IPR.

HIGH TECHNOLOGY FIRMS' RANKING OF
SEVERITY OF INFRINGEMENTS

INTELLECTUAL PROPERTY RIGHTS	DEGREE TO WHICH INFRINGEMENTS ARE SERIOUS		
	Not Very Serious	Somewhat Serious	Quite Serious
Copyrights (n = 23)	35%	17%	48%
Patents (n = 25)	16%	23%	64%
Industrial Designs (n = 7)	43%	14%	43%
Trade Secrets (n = 20)	40%	10%	50%
Trade Marks (n = 21)	73%	5%	23%

NUMBER OF INTELLECTUAL PROPERTY RIGHTS
REGISTERED ABROAD OVER THE LAST THREE YEARS BY
HIGH TECHNOLOGY FIRMS

INTELLECTUAL PROPERTY RIGHTS	NUMBER OF FIRMS REGISTERING ON IPR ABROAD	NUMBER OF IPRS REGISTERED ABROAD IN THE LAST 3 YEARS
Copyrights (n = 23)	12	47
Patents (n = 66)	55	2,183
Industrial Designs (n = 14)	4	37
Trade Marks (n = 53)	36	1,499

PERCENTAGE OF HIGH TECHNOLOGY FIRMS
HINDERED OR PREVENTED FROM IMPORTING

TYPE OF IMPORT	HINDERED OR PREVENTED FROM IMPORTING?	
	YES	NO
Component/Materials (n = 117)	5%	95%
Machinery/Equipment (n = 85)	4%	96%
Technology (n = 93)	5%	95%

DIFFICULTIES HIGH TECHNOLOGY FIRMS HAD
IN IMPORTING

DIFFICULTIES	NUMBER OF MENTIONS*
Problems with Respect to Re-exports	4**
Difficulties Because No Canadian Law Exists	3
Foreign Customs/Export Restrictions	1
Conditions of IPR/Licensing Agreement	1
Problems with Canadian Customs	1

* Firms were able to list up to three IPRs and three reasons for each. The above are the total reasons given.

** One firm had three problems with three IPRs.

PERCENTAGE OF COURT CASES OF HIGH TECHNOLOGY FIRMS
THAT INVOLVED THE FOLLOWING INTELLECTUAL
PROPERTY RIGHTS

INTELLECTUAL PROPERTY RIGHTS (n = 43)	PERCENTAGE THAT INVOLVED THE FOLLOWING IPRs
Copyrights	7%
Patents	51%
Industrial Designs	2%
Trade Secrets	21%
Trade Marks	19%
Integrated Circuit Designs	-
Plant Breeders' Rights	-

SURVEY RESPONSE RATE FOR MEDIUM AND LOW TECHNOLOGY

	<i>Number of Firms Responding</i>	<i>Sample Size</i>	<i>Response Rate</i>
MEDIUM AND LOW TECHNOLOGY			
Clothing and Textile Industries	50	70	71%
Food Processing	20	30	67%
Breweries, Wineries, Distilleries	25	30	83%
Dairy Industry	20	30	67%
Furniture and Fixtures Industries	41	48	85%
Fabricated Metal Industries	26	30	87%
Agricultural implements	26	30	87%
Motor Vehicles and Parts	28	40	70%
Jewellery and Precious Metals	22	30	73%
Sporting Goods and Toys	49	62	79%
Total	307	400	77%

MEDIUM AND LOW TECHNOLOGY FIRMS'
EXPENDITURES ON RESEARCH AND DEVELOPMENT

R & D EXPENDITURES	PERCENTAGE OF RESPONDING FIRMS* (n = 134)
Under \$100,000	62 %
\$101,000 to \$1 million	33 %
\$1.1 to \$5.0 million	4 %
\$5.1 to \$25 million	2 %

* Does Not Add Up Due to Rounding

Missing: 154
Do not know: 19

INTELLECTUAL PROPERTY RIGHTS USED BY
MEDIUM AND LOW TECHNOLOGY FIRMS

INTELLECTUAL PROPERTY RIGHTS	NUMBER OF FIRMS	PERCENTAGE OF FIRMS
Copyrights	51	17 %
Patents	71	23 %
Industrial Designs	37	12 %
Trade Secrets	53	18 %
Trade Marks	195	64 %

**NUMBER AND AVERAGE COST OF INTELLECTUAL PROPERTY RIGHTS
REGISTERED/OBTAINED IN CANADA BY
MEDIUM AND LOW TECHNOLOGY FIRMS**

INTELLECTUAL PROPERTY RIGHTS	NUMBER OF FIRMS REGISTERING AN IPR IN CANADA	NUMBER OF IPRs REGISTERED IN CANADA IN THE LAST 3 YEARS	AVERAGE COST PER FIRM (CONSIDERING GOVERNMENT, LEGAL AND ADMINISTRATIVE COSTS)*
Copyrights (n=35)	18	598	\$3,629
Patents (n=63)	27	69	\$7,203
Industrial Designs (n=33)	15	61	\$2,818
Trade Marks (n=165)	104	873	\$2,374

* Only firms that indicated the number of IPRs are included.

SOURCES USED BY MEDIUM AND LOW TECHNOLOGY FIRMS
TO OBTAIN INFORMATION

SOURCES	FIRMS INDICATING THE FOLLOWING SOURCES WERE USED "QUITE A BIT"	
	Number of Firms	Percentage of Respond- ing Firms
<u>Questions Asked to Firms:</u>		
Discuss Information with Other Firms	20	26 %
Examine Copyrighted Material	5	7 %
Examine Patents	11	15 %
Examine Industrial Designs	5	7 %
For Reverse Engineering	1	1 %
Examine Integrated Circuit Designs	2	3 %
Examine Plant Breeders' Rights	1	1 %
<u>Answers Volunteered by Firms when Asked for Other Sources</u>		
Literature, Magazines	5	46 %
Trade shows, Symposiums, Conferences	5	56 %
Licensing Agreements with Parent/Subsidiary	8	100 %

**MEDIUM AND LOW TECHNOLOGY FIRMS' SATISFACTION
WITH CANADIAN INTELLECTUAL PROPERTY RIGHTS**

	PERCENTAGE BREAKDOWN OF SATISFACTION		
	Not Very Satisfied	Somewhat Satisfied	Very Satisfied
Term of Protection Given (n=80)	1 %	20 %	79 %
Subject Matter (n=7)*	3 %	30 %	68 %
Manner of Enforcement (n=70)	19 %	30 %	51 %
Remedies/Penalties (n=60)	15 %	37 %	48 %

* Does Not Add Up Due to Rounding

**REASONS GIVEN BY MEDIUM AND LOW TECHNOLOGY FIRMS
FOR NOT USING INTELLECTUAL PROPERTY RIGHTS***

REASONS	PERCENTAGE OF TOTAL MENTIONS (n = 122)**
It Takes Too Much Time/Expense to Register for an IPR	30 %
The Protection Given by the IPR is Insufficient/Incomplete	23 %
Need More Information on IPRs	12 %
IPR Not Enforced	7 %
Too Much Information Has to be Revealed to get Registered/Protected	6 %
There is No Existing Canadian IPR But One is Needed	5 %
Cost/Time of Court	5 %
The Protection is Too Specific	4 %
Other	6 %

* Firms were able to list up to three IPRs and three reasons for each. The above are the total reasons listed.

** Does not add up due to rounding.

NUMBER OF LICENSING AGREEMENTS HELD BY
MEDIUM AND LOW TECHNOLOGY FIRMS
IN THE LAST THREE YEARS

INTELLECTUAL PROPERTY RIGHTS	NUMBER OF LICENSING AGREEMENTS IN THE LAST 3 YEARS	NUMBER OF FIRMS
Copyrights	31	16
Patents	40	26
Industrial Designs	7	10
Trade Secrets/Know How Agreements	134	19
Integrated Circuit Designs	-	-
Plant Breeders' Rights	-	-

**REASONS THAT MEDIUM AND LOW TECHNOLOGY FIRMS
WERE DISSATISFIED WITH LICENSING AGREEMENTS**

REASONS*	NUMBER OF TIMES MENTIONED*
License Did Not Provide What was Anticipated	5
Expense	3
Licensing Agreement Too Rigid	2
Given Insufficient/Incomplete Protection	2
Difficult to Deal with Companies/Owners	1
International Standards Need to be Uniform	1

* Firms were able to list up to three IPRs and three reasons for each. The above are the total reasons given, although most firms gave only one reason.

**MEDIUM AND LOW TECHNOLOGY FIRMS' COMMENTS
ON THE RESTRICTIONS OR DIFFICULTIES INVOLVED WITH
LICENSING AGREEMENTS**

REASONS*	INTELLECTUAL PROPERTY RIGHTS					TOTAL
	Copyrights	Patents	Indust- rial Designs	Trade Marks	Trade Secrets	
Conditions of Licensing Agreement	-	1	1	3	1	6
Lack of Communication/ Cooperation with Licensor	3	1	1	-	-	5
Cost	1	-	-	3	-	4
Restrictions From Foreign Governments	-	-	1	-	-	1
Not Given Complete Protection	-	1	-	-	-	1

* Firms were able to list up to three IPRs and three reasons in each. The above are the total reasons and IPRs listed.

NUMBER OF INTELLECTUAL PROPERTY RIGHTS REGISTERED
ABROAD OVER THE LAST THREE YEARS BY
MEDIUM AND LOW TECHNOLOGY FIRMS

INTELLECTUAL PROPERTY RIGHTS	NUMBER OF FIRMS REGISTERING AN IPR ABROAD	NUMBER OF IPRs REGISTERED ABROAD IN THE LAST 3 YEARS
Copyrights (n=10)	4	21
Patents (n=26)	15	63
Industrial Designs (n=14)	9	70
Trade Marks (n=54)	43	453

**PROBLEMS OR DISINCENTIVES ENCOUNTERED ABROAD BY
MEDIUM AND LOW TECHNOLOGY FIRMS**

REASONS*	INTELLECTUAL PROPERTY RIGHTS				PERCENTAGE OF TOTAL MENTIONS (n = 20)
	Copyrights	Patents	Trade Marks	All IPRs	
Expense of/Length of Time to Register IPRs	-	4	5	-	45 %
Infringements/Piracy/ Counterfeiting	1	1	2	-	20 %
Lack of Penalties/ Remedies	1	1	2	-	20 %
Difficult to Learn International Laws/ Procedures	-	-	-	1	5 %
Restrictions or Practices of Foreign Government	-	-	1	-	5 %
Other	-	-	-	1	5 %

* Firms were able to list up to three IPRs and three reasons for each. The above are the total reasons given, although most firms only gave one reason.

DISTRIBUTION OF NUMBER OF EMPLOYEES
IN THE MAJOR COPYRIGHT USERS' GROUP

NUMBER OF EMPLOYEES	NUMBER (n = 82)	PERCENTAGE OF RESPONDING FIRMS*
Under 50	69	84 %
50 to 100	6	7 %
101 to 250	2	2 %
250 or more	70	6 %

* Does Not Add Up Due to Rounding

Missing: 2

**REASONS GIVEN BY MAJOR COPYRIGHT USERS
FOR NOT USING INTELLECTUAL PROPERTY RIGHTS**

REASONS*	PERCENTAGE OF TOTAL MENTIONS (n = 16)**
The Protection Given by the IPR is Insufficient/Incomplete	38 %
IPR Not Enforced	19 %
Need More Information on IPRs	13 %
It Takes Too Much Time/Expense to Register IPR	13 %
The Cost and Time Involved with the Courts	6 %
Other	13 %

* Firms were able to list up to three IPRs and three reasons for each. The above are the total reasons listed, although most firms gave only one reason.

** Does not add up due to rounding.

NUMBER OF LICENSING AGREEMENTS
HELD BY MAJOR COPYRIGHT USERS
IN THE LAST THREE YEARS

INTELLECTUAL PROPERTY RIGHTS	NUMBER OF LICENSING AGREEMENTS IN LAST THREE YEARS	NUMBER OF FIRMS
Copyrights	490	15
Patents	9	4
Industrial Designs	-	-
Trade Secrets/Know How Agreements	3	2
Integrated Circuit Design	-	-
Plant Breeders' Rights	-	-

**PROBLEMS OR DISINCENTIVES ENCOUNTERED ABROAD
BY MAJOR COPYRIGHT USERS**

REASONS	PROBLEMS OR DISINCENTIVES ENCOUNTERED ABROAD WITH COPYRIGHTS		
	United States	Great Britain	Asia
Registration Too Expensive/ Time Consuming	1	-	-
Were Infringed/ Pirated/Counterfeited	-	-	2*
Countries Refused to Pay Royalties	-	1	-
Other	-	1	-

* One firm indicated 2 difficulties

