CAMBRIDGE

Cambridge University Press
978-0-521-71646-8 - Teaching of Intellectual Property: Principles and Methods
Edited by Yo Takagi, Larry Allman and Mpazi A. Sinjela
Excerpt
More information

1

Recent trends and challenges in teaching intellectual property

LARRY ALLMAN
MPAZI SINJELA
YO TAKAGI

Intellectual property education in the past

For many decades, intellectual property (IP) was the exclusive domain of a small number of specialist lawyers, who had generally acquired their IP expertise from working in IP-based companies or representing clients with IP-related problems. At best they might have had an introductory IP course during their legal studies. Such was the state of IP education until relatively recently.

On-the-job training was, therefore, necessary to supplement the limited opportunities to learn about IP offered by academic institutions. One such avenue has been national and regional IP offices (Patent Office, Trademark Office, Copyright Office), particularly those where the relevant laws require substantive examination of patent applications and/or administrative appeals. Those offices often set up internal training facilities to provide IP-specific courses for their staff, often to very specialized levels. The training was initially for primary education in IP, after which the trained staff was deployed to specific functions within the office, for further on the job training. In some countries, after several years of services at an IP office, a number of such trained staff have left to join law firms or other IP-related businesses. This means that IP training programs at IP offices have contributed to the development of IP skilled human resources by constantly supplying experienced experts to the private sector.

Though one could argue that this rather ad hoc form of IP education used to be sufficient, the acceleration in the use of the IP system and the importance IP has attained, on a global scale, has created a demand for more and better trained IP professionals, far beyond that which this rather limited approach could provide. While the following sections will illustrate

© Cambridge University Press www.cambridge.org

CAMBRIDGE

Cambridge University Press
978-0-521-71646-8 - Teaching of Intellectual Property: Principles and Methods
Edited by Yo Takagi, Larry Allman and Mpazi A. Sinjela
Excerpt
More information

the extent of that demand and how an attempt is being made to address lacunae in meeting it, it is clear that opportunities for IP education are still limited both in the scope, beneficiaries and availability of IP programs.

IP issues have, for decades, been researched and discussed, on many occasions and in many different contexts, including national debates on revising and updating national IP laws, and debates in national and international fora on international IP treaties and conventions. WIPO, in cooperation with governments and IP-related non-governmental organizations,[1] has provided assistance to academia and other IP institutions in their research and education activities and programs in the IP field. For example, as far back as 1981, WIPO's assistance resulted in the establishment of the International Association for the Advancement of Teaching and Research in IP (ATRIP),[2] whose members consist of IP professors and researchers from all over the world.

Recent changes in IP education

With the acceleration in the globalization of a world economy that is becoming increasingly knowledge-based, in the last decades, IP was recognized as a trade-related issue. With the adoption of the World Trade Organization (WTO) Agreement on Trade-Related Aspects of Intellectual Property Rights (the TRIPS Agreement),[3] the obligations arising from its implementation prompted a comprehensive review of national IP legislation. This process awakened policy-makers in government and in the business sector to the increasing role of IP in development. The increasing prominence of IP on the national and international scenes has also had a significant impact on the way IP is taught and on the content of what is taught.

The following statistics demonstrate the magnitude of the changes that have taken place in the ever-evolving and expanding relationship between IP and the world economy. In the 1980s, an estimated 40 per cent of the total assets of private corporations in the United States of America consisted of intangible assets. Today, that percentage has increased to approximately 70 per cent.[4] The number of patent applications filed worldwide increased from 884,400 in 1985 to 1,599,000 in 2004. This rate of growth is about 5 per cent annual growth rate, which is comparable to the overall

[1] www.wipo.int/treaties/en/general/. [2] www.atrip.org/.
[3] www.wto.org/english/tratop_e/trips_e/trips_e.htm.
[4] Kamil Idris, *IP– A Power Tool for Economic Growth*, Chapter 3, "Intellectual Property, Knowledge and Wealth Creation", WIPO Publication No. 888 (www.wipo.int/about-wipo/en/dgo/wipo_pub_888/wipo_pub_888_index.htm).

© Cambridge University Press www.cambridge.org

CAMBRIDGE

Cambridge University Press
978-0-521-71646-8 - Teaching of Intellectual Property: Principles and Methods
Edited by Yo Takagi, Larry Allman and Mpazi A. Sinjela
Excerpt
More information

increase in economic activity (as measured by the world growth of GDP). Use of the patent system internationally has increased markedly in recent years. This can be seen by the increase (an average of 7.4 per cent a year since 1995) in patent filings with national patent offices by non-residents of the country of filing and in the dramatic increase in patent filings in countries such as Brazil, China, India, the Republic of Korea and Mexico. Though the use of the patent system remains highly concentrated in five patent offices (United States of America, Japan, Republic of Korea, China and the European Patent Office) accounting for 75 per cent of all patent applications and 74 per cent of all patents granted, the recent surge in the use of the patent system in emerging economies is impressive.[5]

The growing impact of IP has also become a central topic of discussion in various media. It is now perceived as one of several factors that are key to a healthy and successful economy and "wealth . . . will increasingly gravitate to those countries who get three basic things right: the infrastructure to connect . . . ; the right education programs and knowledge skills to empower more of their people to innovate and do value-added work on that platform; and, finally, the right governance – that is, the right tax policies, the right investment and trade laws, the right support for research, the right intellectual property laws, and, most of all, the right inspirational leadership – to enhance and manage the flow with the flat world."[6] According to one expert, IP is one of "[f]our interconnected features of the modern market economy that are of decisive importance, especially for any discussion of global economic integration alongside with the corporation, innovation and the role and functioning of financial markets and . . . [G]iven the role of innovation, intellectual property is not a marginal feature of the property-rights regime of a modern market economy, but its core. It is the most important example of property that only a powerful state can protect."[7]

IP education at university level

Students from a wide range of disciplines, including business, law, fine arts, engineering, the sciences, and journalism, could benefit from IP

[5] WIPO Patent Report 2006 (www.wipo.int/ipstats/en/statistics/patents/patent_report_2006.html#P70_1820).

[6] Thomas L. Friedman, *The World is Flat*, Chapter 8: "The Quiet Crisis", published with updates by Penguin Books (2006).

[7] Martin Wolf, *Why Globalization Works*, Chapter 4: "The Magic of the Market", published by Yale University Press (2004).

© Cambridge University Press www.cambridge.org

CAMBRIDGE

Cambridge University Press
978-0-521-71646-8 - Teaching of Intellectual Property: Principles and Methods
Edited by Yo Takagi, Larry Allman and Mpazi A. Sinjela
Excerpt
More information

education; and many teaching programs should include IP in their curricula. A WIPO Worldwide Academy survey indicated that, in many countries, three programs stand out as most commonly including IP in their coursework.

First, basic law degree programs offer IP courses that give students a general understanding of the philosophy and application of IP law. Even law students who do not intend to specialize in IP should be made familiar with the basic rights that are protected by IP law. Most basic university training programs in the law faculty include courses in commercial law and property law, as well as courses dealing with civil and criminal procedures, together with whatever array and level of basic IP courses it might provide. Some specialized post-graduate (LL.M) programs, including specialized IP–LL.M degree programs typically provide a more comprehensive, specialized knowledge of the theory and practice of IP law.

Second, some business schools have introduced IP courses. Although IP does not yet feature significantly in the curriculum of most economics faculties, almost all business programs (B.A. and M.B.A.) include some overview of the subject. It is important for students who hope to go into business or government to have a basic understanding of the role that IP plays in the modern concepts and day-to-day realities of economics and trade.

Third, in some faculties of science and engineering, general aspects of IP are taught, since the need for students in these disciplines to understand the role of IP in the context of R&D and technology project management is being increasingly recognized. Engineering faculites, for example, are including such topics as the acquisition and management of IP rights (in particular patents). An increasing number of faculties of science and engineering have realized the need for expanded collaboration with industry. To facilitate such collaboration, further mutually shared goals and objectives and safeguard their interests, some universities have established an internal body to be in charge of the management of their IP. The Technology Licensing Office (TLO) facilitates the collaboration between universities and industry, monitors the results, and often adds value to those collaborations through licensing, co-financing and strategic transactional assistance with key players from industry. This trend, and the evolving role of the TLO, also encourages the expansion of basic, and even advanced, IP courses within the faculties of engineering and science, where the results of those collaborations are most visible.[8]

[8] Kamil Idris, *IP– A Power Tool for Economic Growth*, Chapter 4: "Patents, Research and Development, and New Technologies", WIPO Publication No. 888.

© Cambridge University Press www.cambridge.org

CAMBRIDGE

Cambridge University Press
978-0-521-71646-8 - Teaching of Intellectual Property: Principles and Methods
Edited by Yo Takagi, Larry Allman and Mpazi A. Sinjela
Excerpt
More information

It is difficult to estimate the number of universities in the world where IP is taught, due to the absence of reliable data, but a preliminary estimate by the WIPO Worldwide Academy indicates there are some 700 of them, with most of their IP courses being centered in the law faculty. IP courses are elective and often fairly brief. The majority of universities with IP courses on their curricula offer only general IP programs primarily focusing on the nature and extent of the rights which are protectible under IP law, and the impact and role of IP in the context of the knowledge-based, globalized economy.

However, some countries offer more specialized and comprehensive IP courses. For example, in the United States of America, there are some 20 IP-specialized LL.M. programs. In Japan, a few technical universities have started to offer a year-long IP course in conjunction with other technology-related disciplines such as the management of technology (MOT). In France, several universities have compulsory IP courses in the science faculty. Recent trends suggest that more universities will include IP courses in their curricula, while existing IP courses will continue to expand, particularly in countries where IP activities have grown. For example, in China, the Ministry of Education has officially encouraged universities to set up Masters and Ph.D programs in IP law or IP management. As a result, at least sixteen universities now offer IP courses, including five universities where courses are taught at their law school dedicated to IP.[9]

Challenges facing universities

The results of a sampling of some twenty universities around the world – designed to pinpoint the current constraints and challenges faced by academic institutions in the area of IP education – indicated problems in: updating programs to keep up with dynamic and rapid changes taking place in IP laws; obtaining up-to-date materials necessary for the teaching of emerging IP issues; and enhancing the curriculum to make it suitable for an interdisciplinary approach in which IP is taught in the light of its increasing role in such fields as business, commerce, science and engineering.

On June 30 and July 1, 2005, WIPO hosted an International Symposium on IP Education and Research, at which the authors of several of the chapters of this book participated as panelists.[10] The panelists made the following recommendations regarding the above problems:

[9] Information provided by Prof. Shengli Zheng, IPSchool, Peking University, China.
[10] www.wipo.int/meetings/en/details.jsp?meeting_id=8083.

© Cambridge University Press www.cambridge.org

CAMBRIDGE

Cambridge University Press
978-0-521-71646-8 - Teaching of Intellectual Property: Principles and Methods
Edited by Yo Takagi, Larry Allman and Mpazi A. Sinjela
Excerpt
More information

- encourage and advocate at the highest policy level the strengthening of governmental support for IP education and research in the context of development;
- help developing countries establish institutional bases (e.g. IP research centers) and more effective mechanisms to collect and disseminate current and relevant documentation for IP education and research (IP libraries);
- develop the inter-disciplinary nature of IP in curricula, and to bring other partners, such as those in the field of economics, business management, engineering, science and technology, culture, environment and sociology into that process;
- conduct IP research from a national strategic perspective to facilitate national debate and policy formulation in developing countries;
- start IP education at an early stage with a view to fostering a culture which respects creativity and which strives to curb IP abuses;
- explore various new and different sources of funding to enhance IP education and research;
- provide IP researchers in developing countries with opportunities to publish their work, both in their country, and externally;
- conduct joint research operations involving researchers from both developed and developing counties, in an attempt to find common grounds for the further development of the IP system;
- develop a range of models of IP curricula tailored to the needs of different target groups such as engineers and business managers; and
- develop mechanisms allowing universities to collaborate internationally through, for example, teacher and student exchange programs to promote sharing of teaching materials and useful information about IP issues.

The recommendations require further debate at the national level, because there is no "one-size-fits-all" solution and the background, development and needs of each country differ markedly. For instance, the quality of an IP education program depends on the availability and quality of the IP lecturers available to teach it. Ideally, good IP education should be provided by full-time university faculty members who have specific expertise in one or more aspects of IP. However, many universities do not have such specialists available, and IP education depends on professors who take an interest in the IP field, in addition to their main specialty. In some countries, practicing lawyers give part of their time to teach IP courses. Referred to as "adjunct professors", in the United States

© Cambridge University Press www.cambridge.org

CAMBRIDGE

Cambridge University Press
978-0-521-71646-8 - Teaching of Intellectual Property: Principles and Methods
Edited by Yo Takagi, Larry Allman and Mpazi A. Sinjela
Excerpt
More information

of America, these "outside" lecturers provide an effective and economical way of building a comprehensive and high-quality IP program. Adjunct professors can bring the benefit of many different areas of expertise to a university program and provide a breadth of expertise that would not otherwise be available to a university.

However, in many countries where practicing and experienced IP lawyers are still scarce, different solutions need to be explored to meet the strong demand for IP teachers. There is no quick fix: IP education and research needs to receive enough political attention and support, including financial assistance, to enable universities to produce a national core of IP resource persons, with the intention of their becoming IP lecturers some day. Proactive government policies would make it possible to include more IP courses in the programs of national universities. The creation of a critical mass of IP educators, and the momentum associated with that process, would then encourage other universities to benefit from the initial steps already taken. The creation – in parallel – of a training center for government staff responsible for IP rights registration in the national IP Office, and the eventual expansion of the training center into a national IP Academy or Training Centre (which could offer training programs also to IP practitioners) would also contribute to IP education through the exchange of IP resource persons, teaching materials, and IP knowledge at a practical on-the-job level.

The new IP paradigm and its impact on IP education

Given that results from most innovative and creative activities now have some form of IP protection, and given that a well-functioning IP regime is one of the most crucial factors for success in an increasingly knowledge-based economy, the need for awareness and knowledge about IP is no longer limited to lawyers and technical specialists.

In the field of copyright and creativity, consider merely the fact that millions of Internet users are now potential creators of copyright and related rights works, "[t]he success of advanced economies is increasingly dependent not on their physical capital, but on their capacity to mobilize their citizens' brainpower."[11] Many newspapers featured the growing popularity of a website "YouTube" as one of the most significant events in 2006. The website allows a large number of users to post video clips of their own creation which are susceptible of copyright protection.

[11] "The Battle for Brainpower, A Survey of Talent", *The Economist*, October 7, 2006.

© Cambridge University Press www.cambridge.org

CAMBRIDGE

Cambridge University Press
978-0-521-71646-8 - Teaching of Intellectual Property: Principles and Methods
Edited by Yo Takagi, Larry Allman and Mpazi A. Sinjela
Excerpt
More information

In the field of patents and innovation, the patent attorney has always needed to understand the science and technology of the invention, the IP of which he has been engaged to protect. Now, however, the scientist working in the R&D lab must also have a similar level of awareness of IP and what IP rights might arise from his scientific endeavors, for purposes of, for example, determining the ownership of IP rights, downstream benefit-sharing, research co-financing with other scientists or organizations, product development and marketing, and licensing and follow-on products. All of these patent-related considerations are best handled with the assistance of IP professionals (best if locally available in the country, however small in number) and also working with the scientists involved. Such a collaboration at an early stage is critical for effective IP management leading to successful product development and exploitation.

The challenge of producing more and better qualified IP professionals and a more IP-conscious workforce needs to be seen now in the new context of a greatly expanded awareness of the use, value and potential of IP – what might be referred to as a "new IP paradigm." The new IP paradigm, where IP knowledge is necessary at many different levels of enterprise, government, activities of creativity and innovation, and in other stakeholders, is most obvious, and most effective, if IP education can be designed to cater to and support diversified needs in an inter-disciplinary manner. This is the context which is at the very center of the accelerating need for more and better educated IP professionals and IP workers.

While an increasing number of countries have taken a dynamic approach to modernizing their IP legislation and national IP policies, the approach to updating and enhancing IP education has often been slow. It is hoped that the authorities responsible for national education systems and those in academia will look closely into this. In the meantime, in industry and companies, where IP rights are increasingly involved in the crafting of management decisions and overall policy, the pace and nature of changes is much faster. Some private corporations proactively participate in and support IP education by providing financial contributions to IP courses and programs in developing countries.[12] The participation of the private sector in IP education could contribute to meeting recent needs for an inter-disciplinary approach to IP which should benefit from various and actual experience in the management of IP assets.

Ongoing efforts to improve IP education could also be greatly assisted if international cooperation to forge greater partnerships and more effective

[12] www.china.org.cn/english/culture/93464.htm, visited on March 2, 2006.

© Cambridge University Press www.cambridge.org

CAMBRIDGE

Cambridge University Press
978-0-521-71646-8 - Teaching of Intellectual Property: Principles and Methods
Edited by Yo Takagi, Larry Allman and Mpazi A. Sinjela
Excerpt
More information

strategic cooperation among academic and educational institutions, companies and governments were strengthened. The WIPO Worldwide Academy made a first step towards the institutionalizing of international cooperation for IP education by launching a global network of IP Academies.[13]

Lifelong IP education

The need for IP education is no longer limited to university students and specialist IP practitioners. Introducing young students, early on, to the concepts and principles of the IP system and its incentives and infrastructure can pay dividends later. An effective and interesting introduction to IP allows children to see where their creativity can lead them and how their dreams and imaginings can result in actual products and services. At the same time, it teaches them to respect both the original work of others, and their own original work. It also teaches respect in general, and gives them a sense of what current business is about and lessons in how the power of human intellect, innovation and creativity can drive the economy in a sustainable manner.[14]

Specially designed teaching programs which enable business executives and other adult groups to obtain basic or additional IP skills as well as up-to-date knowledge about emerging IP issues applicable to their business activities and career management, have all increased in response to the current dynamic evolution of IP. In some countries, more refresher courses are offered by organizations of IP professionals to their members who wish to obtain additional skills. More business schools are offering IP specialized courses which are now attended also by business managers. Some companies have included IP courses in the corporate educational program to ensure that all researchers, engineers, and managers contributing to the generation and exploitation of the corporate IP assets should fully understand and follow the corporate IP strategy and policies.

Teaching methods, materials and the Internet

A comprehensive, detailed syllabus covering the entire course should be presented to the students in advance. A syllabus is a list (with some

[13] WIPO Press Release UPD/2007/290 at www.wipo.int/pressroom/en/articles/2007/article_0022.html.

[14] Kamil Idris and Hisamitsu Arai, *Intellectual Property-Conscious Nation*, Chapter 5: "Improved Education for the Next Generation", WIPO Publication No. 988 (www.wipo.int/about-wipo/en/dgo/wipo_pub_988/index.html).

© Cambridge University Press www.cambridge.org

CAMBRIDGE

Cambridge University Press
978-0-521-71646-8 - Teaching of Intellectual Property: Principles and Methods
Edited by Yo Takagi, Larry Allman and Mpazi A. Sinjela
Excerpt
More information

explanations) of the topics to be presented in the course, and the reading materials which correspond with each topic. An effective syllabus might separate the topics to be covered in the class in outline form, list the days on which each topic will be covered, and give the names of authors, titles and page numbers of the reading materials. A syllabus provides a coherent outline of the course, giving the students in advance an idea of the topics to be covered, and giving them in retrospect a guide for reviewing what they have, or should have, learned in the course. In scheduling topics for the various class sessions, the amount of time spent on each subject should correspond with the relevance, importance or difficulty of the subject. However, some advanced subjects should only be mentioned in passing and should be left for more advanced courses, or self learning according to the student's needs or interest. This publication includes advice and ideas from our very experienced authors on setting a syllabus. Some selected curricula are also posted on the WIPO Worldwide Academy's website for reference.[15]

In the case of general courses (i.e. basic, broadly focused courses which are designed to give an overview of the various fields of intellectual property), it is important to stimulate the interest of students and allow them to understand better that IP is highly relevant to their daily life. As often is the case, strictly legal aspects of IP are not always easy to digest. An effective technique in an introductory course is to present specific facts concerning current topics involving IP, connecting those topics to how and in what ways they might manifest or impact the daily lives of the students, and thereby hopefully interest the students a bit more – those students might even decide on some specialty focus in IP for their career as a result of that course.

In preparing teaching materials, those used by other lecturers can be a starting point for a new IP lecturer. Today, enormous amounts of information are made available through the Internet. In giving reading assignments, students should be encouraged to search for relevant resources themselves, using the Internet and other appropriate sources. For specific thematic surveys, a number of portals focusing on IP issues and websites dedicated to IP subjects are also useful in locating the most relevant and up to date resources (for example, in addition to the WIPO website itself,[16] the WIPO website offers links to other IP-related organizations[17]).

[15] www.wipo.int/academy/en/teaching/sample_curricula/index.html.
[16] www.wipo.int/portal/index.html.en.
[17] www.wipo.int/members/en/organizations.jsp.

© Cambridge University Press www.cambridge.org