

InnovationMatters

Consulting Editor: Terry A. Young

TABLE OF CONTENTS

June 1, Volume 1 Issue 1

THE NEWSLETTER / WHO WE ARE

p 1

INTERNATIONAL NEWS

p 2

Critical, timely information from sources around the globe

Japanese Panel Established to Develop New Intellectual Property Regulations
Germany's Parliament Adopts Controversial Copyright Law
Russian Duma Enacts New Intellectual Property Legislation
WIPO Best Practices: Increase in Patent Applications in Mexico
Competition for Patent Rights in Response to SARS
Investing in Research: An Action Plan for Europe
African Agricultural Technology Foundation Established
The Centre for the Management of Intellectual Property in Health (MIHR)
ProTon Europe Launched as Pan-European Technology Transfer Network
10% Increase in International Patent Applications Filings in 2002

U.S. NEWS

p 5

Important news from US sources

President's Council Issues Supportive Report on Technology Transfer
Tax Deductions for Intellectual Property Donations Retained in 2003 Tax Bill
Madey v. Duke University: Elimination of "Experimental Use" Exemption
Venture Capital Fundraising Plunges in First Quarter of 2003
Venture Capital Investments Also Fall in First Quarter 2003
New Data Sharing Requirements Established by NIH
SBA Reports Small Businesses Make More Important Innovations than Large Businesses
USPTO's Annual List of "Top Ten" Organizations Receiving Most U.S. Patents in 2002
Supreme Court Upholds Law to Extend Copyright Protection for 20 Years
TEACH Act Expands Distance Education Intellectual Property Rights

RESOURCES

p 8

Valuable reports, studies and surveys from international sources

AUTM Releases 2001 Licensing Survey Summary
Business Incubators: Investing in Ideas
Benchmarking Business Angels
Innovation's Golden Goose
American Formula for Growth: Federal Policy and the Entrepreneurial Economy, 1958-1998
Innovation Tomorrow: Innovation Policy and the Regulatory Framework
Integrating Intellectual Property Rights in Development Policy
Intellectual Property: Federal Agency Efforts in Transferring and Reporting New Technology
Keeping Science Open: the Effects of Intellectual Property on the Conduct of Science
World Competitiveness Yearbook 2002

BEST PRACTICES

p 10

Feature:
Success Factors in University Technology Transfer through Patenting and Licensing
by Jon Sandelin



EVENTS

p 14

2003 International events, conferences and seminars

June
July
August
September
October
November
December

InnovationMatters

Consulting Editor: Terry A. Young

THE NEWSLETTER

InnovationMatters is a twice-monthly electronic newsletter designed for managers of innovation and technology transfer around the world, as well as the attorneys and other service firms that support the innovation industry.

InnovationMatters identifies, selects and reports relevant and current news, resources and events in innovation management, and includes one or more original papers describing best practices.

WHO WE ARE

Technology Innovation Group, Inc. (TIG) is a group of internationally recognized experts that assists individuals, institutions, companies and communities to convert technology to wealth. TIG also creates and builds community and regional wealth through entrepreneurship, incubation, technology-based economic development and technology commercialization.

www.techingroup.com



© 2003 Technology Innovation Group, Inc. All rights reserved.

InnovationMatters is published by Technology Innovation Group, Inc. If you have a question, comment or story you'd like to see in *InnovationMatters*, please send an email to editor@techingroup.com. *InnovationMatters* reserves the right to edit material and does not represent that all submitted material will be used. 7006 Firewheel Hollow Austin TX 78750 USA

Japanese Panel Established to Develop New Intellectual Property Regulations

On March 20, the Japanese government announced a high level panel to debate innovation as a tool to revive the country's competitiveness. Chaired by Prime Minister Junichiro Koizumi, the committee will focus upon intellectual property issues including streamlining the patent prosecution process in Japan and coordinating laws with those of the European Union and U.S. In the current Diet session, five ministries have submitted six bills to reform intellectual property regulations. In response, the Japanese government established the panel in the belief that the issues transcend ministerial jurisdictions and are best managed by a single entity. Recommendations are expected in July. See: <http://www.asahi.com/english/business/K2003032000312.html>



Germany's Parliament Adopts Controversial Copyright Law

On April 11, the German Parliament enacted a controversial copyright law giving universities significant freedom to distribute digital copyrighted materials to students and scholars. Embraced by academia, the law was strongly opposed by publishers. While the law was intended to make German law consistent with directives issued by the European Union (EU), publishers represent that they will contest the new law in Brussels with EU authorities. See: <http://chronicle.com/free/2003/04/2003041407n.htm>



Russian Duma Enacts New Intellectual Property Legislation

The Russian Duma has adopted Federal Law 22-F3, "On Inputting Amendments to the Patent Law of the Russian Federation," effective March 12. The milestone legislation clarifies ownership in intellectual property resulting from research funded by the Russian Government, which lies

with the performing individual or organization in the absence of any other terms in the research contract. This principal is a great step forward in bringing the laws of the Russian Federation in line with many of the industrialized countries of the world, including the U.S, Japan and Germany. Furthermore, in the case that the research contract specifies ownership in the Russian Federation for defense or other national purposes, the Government must file a patent application within six months of the notification of the invention; if not, ownership of the invention reverts to the inventing individual or organization. The new law currently is published only in the Russian language. It complements significant amendments to Russian trademark law enacted by the Duma in December 2002, in anticipation of the country's admission to the World Trade Organization (WTO).



WIPO Best Practices: Increase in Patent Applications in Mexico

In 2000, the Mexican Industrial Property Institute (IMPI) established a number of regional offices to decentralize services and to promote opportunities presented by intellectual property to small and medium-sized enterprises (SMEs). In less than three years, this decentralized approach has recorded remarkable success in increasing the number of applications for patents, marks and industrial designs by Mexican enterprises, inventors and researchers. In a wide-ranging interview conducted with the Director of IMPI Western Regional Office by the World Intellectual Property Organization in April 2003, the success of the model and the implications for the innovation system and SMEs in Mexico are explored. http://www.wipo.int/sme/en/best_practices/imp_i_occidente.htm



Competition for Patent Rights in Response to SARS

The May 5th issue of the *Wall Street Journal* reported that the intense research of the SARS virus also has led to intense competition for patent



INTERNATIONAL NEWS

Table of Contents

rights. At least three organizations have sought patent protection for their research results: (i) the University of Hong Kong has sought a patent on the germ; (ii) Canada's British Columbia Cancer Center filed for protection for all of the virus' genes; and (iii) the U.S. Centers for Disease Control has filed for patent protection on its SARS findings. In addition, several biotechnology companies have filed patent applications claiming drugs to treat SARS. Other individuals and organizations determined not to seek protection for their research findings. *Wall Street Journal*, May 5, pgs. A1 and A8. The *Washington Post* of May 15 featured a similar article on competition for patent rights in response to SARS.



Investing in Research: An Action Plan for Europe

On April 29, EU Research Commissioner Philippe Busquin endorsed a new action plan to increase the average research investment level in the European Union (EU) from 1.9% of GDP to 3% of GDP by 2010. The plan sets forth 32 actions items based upon four themes to create a stronger research base in Europe:

- Focus upon core technologies to implement a common EU strategy;
- Reward and retain skilled scientists, and build teams of focused researchers;
- Redirect and increase public funding for innovation in all member countries; and
- Improve the regulatory environment for research and innovation.

Notably, the action plan proposes that every university student in science, engineering and business should be required to take a course on intellectual property rights and technology transfer principles. The Commission will publish an annual report ahead of the Spring European Council in order that the "Heads of State and Government" may adjust the strategy annually. http://europa.eu.int/comm/research/era/3pct/pdf/com2003_en.pdf



African Agricultural Technology Foundation Established

In March, the African Agricultural Technology Foundation (AATF) was formed to act as a clearinghouse for African agriculture, matching new technology with African researchers, negotiating intellectual property agreements

AATF will match new agricultural technologies with African researchers.

with major corporations, and providing advice on GM crops and other regulatory issues. Headquartered in Nairobi, the AATF will operate with an annual budget of \$1.5 million provided by the Rockefeller Foundation and the U.S. Agency for International Development. According to the *Washington Post* (March 10, 2003), four of the world's largest agricultural companies have agreed to donate patent rights, seed varieties, and laboratory experience to AATF in order to increase food production in Africa.

[Source: SCIENCE, March 21, 2003]



The Centre for the Management of Intellectual Property in Health (MIHR)

The Centre for the Management of Intellectual Property in Health R&D (MIHR) was launched in November 2002 to promote "... access to health technologies for the poor through improved management of intellectual property in research and development." MIHR is an international non-governmental organization (NGO) and a registered UK charity currently housed at London's Queen Mary Intellectual Property Research Institute in London. MIHR has been supported by more than fifty organizations in both the public and private sectors, including an initial grant of \$1.5 million from the Rockefeller Foundation. In April, Dr. Cathy Garner, formerly Director of Research and Enterprise at the University of Glasgow, was named MIHR's Chief Executive Officer. In accepting the appointment, Dr. Garner stated, "Astute management of IP is essential to the development of new drugs and vaccines for



INTERNATIONAL NEWS

Table of Contents

diseases in developing countries. MIHR will work in partnership with public sector research groups and others in developing countries to build the expertise to navigate the complexities of IP laws." www.mihir.org/welcome1.htm



ProTon Europe Launched as Pan-European Technology Transfer Network

Launched in February, ProTon Europe (Public Research Organisations Transfer Office Network) seeks to create a network for the exchange of best practices in technology transfer in Europe. The initial 42 members of ProTon were selected competitively, and have been assigned to one of seven working groups indicative of the organization's focus: technology transfer office structure and management; intellectual property rights (IPR); licensing; industry interaction; spin-off and university companies; policy development; and professional development. Information will be disseminated through workshops, conferences and internet-based systems, leading to the first annual ProTon conference in November 2003. Ernst Max Nielsen, ProTon's Network Manager, suggests that the organization will be "...a hub among existing networks in order to give the [technology transfer] profession a voice at EU level." The ProTon home page, hosted on the Gate2Growth website, contains additional information: www.gate2growth.com
[Source: CORDIS FOCUS, March 10, 2003]

Ernst Max Nielsen, ProTon's Network Manager, suggests that the organization will be "...a hub among existing networks in order to give the [technology transfer] profession a voice at EU level."



10% Increase in International Patent Applications Filings in 2002

For the second consecutive year, the number of international applications received by the World Intellectual Property Organization (WIPO) under the Patent Cooperation Treaty (PCT) has exceeded the 100,000 mark in a single year. Nearly 115,000 PCT applications were filed in 2002, representing a 10% increase over applications received in 2001.

For the twelfth consecutive year, the top five national users of the PCT filing system were the United States (39.1% of all applications in 2002), Germany (13.4%), Japan (11.9%), the United Kingdom (5.5%) and France (4.3%).

The top ten firms filing the largest number of international patent applications in 2002 were:

1. Koninklijke Philips Electronics N.V.
 2. Siemens Aktiengesellschaft
 3. Robert Bosch GmbH
 4. Telefonaktiebolaget LM Ericsson
 5. Matsushita Electric Industrial Co. Ltd.
 6. Sony Corporation
 7. Nokia Corporation
 8. 3M Innovative Properties Company
 9. Bayer Aktiengesellschaft
 10. The Procter & Gamble Company
- For more information on the PCT and its activities, see: <http://www.wipo.int/pct/en/index.html>



President's Council Issues Supportive Report on Technology Transfer

Technology transfer is critical to optimizing the value of federally funded research and its return on investment to the U.S. taxpayer, according to a draft report presented to the President's Council of Advisors on Science and Technology (PCAST) on March 3. The result of a 12-month study, the report makes nine recommendations, the most important of which is presented first: **"Existing technology transfer legislation works and should not be altered."** Specific reference is made to the Bayh-Dole Act of 1980 as the stimulus to a "technology revolution." The PCAST report bolsters the position of technology transfer supporters at a time of controversy in the press and potentially in Congress. The draft is under review by the Council and the Office of Science & Technology Policy, who will make final recommendations to the President. For a copy of the full report: www.aau.edu/research/technolo.html



Tax Deductions for Intellectual Property Donations Retained in 2003 Tax Bill

The Jobs and Growth Tax Act of 2003 (S.2) debated in Congress in May included a controversial provision to sharply reduce the tax deduction that corporations and individuals could claim when donating patents and other intellectual property to universities. The American Council of Education (ACE), on behalf of 11 academic associations, delivered a letter to Congress opposing the change, representing that current tax incentives encourage corporate donations of intellectual property that "provide universities with the opportunity to further their teaching and research missions by providing kernels of new ideas that can lead to exciting new discoveries and the development of important technologies." As sent to the President by Congress, the tax-cut bill did not include the controversial change to current practice. President Bush signed the bill into law on May 28th. For the ACE letter, see: <http://www.acenet.edu/washington/letters/2003/05may/WMC.cfm>



Madey v. Duke University: Elimination of "Experimental Use" Exemption

A decision by the U.S. Court of Appeals for the Federal Circuit has eliminated the experimental use exemption from claims of patent infringement for noncommercial academic scientific research. In its decision, the Court noted that even if a university is pursuing research "with no commercial application whatsoever," it should not assume that its actions are exempt from patent infringement.

Dr. John Madey, the inventor of the free-electron laser, managed the Free-Electron Laboratory

at Duke University from 1989 until 1997. In 1998, Dr. Madey filed suit against Duke, claiming that the university infringed

The organizations contend that the court's decision will have a "significant chilling effect on all academic scientific research, and especially that in biotechnology and biomedicine."

his patents by utilizing the laser and other equipment claimed in the patents. In its defense, Duke argued no infringement existed because the equipment was being used on a federally funded research grant for "experimental uses". The Court of Appeals sided with Dr. Madey stating that experimental use exception cannot be claimed for activities that furthered the university's objectives, "...including education and enlightening students...and faculty participation in those projects.... Moreover, the profit or non-profit status of the user is not a determinative," as research activity attracts additional grants and serves to "increase the status of the institution and lure lucrative research grants, students and faculty."

Duke University has asked the U.S. Supreme Court to review the Appeal Court's decision. Furthermore, six academic associations and 25 universities joined together in March 2003 to file an *amicus* brief with the Supreme Court in support of Duke University's request. The organizations contend that the court's decision will have a "significant chilling effect on all academic



scientific research, and especially that in biotechnology and biomedicine." If the Supreme Court decides to hear the case, it likely will not be considered until October 2003 or later.

The URL for the court's decision: http://www.ipo.org/2002/IPcourts/Madey_v_Duke.htm

The *amicus* brief: <http://www.aau.edu/intellect/Amicus1.03.pdf>



Venture Capital Fundraising Plunges in First Quarter of 2003

Reuters News Service reports that venture capital fund raising in the U.S. dropped by more than forty percent in the first quarter 2003, when compared to the prior fiscal quarter. The net amount raised was \$603.6 million, the lowest quarterly total since 1994. Based upon a report from the National Venture Capital Association, the article cites a tremendous "overhang" in committed capital, a soft demand for initial public offerings in the market, and a reduced rate of corporate acquisitions as causes for the decline. In light of these circumstances, some venture funds actually returned money to their investors in the quarter.

[Source: Reuters News Service, May 5, 2003]



Venture Capital Investments Also Fall in First Quarter 2003

Venture capital investments also declined sharply in the first quarter: 623 companies received investments January-March, compared to 726 companies in the previous quarter. The \$3.8 billion invested in the quarter is the lowest since 1997. Detailed information describing the first quarter's venture capital investment activity in the U.S. is available at <http://www.pwcmoneytree.com>. Additionally, a state-by-state investment table for the first quarter has been prepared by the State Science & Technology Institute, and is available at: <http://www.ssti.org/Digest/Tables/051603t.htm>



New Data Sharing Requirements Established by NIH

The National Institutes of Health (NIH) is implementing a new policy that requires grant recipients to share data produced from research funded by NIH. The policy, which applies to annual grants of \$500,000 or more awarded on or after October 1, 2003, requires the timely release and sharing of data by grant recipients, "timely release" defined as "no later than the acceptance for publication of the main findings from the final data set." In implementing the new rule, the agency represented: "NIH continues to expect that the initial investigators may benefit from first and continuing use but not from prolonged exclusive use [of research data]." http://grants.nih.gov/grants/policy/data_sharing/index.htm



SBA Reports Small Businesses Make More Important Innovations than Large Businesses

According to a press release issued in March by the U.S. Small Business Administration (SBA), small businesses (fewer than 500 employees) developed more important innovations in the U.S. than did large businesses, demonstrating the power of innovation in small companies. In review of issued patents from 1996 to 2000, the SBA found that patents awarded to small businesses were more likely to be among the top one percent of most frequently cited patents than were patents awarded to large businesses (28 percent more often). The number of citations is commonly viewed as a benchmark of the economic and technical importance of new innovations. Additionally, the report identified biotechnology and pharmaceuticals as technology fields in which small business innovations were particularly strong. Surprisingly, the study also found that 70 percent of U.S. businesses that hold patents are manufacturing firms, while only 6 percent of American businesses are manufacturers. <http://www.sba.gov/advo/news/march03.pdf>



USPTO's Annual List of "Top Ten" Organizations Receiving Most U.S. Patents

The United States Patent and Trademark Office (USPTO) announced the "Top Ten" private sector recipients of U.S. Patents in 2002. IBM received the most patents for the 10th consecutive year. The Top Ten corporations, with numbers of U.S. Patents received in 2002, are:

1. International Business Machines Corporation 3,288
2. Canon Kabushiki Kaisha 1,893
3. Micron Technology, Inc. 1,833
4. NEC Corporation 1,821
5. Hitachi, Ltd. 1,602
6. Matsushita Electric Industrial Co., Ltd. 1,544
7. Sony Corporation 1,434
8. General Electric Company 1,416
9. Hewlett-Packard Company 1,385
10. Mitsubishi Denki Kabushiki Kaisha 1,373

www.uspto.gov/web/offices/com/speeches/03-01.htm



Supreme Court Upholds Law to Extend Copyright Protection for 20 Years

In upholding a 1998 law called the "Sonny Bono Copyright Term Extension Act," the U.S. Supreme Court ruled in January 2003 to extend copyright protection in the United States for an additional twenty years. In review of *Eldred v. Ashcroft*, the Court determined that Congress acted within its authority when it lengthened copyright protection for creative works to 70 years from 50 years after the creator's death, and from 75 years to 95 years for corporations. <http://www.techlawjournal.com/topstories/2003/20030115.asp>



TEACH Act Expands Distance Education Intellectual Property Rights

In November 2002, President George W. Bush signed into law "TEACH" or the "Technology, Education, and Copyright Harmonization Act." TEACH updates the distance education provisions of the Copyright Act to meet the challenges of the knowledge-based economy and the networked society. TEACH benefits are many, including enhanced ability to deliver digital content to students outside the classroom, expansion of materials that may be used in distance education, and the authority to convert certain copyrighted works from analog to digital format for use in distance education. TEACH also imposes certain restrictions and requirements on copyright users, such as limitations on the quantity of work that may be digitized. The law is complex in seeking to balance the interests of educators and copyright owners in an age of ever advancing technology.

An analysis of the new law by the American Library Association (ALA):

<http://www.ala.org/washoff/teach.html>

For application of the new law to higher education, see the Copyright Crash Course® developed by Georgia Harper of the University of Texas System: <http://www.utsystem.edu/ogc/intellectualproperty/teachact.htm>



Click on the blue title to access each publication.

AUTM Releases 2001 Licensing Survey Summary

The Association of University Technology Managers (AUTM) released its "FY 2001 Licensing Survey Summary" on May 22nd, reporting results of technology transfer activities at 198 universities, teaching hospitals and research institutions in the U.S. and Canada. The 11th annual AUTM survey reported total adjusted gross license income of \$1.07 billion (down from the \$1.26 billion reported in 2000), with 494 new companies formed to commercialize academic discoveries in 2001. AUTM reports that more than 1,500 commercial products based upon university discoveries have been introduced to the market in the U.S. and Canada since 1998, providing significant public benefit. A summary of the report is available free of charge at [click on the "Media" button] http://www.autm.net/index_ie.html. The complete report is available for purchase at: <https://www.autm.net/store/survey/regnotice.cfm>



Business Incubators: Investing in Ideas

This feature article in the April 2003 issue of "University Business" magazine summarizes the "state-of-affairs" of university-based business incubators in the United States today. Despite drastic budget cuts, a dry venture capital pool and a very slow economy, some university business incubators continue to grow and even thrive with novel approaches. Successful incubators are relying upon innovation in technology transfer to improve the communities.



Benchmarking Business Angels

Start-ups are relying more and more upon business angels - individual investors who finance and advise start-up companies - for early stage financing. The Enterprise Directorate-General of the European Commission created an expert

group to examine public sector opportunities to support business angels, and to identify "best practices." This report from the expert panel provides recommendations to grow the investment capacity of business angels in Europe, such as the creation of networks to match investors with investment opportunities, and initiatives to raise awareness of business angels among SMEs.



Innovation's Golden Goose

This opinion piece in *The Economist* (December 12, 2002) was received with great enthusiasm by the academic community in the United States several months ago. The article describes the Bayh-Dole Act of 1980 as "Possibly the most inspired piece of legislation to be enacted in America over the past half-century....this single policy measure helped to reverse America's precipitous slide into industrial irrelevance." Because the legislation transferred ownership of intellectual property in research funded by the U.S. Government to the performing university, "Overnight, universities across America became hotbeds of innovation...." The writer concludes by suggesting, "...the sole purpose of the Bayh-Dole legislation was to provide incentives for academic researchers to exploit their ideas....A goose that lays such golden eggs needs nurturing, protecting and even cloning, not plucking for the pot."



American Formula for Growth: Federal Policy and the Entrepreneurial Economy, 1958-1998

Produced by the National Commission on Entrepreneurship, this report analyzes the impact of public policy upon the rise of the entrepreneurial economy in the U.S. during the past 40 years. The report concludes that public policies have made positive impact upon the entrepreneurial economy in five key areas: creation of vibrant financial markets; development of strong intellectual property systems; creation of new markets for business expansion; establishment of stable governance; and growth of a skilled workforce.



Innovation Tomorrow: Innovation Policy and the Regulatory Framework

This major study recommends detailed regulatory reform to make Europe the "most competitive and knowledge-based economy in the world." Funded by the Innovation/SMEs Programme of the European Commission, the study recommends that all governance should be "innovation friendly;" innovation should be at the heart of education, R&D, risk capital, enterprise development, intellectual property, employment, taxation, trade, and more.



Integrating Intellectual Property Rights in Development Policy

"For too long, Intellectual Property Rights (IPR) have been regarded as food for the rich countries and poison for poor countries." The Commission on Intellectual Property Rights, a select group of scholars chaired by John Barton of the Stanford University Law School, examined IPR systems internationally to test this hypothesis. In this 191-page report, the Commission suggests that "...the appropriate diet for each developing country needs to be decided on the basis of what is best for its development, and the international community and governments in all countries should take decisions with that in mind."



Intellectual Property: Federal Agency Efforts in Transferring and Reporting New Technology

The U.S. Congress enacted the Technology Transfer Commercialization Act of 2000 to improve the transfer of inventions created in federal laboratories to commercial application. As a requirement under this law, the General Accounting Office sought to determine how nine U.S. Government agencies (those with research budgets greater than \$500 million) had identified, patented, and licensed inventions created in

their laboratories and facilities. Complete with more than 30 tables and figures, this report identifies a number of disparities between these agencies in implementation of their technology commercialization initiatives.



Keeping Science Open: the Effects of Intellectual Property on the Conduct of Science

Produced by the UK Royal Society, this report postulates that intellectual property rights (IPR) constrain the advancement of science: "Although IPR can aid the conversion of good science to tangible benefits, the fact that they are monopolies can cause a tension between private profit and public good. Not least, they can hinder the free exchange of ideas and information on which science thrives." The authors suggest a number of specific policy changes to encourage research, development and commercial application by IPR owners while retaining an open discourse in the conduct of science.



World Competitiveness Yearbook 2002

This annual yearbook published by The Institute for Management Development ranks 49 industrialized and emerging countries on the basis of 314 economic competitiveness-related indicators. For 2002, the United States placed in the top position, followed by Finland and Luxembourg. While admitting that "Prediction is extremely difficult, especially about the future," the Institute also ventures to make predictions about the future of the "World Competitiveness Landscape."



Success Factors in University Technology Transfer through Patenting and Licensing



By Jon Sandelin

Successful licensing of research results (sometimes referred to as undeveloped technology) created in universities or federal laboratories is difficult. The "product" to be licensed is not developed in response to commercial market need, the technology is very embryonic with uncertainty as to whether it will work reliably outside of the laboratory environment, and the financial risk to the licensee in bringing such embryonic technology to market is typically very significant. The licensee must anticipate what competing products will exist some years in the future (when the licensed product finally reaches the market), and have faith that his/her product can gain sufficient market share to justify the development, manufacturing, and marketing investments. The up-front and advanced royalty payments are typically inconsequential when compared to the other required investments to bring a new product to market.

A key attribute of successful organizations or licensing offices is viewing the process from a marketing perspective. They recognize the key role of the inventor, and develop policies and operating procedures that provide incentives to the key participants in the process. The key participants are: (1) the inventor, (2) the licensing associate employed by the university or federal lab, and (3) a person employed by the potential

Jon Sandelin is a Senior Advisor with Technology Innovation Group, Inc. and is recently retired from 19 years with the Stanford Office of Technology Licensing where he remains Senior Licensing Associate Emeritus of Stanford University. Still actively working with university licensing offices in developing and improving operational effectiveness in technology transfer activities, he has particular interest in working with technology transfer programs outside the US. He can be reached via email: jon.sandelin@stanford.edu

licensee who believes the invention is important to his/her company's future. The latter person we will refer to as the Invention Advocate within the Company ("IAC").

The Inventor's Role:

The inventor's participation and cooperation in the licensing process is normally required for a successful outcome. The inventor: (1) creates and discloses the invention to be licensed; (2) identifies people in industry who should be interested in the invention (such contacts are extremely valuable); (3) participates in obtaining patent protection; (4) responds to technical questions about the invention; and (5) hosts laboratory visits of potential IACs, where future research may lead to important discoveries of value to the licensee. The inventor may also, via a separate consulting agreement, provide know-how and show-how that may be critical to the commercialization of the invention.

It should be noted that for university researchers, involvement in the licensing process is normally not required and is seldom, if ever, included in their job description. Thus, policies must create incentives to encourage inventor participation in the process. Potential benefits to the inventor may include some or all of the following: (1) A share of net royalties from the licensing of their invention

(at Stanford, the share is 1/3); (2) research funding by the licensee directly to the lab of the inventor; (3) paid consulting agreements between inventors and the licensee; (4) employment of the inventor by the licensee (this is common when students are inventors/co-inventors); and (5) payment (cash or equity or both) to serving on Scientific Advisory Boards (this is relatively common when the licensee is a start-up company).

The Role of the Licensing Associate:

The licensing associate first evaluates invention disclosures and selects those to be patented and marketed (at Stanford, from 30% to 40% of the invention disclosures received are selected, and of those selected, about 65% are eventually licensed). Selection factors include: (1) prior success in licensing the inventions of this inventor; (2) the inventor's reputation in the field of the invention and willingness to participate in the licensing process; (3) the expectation of future new discoveries related to the invention; (4) the application areas of the invention, particularly when they're in growing markets; and (5) responses from industry contacts asked to review the invention.

The key to licensing success is identifying a person within a company, gaining the attention of that person, and then converting interest into a conviction that their company needs your invention. The inventor is an important source of names of people in companies that may be interested in their invention. By referring to the inventor when contacting such people, there is a good chance of creating initial interest in the invention. Without such a referral, gaining the attention of people in industry is usually very difficult. The initial contact document should be a brief one-page invention summary that can be read in a few seconds, providing an abstract of the invention, its advantages over currently available technology, and applications for its use. Once initial interest is gained, then more detailed information is provided, such as invention disclosure material, journal articles describing the invention, and issued or pending patents. At this stage, it is normally a good practice for the Licensing Associate to coordinate a meeting

between the potential IAC and the inventor.

The next stage is the negotiation of the License Agreement. This requires a realistic assessment of the value of the licensing arrangement to the company, and an understanding as to what the company is seeking from the licensing arrangement. The Licensing Associate should have full authority to negotiate the final terms of the License Agreement, although the Licensing Associate may wish to consult with others (e.g., the inventors, other Licensing Associates, or the Licensing Office Director) if the other party makes unusual or difficult requests. Once completed, the Licensing Associate monitors the progress of Licensed Product development by the licensee to ensure diligence terms are followed. Because the licensed invention is typically far from market, and much can happen as a product is prepared for market, amending License Agreements is very common.

The Role of the Invention Advocate within the Company:

The IAC convinces the management of his/her company that the licensed invention is important to the future of the company. The IAC therefore must be fully aware of the present and future value of the licensed invention, and the potential value of the relationship between the company and the university. An example: In 1974, an engineer based at his company's headquarters in Japan was visiting his company's office in Los Angeles. By chance, he happened to sit in on a presentation on a computer-based sound synthesis technique given by a professor at Stanford. Although this invention had been shown to many others, only this engineer recognized the potential. He became an invention advocate, and convinced his company to become licensed. Ten years later, licensed products were introduced. These products were highly profitable for the company, and Stanford received many millions of dollars in royalties. In 1989, Stanford developed a follow-on technology and an alliance was created between Stanford and this company. That young engineer subsequently became President of this multi-billion dollar company.



Policies, Procedures, and Resources:

1. Policies

- a. Inventors must be stakeholders in the financial success of licensing. They should receive a meaningful share of royalty income. This creates a justification for inventors to disclose inventions and to participate in various aspects of the licensing process. At Stanford University, inventors receive one-third of net royalties earned by their invention.
- b. The licensing office should receive a share of royalties, to offset the costs of the office and with the objective of total self-funding. This motivates the licensing office people, as they create the funding for their salaries and office operations for their success in bringing in licensing income.
- c. The licensing associate should be empowered to make all decisions concerning an invention assigned to him/her. Decisions include: (1) if an invention should be accepted and a patent filed; (2) who files the patent; (3) what companies to contact; (4) how to market the invention; (5) the type of license appropriate for the situation (e.g., option agreement, exclusive, or nonexclusive license); (6) financial terms of the license; (7) diligence provisions of the license; and (8) issues that arise after the license is signed.
- d. Patent investments should be treated as inventory (an asset), and expensed only when it is clear that they are unlicensable.

2. Procedures

- a. Have a very simple invention disclosure form. Detailed information can be obtained at the first interview with the inventor. The barrier to disclosure should be minimal.
- b. Maintain a contacts file, indexed both by company name and by the person's name. Contacts are essential in this business.
- c. Be responsive to inquiries from inventors

- d. and companies. Always return telephone calls promptly.
- d. Maintain a simple docketing and filing system, with an effective tickler system for follow up as needed.
- e. Keep the inventor(s) fully informed about actions taken on their invention.
- f. Always be on the lookout for a better way to do things.

3. Resources

- a. Licensing Associates.
Effective people in licensing usually have some experience in industry -- in marketing, sales, or business development. Good communication skills (both oral and written) are essential. The emphasis and related allocation of time by Associates should be focused on finding potential licensees and on structuring effective license agreements. Effective license agreements are written in easy-to-understand plain language and contain terms that both sides view as fair. The licensing associate only needs to know in very general terms what the invention is or does, why it is useful, and where it can be applied.
- b. Clerical Support.
Licensing generates lots of telephone calls and lots of correspondence. Most marketing materials are paper-based. Keeping track of multiple deals in progress requires efficient filing and tracking systems. An efficient support infrastructure frees licensing associates to focus on marketing.
- c. Communication and Computer Tools.
Telephone, facsimile, and electronic mail have become essential tools in the licensing office. The use of regular mail has declined dramatically given the explosive growth of email and facsimile machine use. Access to computer tools and services is essential, and investments in hardware, software, and training are required.



Guiding Principles:

1. Focus attention on marketing and finding the IAC.
2. Target efforts towards likely buyers, and give them personal attention.
3. The inventor must be a willing participant in the licensing process. Keep inventors fully informed about what you are doing to license their invention.
4. Make it as easy as possible for people to join and/or participate in the licensing process. License agreements should be written in easy-to-understand plain language. It should be a simple and straightforward process to obtain a license.
5. Universities and industry are motivated to be good friends and many benefits flow from industry to the university outside of licensing. Maintain a university view, not a licensing office view, when looking at issues.
6. Attorneys can provide good advice, but should not be in control of the license negotiation. Also, individuals, not committees, should make decisions.
7. Negotiation is a mutual problem-solving process. Seek creative solutions to the concerns of the other party. Understanding what is important to the other side is necessary for reaching a strong lasting agreement.



EVENTS

Table of Contents

Click on organization's name in blue to access website.

JUNE 2003

"GlobAlliances: International Spirit, Local Heart"

[International Economic Development Council \(IEDC\)](#)

Montreal, Canada
June 4-6, 2003

"ISPIIM 2003: Innovation through Collaboration – Clusters, Networks, Alliances"

[International Society for Professional Innovation Management \(ISPIIM\)](#)

Manchester, UK
June 8-11, 2003

"9th Annual Conference: Facing Challenges of Changing Environments"

[European Association of Research Managers and Administrators \(EARMA\)](#)

Faro-Vilamoura, Portugal
June 12 – 14, 2003

"Entrepreneurship, Spatial Industrial Clusters and Inter-Firm Networks".

[6th Uddevalla Symposium](#)

University of Trollhattan, Uddevalla, Sweden
June 12-14, 2003

"LESI Oslo 2003 World Conference: Licensing in a Changing World"

[Licensing Executive Society International \(LESI\)](#)

Oslo, Norway
June 15-18, 2003

"Intellectual Property Rights: Driver of Competition/Growth or Unnecessary Constraint"

[The Royal Institute of International Affairs](#)

Chatham House London, UK
June 16-17, 2003

"External Funding and University Autonomy"

[OECD Programme on Institutional Management in Higher Education](#)

Oslo, Norway
June 16-17, 2003

"Joint French/US Workshop on Technology Transfer and IPR Management"

[Reseau C.U.R.I.E. and the French Embassy](#)

Lyons, France
June 17-18, 2003

"FEAST 4: Networking for Excellence"

[Forum for European-Australian S&T Cooperation \(FEAST\)](#)

Canberra, Australia
June 17-18, 2003

"BIOPARKS 2003"

[Association of University Research Parks](#)

Baltimore, Maryland
June 20-21, 2003

"BIO 2003 Annual Convention"

[Biotechnology Industry Organization \(BIO\)](#)

Washington, DC USA
June 22-25, 2003

"Venture Fest 2003: Oxford's International Fair for Entrepreneurs"

[Oxford University](#)

Cowley, Oxford, UK
June 23-24, 2003

"Ethical Issues in International Health Research"

[Harvard School of Public Health](#)

Boston, Massachusetts USA
June 23-27, 2003



EVENTS

Table of Contents

JULY 2003

"12th Annual Advanced Licensing Institute"

Franklin Pierce Law Center
Concord, New Hampshire USA
July 14-18, 2003

"AUTM Western Regional Meeting"

Association of University Technology Managers (AUTM)
Santa Fe, New Mexico USA
July 20-22, 2003

"Technology Management for Reshaping the World"

Portland International Conference of Management of Engineering (PICMET '03)
Portland, Oregon USA
July 20-24, 2003

"AUTM Central Regional Meeting"

Association of University Technology Managers (AUTM)
Kansas City, Missouri USA
July 27-29, 2003

AUGUST 2003

"2003 University/Industry Conference: International Partnerships in the Research Enterprise"

National Council of University Research Administrators (NCURA)
San Francisco, California USA
August 17-19, 2003

"ACU Annual Conference: Universities Engaging with their Communities"

Association of Commonwealth Universities (ACU)
Queen's University Belfast, Belfast, UK
August 31-September 4, 2003

SEPTEMBER 2003

AUTM Courses: (i) Basic Licensing, (ii) TOOLS and (iii) Startup Business Development

Association of University Technology Managers (AUTM)
Baltimore, Maryland USA
September 7-9, 2003

"Entrepreneurial and Small Business Development Strategies Workshop"

International Economic Development Council (IEDC)
Cincinnati, Ohio USA
September 11-12, 2003

"2003 Annual Conference: Advancing Economic Development in the 21st Century"

International Economic Development Council (IEDC)
Cincinnati, Ohio USA
September 14-17, 2003

"TII Summer School"

Technology Innovation Information (TII)
Portugal
September 15-19, 2003

"Open Meeting on Good Practices"

Business Innovation and Growth from the Exploitation of Academic Research (BIGEAR)
Vienna, Austria
September 18-19, 2003

"Golden Opportunities: 2003 Annual Meeting"

Licensing Executives Society (LES), USA and Canada
San Diego, California USA
September 21-25, 2003

"The Emerging Technologies Conference at MIT and TR100 Awards"

Technology Review: MIT's Magazine of Innovation
Cambridge, Massachusetts USA
September 24-25, 2003



OCTOBER 2003

"2003 SRA International Annual Meeting:
Building Bridges of Knowledge"

**Society of Research Administrators
International (SRA)**

October 18-22, 2003

Pittsburgh, Pennsylvania US

"NAMTAC Fall Conference"

**National Association of Management and
Technical Assistance Centers (NAMTAC)**

Albany, New York USA

October 19-21, 2003

"Academic Conference on Entrepreneurship
in Latin America"

**Center for Entrepreneurship, Universidad
Adolfo Ibanez**

Vina del Mar, Chile

October 26-28, 2003

NOVEMBER 2003

"NCURA's 45th Annual Meeting"

**National Council of University Research
Administrators (NCURA)**

Washington, DC USA

November 2-5, 2003

"Innovations in Early Stage Investing"

**National Association of State
and Venture Funds**

Baltimore, Maryland USA

November 2-5, 2003

"EPIDOS Annual Conference and
PATINNOVA 2003"

**European Commission and European
Patent Office**

Luxembourg

November 10-12, 2003

"AUTM Graduate Course"

**Association of University Technology
Managers (AUTM)**

San Diego, California USA

December 4-7, 2003

© 2003 Technology Innovation Group, Inc.
All rights reserved.

InnovationMatters is published by Technology Innovation Group, Inc. If you have a question, comment or story you'd like to see in *InnovationMatters*, please send an email to editor@techingroup.com. *InnovationMatters* reserves the right to edit material and does not represent that all submitted material will be used.

7006 Firewheel Hollow
Austin TX 78750 USA