

Capturing Value From Innovation

BY DAVID L. TEECE*



Factors firms consider self-exploitation of technology may not be help guide to success

Despite the supposed existence of "first-mover" advantages, first-to-market innovators with new products and processes do not always win. Sometimes where firms were first to commercialize a new product, but did not participate in the profits that were subsequently generated from the new product, are increasingly common.

The archetypal example of the phenomenon was the experience of the British company, ICI, with the body scanner. In the early 1960s, ICI was in a variety of product lines including photographic records, movies, and advanced electronics. It had developed high-resolution TVs in the 1950s, pioneered airborne radar during World War II, and developed the U.K.'s first all-solid-state computers in 1964. In the late 1960s, Godfrey Hounsfield, an ICI senior research engineer, established that computerized axial tomography (CAT) was viable for generating cross-sectional "slices" of the human body. This turned out to be the greatest advance in radiology since the discovery of X-rays in 1895. While ICI was initially successful with its CAT scanner and Hounsfield received a Nobel prize, within six years of its introduction into the U.S. in 1973, the company had lost market leadership, and two years later dropped out of the CAT scanner business.

Other examples include Dowcor, which introduced the plastic calculator, but was unable to withstand competitors from Texas Instruments, Hewlett Packard, and others, and went out of business. Xerox failed to succeed with its entry into the office computer business with its

"Star" system, even though Apple succeeded with the Macintosh, which contained many of Xerox's key product ideas, such as the "mouse" and "windows."¹ The de Havilland Comet saga has some of the same features. The Comet 1 jet was introduced into the commercial airline business two years or so before Boeing introduced the 707, but de Havilland was unable, for reasons discussed later, to capitalize on its substantial early advantage.

If there are innovators who lose, there must be followers and/or imitators who win. A classic example is IBM with its PC line, a great success since the time it was introduced in 1981. Neither the architecture nor components embedded in the original IBM PC were previously considered advanced state technology, nor was the way technology was packaged a significant departure from then-current practice. Yet the IBM PC was absolutely successful and established MS-DOS as the leading operating system for 16-bit PCs. By the end of 1984, IBM had shipped more than 500,000 PCs. Similar success stories can be attached to Japanese companies in VCRs, color TV, computer tomography, and DRAMs.

LACK OF IMITATION

The most fundamental reason for innovators with good, marketable ideas fail to enter or open up markets successfully is that they are operating in an environment where their know-how is difficult to protect. This constrains their ability to appropriate the economic benefits arising from their ideas and their product/process concepts. The two most important environmental fac-

tors conditioning this are the efficiency of legal protection mechanisms and the nature of those mechanisms.

Information distinctive technological capabilities usually derive from knowledge they have developed. But whereas mechanism assets like machines have clear rights of ownership, the know-how and skills developed by the firm cannot be owned by the firm unless they fall into one or another of the various categories of recognized intellectual property — patents, copyrights, trade secrets, trademarks — in which case title can be established, rights of management recognized, and limited protection afforded.

Even when intellectual property protection exists, it does not confer perfect protection, although patents do afford considerable protection of intellectual property in some instances, such as with new chemical products and drugs.² Many patents can be "worked around" at modest costs. Other patents provide little protection because the legal and financial requirements for upholding their validity are too proving their infringement are high. And copyright can often be worked around as it is the expression of ideas and not the ideas themselves that the law protects.

In some industries, particularly where the innovation is embedded in processes, trade secrets are a

*The U.C. Irvine, "Knowledge and Capabilities as Strategic Assets," in D. Foray (ed.), *The Geographic Dilemma*, Cambridge, MA: Ballinger, 1987.

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¹ See "The Lotus Has a Way from Xerox," *Fortune*, September 1, 1985.

viable alternative to patents. Trade secret protection is possible, however, only if a firm can put its product before the public and still keep the underlying technology secret. Usually, only chemical formulas and industrial-commercial processes can be protected as trade secrets after they are "out."

The degree to which knowledge about an innovation is tacit or easily codified also affects the ease of imitation. Tacit knowledge is, by definition, difficult to articulate and so is hard to imitate or to pass on unless those who possess the knowledge can demonstrate it to others.¹ Codified knowledge is easier to transmit and receive and is more exposed to industrial espionage.

Empirically, then, one can divide appropriability regimes into those that are "weak" (innovations are difficult to protect because they can be easily codified and legal protection of intellectual property is ineffective) and those that are "strong" (innovations are easy to protect because knowledge about them is tacit and/or they are well protected legally).² Despite recent strengthening of the protection of intellectual property,³ strong appropriability is the exception rather than the rule. Only in a few industries, most notably drugs and chemicals, is intellectual property thought of as the main mechanism to isolate innovators from followers.⁴

As we shall see, innovators who try to enter markets where intellec-

tual property protection is good have a reasonable chance of winning commercially, in weak regimes they often lose. Since strong appropriability is the exception rather than the rule, innovation in most industries must adopt clever market entry strategies if they are to keep imitators and other followers at bay.

MARKET-ENTRY STRATEGIES BEFORE THE EMERGENCE OF A "DOMINANT DESIGN"

The best market-entry strategies for innovators with good, marketable ideas depend not only on the appropriability regime, but also on where the industry is in its development cycle.⁵ In the early stages of development of many industries and product families, designs are fluid, manufacturing processes are loosely and adaptively organized, and generalized capital is used in production. Competition among firms manifests itself in competition among designs, which are markedly different from each other.

At some point in time, and after considerable trial and error in the marketplace, one design or a narrow class of designs begins to emerge, either naturally or through sponsorship, as the more promising. Such a design must be able to meet a whole set of user needs in a relatively complete fashion.⁶ The Model T Ford, the Douglas DC-3, the IBM 560 and the VCR are examples of dominant designs in the automobile, aircraft, computer, and VCR industries, respectively.⁷

The emergence of a dominant design substituted in of great significance to the strategic positions of the innovator and its competitors.⁸ Once a dominant design emerges, competitors engage to price and

design their designs. Competitive success then shifts to a whole new set of variables. Scale and learning become much more important, and specialized capital is developed and deployed as incumbents seek to lower unit costs through exploiting economies of scale and learning. Reduced uncertainty over product design provides an opportunity to invest in specialized long-lived investments.

In any case, none of these threats need unduly worry an innovator who is preparing to enter a market and has good intellectual property protection, because the innovator knows that its design must have some part of the eventual dominant design. Even if the innovator comes to market in this early phase with a novel product concept but the wrong design, good intellectual property protection will afford the time needed to perform the trials needed to get the design right. The best initial design concepts often turn out to be hopelessly wrong, but if the innovator possesses an impenetrable shield of patents, or has technology that is simply difficult to copy, then the market may well afford the innovator the necessary time to ascertain the right design without being eclipsed by imitators. The innovator can thus proceed through this early phase of industry development confidently, concentrating the bulk of its strategic thinking on how to win after this dominant design emerges, as discussed below.

In the early design development of an industry with weak appropriability, the innovator has to recognize that although it may have been responsible for the fundamental scientific breakthroughs as well as the basic design of the new product, as with Ampex and the VCR,⁹ imitators may enter the fray, modifying the product in important ways, yet relying on the fundamental design pioneered by the innovator. Unless the game of incremental steps and a dominant design emerges, the innovator might well end up positioned disadvantageously relative to a follower. When imitation is possible and occurs coupled with design modification before the emergence of a dominant design, followers have a good chance of having their modified

1. See H. Polster, *Personal Knowledge: How We Keep It and How We Use It* (New York: Harper & Row, 1984).

2. Of course, several appropriability regimes will eventually emerge. Hence, one regime that may not strictly fit its definition, as is the instance.

3. In fact in the U.S., the 1980s have witnessed a marked strengthening of intellectual property. For instance, the Copyright Act (reauthorization law) tends to include one element of competition in the list of protected works. In 1980, the Copyright Act was amended to computer programs. Perhaps of greater significance has been the reving in October 1980 of copyright laws which subject patent infringers to civil and criminal penalties. The Patent and Trademark Office in connection with pending patent applications and patent infringement cases from the U.S. District Courts. This statute has brought forth uncertainty and greater strength in the U.S. Patent system.

4. Polster, *op. cit.*, 1987.

5. For a summary analysis of market entry in an industrial innovation, "Innovation Review 80" (January-July 1986), pp. 40-47.

6. Sometimes the initial set of fits is through small design errors, or the design that is not the best of available alternatives.

7. A dominant design does not by definition, can only be identified prior to extensive use of a number of industries, such as rapid sales growth, can be observed that can help one predict dominant design.

8. In addition to the dominant design and standards under sponsorship. This is achieved a viable strategy, particularly in network industries.

les News

• Licensing
• Societies



MARCH 1981

Licensing Executives Society
International

LES INTERNATIONAL PRESIDENT

Tribute to World Crisis in Persian Gulf

BY FERNANDO MÖLLINGER
President, LES International



I began writing this letter with the hope — shared by all the membership of our organization — that the military confrontation in the Persian Gulf would easily be avoided. As I packed to fly to Mexico City war began, despite the efforts of governments and international organizations to obtain a negotiated settlement with the Government of Iraq. Let us hope that when the March issue of *les Nouvelles* reaches you, we may refer to this episode as part of the history — with no doubt a sad part.

To our members in Israel, Saudi Arabia, J. Möllinger and Yemen our hope that war does not affect their families and property. And to all our members from those countries with an active participation in the conflict, our sincere hope that their fellow citizens may return back safe as soon as possible.

An Executive Committee Meeting was planned to take place in Mexico City on January 26 and 27, together with the Committee Chairpersons, more than half of whom had confirmed their participation, various important matters were in our agenda for said meeting.

Because of the situation in the Persian Gulf some of the participants informed us that they had decided to cancel their trip, and since that left us without a quorum, the meeting had to be cancelled. Sam Layton and Peter Blackett decided to travel to Mexico, so the three of us held informal discussions on some items that were in our agenda. We also shared some social meals with members of the board of LES Mexico who had worked very hard to prepare our meeting. Our sincere thanks to Cesar Flores, Gloria Iba and all LES Mexico for their work and efforts, and also for their understanding.

A seminar organized by LES Mexico took place on January 26, and I am happy to say that it was a great suc-

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4th PAN-EUROPEAN CONFERENCE JUNE 6-7

"TOWARD A BROADER EUROPE"
4th Pan-European Conference

JUNE 6-7, 1981
FRANKFURT

The 4th Pan-European Conference will be organized this year by LES Germany in Frankfurt on June 6-7.

Germany, site of this 4th conference in the series of conferences of the European LES Societies, only a couple of months ago completed the unification of the former two German states and is in the middle of the process of the European unification, which is known under the heading "Europe 1992." These two developments of major importance will be taken up by speakers. Attendees will receive an updated overview.

For the topic of "German Unification," LES Germany welcomes as a keynote speaker a prominent member of the Federal Ministry of Justice, Dr. von Moltke-

schult, who will address the unification of the two very different bodies of law of unified law property.

The second presentation on the friendly will be given by successor of the President in Berlin, the body-making of the former East German Companies. The presentation will deal with the economic situation in the new federal states.

Second Day

The second day will address the European status — status of "Europe in the Year 1992" and will include a presentation on "European Unification in the Area of Intellectual Property Law."

"Europe in the Year 1992" will be in-

duced by a keynote speech to Mr. Kesseler of the EC Commission on the developments with regard to the European unification. This will be answered by two speakers: John Williams who, under the topic "Fortress Europe," may challenge some of the developments. An update on EC proposals, directives and regulations rounds out the morning presentations. It will be given by a member of the staff of the German Parliament Representative to the Community.

In the afternoon, a very ambitious program has been put together to inform participants first on the harmonization of technical standards in the EC, which will be undertaken by Dr. Gutter of Siemens Germany. It will be followed by important speakers, Mr. Jonathan Paul of the Commission, and Mr. Bruce Carsting of the European Patent Office, who will present the progress of European unification in the areas of technology transfer agreements.

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International President

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less, with more than 50 participants.

I certainly hope to be able to meet as soon as possible with the Executive Committee and Committee chairpersons in order to discuss the activities of the different committees for 1991.

This subject, which is the basis of all our activities, makes me go back to Jean-Marie Fortier's letter published in last November in September 1990, which he encouraged an active participation of members in committees. I wish to insist in Jean-Marie's appeal, and in particular I wish to encourage our members to let us have their views and suggestions on what they consider must be accomplished by the various committees. If in addi-

tion to that they can play an active role it will be of great help.

Again, I wish to stress the importance I give to the educational activity. We need ideas and manpower to put them into practice. Many of you should be excellent contributors and speakers, and I therefore encourage you to contact Mosley-Foodstuffs and give your name and topics in which you have experience.

Finally, I should like that we were all distressed to learn that Michel de Haas had died. He will be greatly missed, not only by those who worked with him, but also by many of us who treasure the privilege of knowing Michel and his commitment to the LES objectives. We all share the pain of his family and business associates at his sad time.

Pan-European Conference June 6-7

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The two national property rights. The three speeches are followed by reports of representatives of various European countries on the harmonization of the intellectual property laws in the Member States concerned.

The venue of the conference, Frankfurt, located in the center of Germany, is a major business center. Frankfurt is the nation's financial center, and it seems to become the financial center of Europe, too. Even though Frankfurt is one of the early foundations of German cities, where even the Romans had a well-known estate close by, Frankfurt today is a very modern city with its skyline dominated by skyscrapers. Visitors will find, however, a variety of buildings dating from earlier times, like the House of the Parliament, the place where the first German parliament convened. The conference itself will be held at the Frankfurt Airport Conference Center, across the street from Frankfurt Rhein-Main airport.

A committee for the conference has not yet been set. However, it is expected to be in the range of DM 800,000 to DM 900,000 — including travel on Thursday and lunch on Friday and all refreshments during the breaks.

Rooms have been reserved for the participants at the Sherman Hotel, which is in the same building as the conference rooms. The hotel rooms being reserved under "LES Meeting" at a reduced rate of DM 260, per night for a single room and DM 290 per night for a double room.

To make reservations with the hotel, please contact the Sherman Hotel directly by Tel: +49 69 887771 200-05, or Fax: +49 69 88773311.

Further information on the conference may be obtained from the secretary of LES Germany, Mr. Günter Gortz, c/o Organisation & Support, Hans-Tümpel-Str. 30, 4000 Düsseldorf (Tel: +49 231 136087, Fax: +49 231 136088).

LES Germany is pleased to announce that presiding the 4th Pan-European Conference (June 6-7) in Frankfurt will be Health Care Director, sponsored by the Health Care Committee of LES International. It takes place in the same meeting facilities on June 6-7, 1991. Following the conference there will be the International Property Meeting on June 8-9, in Wiesbaden, Hotel Nassauer Hof.

PROGRAM

- "TOWARD A BRADER EUROPE"
- **Thursday, June 6, 1991**
- Opening Remarks by LES Secretary, Dr. Peter Gortz, Frankfurt
- Introductory Remarks by Program Chairman Oliver Kuster, Düsseldorf
- Welcome Address to Government Representatives
- "German Intellectual Property Rights"
- The Utilization of the Intellectual Property Rights, License Agreements Before and After Unification (Ministerial Council, Ministerial Federal Ministry of Justice, Bonn)
- Economic Situation in the Five New Federal States (Governor of Thuringian State, Erfurt)
- Dinner at one of the typical Auldfrank restaurants in Schönstadt/Nahe
- **Friday, June 7, 1991**
- "European Patent Law 1991"
- Europe 1992: The European Intellectual Property, EC Commission, Brussels

Proposals — Intellectual

- Harmonization (Intellectual Law Systems), Deputy United States Trade Representative, Washington
- Update on EC proposals, draft directives, draft regulations in general (Minister of the East of German Parliament Representative to the Community Conference with Lucifera ABBAS)

Government

- "European Directive in the Area of Intellectual Property Law"
- Harmonization of Patenting, Copyrights in the EC (Dr. Günter, Gortz, Mainz)
- Technology Transfer Agreements under the EC Competition Rules in the Internal Market (Jonathan Peck, EC Commission, Brussels)
- Intellectual Property Rights in the International Market (Gortz, European Patent Office, Munich)
- Report of Representatives of European Countries on Harmonization of Intellectual Property Laws in the Member States (Gortz, Ulla, President, LES Spain, Madrid, Jimmy Dixon, President, LES Management, London, Jean-Marie Fortier, Vice-President, LES France, Paris, Thomas Tump, President, LES Germany, Düsseldorf, further speakers to be announced)

Please note: Following the Pan-European Conference there will be the International Delegated Meeting on June 8-9 in Wiesbaden, Nassauer Hof.

LES Colombia Adds Ecuador to Name

BY ERNESTO CAVELER
President, LES Colombia/Ecuador
The Annual Meeting of LES Colombia was held on November 28, 1990. Two major events occurred.

The society presented a commemorative video plaque to the Superintendent of Industry and Commerce Ms. Fabiola Vilanova de Pineda for outstanding service in promoting intellectual property and technology transfer in Colombia.

The society changed its name to Association of Professionals in Intellectual Property of Colombia, LES Colombia/Ecuador.

This change of name reflects the substantial Ecuadorian membership in the society and also the broad wish of its members to promote regional integration as a means to achieve economic development.

The society decided to rename the same Board of Directors for a new period.

LES China Holds First Annual Meeting

On November 6-8, 1986 LES China held its first annual meeting at the Jinshan Hotel, which is located at the site of the Shanghai International Complex (SIC), about 180 kilometers northeast of Shanghai. The location was significant in that SIC is one of the best examples in China of the benefits of licensing.

The complex has nearly 800 process units, mostly producing basic chemicals from complexes all over the world. SIC also boasts an advanced infrastructure with all necessary power and other utilities, an experienced technical force, and one of the best transportation ports in all of China.

An excellent attendance in excess of 300 was achieved and an entire program, featuring three Chinese speakers, four foreign speakers and three workshops, was presented. Welcoming the attendees at an impressive opening reception was Wang Yaxiang, Vice-President and Senior Economic Officer of COTIC in Beijing, and Wang Jiating, President of the Shanghai International Complex. Larry Evans, Vice-President of LES U.S.A. Canada, brought greetings from Flanagan Holdings, President of LES International, and from David Lees, President of LES U.S.A. Canada. Larry noted and that it was his company (then The Standard Oil Company) that granted the first U.S. license to China for an ethylene plant at the very complex in 1971.

First Speaker

The first speech was by Liu Guozhen, Chairman of the Shanghai-Sino Council of COTIC, whose subjects were the existing Sino-foreign developments and the steps of technology transfer in Shanghai. Then, Wang Jiating, Vice-Director General of MOERT's Technology Transfer Bureau, discussed "Technology Transfer Policy and Management from the Chinese Government's Point of View."

Larry Evans of BP America Inc. spoke on November 6 on "Licensing From the Standpoint of a Large Multinational Corporation." Additionally, Larry briefly covered U.S. antitrust laws as they relate to licensing and the history of LES International.

On November 7, Cui Hanzhi, General Manager of COTIC's Legal Division, discussed "Problems in License Agreements — Mistakes by Chinese Regulators." Hansjooon of Sulzer and Bahner of Schlupp of Munich discussed "Licensing in Europe After 1986," and Roger Taylor of Pervegas, Heidelberg, Frankfurt, Germany & Dunbar, of Washington via Tokyo discussed "Licensing with Japanese Companies."

On November 8, Fleury de Rube (of

Davies Ryan & Bellows of Melbourne) presented a paper entitled, "The MNC's in Licensing." Then, the group had four workshops:

1. Drafting License Agreements.
2. How to Handle Licensing Disputes.
3. Trademark Licensing.
4. The Basics of Licensing presented by Wang Jiating, General Director of the COTIC Patent Agency - Beijing.

New Officers

On Thursday November 8 afternoon, the following new officers were elected:

- | | |
|--------------|---------------------|
| Wang Yaxiang | - President |
| Shang Xiumin | - Vice-President |
| Wang Yuxiang | - Vice-President |
| Yang Shoujun | - Vice-President |
| Bao Guozhen | - Secretary General |

International Communications Committee to Aid Societies

BY BRUNNIE WILSHAGE Chairman, International Communications Committee

In an organization as widespread and diverse as LES, good communications are essential. To provide this, the International Executive has established an LES International Communications Committee, whose task it is to develop or improve those communications between International, the International Committees, National Chapters, members and other organizations.

Members of the Committee include the International President and Secretary, Chairman of the Image, Membership, Education, Publications and Sponsorship committees and regional representatives from North and South America, Europe, the Far East, Australia/New Zealand and South Africa.

The new Committee held its first meeting at New Orleans in October 1986 under my chairmanship. We studied the whole requirement for better communications and recommended to the International Delegates Meeting that priority should be given to a number of specific points. These recommendations were accepted and are now being put into effect.

National Societies

Among the various tasks to be undertaken, action has been taken to enhance links between national societies and the Executive so that the national programs receive proper prominence in the forthcoming activities section.

At the same time, National chapters have been asked to provide an update of their publications, videos, training aids, etc. so

Bao Guozhen - Chairman
Yu Jianjun - Chairman

The second annual conference was planned for October-November 1991 and it, like this one, will be hosted after a typical LES International conference. Minutes will be published for members, including speeches, keynote and panel questions, etc. Also, the group will partner, jointly with the China APTI group, an International Property Journal.

Local groups will be formed in Shanghai, Guangzhou, Xiamen (Fujian) and Shenzhen.

Membership will be greatly expanded to more than 300 because Lu Xunxi of Hong Kong will be in a position to supply hard currency to ease with new members in most international class obligations.

that this information can be published and shared among all LES members worldwide.

With regular international meetings, it is planned to hold a welcoming and briefing session for new delegates to international meetings and committees at the next International Delegates Meeting scheduled for June 28, 1991 in Washington. Prior to this, the Committee will collect names of references for the various committees to inform the work.

Protocol

A protocol of LES International and a manual for the guidance of international delegates will also be prepared.

In addition, the Communications Committee has taken over from the Publications Committee the responsibility for the LES International Officer's Vite. The latest update was mailed on January 15 to all those members who have a role in International and are listed in the Directory. Please be sure to submit any changes (address corrections) to me as soon as possible so that this information is available for the next update.

Finally, may I add that the Committee can do significantly and not to hinder. Where good contacts exist, please continue to use existing links. This committee speaks to contacts with Jack Chen concerning the Annual Membership Directory. However, if you have any difficulty in deciding who to contact on any subject, or are having any difficulty in making the connection, the Communications Committee will be happy to assist by establishing the link.

LES South Africa Plans Conference on Joint Ventures

LES South Africa will hold a conference at the Victoria Falls in Zimbabwe July 7-20, 1987.

The program will consist of a series of seminars/workshops (which will be held prior to the conference), covering subjects, trademarks, designs and copyright. There will be a number of workshops at the conference, presented by experts in their field, both from South Africa and abroad, on a number of topics, such as:

1. Safeguarding Intellectual Property.
2. Exchange Control and Tax Considerations.
3. Alternative Dispute Resolution.

4. Cross-Border Licensing Considerations and Agreement Structuring.
5. Accounting Skills.
6. Case Study of a Local Joint Venture.
7. Termination of a Joint Venture — Practical Aspects.

In addition to the conference, arrange-ments will be made for visiting Victoria Falls, game-viewing in Hwange and visit to Kruger Park. For the more adventurous, there is also wilderness rafting on the Zambezi River.

Indicative accommodation rates are:
Victoria Falls Hotel
Double 1,094 (4.00 per person)
Single 550 (2.00 per person)

Malawi Sun Hotel
Double 450 (1.00 per person)
Single 225 (0.50 per person)
These rates are inclusive of accommodation, breakfast, lunch, dinner and tips.

The cost of the conference will be in the region of \$2,000.

Further details are available from the Secretary, Roy Fungy, or Vice-President, Alan Lyles — telephone: Johannesburg 279-9111 or 27-7277. For numbers Johannesburg 804-4995 or 22-8000. Postal address: P.O. Box 41880, Conyngham, South Street 2195.

LES Germany Publishes First Volume On International Licensing Regulations

By PETER CHROCCIEL,
President, LES Germany

Back in 1987, the managing board of LES Germany adopted a resolution to promote publishing of material on licensing issues, an aim of LES Germany established in the bylaws. Professor Dr. Dieter Pfaff, Director of the Institute for Intellectual Property Rights and Copyright of the Ludwig-Maximilians-Universität München, a member of the managing board of LES Germany, was entrusted to lay the foundation for this work and to supervise a so-called "LES Series." Now, the first volume on "International Regulations" is about to be published.

Aim of the series is to provide for a comprehensive collection of the legal material relating to licensing that could be helpful to the practitioner to easily find the relevant provisions or relevant cases in doing licensing agreements, together with any available recommendations in this area.

Since 1987 work on the project has continued to provide for an overview of the pertinent provisions and to list an outline together with a detailed index. The volumes list all statutory provisions for licensing (cases that must be considered for licensing agreements), but, moreover, also information on recommendations, sample agreements and addresses of concerned public authorities or public enterprises in some of the countries.

The collection of this material is subdivided in "international" (e.g. Paris Convention Rules), "regional" (e.g. EEC, Austria Law) and "national" regulations (e.g. regulations found in the Law of Contracts of the States on Contract of License).

First enterprises of publications will now be a volume entitled "International Regulations," which contains all international and regional regulations. The volume is to be published by the end of this year.

National regulations obtain from more

than 40 countries will be collected in the volume under regional topics. Examples are volumes on EEC countries, EFTA countries, COMECON countries, and important industrial countries such as the U.S.A., Canada and Japan, and one or more volumes on developing countries. All national volumes will have the same outline, which breaks down the legal material into certain topics enabling the practitioner to easily find the necessary information. Each volume will also include an exhaustive index.

All international regulations or information will be printed in original language together with the title. The title of the regulation, however, will be translated into English and will also be listed in English in the index. In that way, a translation of the text will always be the best of the user, which should avoid misinterpretation.

Here are the pertinent regulations

collected:

Members of LES Germany actively contributing in the collection of the material will ensure that a "foreign" partner will work together with their national material. These foreign partners will be contacted directly in their own subject material to incorporate. A questionnaire provided to include the addresses of the German and foreign LES members who have contributed to the collection. In that way, other LES members will be in a position to send any interesting material to the attention of the contributors.

The fact that the published material will be in its original language, but together with an English translation and a German and English outline and index, will further the worldwide use of the collection.

Copies for the volume on International Regulations, which comprises about 100 printed pages, may be placed with any bookstore or directly with the secretary of LES Germany, Günter Cordes, Dresden & Ruppert, Raif-Pfander Str. 20, 8000 Darmstadt.

Changes in Australian Law Reported

By JAMES LUON*

Changes to the Australian Copyright Act 1968 relating to the overlap between copyright and design came into effect on October 1, 1986, a date much later than originally envisaged. These changes have been effected by Sections 18 and 71 of the Copyright Amendment Act 1986 ("the Amendment Act"), which repealed and replaced the provisions of the previous law dealing with this area.

Overview of the Changes

The most significant alteration to the previous law introduced by the Amendment Act is that copyright will now extend to protect most two-dimensional designs from being copied. The changes also have the effect that copyright will generally not extend to

protect three-dimensional designs where articles bearing such designs have already been marketed in Australia or elsewhere by authorized persons. Any previous ability to protect three-dimensional designs by relying on the copyright in the drawing or plan of such designs has been removed.

The Changes in More Detail

The Amendment Act divides designs into those consisting solely of features of two-dimensional pattern or ornament applicable to a surface or an article and other designs. The first category of designs (hereinafter referred to as "two-dimensional designs"), which are reproductions of original artistic works, will not be protected by copyright against unauthorized reproduction even if such designs have

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Meetings Continue Despite World Turmoil

BY DAVID S. GREY

President, LES U.S.A./Canada



Dr. Grey

of ideas between the floor and the speakers.

April will be a busy month with three separate events occurring. The Central/Western Regional Meeting on April 4-8 at Breckenridge, Colorado, should be installed there anything other than catastrophic events by all the snow they have. The Canadian Regional Meeting in Ottawa on April 18-19 is likely to elicit its typical success. The Centennial are unflagging. Lastly, the Seminar on Technology Transfer 1987 begins on April 29 in New York City. This event is always oversubscribed, and registration is limited this year to 75. I urge you to register early if you have not already done so.

The Long Range Planning Committee conducted a survey of the Membership of LES U.S.A./Canada last year

and came up with some interesting statistics. Did you know that 8% of our members are engaged in university licensing that 20% of our members are Ph.D.s that 40% of our members specialize in medical, pharmaceutical or biotechnology industries and another 20% are in the closely related chemical industry (what happened to the railroad, steel and machine industry that nearly 10% of our members are from Canada and another 50% are in the Eastern Region of the U.S.? It is interesting that only about 27% of our members engage in licensing activities more than 50% of the time. It seems many of our members are doing things other than licensing. A much more complete report on the survey was prepared for publication in last November and it appears somewhere in this issue. Many thanks to J. Terry Lynch, Jack Barnes and their associates for their help in conducting the survey.

Lastly, I want to remind you that LES U.S.A./Canada plans to send a Delegation or two to Eastern Europe this fall in a fact-finding mission on policies of technology transfer and protection of intellectual property, and to give seminars on related subjects. The U.S. Department of Commerce is supporting the effort as is the Ministry of External Affairs and International Trade of Canada. We already have a number of volunteers to participate in the Delegation, and if you want to be considered, please write me, Andy Mey of PMA Boston. The planning is well underway, and the time for joining a Delegation is now extremely short.

U.S.A./Canada Membership Survey Results Show Changes

BY J. TERRY LYNCH

The importance of licensing in world commerce has never been greater. An ever increasing number of companies and governmental bodies recognize that protection of their intellectual property rights is an absolute necessity if they are to successfully compete on a global basis.

This realization has fueled strong growth in LES U.S.A./Canada. In order to continue the Society's tradition of serving the needs of licensing professionals by offering a range of relevant programs and activities, it is important that the Organization maintain an accurate picture of its constituency. To this end, LES U.S.A./Canada recently undertook the task of updating and expanding the information available on its membership. During the summer of 1986, a survey form was prepared and mailed to the membership. Out of a total mailing of 2,750 questionnaires, 1264 responses were received. The results were formatted, entered into a computerized database, and analyzed. Preliminary findings were presented to the Board of Trustees at the annual meeting in New Orleans.

SURVEY QUESTIONS AND RESPONSES

The detailed results of the survey are given in the attached tables and selected items summarized below.

Occupation — "Attorneys and Patent Agents" in private practice make up the largest group of respondents (22%), followed by "Corporate Licensing" (17%), "Corporate Patent Attorney, Counsel, Agent" (11%), "Corporate Diversification, Acquisition, Business Development" (9%) and "University Licensing" (8%).

Education — As might be expected, LES members are a well educated group. 89% have at least an undergraduate degree, 49% graduate law degrees and 20% are Ph.Ds.

Industry Specialization — Almost 50% of the respondents specialize in the medical/pharmaceutical, or biotechnology industries. An additional 28% are in the closely related chemical industry. Respondents specializing in the computer field are about evenly split between hardware (8%) and software (7%).

Location — The Eastern U.S. holds

about half of the membership, Central a quarter, West 18% and Canada/Asia. The data further is probably a reflection of the distribution of members across industry lines.

Licensing Activities — Almost half of the respondents said they spent 25% of their time on licensing while only 6% are engaged in it more than 50% of the time. This may be somewhat surprising finding and could be indicative of a shift in the primary job focus of the membership.

The membership is almost evenly split between those who have been engaged in licensing for five years or less, so to those years and more than 100 years.

Seventy-five percent are involved in at least some international licensing. Of these, about a third deal with Pacific Rim countries and a half with Europe. Two of the respondents are presently working with organizations or companies in South America or the Soviet Union.

LES Activities — Most of the work in LES U.S.A./Canada is being done by less than 10% of the membership; the actual

(Continued on next page)

II. Attendance (regional, national or international)

123 meeting in the past three years

A. Yes	55.4%
B. No	39.2%
No Answer	5.3%

If no, why not:

A. Cost	8.7%
B. Subject Matter	2.1%
C. Location	4.3%
D. Other	29.4%
No Answer	53.8%

V. Demographic Information

1. Gender:

A. Male	58.0%
B. Female	3.7%
No Answer	3.3%

2. Age:

A. 18-29	1.9%
B. 30-39	19.0%
C. 40-49	34.9%
D. 50-59	29.2%
E. 60-69	12.0%
F. 70+	1.9%
No Answer	2.1%

3. Citizenship:

A. United States	85.5%
B. Canada	9.0%
C. Other	3.2%
No Answer	2.3%

4. Education:

A. BS	51.9%
B. BA	18.8%
C. Other Undergraduate	4.3%
D. MS	20.1%
E. MPhil	20.1%
F. PhD	20.2%
G. JD	2.3%
H. LL.M.	0.0%
I. M.D.	0.0%
J. Other Graduate	0.0%
No Answer	0.0%

COMPANY/EMPLOYEE INFORMATION

RESPONDENT'S LOCATION



SIZE



- 1-9 Employees 12.8%
- 10-99 Employees 14.8%
- 100-999 Employees/Students 16.1%
- 1000-9,999 Employees/Students 17.1%
- Greater than 10,000 23.8%
- No Answer 2.8%

OWNERSHIP



- Public 43.2%
- Private 54.2%
- No Answer 2.6%

SALES



- Up to \$999,999 12.8%
- \$1,000,000 to \$9,999,999 8.4%
- \$10,000,000 to \$49,999,999 9.0%
- \$50,000,000 to \$99,999,999 2.7%
- \$100,000,000 to \$499,999,999 2.4%
- \$500,000,000 to \$1,999,999,999 33.0%
- No Answer 18.7%

(Continued on next page)

Respondent's Location



- Eastern U.S. 38%
- Central U.S. 24%
- Western U.S. 18%
- Canada 8.8%
- No Answer 9.8%

Ownership



- Public 40.9%
- Private 58.9%
- No Answer 9.8%

Size



- 10-99 Employees
- 100-999 Employees
- 1000-9,999 Employees
- Greater than 10
- No Answer 9.8%

Australia Law

(Continued from Page 4)

been registered under the Australian Designs Act 1986 or have been commercially exploited. The Amendment Act does not contain separate transitional provisions, and uncertainties exist in relation to the application of the Act's provisions to two-dimensional designs created before October 1, 1986. Our preliminary opinion is that the Amendment Act applies to such designs, but it is unclear whether unrestricted copying of such designs occurring after October 1, 1986, can be prevented if the ability to prevent such copying had been lost under the old law following open commercial exploitation of the design. Uncertainty also exists as to what designs are encompassed by the phrase "design consisting solely of features of two-dimensional pattern or ornament applicable to a surface of an article." Designs printed onto the surface of articles such as T-shirts and certain material would be included, but it is unclear whether designs incorporated into the fabric of articles (e.g. wallpaper or drapery) or on such fabric would be included.

The copyright position in relation to designs other than those consisting solely of features of two-dimensional pattern or ornament applicable to a surface of an article is quite different. The ability to protect such designs (hereinafter referred to as "three-dimensional designs") by way of copyright is lost if the design is or has been registered under the Designs Act (S. 75 of the Copyright Act as amended by the Amendment Act). A similar loss of copyright protection occurs if the design has been commercially exploited, that is, if articles bearing the design are made in Australia or elsewhere by or with the

owner of the design in that place of the copyright in the article, work of which the design is a reproduction and at least two such articles are sold, let for hire or offered or exposed for sale or hire in Australia or elsewhere (Section 77 of the Copyright Act as inserted by the Amendment Act).

It does not matter whether the three-dimensional design concerned is registrable under the Designs Act. It is not clear how many articles bearing the design it question must be made in order to invoke S. 77. The appropriate provision in Section 77 refers to the design being "applied industrially," and Paragraph 13 of the Copyright Regulations 1969 provides that a design is taken to be applied industrially

if, inter alia, it is applied to more than 50 articles. The circumstances in which the application of the design to 50 or less articles will constitute industrial application remains unclear.

The new Section 77 does not apply to works of artistic craftsmanship (e.g. limited printing, buildings and models of buildings), and hence these works continue to be protected by copyright despite commercial exploitation. Neither does the new section apply to certain articles that are primarily literary or artistic in character (e.g. book jackets, labels and maps) the designs for which are excluded from registration under the Designs Act by legislation.

LES Publications, Items for Sale

Following is a list of LES publications and other items that are available for purchase:

Basic Licensing Handbook	\$ 50.00	
Postage U.S./Canada - Foreign	3.00	\$ 53.00
Basic Licensing Course Manual	30.00	
Postage U.S./Canada - Foreign	4.00	\$ 34.00
Licensing — A Strategy for Profit	25.00	
Postage U.S./Canada - Foreign	3.00	\$ 28.00
Technology Transfer Value	25.00	
Basic Licensing Audio Tapes	25.00	
ERIC Basic Exemptions Regulations	70.00	
CRF Property Rights - Software	70.00	
LES Legal Pins	70.00	

Write or call:
 LES of S.A./Canada
 71 Reed Avenue
 Newark, NJ 08831-4002
 Phone: 201-652-7760

Central/Western Meets at Vail April 4-6

BY GUY BARNETT and BILL LEE, JR. Meeting Co-Chairpersons

The Joint Central/Western Regional meeting of LEED-USA/Cannex will be held April 4-6, 1981, at the Aspen Registry Resort Center in Beaver Creek, Colorado.

The theme of the program is "Living with the Occasion — For Better or Worse." The program will concentrate on the construction of a facility with the occasion in mind, and termination of a facility about the relationship and. Each day will begin with a plenary session followed by two concurrent workshops devoted to the day's subjects in greater detail.

The program begins with a welcome reception on Thursday evening, April 4. On Friday morning and afternoon, scenic snowcat tours of the Park County forest are offered. A ski lift balloon ride starts at 9:00 AM Friday morning. On Saturday morning, a complimentary afternoon horseback ride is offered, as is a tour of Vail on golf carts.

Friday and Saturday afternoons will be free for recreational activities, including alpine skiing, golf, and tennis. A complimentary in the evening's recreational activities listed in the enclosed information. Note that prearrangements required for group rates for skiing. An LEED-only hotel rate is plan-

ned for Friday afternoon. Also, on Friday afternoon, there will be a family tournament for non-skiers and those wishing a total free evening.

Evening functions are scheduled for Friday and Saturday evenings. On Friday we will have a dinner dance, and on Saturday, an Alpine Apré Ski Festival.

There's a casual, family atmosphere in the rooms. For the dinner dance, a floor and bar/lounge is the most popular for men, and a pool and bar/lounge is the most popular for women.

We look forward to seeing you in Beaver Creek!

PROGRAM

Thursday, April 4

- 8:00 - 8:30 Trustees Meeting
- 8:30 - 8:45 Registration
- 8:45 - 9:30 Welcome Reception for Registrants and Guests

Friday, April 5

- 7:00 - 8:00 Continental Breakfast
- 8:00 - 11:30 Registration
- 8:30 - 9:45 Welcome and Announcements
- David S. Gray, President LEED-USA/Cannex
- Jack L. Hummel, Vice President - Western Region
- William F. Jager, Vice President - Central Region

9:45 - 10:00 PLENARY SESSION

- Thomas J. Wilson, Executive Vice President and General Counsel, The Gates Corporation
- Dr. Frankenstein Revisited: The Occasion as Partner or "Bomber"
- Ken S. Green, President and CEO, Cannex Int'l
- Market Field Penetration: Preparing For Success
- 10:00 - 10:15 Coffee Break
- 10:15 - 11:30 WORKSHOPS (Conducted Concurrently)

Workshop I

Moderal - Mike Jans, Geology Technology Co., Inc.
Parsons - Lowell T. Whitney, Geology Technology Co., Inc.

Parsons - Jon B. Saxe, Syngelec, Inc.

Workshop II

McIntyre - Brian G. Brynarski, Finnegan, Handelman, Pausler, Kanell & Dunne

Parsons - Dr. Richard Pappalardo, National Development

10:00

Parsons - Thomas J. Wilson, The Gates Corporation

10:00 - 4:00 Tennis Tournament, NAAEP Plaza, Beaver Creek

9:00 - 1:00 Reception and Cocktail Hour

7:00 - 11:00 Dinner Dance

Saturday, April 6

- 7:00 - 8:00 Continental Breakfast
- 8:00 - 8:30 Announcements and Introduction
- 8:45 - 10:00 PLENARY SESSION

Dr. William T. Davis, Assistant Director, University of California Planners, Trainers & Consultants Office
"Who's In? Party is Over"
Tom Arnold, White, White & Garney
"Alternative Dispute Resolution - Surely We Can Do Better Than The Courtroom"

10:00 - 10:15 Coffee Break

10:15 - 11:30 WORKSHOPS (Conducted Concurrently)

Workshop III

Wolfeberg - John P. Holloway, University of Colorado

10:00

Parsons - Harry S. Leabay, Washington University

Parsons - Dr. William T. Davis, University of California

Workshop IV

Wolfeberg - Bruce A. Schroyer, Peaty, Schroyer et al

Parsons - Dr. David Parillo, Sherman & Howard

Parsons - Tom Arnold, Arnold, White & Dunne

10:00 - 4:00 Skiing and Recreation

8:00 - 7:00 Reception and Cocktail Hour

7:00 - 11:30 Alpine Apré Ski Festival

ACCOMPANYING PERSONS SCHEDULE

(Times subject to change)

Friday, April 5

Mid Air Balloon Ride	8:00 a.m. - 9:00 a.m.
Senior Snowcat Tour	
Tour & game lunch	9:30 a.m. - 12:00 p.m.
Tour of Wolf Creek, (early)	1:30 p.m. - 4:00 p.m.
Tennis Tournament	1:00 p.m. - 4:00 p.m.
NAAEP Plaza	1:00 p.m.
Reception and Dinner Dance	7:00 p.m. - 11:00 p.m.

Saturday, April 6

Beaver Creek Hotel's Tour	8:00 a.m. - 9:00 a.m.
Vail Skiing Tour	9:30 a.m. - 11:00 a.m.
Reception-Apré Apré (Apré) Festival	8:00 p.m. - 11:00 p.m.

(Subject description of Recreational Activities are included in enclosed agenda to members.)

(REGISTRATION MATERIALS ON NEXT PAGE)

REGISTRATION FORM

LEB U.S.A./Canada Joint Conference/Western Regional Meeting

April 4-6, 1991

WYATT RESORTS BEAVER CREEK,

Beaver Creek, Colorado

Please complete and mail with appropriate fees to:
 Learning Executives Society (LES) & Canada, Inc.
 77 East Avenue, Suite 9
 Norwalk, CT 06851

Name _____
 Company _____
 Address _____
 City _____ State _____ Zip _____
 State of Accompanying Person(s) _____

New Member Since 1/1911:
REGISTRATION FEES (Per Person)
 (All fees non-refundable after March 22, 1991)

Paid by March 4, 1991
 LES Member(s) \$225.00
 Nonmember(s) \$300.00
 Accompanying Person (Thursday Reception
 and Friday Dinner) \$ 80.00
 (Saturday Dinner) \$ 40.00

After March 4, 1991
 LES Member(s) \$245.00
 Nonmember(s) \$320.00
 Accompanying Person (Thursday Reception
 and Friday Dinner) \$ 80.00
 (Saturday Dinner) \$ 40.00

OPTIONAL PROGRAM FEES (Per Person)

Being PAID (MUST BE RECEIVED BY MARCH 14, 1991) To County
 For Group Rates

ADULTS (number each day)

3/28	3/29	4/1	4/2	4/3	4/4	4/5	4/6	4/7	Total
_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
Total # x \$20.00 = _____									

CHILDREN under 10 years (number each day)

3/28	3/29	4/1	4/2	4/3	4/4	4/5	4/6	4/7	Total
_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
Total # x \$25.00 = _____									

Notes: Copies must be received and processed in advance of dates for directly debited group rates. Tickets for those arriving and leaving before April 4 will be available after hotel accommodations. Group fee for 10 days or less includes, but not all day-group rate tickets if time separates them an unaccompanied non-day fee.

Friday Beaver General Tour	
Tour A (morning, with lunch)	\$ 85.00
Tour B (afternoon, without lunch)	\$ 50.00
Friday Hot Air Balloon Ride (morning)	\$250.00
Friday SLEIGH Ride (afternoon)	\$ 4.00
Friday Family Transportation (afternoon)	\$ 35.00
Saturday Breakthrough Historic Tour (morning)	\$ 11.00
Saturday Hot Air Balloon Tour (morning)	\$ 85.00

TOTAL FEES (p. 5 Funds only) \$ _____

WYATT RESORTS BEAVER CREEK

Learning Executives Society 4 April 4-7, 1991

Single Rate \$235 + County Park \$ 25 + Triple Room \$150 + Guest Room \$100
 Deposit 2 nights room & 2 of 5 tax, 20 days prior to arrival

Name _____
 Name(s) of additional persons sharing room _____

Meeting address _____
 City _____ State _____ Zip _____

Phone _____
 Arrival Date _____ Departure Date _____
 Please indicate the following:

Single Double Requesting room _____
 1 person 2 persons

Request last Adult 100L
Note: To assure your reservation, please provide your deposit or supply credit card information which will be charged for no-shows. Payment held without sufficient deposit will be returned. Based on availability, the above rates will be honored three days prior to inter-group arrival and three days after each group departure.

Circle name of card: American Express
 MasterCard Diners Club Cash (Member)

PLEASE USE ONLY ONE CARD PER PERSON
 Credit Card # _____
 Name on Card _____ Expiration Date _____

Reservation Deadline March 14, 1991
 Reservations accepted after this date are based upon availability and rate (if confirmed) is non-refundable based rate.
 Cancellations/No-shows may be required to be paid (check-in card credit card). Cancellations within 60 days of departure incur a forfeiture of deposit.

PLACEMENT OPPORTUNITIES

**MEMBER—OPPORTUNITY FOR
 QUALIFIED APPLICANTS
 —RESERVED FOR YOU!
 SEEKING NEW POSITIONS**

Companies or firms looking for top-level or technology transfer personnel are invited to send their requirements to the Chairman of the Placement Committee at the address below.

The services of the Placement Committee of LEB U.S.A./Canada are available to applicants looking for positions in the financing or technology transfer fields. Please send your resume to the Chairman of the Placement Committee:

Dennis P. O'Leary
 Program Chairman, Finance,
 Games & Supply
 1500 I Street, N.W.
 Washington, DC 20005-2213

The Placement Committee matches the resumes received with the requirements of the various potential openings.

Applicants that qualify to meet these requirements of any available openings will receive forwarded for consideration or appropriate telephone contacts will be made.

Speakers Added for March 10-12 Symposium

The LES U.S.A./Canada-sponsored symposium "Technology Transfer With the Emerging Economies of Central/Eastern Europe, Hungary and Poland" will feature speakers in addition to those announced in the December 1990 issue of *LES* and the official brochure mailed to LES members.

Added speakers include:

- Ambassador Peter Zsolt of Hungary will be the luncheon speaker on Monday, March 11.
- Jozsef Mész, President of the Institute for East-West Security Studies in New York and now in Prague.
- John Macomber, luncheon speaker on Tuesday, March 12, is one of the most prominent "innovators" in the United States. He is President and Chairman of the Export-Import Bank and a former Chairman and CEO of Colsonair Corporation.
- Henrik Svedman, an internationally known expert in international trade, particularly involving soft currency, and governmental-level officials from the "new Central European countries."
- Todd Olson, General Counsel to

Argus, Inc., the nation's largest independent distributor of industrial gases, he was formerly Senior Attorney for the Interstate Commerce Commission in Washington, D.C.

• Krzysztof Matus, Regional Manager-East Europe for E.I. DuPont Company, where he is responsible for Du Pont's operations in Poland, Czechoslovakia, Hungary, Yugoslavia, Bulgaria and Romania.

• János Matonyi, Secretary of State, Hungarian Ministry for International Economic Relations. His previous appointments include Deputy Minister of the State Commission for Privatization, Director General of the Ministry of Foreign Trade, and Commercial Secretary at the Hungarian Embassy in Brussels.

• Zsigmond Prohászka, President of the Agency for Foreign Investments, Hungary, Poland.

• Denis Plonka is a Partner in Eves & Young's International Management Consulting Group and director of the firm's international finance and investment consulting practice. He has concentrated on

consulting projects in restructuring and privatization of state-owned enterprises.

• Robert Stankovic, Deputy Director and General Secretary of the State Economic Council, Office of the Prime Minister of the Czech and Slovak Federal Republic.

• Stjepan (Steven) Z. Szecsenyi, partner of the Chicago firm of Miller United One, Foster, Olson & Lurie, refers to speakers in financing and litigation of intellectual property rights.

• Jay Kohn is President of Kohn International Corporation, a Washington, D.C.-based export trading company.

• Georgina Whittall is Chief Representative for the State Bank Organization in Central and Eastern Europe.

• In a change from the program announced in the December 1990 *LES* brochure, Mr. Kohn, replaces Robert H. Harts as leader of a roundtable at 4:15 p.m. on Tuesday, March 12. The topic of the workshop is, "Buy-Back and Competition as a tool for Technology Transfer."

Canadian Meeting April 18-19 in Ottawa

The 1991 Canadian Regional East Meeting of LES U.S.A./Canada, will be held April 18-19 at the Delta Hotel, Ottawa, Ontario, Canada.

The theme is "Making Technology Transfer Work."

The two-day meeting will provide the day's and day's in developing strategies to achieve financing success.

The meeting is co-sponsored by the Interdepartmental Group on Intellectual Property Management, Government of Canada.

MEETING DESCRIPTION

The program covers subjects such as how to make innovation, protect proprietary rights, and develop financing tactics to bring in technology or transfer technology to others. The policy and practice of the public, nonprofit and private sectors will be explored.

The meeting commences Thursday morning, April 18th, with an optional introductory course on financing, which will cover the process of technology commercialization — programs and policies, leaseback properties, consideration in negotiating license agreements, financing

alternatives, dispute-resolution, and the business aspects of financing.

Thursday afternoon's program will examine the technology transfer function in the private sector and will present an opportunity to compare and contrast the technology transfer models favored by licensors/inventors — a welcoming market reception follows.

Friday morning's session will focus on the technology transfer function from the perspective of the public and nonprofit sectors, with presentations from members of the hospital and university communities as well as from representatives of the provincial and federal governments.

Friday afternoon the meeting wraps up with talks on interfacing with government, technology transfer from funding and selling committees. The meeting ends with the traditional farewell reception.

REGISTRATION FEES

Introductory course on financing	
.....	\$5.00 (non-)
Meeting sessions	
LES members \$175.00 (non-)
Nonmembers \$200.00 (non-)
Accompanying person \$ 50.00 (non-)

VENUE

The Delta Hotel is located at 300 Queen Street, Ottawa, a two-minute walk from the Parliament Buildings, and close to the fine restaurants and Ottawa's business and shopping districts. Every room has a lift/shower, and the hotel has a pool, courts, indoor swimming pool, fitness center and more. Accommodations are available at the reduced conference rate of \$100.00 (CAD) per night, single or double occupancy.

ORGANIZING COMMITTEE AND REPRESENTATION

For further information contact:
Varda Merz, Committee Chairman (613) 237-2070 (fax: (613) 763-3007) Elizabeth Elliot (613) 238-8174 (fax: (613) 238-2008) or Pierre Maréchal (613) 764-0963 (fax: (613) 764-0905).

The program brochure and registration forms were mailed in late January to Canadian members of LES U.S.A./Canada and previous meeting registrants. Others interested in attending should contact Varda Merz, Elizabeth Elliot, or Pierre Maréchal.

LES, AUTM Co-Sponsor Videotape on University Licensing

"University Industry Technology Transfer: Basic Principles" is a series of presentations on a single videotape to knowledgeable individuals from academic institutions and business organizations. The program is a joint educational effort by LES/USA/Canada and the Association of University Technology Managers. Course directors are Paul S. Bell for LES and Paul S. Nyquist for AUTM.

All the 90' segments in the presentation cover the essential basic concepts underlying academic research, business and industrial research, and how effective academic/business/research relationships can promote effective technology transfer.

The purpose of the program is to provide a basic orientation to academic/business research relationships for scientists and administrators from either business or academic organizations.

Multiple Uses

In academic institutions, the videotape program may be used as a guide for continuing programs and to direct new staff members joining university learning of life or approval-of-research offices. It can also be used by these offices to orient faculty members who are entering into a research relationship with a company.

Businesses can use it for similar purposes. New staff members joining the learning and business development office of a company may wish to attend themselves to academic research patterns of thinking. Industrial research managers about to enter into collaborative relationships with academic scientists may wish to enter these ideas and concepts before learning trademark planning/regulating sessions with their counterparts.

The program is divided into four segments. Each segment may be viewed independently and certain segments may be skipped if the subject matter is of no immediate interest to the viewer. For the sake of emphasis, some points are repeated in certain segments. However, it is important for the viewer to remember that each repetition makes important concerns and ideas worth repeating.

LES To Present "Technology Transfer 1991"

Are you new to technology transfer? Want new insights into the process of licensing? Need to sharpen your skills? LES is presenting "Technology Transfer '91," a 3½-day course conducted by professionals for professionals.

The 1991 course will be held in New York City, April 10-14 May 3 at the Harvard Club. The course will emphasize the technology-transfer function areas designed to

CONTENTS

Introduction (15 min.)

Part 1.7-26min.) The Nature of Research at Universities and Companies (22 minutes)

Presenters: **Dr. Stephen Johnson, Harvard Medical School, Dr. Thomas Tolbert, General Motors, Inc.)**

Part 1 describes the basic motivations for academic and industrial research. The presenters also describe important and successful examples of industry-sponsored academic research.

Part 2.28-38min.) The Protection of Patents and Other Intellectual Property at Universities and Companies (15 minutes)

Presenters: **Dr. Jacky S. Aronoff, Mount Carolina State University, Dr. William Davis, SmithKline, Inc.)**

The presenters discuss the development and principal features of university policy and procedures to protect intellectual property developed at universities which offer faculty the opportunity to gain access to and exploit such intellectual property.

Part 3.39-77min.) University-Industry Research Agreements and the Transfer of Technology (22 minutes)

Presenters: **Dr. Alan Palmer, Stanford University, Dr. Alex MacLachlan, DuPont**

Continued

This part presents the important principles of industry-sponsored research at universities, and the ways that such research can lead to important commercial advances for companies.

Part 4.77-105min.) Special Features of the Research Relationship Between Universities and New and Growing Companies (22 minutes)

Presenters: **Dr. Edward Moulthrop, Washington University, Dr. Harold B. Zook, The Squibb Group**

Part 4 addresses the special concerns of new and growing companies as they relate to academic institutions. These new companies are often more interested and dependent on university research advances and often are important partners. However, new companies have special needs and special concerns which influence their relationships with universities.

The cost of this videotape is \$200 for LES and AUTM members; a 25% discount is available for the first videotape purchased by a university or a person affiliated with a university. Please add \$2 postage for shipments in the U.S.A. or Canada and \$7 elsewhere. Send orders to Bayfield Publishers, 11 East Avenue, Suite 5, Norwalk, Connecticut 06851-4900.

New Volume Useful to Licensing Executives

MIGRIN' ON LICENSING

by Roger M. Migrin
Copyright 1990 by Matthew Bender
Lippincott for annual updates
Call: (718) 520-5155
Fax: 1-800-325-1948
or write: Matthew Bender Company
11 Penn Plaza
New York, New York 10001, USA
Attention: T. Fagan

Many LES members will recall that Roger Migrin, a founder of LES/USA/Canada and an accomplished lawyer, is the author of a law journal article, "Migrin on Trade Secrets." The related single volume "Migrin on Licensing" has chapters in volume 2 of the previous law course set and its focus on U.S.A. licensing matters, however, instead of being his scope, Roger's new volume interviews experts with other trademark industrial property. It thus should be of

greater interest to those members of LES whose major focus truly is licensing, whether they live in the United States or simply license into or from there.

"Migrin on Licensing" is a large, readable, and easily-oriented publication that contains licensing material that will be examined and fully understood in their library. It has practical guides in drafting license agreements and sample clauses for use in a variety of situations.

Part I covers the basic licensing characteristics of patents, trade secrets, trademarks, copyrights and various combinations of these.

Part II focuses on an specific licensing practices under U.S. national laws. Part III then turns to previous matters such as negotiation, cross-licensing, secrets before licensing, capex costs, and the like.

Part IV covers the most ground. After a discussion of how that is done, basic types of agreements, it analyzes the parties, warranties, U.S. tax matters, joint bank, records, definitions, matters, and the like. It then passes into improvements, security matters (this section I found to be most helpful, technical assistance, what happens if and when one of the licensed items is infringed, and most-favored terms clauses.

The thanks of LES to Roger for a memorable work that fills a feature a number of problems we face, day to day, in our licensing work. —DORLEY B. SMITH

Recent Developments in the Law Relating to Licensing

BY BBA S. BRADY-VOLPE

FOURTH CIRCUIT HOLDS "NON-DISCLOSURE AND NONDISCOURTEMENT AGREEMENT" IS NEARLY IDENTICAL IN PURPOSE TO EMPLOYMENT AND NONDISCOURTEMENT AGREEMENT AND BARS USE OF CONFIDENTIAL INFORMATION BY PROSPECTIVE INVESTOR

In *John Harmon Co. v. Sunbeam Food & Raising Co.*, 814 F.2d 885, 18 U.S.P.Q.2d 1181 (4th Cir., 1986), the court held that Sunbeam's use of information gained from John Harmon & Co. (JHC) during JHC-Central's negotiations to purchase an investment portfolio from JHC was in violation of a confidentiality agreement signed by Sunbeam.

JHC was in the business of purchasing "portfolios" from Xerox Corp. which gave JHC both the right to Xerox's income from groups of Xerox accounts (Xerox) and the residual value of the Xerox after the leases expired. JHC acted as a broker in purchasing these portfolios for other investors and charging the investors a percentage of the net rate. JHC recently changed its customers for the use of JHC's expertise in determining the suitable related Xerox portfolio which a competitive bid could be made on behalf of the customer.

When negotiating a possible bid with a potential investor, JHC required the potential investor to sign a "Non-Disclosure and Nondiscourtegment Agreement" before JHC discussed any confidential information. The agreements required an investor to disclose any information obtained from JHC and not to independently pursue the purchase of portfolios from Xerox for the duration of the portfolio agreements from one to three years.

Sunbeam expressed interest in JHC in purchasing a portfolio and an agreement was signed as described above. Since Sunbeam had already also approached a competitor of JHC, the agreement provided that Sunbeam could purchase a portfolio through the competitor to Xerox. JHC's information wasn't used by Sunbeam in reaching a bid for Xerox. Once the agreement was signed, JHC disclosed to Sunbeam much confidential information relating with subjects such as bid preparation, strategy, economic models and bid portfolio performance.

Sunbeam did not reach agreement with JHC on a bid. However, Sunbeam still bid on a portfolio without competitor JHC or JHC's competitor. Instead, Sunbeam did through a former employee of JHC's con-

tractor who had founded his own company. Sunbeam was forced to purchase the portfolio with the present best bid offering.

The U.S. Circuit of Appeals for the Fourth Circuit affirmed a Virginia District Court holding that Sunbeam breached the confidentiality agreement. The court stated that the person through whom Sunbeam purchased the portfolio was a mere "leading actor" to Sunbeam. The court reached this conclusion based on Sunbeam documents which discussed a third purchase through a "real company" to cut out the middleman. The court held that JHC's relationship with potential investors was the same as an employee-employer relationship in regard to the use of trade secrets and focused on breach of the agreement rather than actual use of information obtained from JHC.

The court stated that the agreement was "nearly identical in purpose" to an employee's covenant not to compete with a former employer and evaluated the agreement under Virginia's three-part nondisclosure test for such covenants. Under Virginia law, such agreements must be reasonable from the standpoint of the employer in being as greater than necessary to protect a legitimate business interest and from the standpoint of the employee in not being unduly harsh in requiring a legitimate effort to earn a livelihood. The agreement must also be reasonable from the standpoint of public policy. The court found the confidentiality agreement reasonable under all three branches of the test.

The court affirmed the district court's jurisdiction on future violations of the agreement and granted a constructive trust of Sunbeam's profits from the portfolio. The court chose this remedy because JHC's loss was much more difficult to determine than Sunbeam's benefit from the breach of the agreement. The case was remanded to the district court for a determination of Sunbeam's profit on the portfolio which was then to be awarded to JHC.

SIXTEENTH CIRCUIT HOLDS THAT COPYRIGHT OWNER MUST SHARE PROFITS OF INFRINGEMENT SETTLEMENT WITH EXCLUSIVE LICENSEE EVEN IF THE INJURY DID NOT INVOLVE AN ACTUAL APPROPRIATION OF THE EXCLUSIVE LICENSE

In *Original Appellate Atlanta v. E. Diamond Associates Inc.*, 81 U.S.P.Q.2d 1194 (15th Cir., 1986), the court held that Original Appellate Atlanta (OAA), the copyright owner in George Pato's *Yoko*, was required to share proceeds of an infringement settlement with E. Diamond

Associates Inc. (Diamond), an exclusive licensee.

Diamond's license granted an exclusive license to "utilize the name, character, spirit, design, business and visual representation" of the George Pato solo on stickers. The agreement expressly named in OAA the greatest assistance with the George Pato name and the power to decide whether action should be taken to enforce the copyright.

OAA brought suit against Topps Clearinghouse for copyright infringement based on Topps' George Pato Kola stickers. A settlement was reached in which Topps paid OAA \$7,000,000 in return for a promise not to sue Topps or to allow copyright to sue Topps for copyright infringement. OAA then instituted the present lawsuit to seek a declaration judgment that Diamond had no interest in the proceeds of the settlement.

The district court granted summary judgment for OAA, holding that Diamond had no right to any proceeds since OAA had the power to decide whether suits should be brought in account of infringement. The court acknowledged the OAA had a fiduciary duty to Diamond to protect Diamond's rights, but held not compensate Diamond upon any recovery. The court stated that the recovery from Topps was merely compensation for damage in goodwill, and did not reflect any loss of revenue to Diamond.

The U.S. Court of Appeals for the Eleventh Circuit reviewed and affirmed the district court's decision. The appellate court decision was based upon *Myriad v. Shurtleff*, 55 F.2d 24, 85, 68 U.S.P.Q.2d 175 (5th Cir., 1945), 67-2 U.S.P.Q.2d 622 (5th Cir. 1965), which dealt with the copyright of a play. In *Myriad*, the holder of copyright in a play was granted damages for infringement of the play by the maker of a movie based on the play. The copyright holder was required to share the damages with a licensee to perform the play based upon two findings. First, the copyright holder had granted the licensee an interest in the movie rights in the license agreement. Therefore, any damages recovered by infringement of those rights had to be shared. Second, the copyright holder had a fiduciary duty to the licensee based upon the licensee's equitable interest in the copyright (movie) from the interest granted in movie rights. The court stated that an implied negative covenant included the ungranted portion copyright to the detriment of the licensee existed.

The Eleventh Circuit reaffirmed rationale of *Myriad* in relating the situation concerning summary judgment. Under the first finding, Diamond would be entitled to the

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proportion of the settlement representing damages for Tappan's appropriation of Diamond's exclusive license. Under the second rationale, Diamond would be entitled to the proportion of the settlement representing infringement from Tappan's conduct (50%) then appropriation of Diamond's exclusive license. The court remanded the case to determine whether Diamond suffered any injury as a result of Tappan's conduct.

The court rejected an argument that the proper test was distinguished from *McQuinn* because the license in *McQuinn* included an express grant of proceeds of the sale of movie rights to the licensee in addition to the license to perform. The determination of the same to express grant of rights to proceeds of infringement suits was included in the license, that Diamond had to fight to proceed. The court of appeals disagreed stating any injury to Diamond, whether through appropriation of the license or otherwise, gave Diamond a right to a proportion of the settlement.

COURT GRANTS DAMAGES OF \$200 MILLION, INCLUDING 10% PROFIT, RECOVERABLE ROYALTIES AND THE JUDGMENT INTEREST TO POLAROID IN SUITWAY PHOTOGRAPHY PATENT & INFRINGEMENT SUIT

In *Polaroid Corp. v. Eastern Photo-Co., 78 U.S.P.Q.2d 1445 (D. Mass., 1990)*, the court calculated the damages awarded to Polaroid for infringement of 12 patents dealing with instant photography. The length and detailed decision dealt only with damages to infringement liability was determined in an earlier proceeding.

The court began its analysis by stating that when determining lost profits use the preferred measure of damages rather than a reasonable royalty which is considered to be a minimum amount of damages. The court then attempted to quantify Polaroid's lost profits following the approach set out in *Handau Corp. v. Shiloh Bros. Film Distrib. 878 F.2d 1150, 81 F.S.P.R. 726 (9th Cir., 1991)*. Under *Handau*, Polaroid had to show (1) demand for the patented product in the market, (2) the absence of an adequate noninfringing substitute, (3) its manufacturing and marketing capability to exploit the demand and (4) a detailed computation of the amount of profits it would have realized absent infringement.

In evaluating demand, the court refused to employ common Polaroid's infringer's sales of instant cameras to determine the total amount of sales Polaroid could have made without competition from Kodak. Rather, the court assessed all market influences including competitor sales (other cameras), the marketing capabilities of each party, advertising, reputation, promotion, product features and quality. The

court also examined whether brand loyalty or product features raised concerns to the competitor's or instant cameras. The court refused to conclude, due to uncertainty, the effects of "Tappan's" own instant cameras caused by competitive advertising. The court found after also examining empirical evidence that Kodak had not proved that it had expanded its market for instant photography to its suits.

In assessing the demand for patented products, the court stated the demand based on the parties and substituted sales which Polaroid could not have made for lack of demand at its position if Kodak's were unavailable. The substituted sales, totaling over 11 million units, were generally in foreign countries where there was no demand for Polaroid's product due to lack of certain features or lack of an organized local distribution network. Also the court substituted sales to organizations which used cameras sought incentives or bonuses because Polaroid was inactive in the market. However, the court found that Polaroid could have made nearly all of Kodak's sales because there was nothing unique and critical to Kodak's army unit that without its infringement, demand would have been diminished.

The court also considered and rejected a claim by Polaroid that it would have been able to charge more for its cameras both during Kodak's sale of infringing items (prior to 1988) and after Kodak had stopped. The court, while acknowledging that the market had been affected by Kodak's entry, stated that Polaroid did not prove that it could have charged higher prices or made more profit in a world absent Kodak. Rather, it was more likely that Polaroid would have followed many of the same marketing and pricing strategies even if Kodak had not entered the market because higher pricing by Polaroid would have reduced demand due to competition from conventional photography, in which it already was selling. Polaroid's profits, therefore, the court limited Polaroid's recovery to lost profits in sales lost to Kodak, and did not include in the award any amount based on price inroads.

The court next found that the alleged *Handau* factor was met in that no more fitting instant camera substitutes were available on the market.

The court further limited Polaroid's recovery in its analysis of the *Handau* factor, capacity to exploit demand. The parties disagreed over whether Polaroid's capability should be judged on the actual and of what "could have" been done or what "could have" been done in a world absent Kodak. The court stated that Polaroid had to show that it was more likely than not that Polaroid would have added capacity to meet the additional demand of Kodak's customers. However, the court also stated that what was physically pos-

sible (i.e., could have been done) was a *GOVERNING FACTOR* in the analysis and that Polaroid was entitled to every benefit of the doubt on this issue.

Based on Polaroid's in place and potential manufacturing capacity, the court found that Polaroid itself may have enough film to meet the total camera market demand during the years 1978 and 1981-1985, but not during 1977-1980. The court then found that Polaroid's camera sales were a function of film availability because Polaroid would have voluntarily reduced its camera output following the maximum amount it could get if it could not manufacture enough film for the cameras. Therefore, the court reduced the number of cameras sales Polaroid would have made during the film shortage years (1977-1980) by an amount necessary to match film demand with camera manufacturing capacity.

Once the court found the manufacturing and marketing capacity of Polaroid, it calculated actual damages from lost sales of cameras and film as under the *Handau* test. The court assessed Polaroid lost profits on film sales from 1975-1985 and camera sales from 1976-1990 totaling \$24,000,578 based on fixed and variable costs and the number of units sold. Since the court found Polaroid would have either made profit less than a reasonable royalty or lost money on its camera sales from 1976 to 1985, a grossed Polaroid reasonable royalty on Kodak's sales in those years.

The court stated that a reasonable royalty could be calculated by examining the infringer's business entering the market and internal grant provisions and regulations. Alternatively, a hypothetical negotiation between a willing licensor and licensee could be used. Polaroid requested a royalty of 12.5%, and Kodak suggested 5%. The court rejected Polaroid's figure because such a license would have required Kodak to operate at a loss and therefore would not be the product of a reasonable negotiation. Considering all of the facts and circumstances under both approaches, the court determined that 10% was a reasonable royalty which gave Polaroid \$208,183,117.

The court found to affirmance in exceptional circumstances comprising an award of attorney's fees of attorney's fees. The court did grant production of interest of \$465,251,738 based on the Treasury rule, compounded annually, bringing the total award to \$208,648,857.

TAX COURT INCREASES COMBISUMER'S ADJUSTED RYALTY, 17 PARTS OF 27-02%, DOWN TO 20%

In *Shushan-Land Incorporated and Consolidated Subsidiaries v. Commissioner, CCH Ent. 85, 811-92 TC 581, 85-2 USTC ¶10,046, the Tax Court reduced a royalty*

TC) (1988), the Tax Court held that a royalty agreement entered into by Rowatt & Lamb (R&L) and its wholly owned subsidiary, Rowatt & Lamb Ireland (R&LI), in 1985, did not constitute an arm's length transaction and allocated income from R&LI related to R&LI pursuant to section 482 of the Internal Revenue Code. R&LI had established R&LI Ireland to take advantage of certain tax and other incentives offered by the Republic of Ireland. R&LI granted R&LI Ireland a nonexclusive license to use patented and unpatented manufacturing technology for producing steel control levers, and to use certain R&LI trademarks in the sale of the control levers. In return, R&LI was to receive a majority (50 percent) of sales which were made in R&LI or other subsidiaries of R&LI.

Section 482 is one of the so-called supply-side provisions of the Tax Reform Act of 1986. Section 482 allows the Commissioner of Internal Revenue to allocate income between controlled enterprises if a determination is made that such an allocation is necessary to prevent evasion of taxes or to clearly reflect the true income of related enterprises. Section 482 states that income related to the transfer or license of intangible property shall be comparable with the income attributable to the intangible property. Section 1.482-1(b) of the Income Tax Regulations provides that when one controlled entity sells tangible or intangible property to another controlled entity at other than an arm's length price, the Commissioner may allocate the income between the entities to reflect an arm's length price.

In the R&LI case, the Commissioner found a history of deficiency against R&LI for allocated income to R&LI from R&LI Ireland based on tax grounds: the price of control levers sold by R&LI Ireland to R&LI and the royalty rate paid to R&LI. The Tax Court reviewed a portion of the Commissioner's decision and determined that the transfer was not at an arm's length price based on a comparison with sales of comparable products by competitors. The Tax Court, though, agreed with the Commissioner that a 5% royalty rate did not constitute an arm's length consideration for comparable intangible property. However, the Tax Court found the Commissioner's adjustment of the royalty rate to between 27 and 30% unreasonable and instead imposed a 20% royalty.

In attempting to determine a reasonable royalty, the Tax Court rejected expert

testimony offered by Rowatt & Lamb stating that a 5% royalty constituted an arm's length consideration for a license of its intangibles based on competitor's agreements and on the related rate levied by R&LI and R&LI Ireland. The Tax Court also rejected expert testimony offered by the Commissioner stating that a 27 to 30% royalty constituted an arm's length consideration based on a review of the intangible property which R&LI Ireland received in 10-10-year licenses and that determining the form of what an independent manufacturer form would pay for such.

The Tax Court instead relied for guidance on Section 1.482-1(b) of the Income Tax Regulations which states that arm's length consideration is the amount that would have been paid by a unrelated party for the same intangible property under the same circumstances. The best evidence of arm's length consideration is the amount actually paid to unrelated parties for the same or similar intangible property under the same or similar circumstances. The court found that other transactions involving unrelated parties contained in the record were not sufficiently similar to the R&LI case due to differences in technology and the circumstances at the time of the agreements. In the absence of a sufficiently similar transaction involving an unrelated party, section 1.482-1(b)(2)(ii) lists the following relevant factors in determining the amount of an arm's length consideration:

- (a) The prevailing rates in the same industry or for similar property.
- (b) The effect of competing transactions of the same or competing businesses.
- (c) The terms of the license, including limitations on the geographic area covered and the exclusive or nonexclusive character of any rights granted.
- (d) The uniqueness of the property and the period for which it is likely to remain unique.
- (e) The degree and duration of protection afforded to the property under the laws of the relevant countries.
- (f) Value of services rendered by the transferee to the transferee in connection with the transfer, either the making of paragraph 1.482-1(b)(2)(ii).
- (g) Proprietary profits to be realized or costs to be savings by the transferee through its use or subsequent transfer of the property.
- (h) The capital investment and starting up expenses required of the transferee.

(i) The next subsection is (j), (presumably left blank).

(k) The availability of substitutes for the property transferred.

All the arm's length rates and prices paid by unrelated parties above the property to transfer or substituted to such parties.

(l) The rates incurred by the transferee in developing the property, and

(m) Any other fact or circumstance which an unrelated parties would have been likely to consider in determining the amount of an arm's length consideration for the property.

The court chose to rely on 1.482-1(b)(2)(ii)

(ii) (g) and (h) - prospective profits to be realized by the transferee through its use of property, and the capital investment and start up expenses required of the transferee. The court constructed its royalty rate by taking a percentage of the price R&LI Ireland expected to earn from its sales to R&LI. The Commissioner's proposed royalty was declared unreasonable because it would have exceeded R&LI Ireland from making a profit through use of R&LI's intangible property. The Tax Court stated that an independent party would have no economic incentive to enter into the agreement with R&LI at such a royalty rate.

The court held that, at arm's length, R&LI Ireland would have anticipated production if incurred to show as much as 50% of the profits from use of the intangibles, as consideration for use of the intangibles. The court based its finding of 50% on evaluations of degree of investment and risk exposure. A sharing of 50% of the profits equated to a royalty rate of 20%. The court then allocated to R&LI the income representing the difference between the agreed 5% royalty and a 20% royalty.

A practitioner, in drafting licensing agreements between related entities, should be aware of the power of the Commissioner of Internal Revenue to challenge a license under section 482 of the Internal Revenue Code. Since the Tax Court stated that the best evidence of arm's length consideration is an amount paid by the same or similar unrelated parties for the same or similar intangible property under the same or similar circumstances, any available evidence of such transactions should be gathered at the time the agreement is made for use in formulating and justifying the chosen royalty rate. If such information is not available, other information such as listed in 1.482-1(b)(2)(ii) of the Income Tax Regulations could also be collected if the time the agreement is made.

Canada/Eastern Regional Meeting On Target

Plans for the 1988 U.S.A./Canada Eastern Regional/Canadian Meeting on June 27-29, 1987, are rapidly taking shape. The organizers for Tony McManus (Great Britain) are waiting at the wings of the Mar-

riott Long Wharf Hotel in Boston. The four buses and minivans are lined up at the door with the Lexington Mission standing guard.

The Health-Care Committee Meeting on

June 27 (in press), 1987 registration forms and LEO registration forms for the evening golf meetings will be mailed to U.S.A./Canada members early in April. RICHARD A. SWIFT, Co-Chairman.

Recent Decisions Relating to Trademark Licensing

BY RONALD S. COOLLEY
and J. PAUL MILLERSON*

Over the last few months, the courts have considered circumstances considered to constitute a naked license, the alienability and assignability of a mark under the language of a particular agreement, and the continued use of a mark by a terminated licensee.

An agreement transferring limited rights to use a mark to a real estate broker, where the only specified control in the agreement was that the user not be required to do a licensed real-estate broker in good standing and where no other actual controls were implemented, was a naked license. *First Interstate Bancorp v. Bancorp*, _____ F. Supp. _____, 18 U.S.P.Q.2d 1794 (S.D. Cal. 1988).

An agreement transferring all rights in a trademark to the "Buyer," rather than to the "Buyer and his heirs and assigns," did not make the acquired trademark rights under the agreement assignable by the buyer. *Francis S. Denney, Inc. v. I.S. Laboratories, Inc.*, _____ F. Supp. _____, 10 U.S.P.Q.2d 1799 (S.D.N.Y. 1988).

The continued use of a mark by a licensee, whose license had been terminated for misuse, was likely to cause confusion and constituted trademark infringement. *Rockwell Int'l Instrumentation, Atlas Enterprises, 742 F. Supp. 955*, _____ U.S.P.Q.2d _____ (D.S. Mass. 1988).

DISCUSSION

First Interstate Bancorp v. Bancorp, _____ F. Supp. _____, 10 U.S.P.Q.2d 1794 (S.D. Cal. 1988).

First Interstate Bancorp ("Bancorp") used Bancorp which was doing business under the name "First Interstate Lending," for trademark infringement. Bancorp counterclaimed for trademark infringement by Bancorp.

Bancorp registered "First Interstate Bank" as a service mark in California on May 21, 1985, and began use of the name "First Interstate Bancorp" about June 1, 1985. Bancorp subsequently obtained a number of "First Interstate" related registrations. Bancorp had a real estate business, which operated under the name "First Interstate Realty" and "First Interstate Realty and Investment Company," starting in March of 1985 (apparently without knowledge of Bancorp's prior use).

Bancorp sought a summary judgment on Bancorp's counterclaim on the basis that Bancorp had engaged in unconfined licensing of the mark "First Interstate" and therefore had waived any right to sue Bancorp for a basis for the counterclaim for infringement.

In March of 1986, Bancorp had terminated its relationship with Bancorp. Bancorp

licensed certain rights to use the name "First Interstate Realty and Investment Co." and "First Interstate Realty" to Joe D. Carson ("Carson"), an individual with whom Bancorp had had social and professional contacts for about seven years. The agreement required Carson to be a licensed real estate broker in good standing and the broker of record for any business established under the licensed terms. However, Carson's business was to be conducted independently of Bancorp, and Carson was solely responsible for the supervision of his agents, and for all the rules and regulations set forth by the State of California.

The court found that, independent of entering into the agreement, Bancorp had not supervised any of Carson's activities or required Carson to meet any standards or criteria for performance other than those contained in their agreement. The court did note that Bancorp had provided some sales materials to Carson and that Bancorp had occasionally visited and discussed with Carson how the business was doing.

High Standard

The court reviewed the facts for the likelihood of confusion and noted that such a practice was inherently deceptive and constituted abandonment of any rights in the trademark by the licensor. However, in its analysis, the court recognized that the amount of control that a licensor must exercise is limited only to that which is necessary to prevent deception and, since the finding of traditional control works a forfeiture, the party asserting a naked license must meet a high burden of proof. The court was satisfied that Bancorp had met its high burden.

The court's conclusion that a naked license existed was supported by the lack of any control or restrictions in the agreement that the agreement actually included an explicit disclaimer of Bancorp's responsibility to control activities related to the quality of the services offered by Carson, and a waiver of any demonstrated actual control exercised by Bancorp, as through inspections or supervision of Carson. The court was not persuaded by Bancorp's argument of numerous contacts with Carson to discuss various aspects of the real estate business since these were "informal" and lacking support of the kinds of supervision and inspection that had been found adequate in other cases. Further, there had been testimony from Carson about the lack of supervision and involvement of Bancorp in his business. Finally, Bancorp's argument of reliance on its prior experience with Carson and its trust in Carson's integrity, experience and pro-

fessionalism was not sufficient. The court distinguished the cases that permitted a licensor to rely on the licensee's personal control as involving additional facts relating to the control issue. The court concluded that reasonable reliance on the licensee's quality control efforts alone was not sufficient to avoid a naked license determination.

Consequently, the court held that Bancorp's license to Carson was a naked license and resulted in an abandonment of any rights in the trademark that Bancorp may have had. Bancorp's motion for partial summary judgment was therefore granted.

Francis S. Denney, Inc. v. I.S. Laboratories, Inc., _____ F. Supp. _____, 10 U.S.P.Q.2d 1799 (S.D.N.Y. 1988).

Francis S. Denney, Inc. ("Denney") sought a preliminary injunction against I.S. Laboratories, Inc. ("Labs") production of the trademarks "Shower" and "Tens Shower" for a line of plastic showerheads and hand showers. The matter also included trade dress claims.

The marks, and the line of products all based on the marks, were developed by a predecessor of Labs in the early 1960s. These products were "generic" and marketed through about 200 of Retail Martus and Sales Firm Agents.

In June 1986, Labs' predecessor sold the marks and trade dress in question, and the associated goodwill, to John Propp, Inc. ("John"). The 1986 purchase agreement provided, in part:

"[Denney], owner, trade, stop and other or related trademarks to Buyer and Buyer's purchase arrangements from Sellers, as a going concern."

Two years later John transferred its ownership rights in the marks and product line in question to Denney.

Thereafter, Labs became a customer of Denney for the products in question. However, Labs also began to offer its own line of products, which used a very similar trade dress to the Shaver line, and used Denney in promoting that line, which made references to "Dr. I.S. Shaver," the originator of the product line.

Labs argued that it was released from the contractual restraints on use of the Shaver trademarks imposed by the 1986 agreement because the restraints in that agreement related only to the benefit of the immediate buyer, John. Apparently, Labs took the position that since the 1986 agreement transferring the trademarks assets was only to the "Buyer," and did not include a reference to the "heirs and assigns" of the Buyer, the rights transferred were not assignable, and that John's subsequent assignment to Denney released Labs from

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INTERNATIONAL CONFERENCE IN SAN DIEGO

BY CONVIN HORTON Annual Meeting Chairman

The 1991 ILES U.S.A./Canada Annual Meeting is an international conference and it will be held November 1-5, at the San Diego Marriott Hotel and Marina. This elegant, modern hotel, set beautifully on the edge of scenic San Diego Bay, is close to the city center and convenient to the many restaurants and attractions offered by this area. For the time of year, daytime temperatures in the Pleasure City are pleasant and sun is readily available.

The principal meeting will begin with a welcoming reception on Sunday evening, November 1, and will close on Wednesday, November 5 with a formal dinner-dance.

The theme of the conference is "Locating The Broader Base." The program will feature strategies for using technology transfer to promote and complement broader business goals.

There will be a number of speakers from North America and the abundant talent on the West Coast will not be overlooked. Importantly, the program will feature speakers from the international arena to reflect the international character of the meeting. A segment of the program, entitled "Winds of Change," will provide an important update on the fast-changing business environment worldwide.

Complete meeting packets will be mailed to all ILES members in July. Meeting and hotel details will be published in the June 1st Newsletter.

Now is the time to mark your calendar for November 1-5, 1991!

and cannot comply with design modification before the emergency of a dominant design, followers have a good chance of having their modified product accepted as the industry standard, often to the great disadvantage of the innovator.

In this situation the innovator must be careful to let the basic design "float" until sufficient evidence has accumulated that a design has been delivered that is likely to become the industry standard. In some industries there may be little opportunity for product modification. In other industries it may be quite considerable. The reason for letting the design float is that once a heavy capital investment is committed to a particular design, the innovator will have created certain irreversibilities that will prove to be a severe handicap if the initial guesses with respect to what the market wants turn out to be wrong.

The early history of the automobile industry illustrates exceedingly well the importance for subsequent success of selecting the right design. None of the early producers of steam cars survived the early choice, when the closed body internal combustion engine automobils emerged in the dominant design. The steam car, nevertheless, had numerous early virtues, such as reliability, which the internal combustion engine automobils could not deliver.

The British Daimler with the Connel in its automobile, de Havilland had picked an early design with significant flaws. Survivors at the right angles corners of the windows were higher than predicted, lower the metal fatigue that lead to fatal crashes, significant irreversibilities, and less of reputation seemed to prevent the innovator from successfully competing in what subsequently emerged as the dominant design. But for the accidents, de Havilland might have retained their world lead in jet airplane construction.

As a general principle, it appears that innovators to seek appropriability regimes need to stay flexible and to be intimately coupled to the market so that user needs can fully impact designs, because the prob-

ability will be low that an innovator's initial design will be just what the market wants. But it may not always be possible to stay flexible. Thus, in industries with large developmental and prototyping costs and easy imitation of the product concepts, the probability that the innovator will be among the winners whose dominant design emerges is likely to be low.

MARKET ENTRY STRATEGIES AFTER THE EMERGENCE OF THE DOMINANT DESIGN

Suppose the innovator is still in the game when the dominant design has emerged. It then has to face a new problem — that of occupying access to complementary assets and possibly complementary products. An innovation consists of certain technical knowledge about how to do things better than the existing state of the art. In order for such items to deliver value to the consumer, a must be sold or utilized in some fashion in the market, usually in conjunction with other items. The bundling of items is usually necessary to create a product. Thus, the Intel 8088 microprocessor was more than a chip.¹¹ It comprised the chip to be sure, but also application notes, ads, microprocessor development systems and simulators, software, field applications engineering, and single board computers, customer education programs, and Bob Naveo's ability to capture the public imagination.¹²

In almost all cases, the successful commercialization of an innovation thus requires that the know-how is quenched be utilized in conjunction with the services of other assets. Two classes of complementarity can be distinguished. First, there are *buyer complementarities*. A "product" can be thought of as the bundle of what a customer buys. It is not only the physical device or service from which the customer gets direct utility but includes a number of other factors, products,

and services that make the innovation desirable, useful, and convenient. Thus, computer hardware must have software available, automobils must have service, textbooks must have examination copies, and copiers need paper and toner.¹³ If any item is not properly augmented in this fashion, it might be thought of as a *straw seller* that a "product."¹⁴ Innovating firms frequently make the mistake of underestimating the complementarity that must be available for a product to sell well.

The second, though partly overlapping, class of complementarities exist on the supplier side. These are the other parts of the "value chain" that the innovator must assemble or otherwise access in order to ensure that the product is produced and delivered to the customer. Obvious examples are manufacturing, distribution, and after-sales support.¹⁵ The delivery of value to the customer will often require that the complementary assets utilized will be highly particularized to the innovation; for example, the manufacture of VCRs in relative requires special precision manufacturing equipment to make the magnetic heads.

Before the dominant design emerges, production volumes are low, and there is little to be gained in developing specialized assets, as scale economies are unattainable and price is not a principal competitive factor. However, as the leading design or designs begin to be revealed by the market, volume increases and opportunities for economies of scale will induce firms to begin gearing up for mass production by acquiring specialized tooling and

11. The invention of the deceptively simple complementary method had the greatest likely to occur unless a striking example of how the cost of providing these complementarities can be reduced.

14. When a device is properly augmented with the relevant complementarities, it becomes a product.

15. The "other items" to be used by three 1980s and others to create a firm may differ in nature. However, the assets and capabilities required to commercialize new technology often go outside the firm's existing boundaries. The value chain does not provide guidance as to which activities are to be done "in house" and which are to be left to others.

11. See B. Bostrom and M. Almqvist, "The Limits for Innovation in Industry," *Strategic Policy*, 11 (1983), pp. 209-220.

12. See William S. Dutton, *Advertising and Copywriting*, New York: Regency Press, 1980.

equipment, and possibly specialized distribution as well. Since these investments involve significant irreversibilities, producers are likely to proceed with caution.

Whatever the reasons for needing specific assets — whether it is the emergence of a dominant design requiring scale-up or simply the particularities of the technology — the impact of their ownership on competition and the distribution of profits among industry participants is of great significance. This is because specific assets almost always have, or quickly develop, firm-specific attributes. Their inaccessibility may be embedded in physical capital, specialized knowledge, or locational or relational specificities. These are often difficult to imitate, which makes them valuable to hold and an important source of competitive advantage.

Specific complementary assets can thus represent the second line of defense for rare products and processes. If intellectual property law does not provide the separate holding mechanisms for the innovator, ownership of complementary assets can often do so.

And here lie the advantages to incumbency. Firms that are simply "in the business" will have built or acquired many of the necessary complementary capacities, unlike the innovator in a market that it sweeps them away. Market-entry strategy for them is relatively straightforward if the innovator requires support from complementary capacities already in place and controlled by the innovator. The incumbent is in a position to move forward quickly and confidently.

And even if it is not incumbent, but others are, the incumbent may find the value of its complementary assets, like distribution and manufacturing, increasing if the innovation generated by others can be held within the assets it already has in place. If this situation is a permanent one — that is, if a stream of competency-enhancing innovations is expected from external sources while little is expected from internal sources — the incumbent could find itself an attractive acquisition candidate. Thus, even if an incu-

ber firm loses innovative capabilities, it is still in a position to profit per se (i.e. it owns or otherwise controls complementary capacities that are not easy to imitate, and its innovation continues from external sources and is competency-enhancing rather than competency-diminishing).

Suppose the innovating firm is a new entrant. It has two pure strategies to select from with respect to acquiring complementary assets. At one extreme it could integrate into *i.e.* build or acquire all of the necessary complementary assets. This is likely to be unnecessary as well as prohibitively expensive. It is wiser to recognize that the variety of assets and competences that need to be acquired is likely to be quite large, even to commercialize only modestly complex technologies. To produce a personal computer, for instance, a company needs to access expertise in semiconductor technology, disk drive technology, networking technology, keyboard technology, and several others. No company has kept pace on all of these areas by itself.

At the other extreme, the innovator could attempt to access these assets through straightforward contractual relationships (e.g. component supply contracts, fabrication contracts, distribution contracts, etc.). In many instances contracts may suffice, although it does expose the innovator to various hazards and dependencies that it may wish to avoid.

Quality rarely provides extreme or pure cases. Decisions to integrate or license involve tradeoffs, compromises, and mixed approaches. It must be said, however, that the business world is characterized by mixed modes of organization, involving judicious blends of contracting and integration. Moreover, legalizing contractual relationships can be functionally akin to integration; internalization can be so decentralized as to be akin to contracts.

A particularly remarkable entry strategy that emerged in the 1970s and 1980s was the strategic alliance. Strategic alliances involve more than a simple transactional

relationship. It might include technology swaps, joint R&D or co-development, and the sharing of complementary assets, e.g. one party manufactures and the other distributes for a co-developed product.

Strategic alliances, including consortia and joint ventures, are often an efficient and efficient way to commercialize innovation, particularly when an industry is fragmented. As compared to mergers, strategic alliances and other forms of informal agreements preserve organizational autonomy and individual incentives.

Alliances are often superior to license agreements, particularly when commercialization of the technology in question is less well developed. Linkage is a significant problem, and license learning is critical. The joint venture structure is particular in that it is rather flexible and permits future contingencies to be handled flexibly through the joint venture's governing board. Contractual relationships, as represented by licenses, offer less flexibility. Unexpected changes must be re-negotiated through renegotiation, and this exposes one of the parties to significant business risks.

The best strategy and chance of success will thus depend on these factors: (1) intellectual property protection; weak or strong; (2) interdependence between the innovator (and imitator) and the owners of the complementary assets; (3) the innovator's competitive position vis-à-vis potential imitators with respect to his ability to access complementary assets. The strategies that flow from this analysis are summarized in Figure 1. The analysis provides heuristics for ascertaining the best strategy for the innovator.

Optimal strategies may not guarantee success. However, wrong strategies can make things much worse. For instance, if an innovator chooses to integrate when he should have contracted (or not even have entered the game), it will certainly cost more resources than necessary for to-additional strategic benefits. Furthermore, if integration takes the form of building extra capacity in specialized assets, it may lead to industry overcapacity

**Market Entry Strategies
Case of Weak Appropriability Regime.**



Figure 3

and, hence, may depress overall industry profitability substantially. Conversely, if the innovation conditions within it should integrate it may never get into the game because an imitator may end the try-out run. Even if this does not happen, the asset supplier will always be in a position to exact maximum benefits from the innovator's whomever the contract fails to take account of new situations that may arise.

Access to capitalization plays a role in causing innovators to fall into these traps. Large established firms with adequate cash positions have a tendency to integrate where there is no strategic advantage in doing so, while undercapitalized start-ups are notorious for attempting to use collaborative arrangements larded with strategic hazards.

CONCLUSIONS

We can now see very clearly why IBM failed, despite IBM having control an order-of-magnitude

technological breakthrough. The worse that IBM developed was a technical sophistication much higher than would normally be found in a hospital, requiring a high level of training, support, and servicing. IBM had none of these capabilities, could not easily contract for them, and appears to have been slow to realize their importance. It most probably could have formed a partnership with a company like Siemens to access the requisite capabilities. Its failure to do so was a strategic error compounded by the very limited intellectual property protection that the law afforded the innovator. Although subsequent court decisions have upheld some of IBM's patent claims, once the product was in the market it could be reverse engineered and its essential features copied. Two competitors, GE and Technicon, already possessed the complementary capabilities that the innovator required, and they were also technologically capable. In addition, both were experienced marketers of

medical equipment, and had reputations for quality, reliability, and service. GE and Technicon were thus able to convert their R&D resources to developing a competing scanner, borrowing ideas from IBM's scanner and improving on it where they could.

If IBM illustrates how a company with outstanding technology and an excellent product can fail to profit from innovation while the imitators succeed, the story of the IBM PC indicates how a new product representing a very modest technological advance can yield remarkable returns to the developer. As noted earlier, the IBM PC, introduced in 1981, was a success despite the fact that the architecture was rather ordinary. IBM decided to use existing technology to produce a solid, reliable machine rather than state-of-the-art. With a one-year mandate to develop a PC, IBM could do little else. However, the IBM PC did one what at the time was a new 16-bit microprocessor (the Intel 8088) and a new disk operating system (DOS) adopted by IBM by Microsoft. Other than the microprocessor and the operating system, the IBM PC incorporated existing more "standard" and used off-the-shelf parts from outside vendors.

The key to the PC's success was not the technology. It was the set of complementary assets that IBM either had or quickly and skillfully assembled around the PC. In order to expand the market for PCs, there was a clear need for an expandable, flexible microcomputer system with extensive applications software. IBM could have based its PC system on its own patented hardware and copyrighted software. Such an approach would cause complementary products to be nonavailable, forcing IBM to develop proprietary and comprehensive library of software in a very short time. Instead, IBM adopted what might be called an "imitated cost/benefit" approach. By adopting an open system architecture, as Apple had done, and by making the operating system information publicly available, a spectacular output of third-party software was induced. IBM estimated that by mid-1983 at least 3,000 third-

