# "INTELLECTUAL PROPERTY HAS GONE GLOBAL – ARE LAW SCHOOLS READY?"

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Not too many years ago, intellectual property (IP) law seemed an arcane area of the law, its practical value rather obscure even to lawyers. This has changed. IP law now impacts ordinary citizens' lives on a regular basis. Issues, ranging from affordable pricing of medicines to illegal downloads of digital audio and video content, are at the center of public debate in media throughout the world. IP law makes regular headlines in the U.S., but also in Canada, in the EU, in Brazil, China, Australia, Russia, India - in fact everywhere.

IP laws form the legal framework which regulates intangible products, including software programs, chemical compound formulae, media and entertainment products, DNA sequences and many more. IP laws include areas such as patent, copyright, trademarks, design, domain names, trade secrets, privacy law, licensing transactions, etc.

The growing importance of intangible products requires legal professionals capable of handling complex IP issues in an international setting. It is up to law schools to adequately prepare young lawyers for these challenges. This article discusses the need for establishment of training programs with an internationalized approach to IP law.

# Information Intensive Products in the Global Marketplace

It all began in Silicon Valley in the 1980ies. Start-ups operating in a garage, with tangible assets of two tables, two chairs and two computers, were being acquired for multiple millions of dollars. The value of these companies lay, not in their tangible assets, but in the intangibles, the software programs they developed. These were the budding Apples, Yahoos and Googles.

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Attention began to focus on intangibles, their value and how it can be captured and monetized. Investment flowed into new industries such as information technology, biotechnology and nanotechnology and resulted in accelerated innovation and growth.

Today, intangibles, more accurately referred to as information intensive products (IIP), likely make up the bulk of developed economies' assets. It has been estimated that IIP constitute about 75 percent of the assets of publicly-listed U.S. businesses.<sup>3</sup> Transfers of IIP in the form of technology-licensing yield revenues of about \$45 billion in the U.S. and over \$100 billion worldwide.<sup>4</sup> The over \$1 trillion invested worldwide each year in innovation and R&D attest to the continuing growth of IIP.<sup>5</sup>

Innovation is not limited to the "developed" world. In 1994, North East Asia (Japan, Republic of Korea and China) produced 7.6% of worldwide patent applications; in 2008 it produced 26.2%. Asia now accounts for 45% of first-degree science, technology and engineering graduates in the world. The software industry in India has grown from \$1.2 billion in 1995 to an estimated \$60 billion in 2009.<sup>6</sup>

# The Challenges Facing IP Laws

Yet the laws governing information intensive products, often subsumed under the broad umbrella of "IP laws",<sup>7</sup> are not ready to meet the challenges of a digitized, networked, rapidly globalizing economy. Many areas of IP law are still struggling for effective solutions. Two of the main reasons are (1) the territoriality of IP laws and (2) the rapid development of technology.

IP laws remain preponderantly territorial. Passed by national legislatures, these laws govern conduct that occurs within individual countries' national borders. IP protection must be secured individually for each country, infringement is evaluated under the national law of each country and enforcement must be undertaken on a country-by-country basis. Territoriality of IP laws impedes the streamlined global operation of

<sup>&</sup>lt;sup>3</sup> A Market for Ideas, The Economist, October, 2005.

 <sup>&</sup>lt;sup>4</sup> Shaheen Lakhan, Meenakshi Khurana, The State of Intellectual Property Education Worldwide, Academic Leadership, The Online Journal, Volume 5 - Issue 2, Jul 31, 2007.
 <sup>5</sup> Francis Gurry, Director General of WIPO, "Towards a World of Multi-Polar Innovation", Speech at the Seventh Ministerial Conference of the World Trade Organization, Geneva,

November 30, 2009.

<sup>&</sup>lt;sup>6</sup> Id. (Gurry).

<sup>&</sup>lt;sup>7</sup> The IP law "umbrella" includes areas of law such as patent, copyright, trademark, trade secrets, design, geographical indications, privacy law, and their cross-disciplinary off-shoots, such as entertainment law, licensing transactions, cyberlaw, digital media law, etc.

businesses. Territoriality impacts international trade and gives rise to international economic disputes.

IP laws are further confronted with a reality of constant change. By their nature, they are closely intertwined with science and technology: patent law protects cutting-edge technology, copyright is impacted by the ease of copying on the Internet. New developments, such as new forms of knowledge<sup>8</sup>, new means of communication<sup>9</sup>, new monetization models<sup>10</sup> and new international policies<sup>11</sup> constantly challenge traditional notions of IP law. Because technological development is ongoing, legal norms addressing these new realities have little time to develop and solidify.

Nonetheless, business must continue. Despite unsettled laws and widespread counterfeiting practitioners must, for instance, keep advising clients on how to secure international protection for gene-based diagnostic devices<sup>12</sup>, or help global Internet service providers find ways to segment their offer by jurisdictions in order to comply with different and ever changing national laws.<sup>13</sup>

Furthermore, the next 20-40 years will be critical for shaping worldwide IP policies for the future.<sup>14</sup> Policies and norms must be developed that are capable of functioning in a global environment of change. Awaiting resolution are such farreaching issues as the proper scope of patent protection to balance adequate funding of innovation against access to medicines by the developing world<sup>15</sup>, devising a

<sup>&</sup>lt;sup>8</sup> E.g. disciplines such as bioinformatics, nanotechnology, biointeractive materials, cognitronics, molecular manufacturing are emerging. Paul Saffo, Untangling the Future, Business 2.0, June 2002, http://www.saffo.com/essays/untangling.php.

<sup>&</sup>lt;sup>9</sup> The Internet's constantly evolving communications and file-sharing protocols provide new modalities for infringement.

<sup>&</sup>lt;sup>10</sup> Strategic patent acquisition models, patent pools, patent auctions and other forms of patent monetization; see e.g. www.oceantomo.com, www.rpxcorp.com; www.alliedsecuritytrust.com.
<sup>11</sup> Developing countries' challenges of cost of patented medicines; efforts to amend TRIPS to conform to the Convention on Biological Diversity's disclosure and sharing for indigenous genetic resources provisions.

<sup>&</sup>lt;sup>12</sup> After years of liberal patenting of genetic inventions in some countries, the impact of gene patents on the cost of medical treatment has been raised in pending litigation in the U.S., Ass'n for Molecular Pathology v. Myriad Genetics, et. al, pending in the United States District Court for the Southern District of New York, Case nr. 1:09-CV-4515, and under examination in legislatures in various countries, such as Australia and the U.S.

<sup>&</sup>lt;sup>13</sup> E.g. eBay's counterfeit detection system being faced with conflicting rulings on two sides of the Atlantic(CITE); Google's ongoing struggle with China's filtering laws; etc.

<sup>&</sup>lt;sup>14</sup> See, The Bioeconomy to 2030: designing a policy agenda, OECD Publication,

http://www.oecd.org/document/48/0,3343,en\_2649\_36831301\_42864368\_1\_1\_1\_1,00.html. <sup>15</sup> Issues such as compulsory licenses and patent right exhaustion are unresolved and of great concern to all stakeholders.

uniform international regime to deal with piracy of digital goods<sup>16</sup> or the tension between preservation of biological resources and traditional knowledge and patent laws.<sup>17</sup> These policies should be shaped by professionals adequately trained to address them<sup>18</sup>.

## Rising to the Challenge - the Role of Law Schools

The primary responsibility for appropriately training such professionals lies with law schools<sup>19</sup>, but the process of implementing programs with a global approach has been slow.<sup>20</sup> While many law schools have embraced domestic IP law, its crossborder aspects present additional hurdles. Bar exam requirements limit the choices of new subjects and international aspects of IP law are generally not among them. IP faculty trained across borders are not common. Opportunities for practical training, such as clinics or internships, are unavailable in many areas. Finally, students are often not attuned to the need for global approaches to IP law.

Even so, some successful IP law teaching and research centers have emerged. Generally, such programs feature two main ingredients: (1) a favorable local "ecosystem", i.e. a concentration of universities, R&D, new technology, business or legal infrastructure and, (2) a certain degree of "internationalism", for centers with a global orientation.

The importance of the ecosystem is illustrated by the fact that the top ten ranked IP law programs in the U.S., Stanford University, U.C. Berkeley Boalt Hall and Santa Clara University School of Law (ranked 1, 2 and 8 respectively)<sup>21</sup> are located in or close to Silicon Valley. Similarly, India's leading law school, the National Law School of India University - Bangalore<sup>22</sup>, with a strong IP and technology based curriculum,

<sup>&</sup>lt;sup>16</sup> The current, highly controversial thinking is that ISPs might be best placed to implement any measures against infringing users, by way of a "graduated response" to infringements, culminating with interruption of the user's Internet service.

<sup>&</sup>lt;sup>17</sup>European Patent Office revokes "pelargonium extract" patent, http://www.epo.org/aboutus/press/releases/archive/2010/20100126.html.

<sup>&</sup>lt;sup>18</sup> In addition to legal training, a cross-disciplinary approach that includes science, technology, business management, economics, etc. is becoming increasingly important in both practice and research.

<sup>&</sup>lt;sup>19</sup> Private providers of, primarily, executive training in IP laws and related aspects are another source of education in the IP law field. The need in the industry for such training is stimulating rapid growth of this industry.

<sup>&</sup>lt;sup>20</sup> I.e. programs covering training in both international IP law at a political level and concepts of relevant national and regional IP laws.

<sup>&</sup>lt;sup>21</sup> US News and World Report 2009, http://grad-

schools.usnews.rankingsandreviews.com/best-graduate-schools/top-law-schools/intellectual-<sup>22</sup> www.nls.ac.in along with its Center for Intellectual Property Rights, Research and Advocacy,

http://www.iprlawindia.org/

research and publications in the IP field, is located in Bangalore (often referred to as India's "Silicon Valley").

Strong academic ecosystems also tend to spawn IP strength. Most of the world's leading universities have IP institutes, to name just very few, the Center for Intellectual Property and Information Law at the University of Cambridge<sup>23</sup>, the Oxford Intellectual Property Research Centre,<sup>24</sup> the Berkman Center for Internet and Society at Harvard University<sup>25</sup> or the Duke Center for the Study of the Public Domain.<sup>26</sup>

"Internationalism" is fostered through collaboration and partnerships with institutions worldwide, joint programs, overseas campuses, faculty exchanges, student exchanges, course offerings focusing on international and cross-border issues, research into internationally relevant topics, etc.

Law schools and research centers outside the U.S. seem to have fared somewhat better in this regard.<sup>27</sup> For instance, the WIPO Worldwide Academy<sup>28</sup> evolved from the internationally focused IP ecosystem offered by World Intellectual Property Organization (WIPO)<sup>29</sup> and its activities worldwide. The WIPO Academy serves WIPO's educational needs and offers a wide variety of courses at master's level and executive training. Courses are offered in different countries and different languages, and cover international IP law and domestic laws of WIPO member countries. Research at the WIPO Academy is similarly diverse and globally focused. The WIPO Academy has partnered with academic and government institutions worldwide.

At a European level, the Max Planck Institute for Intellectual Property, Competition and Tax Law<sup>30</sup> (MPI) grew out of an ecosystem that includes the European and German patent offices and patent courts.<sup>31</sup> With the strengthening of the European Union, the MPI is called upon to provide advice to European governments and legislators and emerged as a powerhouse of European IP. MPI, through its

<sup>&</sup>lt;sup>23</sup> http://www.cipil.law.cam.ac.uk

<sup>&</sup>lt;sup>24</sup> http://www.oiprc.ox.ac.uk

<sup>&</sup>lt;sup>25</sup> www.cyber.law.harvard.edu

<sup>&</sup>lt;sup>26</sup> http://www.law.duke.edu/cspd

<sup>&</sup>lt;sup>27</sup> Arguably, regular exposure to other countries' legal systems results in increased awareness and familiarity. E.g. the EU's internal market forces EU-wide interaction; developing countries frequently consider the laws of more developed countries in an effort to learn and harmonize. <sup>28</sup> www.wipo.int/academy

<sup>&</sup>lt;sup>29</sup> www.wipo.int.

<sup>&</sup>lt;sup>30</sup> www.ip.mpg.de located in Munich, Germany.

<sup>&</sup>lt;sup>31</sup> Home of the European Patent Office, the German Patent and Trademark Office and the German Federal Patent Court.

partnership in the Munich Intellectual Property Law Center<sup>32</sup> together with George Washington University Law School, U.S.A offers an internationally focused LLM degree.

Queen Mary's School of Law at the University of London, is situated in an international business hub. Its IP institute, the Queen Mary Intellectual Property Research Institute (QMIPRI)<sup>33</sup> features international faculty and doctoral research students hailing from over 20 countries. QMIPRI views its role as that of a "hub" in the international world of intellectual property law, consulting governments, commercial firms and non-governmental organizations<sup>34</sup>.

Other institutions worth noting for the international scope of their IP law coverage are the Center for International Intellectual Property Studies of the University of Strasbourg (CEIPI),<sup>35</sup> which has prepared thousands of EU lawyers for patent bar exams and offers an LLM program targeting international students, as well as a broad array of research and special lectures. Similarly, the Institute of Intellectual Property in Tokyo (IIP)<sup>36</sup> with an office in Washington, DC, hosts symposiums and seminars, fosters exchanges with overseas organizations and international collaboration on IP matters.

### How to Start an International Intellectual Property Program?

All of the above considered, how would a law school start its first steps toward a meaningful international IP program?

Bucerius Law School in Hamburg, Germany (BLS)<sup>37</sup> may offer a promising model. BLS benefits from the requisite ecosystem, a pronounced international orientation, and, above all, a strong will to succeed.<sup>38</sup> Hamburg, the northern German city in which BLS is headquartered, is the powerhouse of the German media industry<sup>39</sup>, the

<sup>38</sup> BLS Provost, Dr. Hariolf Wenzler, views the future this way: "in the course of the next few

years, a handful of law schools worldwide will emerge as true leaders in international legal

education. Bucerius Law School plans to be among them."

<sup>&</sup>lt;sup>32</sup> www.miplc.de

<sup>&</sup>lt;sup>33</sup> http://www.gmipri.org

<sup>&</sup>lt;sup>34</sup> http://grad-schools.usnews.rankingsandreviews.com/best-graduate-schools/top-law-schools/intellectual-property-law

<sup>&</sup>lt;sup>35</sup> http://www.ceipi.edu

<sup>&</sup>lt;sup>36</sup> http://www.iip.or.jp

<sup>&</sup>lt;sup>37</sup> www.lawschool.de Bucerius Law School is ranked among the three top law schools in Germany. http://www.law-school.de/hochschule.html?&L=1 ("Rankings")

<sup>&</sup>lt;sup>39</sup> This fact was most recently emphasized by the Mayor of Hamburg, in the 2009 Annual Media Dialogue, a gathering of leaders of Germany's most important media, that also received organizational support from BLS. www.mediendialog-hamburg.de, where the famous

center of an emerging IT business concentration and boasts the most prominent copyright courts in Germany<sup>40</sup>. BLS' international orientation is evidenced by a broad array of international partnerships, student and faculty exchanges and programs targeting international students.<sup>41</sup>

In Fall 2009, BLS organized its first IP and Media Law lecture series<sup>42</sup>, which featured speakers from around the world, including internationally renowned academic personalities in the IP field. The topics addressed were cutting-edge IP issues that imminently confront global society.

The Fall 2009 lecture series is followed by a series of panel discussions in the U.S., organized under the auspices of the U.S. branch of BLS, the American Friends of Bucerius Law School (AFBLS), headquartered in New York<sup>43</sup>. Venued in New York, Los Angeles and Silicon Valley, respectively, these panel discussions focus on a transatlantic perspective on IP topics currently confronting the U.S. and the European Union, and will include panelists from both sides of the Atlantic.

BLS is further establishing an international academic advisory committee for its IP and Media Law program and searching for an internationally renowned IP scholar willing to spearhead the proposed Center for Intellectual Property and Media Law at the Bucerius Law School. In parallel, the selection of internationally oriented IP courses is being broadened, offered by both home and visiting faculty.

<sup>41</sup> BLS partners with 92 law schools from 30 countries worldwide, including Stanford Law School, Boalt Hall Law School at UC Berkeley, NYU, Cornell, Georgetown, Science Po, Cambridge, Oxford, National University of Singapore, University of Sydney, University of Cape Town and others. Each year some 100 foreign students from spend the fall semester at BLS while the German students complete their mandatory semester abroad. ABA accredited courses are offered. BLS offers an MLB in Law and Economics<sup>41</sup> as well as a Summer Program. A summer program in China is organized in cooperation with various Chinese partners

<sup>&</sup>quot;Hamburg Declaration" signed by numerous publishers and broadcasters.

http://www.epceurope.org/presscentre/archive/International\_publishers\_demand\_new\_intelle ctual\_property\_rights.shtml

<sup>&</sup>lt;sup>40</sup> See e.g. LG Hamburg, Urteil v. 09.01.2009, Az. 324 O 867 /06, where the Federal Court of Hamburg held that automatically created snippets by Google do not infringe copyright.

partners <sup>42</sup> A brief summary of the lectures can be found in the Attachment to this document. See also http://www.law-school.de/ipmedialaw.html?&L=1.

<sup>&</sup>lt;sup>43</sup> American Friends of Bucerius Law School, a U.S. non-profit corporation. http://www.afbls.org

Bucerius Law School provides but one possible model to guide law schools that choose to embark on the path of a meaningful internationally oriented IP law programs. Regardless of the model adopted however, ti is important to keep in mind that the time has come to give serious consideration to an internationalized approach to IP laws.

The approach followed by BLS is but one of many possible models which a laws school can use to embark on the path of a meaningful internationally oriented IP law program. Regardless of the model adopted however, it is important to keep in mind that the time has come to give serious consideration to an internationalized approach to IP laws.

#### ATTACHMENT

#### SHORT SUMMARY OF FALL 2009 "IP AND MEDIA LAW LECTURE SERIES"

In the first lecture, Dr. Dana Beldiman<sup>44</sup> and Prof. Bernd Hugenholtz<sup>45</sup> spoke about "Copyright Piracy on the Internet – Litigate, Legalize, License or Laissez Faire?' After sketching out the background of this technologically and legally complicated field, Prof. Hugenholtz described with humor the ongoing clash between legal norms governing copyright and the reality of massive illegal P2P filesharing that actually occurs on the Internet. Among possible solutions to this phenomenon, that would end litigation against end-users, a system of statutory licensing would be most effective. Dr. Beldiman addressed liability of Internet service providers (ISPs), comparing statutory provisions and judicial decisions from both sides of the Atlantic. In examining future trends, she found that enforcement actions tend to be shifted to ISPs and away from rightholders, and discussed the pros and cons of this development.

The second lecture featured Professor Jerome H. Reichman<sup>46</sup> and Jürgen Römhild<sup>47</sup> on the topics "Patents and Public Health – Legal, Economic and Public Policy Aspects of Access to Medicines". Prof. Reichman outlined the evolution of international patent law under WTO/TRIPS. The developments in recent years, have caused tension between the pharmaceutical industry and many developing countries over access to and pricing of medicines. Given individual countries' lack of economic power to negotiate agreements with the pharmaceutical industry, Prof. Reichmann advocated pooling of compulsory licenses as a possible way of providing developing countries with better access to medicines. Jürgen Römhild gave the audience an inside view into the economic decisions facing a pharmaceutical manufacturer who also conducts R&D. Despite the difficult balancing between pricing and research funding, it became clear that pharmaceutical manufacturers are engaged in massive efforts to make available medicines to less developed countries by a variety of means, ranging from voluntary licenses to straight donations.

In the third presentation Prof. Graeme B. Dinwoodie<sup>48</sup> und Prof. Dr. Axel Metzger<sup>49</sup> spoke about "Reshaping Territoriality: The Reach of Trademarks in Global

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<sup>&</sup>lt;sup>45</sup> University of Amsterdam, the Netherlands

<sup>&</sup>lt;sup>46</sup> Duke University, U.S.A.

<sup>&</sup>lt;sup>47</sup> Head of Trademarks & Unfair Competition, Boehringer/Ingelheim, Germany

<sup>&</sup>lt;sup>48</sup> Oxford University, UK

Digital Networks." Based on prominent examples primarily from European court decisions, Prof. Dinwoodie illustrated the difficulties facing trademark owners when seeking to register and enforce trademark rights in different countries. Prof. Metzger emphasized the relation to international IP rights and emphasized in particular the challenges raised by the European community trademark.

Finally, the topic "How Much of an Incentive is it Really? – The Effect of Copyright on Creativity", featured Prof. Niva Elkin-Koren<sup>50</sup> and Prof. Michael W. Carroll<sup>51</sup>. Prof. Carroll pointed out that historically ownership and protection of IP have always developed in response to changes in production and distribution mechanisms. This Currently this problem would apply to derivative digital works, a phenomenon sought to be alleviated by the Creative Commons project, of which he was one of the founders. Prof. Elkin Koren examined the question of lack of incentive in the context of works created as part of social networks. Since existing laws do not adequately address this issue, new regulations governing of the network operators would be required.

<sup>&</sup>lt;sup>49</sup> University of Hannover, Germany

<sup>&</sup>lt;sup>50</sup> University of Haifa, Israel

<sup>&</sup>lt;sup>51</sup> American University, U.S.A