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The WIPO Academy: delivering IP training for the 21st century

By **Francis Gurry**, Director General, WIPO

As the WIPO Academy, WIPO's training arm, marks its 20th year, there is no better time to reflect on the enduring need for education in the field of intellectual property (IP). In today's global, knowledge-based economy, IP rights play a critical role in both encouraging and leveraging the economic value of innovation and creativity in support of economic development. Enabling policy-makers, businesses, academics and students to better understand how these rights work, and the benefits that can flow from their strategic use, is a critical part of efforts to promote more effective use of and respect for IP rights around the world.

Since its establishment in 1998, the WIPO Academy has played a leading role in expanding the global IP knowledge base and in strengthening the IP expertise of developing and least developed countries. Today, it is a global center of excellence for IP training, education and human capacity-building. Every year, its expanding portfolio of courses attracts growing numbers of participants. These include government officials, young legal professionals and students of all ages. But the evolving needs of a global talent pool, growing demand for high-quality, interactive learning tools, and rapid technological advances are fueling the development of IP curricula and a continued focus on delivering an innovative and affordable portfolio of courses and training materials.

TRANSFORMING THE GLOBAL IP EDUCATION LANDSCAPE

Over the last 20 years, the WIPO Academy has transformed the global landscape for IP education. The statistics are compelling. In that period, almost 600,000 participants from across the globe have benefitted from the IP education and training courses offered by the Academy.

“Advances
in AI promise
to drive the
next big leap
in education
and teaching
across all
disciplines,
including IP.”

Francis Gurry, Director General, WIPO



Every year, the expanding portfolio of courses offered by the WIPO Academy attracts growing numbers of participants.

Nearly 5,000 government officials from developing and least developed countries and countries in transition have taken part in more than 428 specialized professional development courses. Organized in close collaboration with member states, IP offices and IP institutions, these courses use case study materials to provide participants with the technical knowledge and practical training they need to support the development and implementation of effective IP policies and systems at home.

More than 1,250 students have graduated from the WIPO Joint Master's Programs, of which more than half have benefitted from WIPO-funded scholarships and have since returned to their home governments. By the end of 2018, such programs will be offered by ten top universities around the world, reflecting growing demand for specialization in IP higher education.

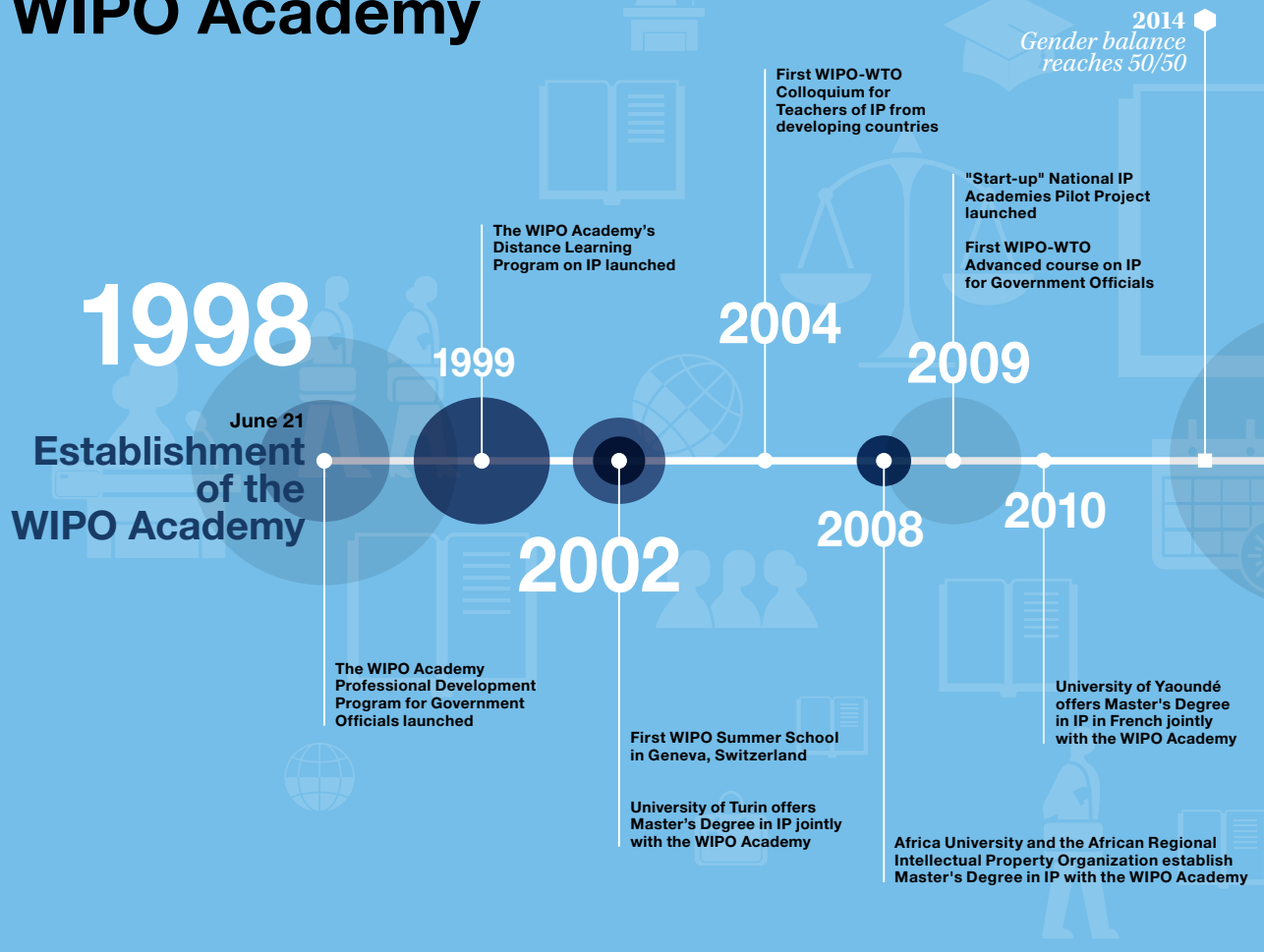
A further 3,500 or so young professionals and students have also taken part in almost 100 WIPO Summer Schools organized with partners around the world, again reflecting growing global interest in IP. Today, women make up more than 50 percent of participants across the Academy's portfolio of courses.

TARGETED PROGRAMS

In response to the expressed needs of WIPO's member states, the Academy is also delivering IP education and training solutions through a series of targeted projects. For example, the Judicial Training Institutions project provides tailored training for members of the judiciary. The recently launched IP4Youth&Teachers initiative is supporting efforts to ensure IP education is part of school curricula. And through the National IP Training Institutions, the Academy is working with member states to actively support efforts to establish national IP training institutions to further strengthen national IP training capabilities.

The positive impact that the WIPO Academy has had on the global landscape for IP education, however, would not have been possible without the active support of its strategic partners, namely, member states and academic institutions. These strategic partnerships and cooperation agreements provide a very solid foundation for the Academy to roll out its current programs and expand its offering in the future.

20 years of the WIPO Academy



DISTANCE LEARNING BOOSTS PARTICIPATION

The WIPO Academy's Distance Learning (DL) program has made it possible to achieve high levels of course participation. The DL program, which accounts for the lion's share of course participants, means that geography is no longer a barrier to affordable IP education.

The Organization's ongoing investment in the Academy's information and communication technology (ICT) infrastructure means that IP-related distance learning courses are now available in over 190 countries through the Academy's e-platform. Currently, DL courses are available in Arabic, Chinese, English, French, Russian and Spanish, and are supported in Croatian, German, Japanese and Korean. Customized versions of the courses help ensure students benefit from training modules and course materials that are relevant to needs both in terms of language and national circumstances.



As demand for customized products remains very high, we anticipate that this area of the Academy's work will continue to expand in the coming years.

TOWARD IP EDUCATION FOR ALL

Widespread access to ICTs has made the transformation in IP education and teaching a reality. It offers anyone interested in learning about IP and its role in the commercialization of assets an easy and affordable pathway to the learning resources they need.

The rapid evolution of these technologies is also making it possible to continuously improve the way in which students can access a rich source of IP learning: not just through the use of electronic devices, which make "learning on the go" a reality, but also by connecting with peers, IP experts and a plethora of IP learning resources via the Internet and cloud-based computing solutions, webinars and a growing number of online fora.

The WIPO Academy has taken advantage of these technologies to help make IP education globally accessible. We recognize that some developing and least developed countries continue to face connectivity and bandwidth challenges and have adapted our offering accordingly. It is clear, however, that as the digital divide becomes ever narrower, more people from developing and least developed countries will be able to take full advantage of the IP education opportunities provided by the WIPO Academy and its partners. And with advances in artificial intelligence (AI) coming on stream, this is likely to be a reality sooner rather than later.

THE FUTURE OF IP EDUCATION: A ROLE FOR AI

Advances in AI promise to drive the next big leap in education and teaching across all disciplines, including IP. The opportunities afforded by its widespread use in IP education are truly exciting. For tutors, AI promises to make the mundane and rather laborious task of grading papers a thing of the past. We can foresee AI-assisted solutions that will enable teachers to design and deliver learning tailored to the specific needs of students and AI-driven education programs that give specific and detailed feedback on work submitted by students.

This doesn't mean that academics will suddenly find themselves without a job; it means they will have more time to focus on students who most need their support. AI-assisted programs will help to improve the quality of teaching, student-teacher interactions and learning outcomes. And, of course, it will carve out more time for university professors and lecturers to engage in their academic research.

BETTER DATA ANALYSIS WITH AI

AI and other advanced ICTs will also make it possible to better capture, manage and analyze data, with dividends in terms of capturing academic research findings, as well as improving the practical administration of educational courses with respect to course design, marketing, registration and certification.

Perhaps the greatest potential practical benefit to flow from the application of AI-based tools to IP education lies in their ability to improve the way we monitor and evaluate the impact of the work we do. With better tools to gather data on how participants apply the knowledge and skills they gain from Academy courses, we will be better placed to ensure courses are relevant to real-world needs, improve learning outcomes and assess the impact and value of the investment we are making. That is why, as we look to the future, the WIPO Academy is exploring ways to harness AI to support its work.

In concrete terms, this will involve the introduction of digital tutors to all distance learning courses. This, combined with plans to decentralize the management, administration and delivery of these courses, will enable the Academy to manage ever-increasing demand for customized course materials. It will also enable the Academy to expand its reach and respond to growing demand for accessible, high-quality and personalized IP educational tools and services.

FUTURE-PROOFING IP EDUCATION

The use of AI to enable more effective and efficient delivery of IP education is just one part of the equation for delivering IP educational services fit for the 21st century. As the pace of technological innovation continues to gather momentum, IP systems will need to be responsive to emerging concerns and adapt to future challenges. This, in turn, will generate a need for new IP knowledge and for research into possible new approaches and responses to emerging IP issues to inform how best to design and "future-proof" national and international IP frameworks. As has been the case since the inception of the international IP system in the 1880s, IP frameworks need to keep pace with rapid technological change. Policymakers need access to rigorous academic research in the field of IP in order to respond effectively to these changes, and all those involved in IP education need to equip future generations with the IP knowledge they need to rise to coming challenges.

Photo: WIPO / Bairrod



Since its establishment in 1998, the WIPO Academy has transformed the global landscape for IP education. In that period, it has trained around 600,000 students from across the globe.

So, as we look to the future, it is important that we not only focus on how we teach IP, but what we teach. Current debates surrounding blockchain, AI, personalized medicine, genetic engineering, precision agriculture, climate change, the need for adaptive and mitigating green technologies and concerns surrounding the ownership and management of digital content are examples of the issues that will occupy the minds of policymakers in coming years.

It is hard to imagine what the shape of IP and technology will be when the WIPO Academy marks its 40th anniversary. But as it embarks on that journey, the Academy will continue to design and deliver forward-looking programs in response to the evolving needs of IP students and professionals around the world. In so doing, it will continue to embrace new knowledge generated from diverse, high-quality academic research in all areas of IP and from all corners of the globe.

While what we teach today may not provide the answers to all of the questions that may arise tomorrow, it must, at a minimum, enable and inspire us to understand the possible implications of those questions and to find effective approaches that lead to satisfactory outcomes. In a similar vein, the research undertaken by IP academics and researchers should anticipate the types of IP challenges and issues that may emerge as new, transformative technologies come on stream and generate new opportunities to reshape the global innovation landscape and the IP rights that underpin it.

LET'S LIGHT UP THE WORLD WITH INNOVATION

Innovation is complex. The countries below all rank highly on different dimensions of the **GLOBAL INNOVATION INDEX 2018**. What would happen if they connected?

Creative Outputs

CHINA
Trademarks by origin

TURKEY
Industrial designs by origin

KENYA
Printing and other media

MEXICO
Creative goods exports

LITHUANIA
Mobile app creation

Infra-structure

DENMARK
ICT use

MOZAMBIQUE
Capital and infrastructure investment

SRI LANKA
GDP/unit of energy use

Knowledge and Technology Outputs

SWEDEN
PCT patent applications

UNITED KINGDOM
Quality of scientific publications

COSTA RICA
Productivity growth

BOTSWANA
New business creation

MALAYSIA
High-tech exports

INDIA
ICT services exports

Institutions

SINGAPORE
Regulatory quality

GEORGIA
Ease of starting a business

Human Capital and Research

RWANDA
Education funding/pupil

ESTONIA
Performance of pupils in reading, maths, and science

AUSTRALIA
Tertiary enrollment

IRAN, ISLAMIC REPUBLIC OF
Graduates in science and engineering

ISRAEL
Researchers

KOREA, REPUBLIC OF
Gross expenditure on R&D

UNITED STATES OF AMERICA
Quality of universities

Market Sophistication

COLOMBIA
Ease of getting credit

JAPAN
Domestic credit to private sector

FRANCE
Venture capital deals

Business Sophistication

ECUADOR
Firms offering formal training

SWITZERLAND
University/industry research collaborations

UNITED ARAB EMIRATES
State of cluster development

VIET NAM
High-tech imports

HUNGARY
FDI inflows

GII 2018: Energizing the world with innovation

By **Catherine Jewell**,
Communications Division, WIPO

The focus of the Global Innovation Index 2018 is *Energizing the World with Innovation*. The GII, now in its 11th edition, benchmarks the innovation performance of 126 countries, offering policymakers a snapshot of the strengths and weaknesses of national innovation ecosystems. Sacha Wunsch-Vincent, a senior economist at WIPO and one of the co-editors of the GII 2018, discusses some of the key findings of this year's report.

What are the key findings of the 2018 edition of the GII?

This year, the global economic outlook is rather optimistic, both in terms of growth and innovation. In most economies today, investment in research and development (R&D) and innovation are priority areas. Global R&D spending, which more than doubled between 1996 and 2006, continues to rise. And the private sector is playing an increasingly important role in the global R&D investment landscape, with global business R&D spending rising by 4.2 percent in 2016.

However, there is still a clear need for policymakers to focus on implementing pro-innovation policies to sustain this momentum and boost the economic performance of low- and middle-income economies. China's achievements in strengthening its innovation ecosystem and remarkable rise in the GII rankings – ranked 17 this year – is an interesting example for other middle-income countries to follow.

While the innovation gap between high-income economies and the rest of the world remains wide, and marked regional imbalances in innovation performance persist, many countries are progressing. For example, GII 2018 identifies 20 so-called “innovation achievers,” whose innovation performance surpasses their level of development. Colombia, South Africa and Tunisia join this group for the first time.

GII 2018 also confirms that wealthier countries with more diversified and export-oriented economies tend to achieve a higher score in innovation rankings, both in terms of the quality and volume of innovation outputs. In a similar vein, we see the greatest concentration of science and technology clusters in the United States (26 clusters), China (16 clusters) and Germany (8).

The GII also underlines the need for breakthrough innovations in the energy sector, particularly in light of climate change-related targets and projected increases in energy demand.

Beyond the rankings, what is the focus of this year's GII?

In GII 2018, WIPO and its partners explore how innovation is contributing to solving the global energy challenge and how different countries are tackling it. By 2040, the world's energy requirements will increase by 30 percent, according to the International Energy Agency (IEA). Traditional fossil fuel-based energy systems are unsustainable. Only by fostering innovation will it be possible to develop the types of clean energy systems required for the future.

How would you characterize the current global energy landscape?

The global consensus emerging from international initiatives like the Paris Climate Accord of 2015 and the United Nations Sustainable Development Goals (Goal 7) has added impetus to energy innovation around the world, triggering a general shift away from fossil fuels toward renewable energy as a primary power source. In 2017, the world's total renewable power capacity surpassed coal for the first time. You could say we are in the midst of "an energy revolution."

What is the crux of the energy challenge?

The energy equation facing policymakers involves rising energy demand and the need to reduce greenhouse gas emissions while fostering economic growth. Finding effective solutions to this complex challenge requires a radical re-think of the way we produce and consume energy. Today, the global renewable energy supply stands at around 15 percent. By 2050, around 85 percent of the world's primary energy needs to come from renewables. This will require innovation across energy value chains and across sectors, as well as innovative policymaking to support the rapid deployment and uptake of renewable energy technologies.

Why is renewable energy on the rise?

A number of factors are at play. The international consensus mentioned above is an important driver. Also, many countries, especially developing countries, are facing rising energy demand, due in large part to population growth, and lack the infrastructure needed to meet existing and

future demand. Moreover, in a context where centralized grid systems covering long distances are prohibitively expensive to build and present environmental challenges, renewable energy technologies have become more efficient, affordable and competitive. While the energy mix that renewables represent varies from country to country, there is a marked uptick in their adoption.

What types of technologies does renewable energy encompass?

Solar and wind energy are perhaps the two most familiar forms of renewable energy. Solar photovoltaic (PV) power systems have vastly improved in recent years in terms of their efficiency, affordability and scale of use and have become a competitive alternative to fossil fuels. Novel financing and assembly systems are boosting uptake in high-income countries, and many developing countries, including India and South Africa, are also actively supporting widespread installation of solar PV systems.

Wind power has also become a competitive and viable energy option and now, thanks to innovation, is among the cheapest renewable energy sources. Today, some 24 countries are generating around 5 percent of their annual energy demand from wind power (see Chapter 2).

Innovation is also making less well-known renewable energy sources, such as tidal and geothermal power, more attractive. Innovative and increasingly efficient waste-to-energy-conversion systems are also gaining ground.

In which countries has renewable energy innovation really taken off?

Energy innovation is taking place globally. However, China, the world's largest producer and consumer of energy, stands out as a driving force in the global development of renewable energy. It is making renewable energy a priority and currently has the largest renewable energy-generating capacity in the world.

Brazil is also notable. It has one of the world's cleanest energy systems and a very active energy innovation ecosystem. Renewables currently account for 43.5 percent of total energy consumption for transport and electricity.

Chile is also on track to become a major solar energy producer. It is investing heavily in strengthening its energy innovation ecosystem to exploit the unique conditions of the Atacama Desert – which has the world’s highest levels of solar radiation – to become a solar energy exporter by 2035. It also aims to produce 70 percent of its energy requirements from renewables by 2050.

India, too, is making the shift away from fossil fuels a priority. On the back of a five-fold increase in solar PV units since 1980, India is expected to become the world’s second largest producer of electricity from PV units by 2040, according to the IEA. But further innovation is essential if India is to meet its expanding energy needs, foster economic growth and address climate change.

Of course, many other countries are also active in the renewables area, but the countries mentioned above are striking in their ambitions and achievements in the renewables space.

Is there a role for small countries?

Yes; in the 2018 GII we see how Singapore, a country with limited capacity to install solar power units, is punching above its weight in driving renewable energy innovation (see Chapter 11). Through its “living lab” approach, Singapore has positioned itself as a hub for global innovators to “experiment, innovate and collaborate.” Since 2006, Singapore has invested USD 1.5 billion in clean tech R&D, targeting, in particular, optimization of solar PV systems and support structures.

What about grassroots innovation?

We see important practical innovations relating to the production and use of biomass in Sub-Saharan Africa, where 90 percent of people depend on wood fuel and charcoal for energy. In Malawi, for example, wood pruned from on-farm agro-forestry activity, coupled with the deployment of efficient cooking stoves, is proving a more sustainable fuel option. Similarly, in Kenya, briquetting technology – where charcoal dust (80 percent) is combined with soil (20 percent) – is mitigating climate change by reducing demand for wood fuel, providing a longer-lasting and cleaner energy option, and creating jobs.

Image: WIPO / Olivier Cefai



In GII 2018, WIPO and its partners explore how innovation is contributing to solving the global energy challenge and how different countries are tackling it.

Why is innovation important in the energy sector?

Shifting to renewable energy is an essential step on the path to a sustainable future. Continued investment in energy innovation is critically important if we are to find cleaner, more efficient and cost-effective ways to meet rising energy demand; provide power to the 1.2 billion people that still lack access to electricity; reduce greenhouse gas emissions; and maintain economic growth.

Analysis of international patent data by WIPO shows that the accelerated growth in renewable energy-related patenting between 2004 and 2013 was followed by a slow decline, and that innovation is uneven across the energy value chain.

Innovation is the key to building global renewable energy capacity and energy efficient solutions across all sectors and at all stages of the energy lifecycle, including generation, transmission and storage.

Given the complexity of the task, GII 2018 outlines the advantages of adopting a systems approach to energy innovation (see Chapter 5) to support comprehensive energy policy frameworks that: identify priority areas for innovation; foster the development of a range of energy options to meet the varying needs of end users; and that support optimal integration of power systems.

But innovation also has a role to play in supporting the more rapid deployment and uptake of these technologies by end users to optimize energy use through smart grids and advanced energy storage systems; for example, for more efficient industries, transport systems and cities. Ultimately, innovation creates options and is the key to unlocking new approaches and new solutions for affordable and reliable renewable power systems underpinned by competitive and innovative energy markets.

Is energy storage still a big issue?

Yes, energy storage remains a big challenge. Energy storage systems and re-charging stations that are effective, affordable, safe, convenient and that meet the varying needs of users are vital to the future development of

the world's energy systems. Significant progress has been made in recent years in optimizing batteries for small-scale use, including for mobile phones and electric vehicles. And despite remarkable advances by TESLA and others in installing large energy storage facilities – in South Australia, for example – much more innovation is needed in this area. A recent study by Australia's Office of the Chief Scientist indicates that “using the total world's battery production capacity in 2014 would translate into only 11 minutes and 27 seconds of global electricity consumption stored” (see Chapter 6).

What role is there for government in creating an enabling energy innovation environment?

Government has a key role in driving energy innovation and in implementing the incentives and regulations needed to stimulate investment in energy innovation and its deployment and uptake.

Continued public investment in energy innovation is crucial, as is the need to create a favorable business environment to attract private sector funding. Innovative companies will be key drivers of the energy sector's evolution, but their participation hinges on their ability to commercialize their products and secure a return on investment. Government can help by providing access to a robust intellectual property (IP) system that supports the process of translating breakthrough research into marketable products. This will go a long way in attracting the investment required to support ongoing innovation and strengthen national energy innovation ecosystems. IP systems also generate useful business and technological intelligence that can support businesses and policymakers in their R&D investment decisions.

Similarly, the emergence of an innovative and competitive energy ecosystem involves government actively fostering collaboration between the private sector – including large utilities and innovative startups – and universities and research institutes. It also involves coordinating public policy and innovation programs to leverage synergies and to ensure the emergence of integrated renewable power systems and improved levels of energy efficiency across all sectors. Innovative policymaking is critically important.

LEADERS IN INNOVATION

GLOBAL INNOVATION INDEX 2018 ranks the innovation performance of nearly 130 countries. Each country is scored according to 80 indicators.

Global Leaders

- 1 SWITZERLAND
- 2 NETHERLANDS
- 3 SWEDEN
- 4 UNITED KINGDOM
- 5 SINGAPORE

Regional Leaders

Northern America

- 1 UNITED STATES OF AMERICA
- 2 CANADA

Latin America and the Caribbean

- 1 CHILE
- 2 COSTA RICA
- 3 MEXICO

Sub-Saharan Africa

- 1 SOUTH AFRICA
- 2 MAURITIUS
- 3 KENYA

Europe

- 1 SWITZERLAND
- 2 NETHERLANDS
- 3 SWEDEN

Northern Africa and Western Asia

- 1 ISRAEL
- 2 CYPRUS
- 3 UNITED ARAB EMIRATES

Central and Southern Asia

- 1 INDIA
- 2 IRAN, ISLAMIC REPUBLIC OF
- 3 KAZAKHSTAN

South-East Asia and Oceania

- 1 SINGAPORE
- 2 KOREA, REPUBLIC OF
- 3 JAPAN

Income Group Leaders

High income

- 1 SWITZERLAND
- 2 NETHERLANDS
- 3 SWEDEN

Upper-Middle income

- 1 CHINA
- 2 MALAYSIA
- 3 BULGARIA

Lower-Middle income

- 1 UKRAINE
- 2 VIET NAM
- 3 MOLDOVA, REPUBLIC OF

Low income

- 1 TANZANIA, UNITED REPUBLIC OF
- 2 RWANDA
- 3 SENEGAL

#GII2018



*COCO*pyright and the value of moral rights

By **Javier André Murillo Chávez**,
Professor, Pontifical Catholic University
of Peru, Lima, Peru

Coco is a heart-warming story that promotes both family values and awareness of the role that copyright plays in protecting the interests of creators.



“Those who don’t cry after seeing *Coco* do not have a soul,” claims a popular Internet image that went viral shortly after the release of the acclaimed Disney film, *Coco*, in late 2017.

Intellectual property (IP) lawyers and academics have two reasons to shed a tear when they see this masterpiece of the seventh art. First, because it is a heart-warming story that promotes family values, and second, because the film is about music, lyrics, songs, *mariachis*, and the role that copyright plays in protecting them and the interests of creators.

Disney’s *Coco* recounts the story of Miguel Rivera, a young boy who is drawn to music, but is forbidden by his family to follow his dreams because of the hardship brought on them when Miguel’s great-grandfather seemingly abandoned them for a life on the stage. In his efforts to realize his dreams, Miguel finds himself among his ancestors in the spirit world of the afterlife. Copyright and moral rights, in particular, lie at the heart of the story. Only when Miguel discovers what really happened to his great-grandfather – he was murdered by his best friend, who stole his songs and rose to fame singing them – did Miguel’s family allow him to become a musician.

UNWRAPPING MORAL RIGHTS

At the international level, the Berne Convention for the Protection of Literary and Artistic Works (Article 6*bis*) requires its members to grant authors the following rights:

- i. the right to claim authorship of a work you have created (also referred to as the right of attribution); and
- ii. the right to object to any distortion or modification of your work that may be prejudicial to your honor or reputation (also referred to as the right of integrity).

Moral rights are conferred on individual authors. In many national laws, these rights cannot be transferred or waived; authors retain them even after they have transferred their economic rights.

In the laws of some countries, the moral rights conferred in national law go beyond the international standard set by the Berne Convention. Although these may differ from one country to another, they may also include the right:

- to decide whether or not your work may be disclosed or released to the public, and when and how such disclosure takes place;
- to withdraw all commercially-available copies of a previously published work that contains intellectual or moral opinions you no longer hold (with appropriate financial compensation to any third parties, of course); and
- to have access to the original work in the case of one-off pieces, such as a painting or sculpture.

Photo: © Disney/Pixar



Coco recounts the story of Miguel Rivera, a young boy who is drawn to music, but is forbidden by his family to follow his dreams because of the hardship brought on them when Miguel’s great-grandfather seemingly abandoned them for a life on the stage.



The weight given to moral rights in countries with civil law traditions far exceeds that conferred by the common law systems of the United Kingdom and the United States, where economic rights have far greater importance. In the United States, for example, until the adoption of the Visual Artists Rights Act (VARA) in 1990, artists in that country had little, if any, legal means of protecting the integrity of their work. And, while VARA has improved the situation, the Act still only applies to visual artists and is quite limited in its scope.

Despite these differences in civil and common law systems, economic rights and moral rights are two sides of the same copyright coin. Economic rights are, without question, the engine of the copyright system; they ensure that the author is financially remunerated and can earn a living from her or his work. As such, economic rights are an incentive for creators to invest their time, energy and talent in enriching our

cultural heritage. But moral rights provide the basis for economic rights to function. Imagine a copyright system that allows artists to compose songs that audiences love, but which are appropriated by third parties who falsely claim authorship; or in the art world, a masterpiece to which third parties add doodles without the artist's permission. Beyond the injustice of not being recognized as the author of something you have created, where is the incentive to create if others can simply free-ride on and benefit from your work, leaving you with nothing?

MORAL RIGHTS AND HECTOR RIVERA'S LEGACY

As Hector Rivera's story unfolds, the audience is drawn into a powerful tale about why moral rights are so important, and – as expressed through the Day of the Dead celebrations, when family and friends gather to remember those who have died – their perpetual nature. In many legal systems, moral rights protect a creator's work in life and after their death.

Hector's story highlights what can happen when a creator's moral rights are infringed and how a creator's reputation can be ruined when an imposter takes his or her place. In *Coco*, Hector, the rightful composer and singer, was reduced to a penniless vagrant, while his usurper, the "great" Ernesto de la Cruz, is – initially, at least - portrayed as the most famous Mexican *mariachi* composer and performer in history.

Some may dismiss moral rights because they do not generate any income, at least directly. But for a creator, moral rights are critically important, in life and in death, because they safeguard their association with their work, which is the embodiment of their creative talent. Without moral rights, and the recognition and protection they afford, how can authors build their reputation and prevent others from modifying them without permission? More importantly, how can creators secure remuneration for their works without the guarantees that moral rights offer?

When Ernesto De la Cruz murdered Hector Rivera in the film, he did not just end his life and take him away from his family forever. By stealing his lyrics and his songs, he also killed his memory and his legacy. This is powerfully illustrated by Hector's song *Remember Me*, which he had composed for his daughter and which encapsulates the originality of his work. Because of Ernesto's actions, Miguel's family came to hate music, believing it was the source of their hardship. But as the story reveals, their belief that Hector had abandoned them turned on a lie – plagiarism in the extreme.

As mentioned above, moral rights also play an important role following a creator's death, as they enable a creator's heirs to protect his or her memory. By portraying a world in which dead people are unable to defend their interests, the film deftly highlights the importance of legal rules and procedures to protect the privacy, authorship, integrity, access and dignity of creators' original works during their lives.

Imagine how many stories like Hector's actually play out in the real world. Plagiarism, as the principal enemy of the moral right of authorship, is one of the most difficult types of infringement to detect. Why? Because authors often have a poor knowledge



Photo: © Disney/Pixar

Coco is a powerful representation of the real damage and hardship that can arise when moral rights are infringed. In *Coco*, Miguel's true great-grandfather, the composer and singer, Hector Rivera, whose works had been stolen by Ernesto de la Cruz, was reduced to a penniless vagrant.



Photo: © Disney/Pixar

In his efforts to realize his dreams, Miguel finds himself among his ancestors in the spirit world of the afterlife, where he discovers what really happened to his grandfather. Copyright and moral rights lie at the heart of the film.



Photos: © Disney/Fixar



Children's films like *Coco* are a powerful medium by which to improve understanding about the role and importance of IP rights like copyright, and the impact that infringement can have on creators and their families.

of copyright law, and because infringers always try to hide their underhanded behavior. These two factors make it difficult for copyright lawyers to prove that infringement has actually occurred.

One could also draw parallels between the moral rights issues traced in *Coco* and the growing number of ghost writers we see today. Ghost writers create a work on behalf of a third party in return for money, on the understanding that their contribution to that work is not publicly recognized. The term "ghost" can now also be applied to lyricists, scriptwriters, painters, sculptors and many other creators. Ghost writers and creators are widespread within common law systems. However, in civil law systems, they are not recognized, given the inalienable nature of moral rights, which cannot be surrendered or transferred.

EDUCATING CHILDREN ABOUT MORAL RIGHTS

Hector's story is a powerful representation of the real damage and hardship that can arise when moral rights are infringed. There are at least three moving twists in the film: the revelation that Miguel's great-great grandfather was in fact Hector Rivera, an accomplished *Mariachi* composer and singer; the discovery that Coco is Hector's daughter; and Miguel's interpretation of *Remember Me* for his grandmother, *mamá* Coco. After that last moving scene, the audience is still left wondering what will happen to the dastardly Ernesto de la Cruz. But thankfully, the film ends on a happy note from a legal perspective. First, we see Ernesto's derelict tomb dressed in a banner bearing the word "forgotten," shrouded in spider webs and dust. Second, a tourist guide explains how Miguel, with the help of the letters *mamá* Coco had received from her father, had unmasked Ernesto's fraudulent acts and restored Hector Rivera's reputation to its rightful place.

Of course, *Coco* serves up the required happy Disney ending we all expect, but it also sends a powerful message to children about the importance of moral rights and the consequences of not respecting them. Filmmakers often touch on the economic importance of IP rights in their movies, but moral rights typically remain in the shadows. *Coco* breaks that mold.

The children who see films like *Coco* have minds like sponges; they absorb everything. Movies and TV shows are very powerful mediums by which to explain moral values to children. In an industry plagued with piracy and plagiarism, movies are a smart way to improve understanding about the role and importance of intellectual property (IP) rights like copyright, and to impress upon children the impact that infringement can have on creators and their families.

Arguably, the damage caused by infringing moral rights is not comparable to infringement of economic rights, but *Coco* demonstrates the close interplay between each. The fact that Hector's legacy was lost because his moral rights had been infringed meant that his family did not receive their rightful royalties from the songs Hector had composed and which Ernesto had stolen. Here we see in practical terms that economic rights cannot function effectively without moral rights.

These powerful messages will be absorbed by the thousands of families who see the film. Chances are, they are going to really dislike Ernesto De la Cruz for his actions and will embrace the idea that stealing an artist's songs and lyrics can bring misfortune and penury to creators and their families. By airing these issues in children's films, filmmakers create opportunities to support the emergence of a new generation of copyright-aware citizens. That is the value of exposing audiences to films like *Coco*.

There is a hope in every IP lawyer and academic – including those who have taken their children to see *Coco* – that one day when our sons and daughters express a wish to become an artist, composer or writer, we are not panic stricken, but can breathe calmly, secure in the belief that their work will be respected and protected, and can support them and say, "What a great idea!"

Strengthening Africa's audiovisual sector: market intelligence is critical

By **Deidre Kevin**, Media consultant



Photo: James Thew / Alamy Stock Photo

The WIPO Feasibility Study on Enhancing the Collection of Economic Data on the Audiovisual Sector in a Number of African Countries highlights the importance of mapping audiovisual markets in creating the knowledge and understanding required to elaborate coherent and effective policies and strategies for audiovisual sectors to realize their economic potential.

The cinema and audiovisual industries play a significant role in the promotion and preservation of cultural heritage. These industries also provide employment, promote innovation and contribute to national economies. The audiovisual industries in many developing countries have huge potential to support national economic development, but what steps need to be taken to realize their full economic potential?

A recent study commissioned by WIPO – *The WIPO Feasibility Study on Enhancing the Collection of Economic Data on the Audiovisual Sector in a Number of African Countries* – highlights the importance of gathering

audiovisual market data to achieve tangible results in developing effective policies, including for the acquisition, management and use of intellectual property (IP) rights, to strengthen the audiovisual sector in five African countries.

The study covers Burkina Faso, Côte d'Ivoire, Kenya, Morocco and Senegal and was undertaken in the context of a WIPO project to strengthen the audiovisual sectors of those countries. It explores current trends, obstacles, challenges and potential opportunities in those audiovisual markets; highlights the advantages of effective audiovisual market-data mapping; and identifies steps to support more effective data collection.

A thriving audiovisual sector allows creative professionals to reap the economic benefits of their work and hinges on awareness of, and access to, an effective IP system. It also requires detailed knowledge of audiovisual markets. But little is known about the size or nature of domestic audiovisual markets in many developing countries. This, coupled with the sector's informal nature, and poor IP awareness, makes identifying and effectively managing IP assets to leverage the sector's economic potential a huge challenge.

DATA ON PRODUCTION, DISTRIBUTION AND CONSUMPTION

Data collection is vital to the development of effective policies, strategies and regulatory tools for a dynamic audiovisual sector. Policymakers need to be able to understand how markets for film, TV and video-on-demand work; who the main players are; and the latest consumer trends and viewing habits.

The WIPO study highlights a fundamental data gap within the audiovisual sectors of the countries covered. Even basic information on the number of films produced annually is unavailable. In some cases, there is simply no system in place to register or license production shoots, and in others, such systems are not being fully utilized by producers.

Statistics on the number of companies and professionals involved in the industry and revenues earned from content distribution are also rarely available. Where they exist, government entities that fund and support audiovisual production, such as Morocco's *Centre Cinématographique Marocain* (CCM), help to fill the information gap.

Several countries also lack data on the way audiovisual works are consumed. These data include audience numbers, viewing figures for cinema and TV and evolving programming tastes and trends. These can provide valuable insights for producers and broadcasters when shaping program content.

Consumer surveys in Kenya on programming preferences have shown that viewers are very keen on local content and local stories. This is good news for the industry, as these findings have encouraged the implementation of TV quotas for local content and are also helping to convince broadcasters about the potential economic gains associated with supporting local production. Similar studies have been carried out in Senegal, but are expensive and require considerable resources. In the long run, a joint industry-government collaboration to establish audience measurement systems would help countries better understand and leverage the potential of their local audiovisual markets.

Requiring businesses in the audiovisual sector to formally engage in reporting certain market data can strengthen the sector in a number of ways. First and foremost, it boosts the legitimacy of audiovisual professionals and their business dealings. It also makes the sector more attractive to investors and enhances recognition of the contribution of audiovisual industries to the national economy.

Together with appropriate regulatory bodies and funding agencies with a mandate to do the data gathering, these data also support successful policy implementation,

including for copyright and the effective management of creators' rights. They also facilitate the process of evaluating and assessing the impact of policies, use of funding and compliance with regulatory obligations.

OPPORTUNITIES FROM DIGITIZATION

The digitization of broadcasting, particularly the switch to digital terrestrial television (DTT), promises significant opportunities to boost the development of the audiovisual sector in African countries.

Digital terrestrial broadcasting allows for more efficient use of frequencies, making it possible to broadcast many more channels. This is expected to fuel demand for the type of content that viewers want to watch, again underlining the need for data on how viewers consume content. None of the countries in the study has yet completed the transition to DTT, but each is seeing exponential growth in TV channels. These rapid developments further underline the need for data mapping.

DTT also creates data-gathering opportunities. For example, growing use of set-top boxes to deliver TV content can be used to monitor and assess audience viewing rates and preferences, at least for a representative sample of the population. It also offers an opportunity for TV licensing authorities to require TV broadcasters to meet quotas for locally-produced content, thereby satisfying local viewers and strengthening local content production.

There are also opportunities for policymakers and regulators to strengthen the bargaining position of audiovisual creators and producers in relation to broadcasters. Currently, broadcasters often buy works at knock-down prices and can even require producers to pay for broadcast time – or source advertising for it – and to share any advertising revenue with them. The time is ripe to recalibrate the business negotiations between these parties and to agree on fair and decent terms of trade.

PARTICIPATION IN THE GLOBAL AUDIOVISUAL INDUSTRY

The presence of several powerful Pan-African media operators – Canal Plus, DStv and Starsat – in African media markets further highlights the importance of data gathering. These companies often engage in TV satellite distribution and audiovisual production. Knowledge of how they operate and their links with other audiovisual actors is essential to understanding their market power and market dynamics.

Interestingly, these international outfits often aggregate market intelligence on subscribers, earnings, and performance to further strengthen their own market position. Their market power is so significant that it is important to understand the scale of their operations and to engage with them to support and distribute local content produced.

The WIPO study explores challenges and potential opportunities in the audiovisual markets of Burkina Faso, Côte d'Ivoire, Kenya, Morocco and Senegal.



Photo: Rupert Sagar-Musgrave / Alamy Stock Photo

The switch to DDT will have a major impact on audiovisual markets and will fuel the need for economic intelligence. Beyond its crucial role in supporting the economic development of the sector, there is also an opportunity here to create professional data-collection systems and innovative legal services to counteract the scale and impact of piracy within the sector.

Piracy is perhaps the most intractable challenge confronting the audiovisual sector in the countries studied. In the digital age, piracy has graduated from black market DVDs to the sharing of films on USB drives and via social networks and online streaming services. It is affecting all distribution platforms, slowing the development of national audiovisual industries and threatening the livelihoods of creators. How can countries effectively respond to this insidious problem?

One way, is to strengthen IP legal frameworks and make them more effective in tackling such infringements. Another is to work toward providing a broad offering of legal video-on-demand services. This has proven an effective way to encourage people to favor legal viewing options in Europe and the United States. However, success in effectively tackling piracy requires the concerted effort and cooperation of all stakeholders.

RAISING AWARENESS AMONG STAKEHOLDERS

Addressing the data needs of the audiovisual sector in African countries will require a greater focus on training businesses within the sector. This will boost understanding among creators and producers of the importance of registering their works and sharing business data (on employees, audiovisual works, budgets, etc.) with relevant organizations. By using market data, audiovisual businesses will be better placed to find partners for the production and sale of their works. The more companies engage in these processes, the more data will be available. This will lead, in turn, to better policies and stronger economic performance.

More also needs to be done to build understanding and awareness of copyright within the sector. Only then will producers and directors be able to more effectively exercise their IP rights and monetize their creative assets.

There are many examples of good practice to boost the audiovisual sector in each of the five countries covered by the study. For example, the collection of data on film and audiovisual production in Morocco, the establishment of a private collective management organization in Senegal, tax rebates in Côte d'Ivoire to encourage company registration,

the introduction of local production quotas and improved categorization of audiovisual companies in Kenya. Such initiatives, rooted in the implementation of supportive policies and regulations, enhance the sector's performance and improve data collection, but alone, they fall short of what is needed for the audiovisual sector to thrive.

On the other hand, it is also important to focus on educating collective management organizations and national copyright offices about the importance of audiovisual market data collection. An understanding of the audiovisual sector, its business models, the role of broadcasters and distribution companies and of new media players in the online world is central to the successful implementation of copyright frameworks, long-term strategic planning and the future viability of audiovisual sectors. Data on potential audiences and views is fundamental to enhancing the industry's negotiating power. And data on the performance of audiovisual works is vital to assess the value of IP remunerations payable to creators.

CREATING AN ENABLING ENVIRONMENT FOR DATA COLLECTION

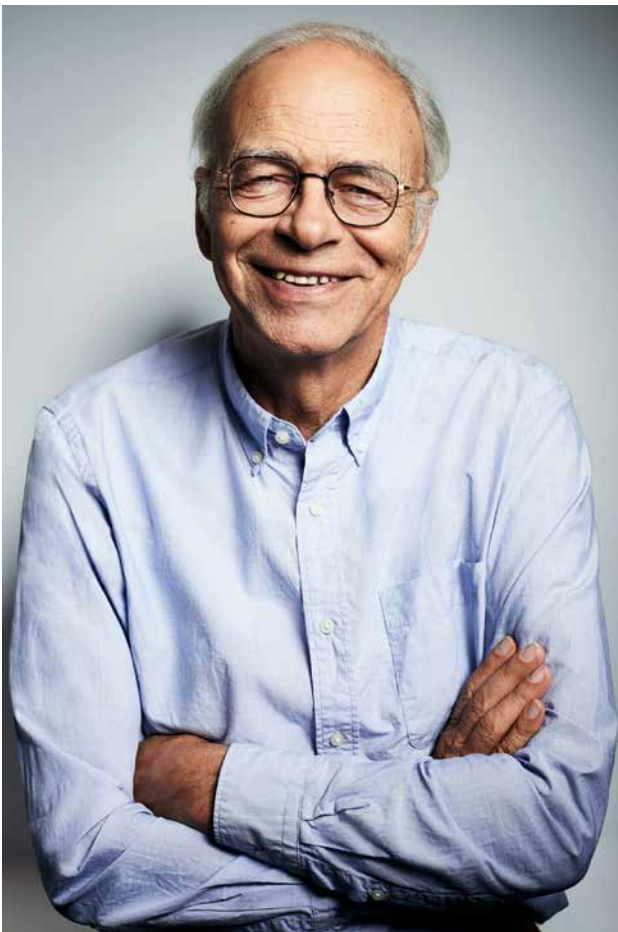
Establishing an effective copyright framework within the audiovisual sector is an important step toward the collection of audiovisual market data. Such a framework would require broadcasters to report on their programming, including original and commissioned content, and financials relating to spend-per-hour and spend-per-genre. Such data enhance understanding of the economics of the sector. Similarly, film distribution market players and cinema theatres would report on admissions and box office revenues. When rolling out these frameworks, however, it is important to clearly explain the business, financial and economic benefits that can flow from robust data collection to all parties concerned.

Many institutions are involved in funding, regulating and managing the production and distribution of audiovisual works. By collaborating and pooling their resources and information, these entities can better identify gaps in data collection and solutions for improved data transparency. Given the presence of pan-African operators, there is also logic in fostering cross-national cooperation on these issues. Such regional collaboration has helped enhance transparency and performance of audiovisual markets in Europe and South America.

Mapping audiovisual markets – the players, audiences, revenues and trends – is pre-requisite to creating the knowledge and understanding required to elaborate coherent and effective policies and strategies for the audiovisual sector. Such market intelligence will go a long way in enabling these sectors to realize their full economic potential and in enriching the cultural fabric of individual societies and global cultural heritage as a whole.

Ethics, technology and the future of humanity*

Photo: Aleitta Vaandering



Professor Peter Singer raises a number of thought-provoking questions on ethics, technology and the future of humanity.

The widely-renowned Australian moral philosopher, Peter Singer, is at the forefront of thinking on the social impact and ethical implications of new technologies. In June 2018, Professor Singer gave a public lecture on ethics and technology at WIPO. A summary of his lecture follows.

ETHICS DEFINED

When we reflect on the judgments we make, we should be able to agree on some basic principles of ethics or disagree on particular applications of those principles in different circumstances. For example, from an ethical viewpoint, we ought to be able to accept that the interests of all people are equal. My interests don't count for more than those of others elsewhere, provided similar interests are at stake. If we assume a given disease causes similar suffering in humans everywhere, then I think we can agree we should give equal weight to each patient suffering from it, irrespective of other differences.

That idea is reflected in the Universal Declaration of Human Rights and other international covenants. Ethics is not a matter of taste; it is a self-evident truth akin to the reasoning of mathematics or logic. Therefore, ethics is a matter on which there are objectively right and wrong answers.

But, of course, within that idea of equal consideration of interests, there is room for different ethical views about what we ought to do and how we are to live. There are two fundamental philosophical approaches to this.

One view says that the right thing to do – insofar as everyone's interests have equal weight – is to try to maximize the interests of everybody, to promote well-being and reduce suffering. This is the utilitarian view associated

* Summary by Catherine Jewell

with the 18th and early 19th century English philosophers, Jeremy Bentham and John Stuart Mill, and it is still held by various contemporary philosophers, including me.

The other view, associated with the 18th century German philosopher, Immanuel Kant, is the idea that certain things are inviolable; they are contrary to human dignity and must never be done.

The utilitarian view doesn't mean that human dignity is not important. Such rights are important because they lay a foundation for a society that promotes the well-being of everyone. But that view doesn't mean that you could never act against particular human rights.

Take the scenario of a runaway train heading toward a tunnel where it will kill five workers. If you divert the train it will kill only one. As a utilitarian, I think one should be prepared to sacrifice one life to save five.

ETHICS AND INTELLECTUAL PROPERTY RIGHTS

When it comes to intellectual property (IP) rights, the utilitarian perspective encourages innovation and creation for the benefit of all. There is, however, an alternative view that says property rights, including IP rights, are inherently natural rights, and that it is wrong to deprive people holding those rights of the things that they have a right to, independent of the consequences. Less well known, however, is that within that natural law tradition, there are limits to those natural rights with respect to property. For example, if somebody, of necessity – because they are starving – takes something from someone who has abundance – a loaf of bread, for example – that is not theft because the natural law theory of property rights states that these rights exist in order to enable us to satisfy our needs. When those rights interfere with meeting our basic needs, they no longer hold.

Now, when we apply that to the use of IP in relation to the medicines needed to treat people who cannot afford them, for example, that could result in a doctrine that justifies the production of generic versions of patent-protected drugs for these patients in poor countries. There are, in accordance with this view, provisions in international agreements like the Agreement on Trade-Related Aspects of Intellectual Property (TRIPS) that allow governments to give permission to produce generic versions of patented drugs (under what is known as a compulsory license) in specific situations. Such an approach can be defended, both from a utilitarian perspective and a natural law defense of property rights.

The utilitarian perspective, which takes a long-term view, gives more importance to the right to patent protection, whereas the natural law view focuses on the immediate needs of the person who will die without the drug. The natural law view says nothing about the future generations who will benefit from the development of new drugs that we don't yet have, and which may only be developed if pharmaceutical companies believe they have sufficient financial incentives to develop them.

When tackling global health challenges, we need to take that long-term view, while also recognizing we need to find ways to make life-saving drugs available to those who need them. And we need to avoid situations where effective drugs are available in affluent countries but are unaffordable for developing nations.

“We shouldn’t assume that evolution is guided by some kind of providence to reach the best ethical outcomes. We could imagine better outcomes: more intelligent, altruistic and compassionate humans, for example. Maybe that’s what we need to do to protect the future of humanity.”

Peter Singer

The more difficult question, however, is how do we create incentives for pharmaceutical companies to produce drugs for markets that are unlikely to yield financial returns?

Today, a patient in an affluent country can benefit from very expensive drugs costing up to USD 500,000 per year of treatment. In contrast, in developing countries, the distribution of insecticide-treated bed nets can save one life in malaria-prone regions for around USD 3,400 per year. That gap is too great. Changing this situation probably means saving more lives cheaply in the developing world and capping the amount we spend on saving lives in affluent countries.

TECHNOLOGY AND BIOETHICS

Let me now turn to the complex interplay between technology and ethics.

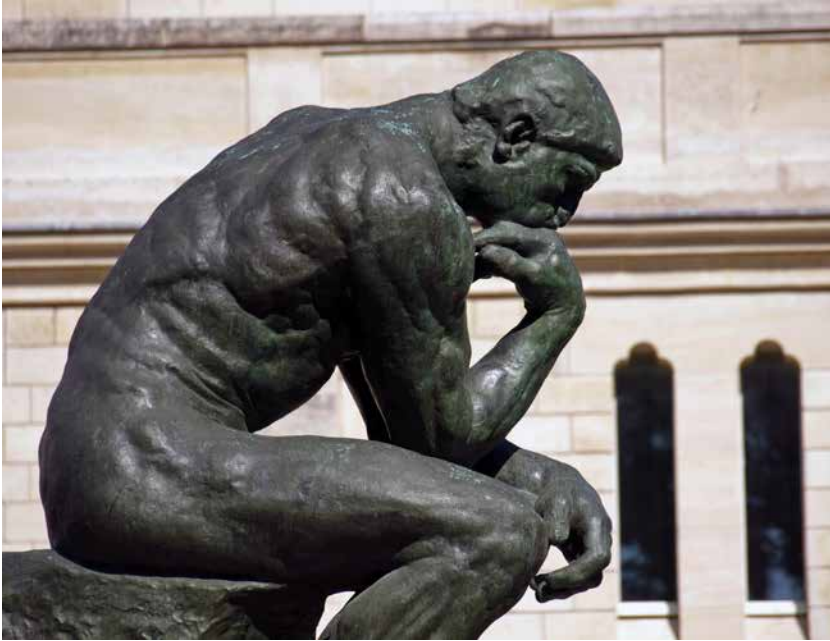
In the 1950s, the invention of the respirator made it possible to keep patients alive who were unable to breathe unaided. It continues to save lives of patients who, after a short time, recover completely. That's wonderful. But what about patients that never recover consciousness or the ability to breathe unaided? That posed an ethical problem; one that became even more acute in the 1960s, when Dr. Christiaan Barnard demonstrated the life-saving potential of transplanting a heart from one patient to another. What should we do with patients on respirators who show no brain response and will never recover consciousness? Do we keep them on the respirator for the rest of their natural lives or do we turn it off and allow them to die?

Our response was to change how we define death. Up to that point, a person was legally dead when their heart, respiration and pulse stopped. We simply added irreversible cessation of all brain function to that definition. That made it possible to declare some of the patients on respirators legally dead. But more importantly, it meant we could remove the organs of patients on life-support while their heart was still beating and use them to save other lives. If these patients were living, that would be directly contrary to the Kantian idea that we should never use a human to serve the ends of others. We avoided that by changing the definition of death. That change in

“My hope is that we will use technology to bring about a better life for all in a more egalitarian way that helps those who are worst off. That is where we can do the greatest amount of good.”

Peter Singer

Photo: majava / iStock / Getty Images Plus



Professor Singer notes that the new technological future of artificial intelligence and super intelligent machines that are much smarter than humans raises many questions that require careful reflection.

definition was not the outcome of any scientific discovery. It was a policy choice. But it is extraordinary that there was so little opposition to it at the time, even if it remains a topic of discussion.

Then, in the 1970s, *in vitro* fertilization was developed. *In vitro* fertilization has been successful in helping infertile couples have children. It also made it possible to produce a viable embryo outside the human body and to transfer it to a woman with no genetic link to that embryo. It meant that a woman who wanted a child but was unable to produce any eggs could now have one. It also meant that a woman could offer her womb for hire as a paid surrogate. There is already a certain level of international business in this area, and that is ethically questionable. But perhaps the more important issue for the future of humanity is what we can do with viable embryos produced outside the body in terms of genetic screening and modification.

Pre-natal genetic screening and selection to detect certain diseases that may result in terminating a pregnancy is commonplace. Another method of achieving the same outcome is for women at high risk of having a child with a genetic abnormality to undergo *in vitro* fertilization. After taking drugs to produce multiple eggs, which are then fertilized, the resulting embryos are screened and a healthy embryo is transferred to the woman, eliminating any risk of termination and enabling her to bear a child free from disease.

That, in itself, is not particularly controversial. But as our knowledge of genetics advances we are also going to find better-than-average genes, and it is not difficult to imagine couples will want to screen embryos for a child with the characteristics they want. What sort of future might this lead to? One could imagine the emergence of a genetic class structure, a genetic aristocracy and proletariat, where individuals – and indeed countries – use genetics for improved intelligence, for example, to secure a competitive advantage in the world. Do we want to move away from the rather limited but still significant mobility that exists between classes today? And if we decide not to prohibit the use of genetic technology in this way, how should it be made accessible and regulated? We need to think about these things.

Moreover, in the next decade, it is quite possible that with CRISPR gene-editing technology, we will be able to modify embryos. If that proves safe and reliable – which is still in doubt – it is likely to lead to a modified kind of human nature. I don't regard that as intrinsically wrong. Human nature and our genetic make-up have evolved to help us survive. We shouldn't assume that evolution is guided by some kind of providence to reach the best ethical outcomes. We could imagine better outcomes: more intelligent, altruistic and compassionate humans, for example. Maybe that's what we need to do to protect the future of humanity.

ARTIFICIAL INTELLIGENCE AND THE FUTURE OF HUMANITY

The development of artificial intelligence (AI) is another important area requiring careful reflection. Increasingly, AI is being used to do work that humans can already do. In manufacturing, for example, robots are taking on the repetitive tasks formerly undertaken by workers on the factory floor. We can anticipate that the use of AI will take on these tasks in many other areas. That means we have to think about how to develop a society where there is much less need for human work, but which captures and transfers productivity gains to people – through some kind of universal basic income scheme perhaps – in a way that meets their need for a sense of purpose. This will be a very difficult challenge.

Some commentators believe the development of super intelligent machines that are significantly smarter than humans are imminent. What will that mean for the future of humanity? Will super intelligent machines decide they are better off without us? That alarming prospect could be a tragedy of unimaginable proportions ending billions of years of existence on the planet and the lost potential of all future generations of humans. Should we, then, focus on reducing, as far as possible, the risk of human extinction? Or would these super intelligent machines themselves – if they were conscious beings – have intrinsic value, equivalent to, or even superior to, our own? Most people will reject that suggestion; but perhaps we have an inherent bias in favor of our own species. We certainly need to think more about this prospect.

There are many questions facing us as we march toward this new technological future. And there are many uncertainties. My hope is that we will use technology to bring about a better life for all in a more egalitarian way that helps those who are worst off. That is where we can do the greatest amount of good.

Thank you.

The role of IP rights in the fashion business: a US perspective

By **John Zarocostas**, freelance journalist



Photo: Courtesy of Julie Zerbo

Julie Zerbo (above), Editor-in-Chief of *The Fashion Law* discusses the growing importance of IP rights in the global fashion industry.

In recent years, intellectual property (IP) rights have played a pivotal role in the growth of the highly competitive global fashion industry, which generates more than USD 2 trillion per year. Amid breakneck advances in information and communication technologies (ICTs), supply-chain logistics, social media and an evolving buyer culture, IP rights and their protection are likely to become ever more central to the fashion industry.

Julie Zerbo, founder and Editor-In-Chief of *The Fashion Law* (www.thefashionlaw.com) in New York, a leading publication for fashion law news and analysis, discusses the growing importance of IP rights for the fashion industry, the significance of recent landmark rulings relating to copyright and trademarks and some of the challenges and opportunities ahead for fashion law in the digital age.

How are IP issues affecting the fashion industry?

IP law has played an enormous role in the proliferation of fashion. Take runways, for example; very few designs on display are sold in stores. The runway is an opportunity for designers to display their creative talent, attract media attention and build awareness

of their brand. They also provide an opportunity for a brand to sell more affordable items, such as perfumes, cosmetics or T-shirts, with brand names prominently displayed on them. So much of the fashion industry thrives on this type of IP licensing. IP is a core asset of the fashion business. In the United States, we talk a lot about copyright law as the main source of protection for designs and its interaction with fashion. But trademarks are really the most widely used means by which fashion brands protect themselves in the United States.

The recent landmark case, *Star Athletica, LLC v Varsity Brands, Inc.*, is likely to have an impact on the fashion industry in the United States. The case, which went to the US Supreme Court, centers on the copyrightability of designs on the surface of cheerleader uniforms and the concept of “separability,” which is a pre-requisite for a garment or other useful article to be protected under US copyright law. As copyright law does not seek to protect or create a monopoly over useful articles, and as garments, dresses, shoes, bags and so forth are considered useful items, they don’t qualify for copyright protection as a whole. Only design features that can be separated from a garment or other utilitarian or useful item, so to speak, qualify for copyright protection in the United States. The whole issue has been a major source of frustration for designers in the United States for some time because it means that only certain aspects of their garments, and not the garment as a whole, are protectable.

With that as a baseline, fashion businesses in the United States are using IP in interesting and creative ways. For example, we now see growing reliance on design patent protection, even though it is more expensive and time-consuming to obtain than copyright protection. More businesses are also relying on trademark protection to protect their brands and trade dress (i.e. the appearance and packaging of their products).

What IP and fashion trends are emerging on both sides of the Atlantic and in emerging economies?

As I mentioned, in the United States, there is now much greater reliance on design patent protection, particularly among more established brands with deep pockets. These brands tend to protect their staple products – those that will be sold in more than one season – in this way. In these cases, design patent protection is seen more as an investment. The re-introduction of logos on bags and garments is also on the rise. This is a way for brands to meet the demands of Instagram-happy millennials and Gen-Z consumers, who want to make it known what brand they are wearing. It also gives brands a way to legally protect aspects of their garments and other utilitarian items that might not otherwise be protectable.

Photo: CCO



“The runway is an opportunity for designers to display their creative talent, attract media attention and build awareness of their brands,” says Julie Zerbo.



Photo: gorodankov / iStock / Getty Images Plus



IP is a core asset of the fashion business. In the United States, copyright and trademark law are the main source of protection for designs and fashion brands. Designers in Europe benefit from registered and unregistered design rights, which offer them a significant advantage over US designers.

What are the key differences between the IP laws governing fashion in Europe and the United States?

One of the main differences is that the European Union has registered and unregistered Community design rights that provide protection for garments and accessories as a whole. That simply does not exist in the United States, and is a big advantage that European designers have over US designers.

European fashion markets significantly predate the US fashion industry. This explains why IP law for fashion and textiles has existed for much longer and is more expansive in Europe. That is a plus for European designers. New York's fashion industry got started thanks to licenses from Parisian designers to produce lower-cost garments and accessories. That's how New York effectively became the home of fashion licensing.

So much of the difference between Europe and the United States with respect to the laws governing fashion comes down to history. France was one of the first places to turn out original creative designs. Design protection has been a priority in France since the 15th century, when the "fabrication of textiles" was granted protection. That was just not on our radar in America at that time. Design-specific protection was confirmed in French national law by the Decree of the National Convention of July 19, 1793, and further refined by

the special design laws of 1806 and 1909, which provide French designers with significant levels of protection.

Is anything being done to bring US fashion law into line with Europe?

Over the past decade, three different copyright bills have been proposed to Congress: the Design Piracy Prohibition Act (introduced in 2009), the Innovative Design Protection and Piracy Prevention Act (introduced in 2010), and the Innovative Design Protection Act (introduced in 2012). Each bill proposed amendments to the US Copyright Act to provide *sui generis* protection for fashion designs. In particular, the bills sought to remove the "separability" requirement so that designers would no longer have to derive protection from individual creative elements of the design of their garment. Unfortunately, none of the bills gained sufficient traction in Congress and they were not passed. Those are the three most significant recent attempts to close the gap between US and European laws governing fashion.

Was the lack of legislative success largely due to insufficient lobbying power?

There was definitely lobbying. But the bills themselves weren't strong enough. There was a lot of enthusiasm to protect garments and accessories as a whole, but there was no consensus on the specifics of exactly how to do that.

Tell us about some of the recent landmark cases that have had an impact on the US fashion industry.

As I mentioned earlier, *Star Athletic, LLC v Varsity Brands, Inc.* was a landmark case that went before the Supreme Court in 2017. The case centered on the protectability of cheerleading uniforms. Specifically, it examined whether certain creative elements of the design of a cheerleader's uniform – such as the stripes of a chevron – could be protected under US copyright law. In other words, could these elements be separated specifically or conceptually without taking away the purpose of the design, namely to be a cheerleading uniform?

In its decision, the Supreme Court clarified the standard for separability, saying that, in general terms, certain creative elements – whether two-dimensional or three-dimensional – of a garment may be protected by copyright law. However, it refused to speak to the protectability of, or the level of creativity inherent in, the specific uniforms in question.

The case has to go back to the lower court to determine whether the cheerleading elements were sufficiently original to warrant protection. While it is not yet clear what the practical impact of the decision will be on the US fashion industry, it does offer designers some hope of being able to use copyright law to make a case for defending at least some creative aspects of their garments.

The recurring cases involving French luxury footwear designer Christian Louboutin are also interesting. They raise the issue of whether it is possible to protect a single color in the fashion industry, in this case red. In 2008, Christian Louboutin acquired trademark rights in the United States over the bright-red lacquered sole featured in much of the footwear he produces. US trademark law (the Lanham Act) allows for the registration of a trademark that consists of a color. In 2011, when French fashion house Yves Saint Laurent (YSL) released its monochrome footwear collection in a range of colors, including red, Louboutin filed a lawsuit against YSL claiming infringement of his so-called red-sole trademark. In response, YSL challenged whether Louboutin's color trademark qualified for trademark protection in the first place, claiming it lacked distinctiveness and was purely ornamental. The upshot of the legal wrangle is that,



The French luxury footwear designer Christian Louboutin has engaged in a number of legal battles in various countries to protect his signature red-soled shoes as a trademark.

in the United States, Louboutin's red-sole trademark is limited "to uses in which the red outsole contrasts with the color of the remainder of the shoe" by decision of the United States Court of Appeals for the Second Circuit. These cases have led to a number of cases in other countries where Louboutin is seeking to protect his signature red-soled shoes.

There have also been a number of interesting cases in the European Union. For example, a landmark decision resulted from the case involving luxury cosmetics manufacturer Coty and third-party online platforms like Amazon (*Coty Germany GmbH v Parfümerie Akzente GmbH*). Here, the Court of Justice of the European Union (CJEU) held that in order to protect the luxury nature of their goods, luxury brand owners are able to restrict the sale of their goods by their authorized distributors to online third-party platforms, such as Amazon. The original purpose of the case was to determine whether such restrictions ran counter to European competition laws. But is it also very much an IP-related case in that it centers on the ability of trademark owners to protect the value of their luxury brands when their products are sold by authorized distributors to third-party online platforms that the brand owners would not normally engage with. In this instance, the CJEU essentially held that Coty, which holds the licenses for a huge array of branded fragrances like Calvin Klein, Prada and Marc Jacobs, can block brands from selling their products on the third-party internet retail sites.

Is fashion-related IP litigation concerning social media and e-commerce on the rise?

Today, so many people and so many brands are using social media platforms to post content over which they don't necessarily hold the rights. This is giving rise to a significant number of copyright infringement cases. Beyond that, it is clear that cybersquatting – when someone hijacks a trademark and registers it as a domain name in bad faith – and trademark squatting are not going away anytime soon.

In 2017, there was an interesting trademark lawsuit in China involving US sports apparel manufacturer New Balance. The Suzhou Intermediate People's Court (near Shanghai) ordered three Chinese shoemakers to pay more than RMB 10 million (around USD 1.5 million) in damages to New Balance for infringing its signature slanted "N" trademark. While small by international

standards, the damages are reported to be among the highest to have ever been awarded to a foreign company in a trademark dispute in China.

What about sustainable fashion and IP law?

Sustainability is a big trend and will become the norm. The production and manufacture of the huge range of products we have in the world today are taxing the environment, so sustainability is only going to grow in importance. Organizations like the Federal Trade Commission in the United States and the Advertising Standards Authority in the United Kingdom will give greater attention to the labelling of "sustainable products" in the future.

Right now, for lines to be sustainable is a trendy selling point. We don't yet really have a measure for gauging what sustainability means or what "all natural" means. So, at some point, I think we will see a regulated legal standard emerge that will require anyone who uses it to meet a range of criteria.

Looking ahead, what will be the impact of 3D printing and artificial intelligence (AI) on the fashion sector?

As 3D printing becomes more accessible, there are potential risks of infringement, such as the unauthorized reproduction of copyright-protected patterns and trademarks; for example, when logos are recreated in a 3D version of a product without authorization. But until 3D printers are cheap enough for individuals to have them in their homes (which I think is still some way off), this is mostly conjecture.

What I find particularly interesting at the moment is blockchain and its potential both to assist right holders in recording and managing their IP rights and to fight against fakes. Tackling counterfeit goods, particularly online, is a costly, time-consuming and unending process for brands. I am optimistic that blockchain and other emerging technologies can help provide more efficient and affordable ways of dealing with that problem.

Risky business: the five biggest IP mistakes startups make

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Photo: Tempura / E + / Getty Images

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Starting a new business is a daunting task, and not something for the faint of heart. Entrepreneurs require passion, drive and a stubborn perseverance borne of a determination to succeed. Entering my 25th year of legal practice, I have the great privilege to represent many startups and to witness the trials and tribulations associated with launching a successful business. Sometimes these businesses grow beyond expectations and achieve great success, but sometimes they fail. There are a multitude of reasons why promising startups don't make it, but the most common ones may surprise you.

When it comes to businesses and their IP, many young companies fail to recognize the breadth of their potential IP assets or to appreciate their importance. Although wholly avoidable, there are a number of persistent errors that hamper startups from the capital raising process to launch, and beyond. Here are five of the biggest mistakes, in descending order, that I have witnessed in practice that others should not ignore.



5. A PIECEMEAL, "DO-IT-YOURSELF" APPROACH TO IP

This silent killer of young companies is understandable. For some startups, funding may be scarce, or in its infancy, forcing the entrepreneur-founder(s) to take on tasks with little or no capability (or experience) to handle them. For others, the race to market trumps a more methodical approach. A "do-it-yourself" (DIY) approach is risky at best. Intellectual property (IP) rights require a deft hand and appropriate guidance from qualified IP counsel. Experienced entrepreneurs usually understand the importance of such guidance and anticipate their IP needs. But for young, less experienced companies, it can be quicksand. Startups need to engage qualified IP counsel to help identify needs and guide solutions from the outset. And believe it or not, this is not terribly expensive! There is no excuse for not having an initial consultation with a qualified IP attorney. Without question, such a consultation will help lay the groundwork for the IP rights the startup may have (or seek) and its attendant IP needs. At the very least, it will equip the company with an understanding of what it needs to do so it can plan accordingly.

4. IMPROPER DOCUMENT FOUNDATION

This problem plagues most startups, for a variety of reasons. Whether the result of "forms" received from other colleagues or a natural extension of the DIY approach outlined above, failing to keep company documents in order is dangerous. And when it comes to IP, it can be fatal. For example, the founder of a technology startup may seek to use a *pro forma* non-disclosure agreement (NDA) with prospective investors or, better yet, potential developers. All too often, the startup gives little or no consideration to how such a *pro forma* agreement defines "confidential information," its terms, and indeed, what it includes, what it excludes and its duration. Does the NDA limit use of the confidential information it covers to an expressed purpose? And what about provisions that prevent any implied license for IP under the NDA, and the return or destruction of such information in the

possession of the recipient? In some cases, assignment provisions may be necessary to ensure that any concepts that naturally flow from the recipient as a result of discussions covered by the NDA (such as improvements to underlying IP disclosed under the NDA made by the recipient) are captured by the disclosing party. Standard forms rarely work, and this is an area where qualified legal counsel is absolutely necessary.

3. IGNORING STANDARD IP PRACTICES IN THE RACE TO MARKET

This is one of the most dangerous mistakes a startup business can make. As outlined above, IP rights protect different things and, in some cases, cannot be acquired unless specific steps are taken. For example, a startup cannot benefit from protection of its trade secrets unless it takes specific steps to protect the secrecy of such information. In the United States, this usually requires both physical and technical measures to protect such valuable IP capital. Moreover, US-based businesses may eliminate foreign patent rights in an invention if there is a public disclosure (even though there is a 12-month grace period after disclosure within which to file an application for US patent rights). Where trademarks are concerned, at the very least, startups need to ensure they have performed a trademark search to see if their proposed mark is already being used by (or is confusingly similar to) that of another company. Often, such practices are standard operating procedure, but for many startups, the principals ignore these practices at the outset, either because they do not know or are because they are too busy moving forward with product or service launch. Addressing these needs later (rather than sooner) is a risky proposition, and usually resembles triage of IP assets – when a startup has no choice but to focus on protecting higher value assets – rather than a coherent IP strategy. Ignoring standard IP practice is never a good solution, and usually results in limited (or even eliminated) IP rights. The bottom line: be proactive in implementing standard IP practices throughout the pre-launch process. Not doing so may even run afoul of representations to accredited investors.

2. FAILING TO IMPLEMENT APPROPRIATE CONFIDENTIALITY CONTROLS

This is a recurring issue. As outlined above, although most startups use some form of NDA, such *pro forma* documentation rarely meets their actual needs. A bigger problem, however, is inconsistent use of appropriate documentation and a failure to initiate (or enforce) controls. For example, a technology startup may inadvertently disclose confidential information to a contract developer without a signed NDA in place. Or, the company may have a development agreement for use with the developer, but fail to incorporate a finalized statement of work outlining development requirements and milestones as part of the executed agreement. The results of ignoring such reasonable controls are almost always painful. The last thing a young company needs is litigation that could have been avoided by implementing (and enforcing) reasonable internal controls. Litigation is a costly process, yet eminently avoidable.

1. FAILURE TO CREATE AND IMPLEMENT AN IP STRATEGY

The failure to develop (or execute on) a well-thought-out IP strategy often proves fatal to startups. This is the biggest mistake startups make from my perspective. Young companies commonly develop all kinds of plans – business plans to obtain investment capital, marketing plans, recruitment plans and even search engine optimization strategies – so why do they commonly ignore a plan to address some of their company’s most valuable assets? A number of reasons come to mind, but the most common one is their zeal to get to the market. In their haste to commercialize their product, most startups don’t take the necessary steps to identify and protect their IP assets. A piecemeal approach to IP protection almost always costs *far* more than anticipated to effectively protect much *less* than expected. Startups should always – *always* – take the time up-front with qualified IP counsel to outline their existing *and contemplated* IP assets and to develop a plan of action to acquire and protect them. In so doing, a company can reap significant value from the IP assets it creates, and can shield itself from potential exposure to third-party infringement. Simply put, if you fail to plan, then plan to fail.

Whether you are part of a startup or advising one, these problems are real. But they can be avoided if appropriate proactive steps are taken. The key term here is "proactive." From the outset, startups need to take reasonable steps to help lay the foundation for their future success and avoid problems with IP assets. Yes, there are costs associated with this, but those costs pale in comparison to the costs of *not* taking appropriate action. Take the time to engage qualified IP counsel, create an IP plan and execute it over time. The success of your business depends on it.



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