

# WIPO MAGAZINE

JUNE 2016

No. 3



Unlocking design potential  
in developing countries

p. 7



Reggae:  
Jamaica's gift to the world

p. 18

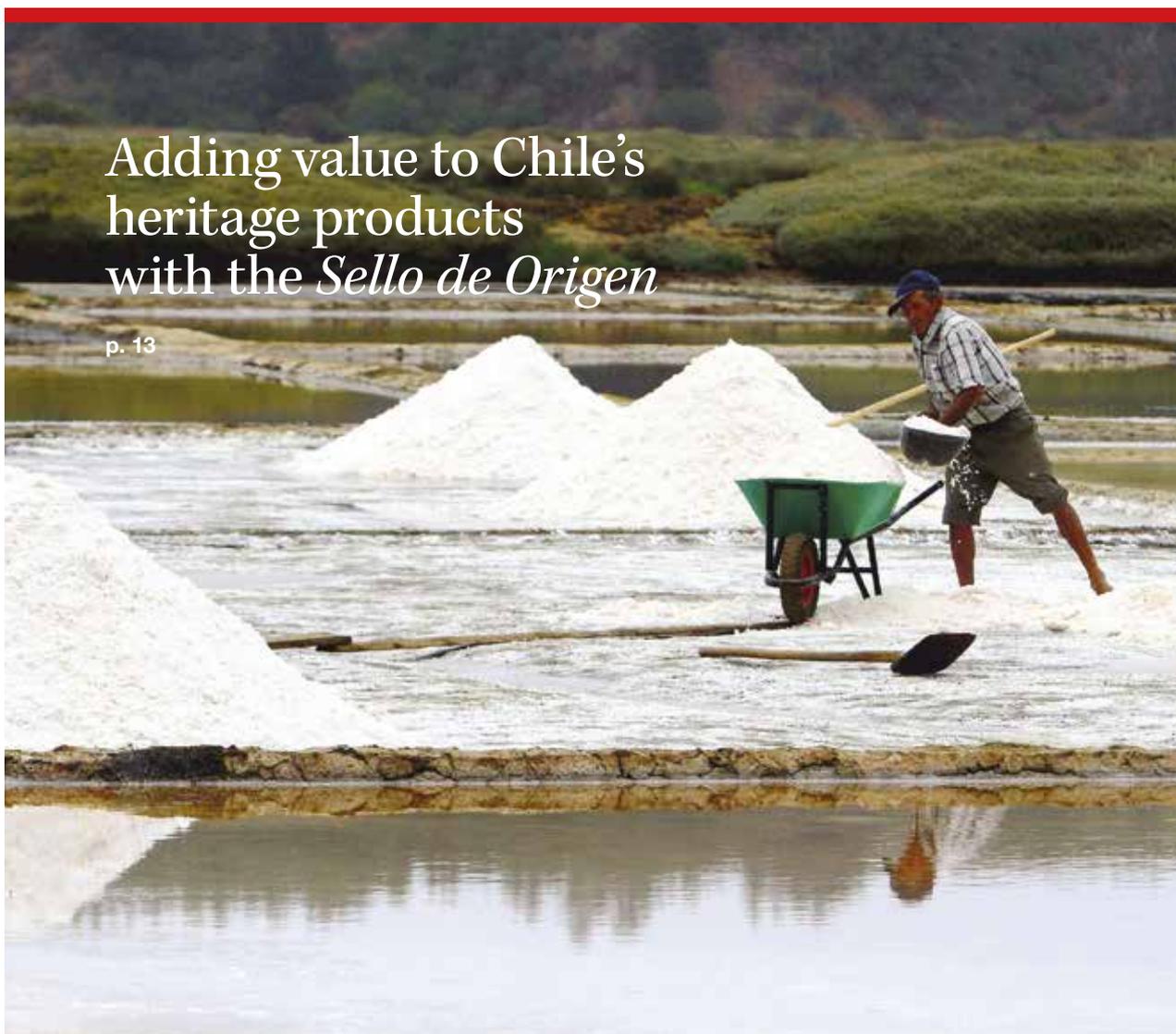


Publishing and the  
digital economy

p. 32

Adding value to Chile's  
heritage products  
with the *Sello de Origen*

p. 13





# Table of Contents

2	China's trademark activity continues to soar
7	Unlocking design potential in developing countries
13	Adding value to Chile's heritage products with the <i>Sello de Origen</i>
18	Reggae: Jamaica's gift to the world
25	Copyright and museums in the digital age
29	Getting a handle on Twitter
32	Publishing and the digital economy
37	Patenting catalyst technology: activating change and overcoming challenges

Editor: **Catherine Jewell**  
Graphic Design: **Annick Demierre**

	<b>Acknowledgements:</b>
2	<b>Binying Wang</b> , Deputy Director General, Brands and Designs Sector, WIPO
7, 13 & 29	<b>Marcus Höpperger</b> , Law and Legislative Advice Division, WIPO
18	<b>Carol Simpson</b> , Regional Bureau for Latin America and the Caribbean, WIPO
26	<b>Michele Woods, Miyuki Monroig</b> , Copyright Law Division, WIPO
32	<b>Geidy Lung</b> , Copyright Law Division, WIPO
37	<b>Matthew Bryan</b> , PCT Legal Division and <b>Tomoko Miyamoto</b> , Patent Law Division, WIPO

Cover images:  
Left to Right: Caiman, Argentina;  
International Reggae Day;  
© David Levenson / Alamy Stock Photo (BK99M4)  
Main image:  
Agencia Uno – Imagen de Chile

© World Intellectual  
Property Organization

# China's trademark activity continues to soar

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

China's Commissioner of the State Administration for Industry and Commerce (SAIC), Minister Zhang Mao, is responsible for overseeing the world's largest trademark office. Mr. Zhang explains why Chinese trademark activity has shot up in recent years and is set for further growth.

## ***What is the status of trademark activity in China?***

Trademark applications filed in China over the last decade have soared from 766,319 in 2006 to 2,876,048 in 2015. This trend is continuing despite sluggish global economic growth.

Five factors account for this rapid growth. First, the Chinese Government's drive to boost "mass entrepreneurship and innovation". This has helped maintain strong economic growth, promoted market development and lowered market entry barriers. It has also resulted in the formation of many new companies which are boosting entrepreneurship, innovation and trademark activity.

Second, the implementation of the 2014 Trademark Law has helped create a sound legal environment for trademarks to thrive. Intellectual property (IP) laws and regulations are constantly improving.

Third, the industry and commerce authorities and market regulators at all levels are working to create a level playing field for the protection and use of trademark rights.

Fourth, SAIC is actively improving its trademark registration procedures to ensure applicants have access to efficient, high-quality services. At present about 70 percent of all trademark applications are filed online and that number is growing every month.

Fifth, extensive IP outreach efforts have boosted public and business awareness of the value of trademarks.

## ***Are foreign applicants protecting their trademarks in China?***

In 2015, there were 176,893 trademark applications filed by foreign applicants, including those filed under the Madrid System for the International Registration of Marks, that is, 6.15 percent of all applications received by the Chinese Trademark Office (CTMO). By April 2016, valid foreign trademark registrations accounted for 10.68 percent of all valid CMTO trademark registrations.

## ***Are Chinese applicants using WIPO's Madrid System?***

China joined the Madrid System in October 1989 and became its seventh-largest user in 2015, when Chinese applicants filed 2,321 international applications. This is less than 0.1 percent of all applications filed with the CTMO, so there is huge potential to expand use of the System by Chinese enterprises.

The Madrid System is a convenient way for Chinese enterprises to register and protect their trademarks abroad, and for foreign companies to do so in China. It can support the long-term business goals of Chinese companies and help strengthen international recognition of Chinese brands, which is our long-term goal. For over 25 years, the Madrid System has underpinned China's impressive record in foreign trade and is an integral part of China's "Go Global" Strategy.

## ***How would you like the Madrid System to evolve?***

We would like the System to expand its membership and to become the preferred option for companies

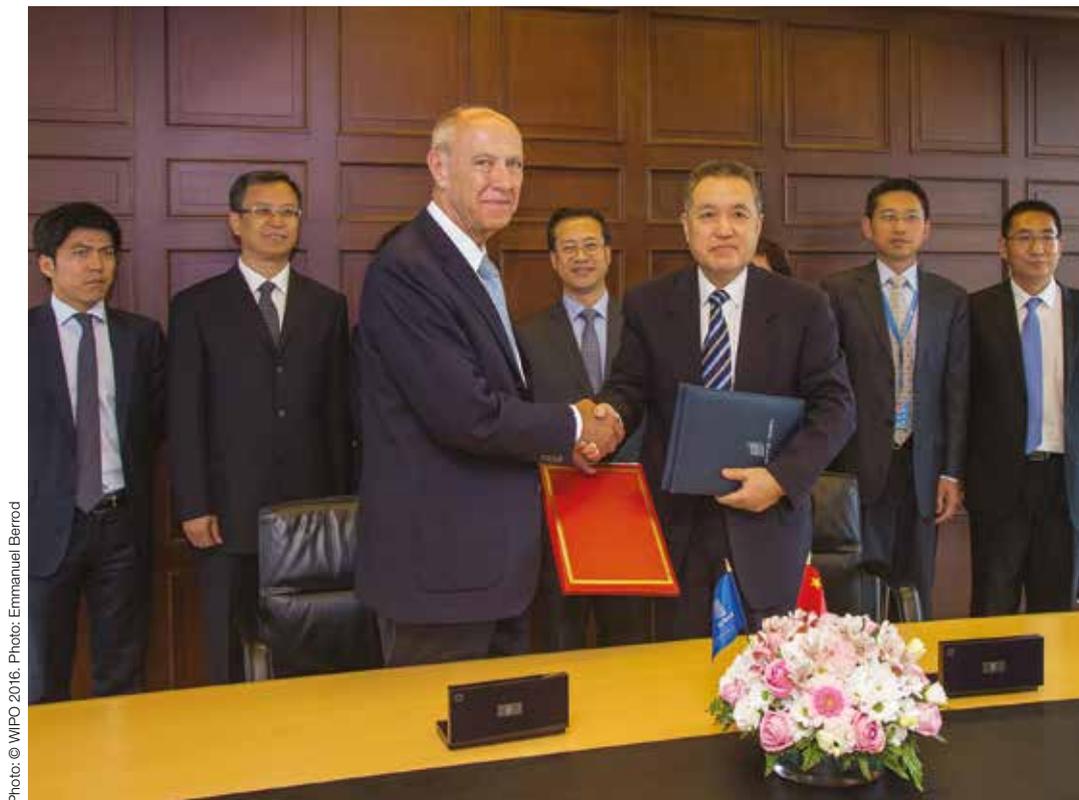


Photo: © WIPO 2016. Photo: Emmanuel Berrod

In 2015, China was the seventh largest user of WIPO's Madrid System for the International Registration of Marks. But with international trademark applications accounting for less than 0.1 percent of all applications filed with the Chinese Trademark Office, there is huge potential to expand use of the System in China. In May 2016, Minister Zhang Rao (right) and WIPO Director General Francis Gurry (left) signed an agreement to promote better use of the Madrid System by Chinese companies.

seeking international trademark protection. We would like to see it further simplified and automated to better serve users, including national IP offices, and to boost use. Measures to strengthen cooperation between the national offices and WIPO would also be welcome, along with more support in processing work relating to the System.

#### ***What are the main challenges facing the CTMO?***

There are four. First, we need to increase the average number of trademarks owned by Chinese enterprises. In 2011, 1,074 registered trademarks were owned for every 10,000 enterprises in China. That compares with 2,167 and 3,024 respectively for the Republic of Korea and the United States. While progress has been made – by 2015 the figure had increased to 1,335 – the gap remains large.

Second, although it is the world's second-largest economy, China has relatively few well-known international brands. According to World Brand Lab's *World's 500 Most Influential Brands*, China is ranked third with just

31 influential brands compared to the top-ranking US with 228 and the UK with 44.

Third, we need to boost international trademark filing activity by Chinese companies. In developed countries, such applications account for between 35 and 75 percent of all trademark applications. In China, the figure is just 4 percent. Most trademark applications are filed domestically.

Fourth, we need to make more effective use of our trademarks to drive economic growth. In 2015, the total value of Interbrand's *100 Best Global Brands* equaled 14 percent of China's GDP, yet only two Chinese brands – Huawei (ranked 88) and Lenovo (100) – made the list, so there is clearly scope to do more.

#### ***You mentioned the 2014 Trademark Law. What impact has that had?***

It has significantly improved the trademark landscape in China in favor of enterprise development. For example, companies can now trademark sounds, register one



Photo: Courtesy of SAIC

Minister Zhang Rao, who oversees the world's largest trademark office, believes brand strategies underpinned by trademark protection will be an increasingly important driver of economic development in China.

The Chinese Trademark Office (below) is the largest in the world. It covers over 40,000 square meters, and received over 2.8 million trademark applications in 2015.



Photo: Courtesy of SAIC

trademark under multiple classes of goods and file applications online. A legally binding time limit of nine months has been introduced for the examination and adjudication of trademark cases along with an improved opposition procedure.

To further promote market order and fair competition, the law also introduces new categories of trademark infringement, including for well-known trademarks, and stronger punitive damages to crack down on trademark “free-riding”, “squatting” and “hogging”. It also eases the burden of proof on rights holders.

And SAIC is implementing a range of complementary regulations to further enhance the quality and delivery of its trademark-related services.

We will further automate trademark registration and examination procedures, making best use of information technologies to increase efficiency. We are also establishing a cross-departmental collaborative governance mechanism to crack down on infringements more effectively. An integrated online platform for trademark-related law enforcement is under development to help boost transparency and consumer confidence in this area, and we will continue to build IP awareness at all levels and in all sectors.

The ultimate goal is to provide businesses at home and abroad with more convenient and effective public services, and to create a more competitive and orderly market for business growth.

### ***Do you think people in China are becoming more aware of IP?***

Yes, significantly. A recent study by *China Intellectual Property News* showed that public IP literacy rates increased by nearly 25 per cent between 2008 and 2015. Over 78 percent of respondents agreed that it is important to “respect knowledge, advocate innovation, and honor good faith and law”, while 54.5 percent recognized the close link between IP, work and social well-being.

The same study found that over 83 percent of Chinese enterprises believe IP is a strategic resource for improving economic growth and technological development, and around 59 per cent of them recognize IP as a property right. When confronted with IP infringement,

more than 95 percent would take some action – be it negotiation, administrative proceedings or litigation – rather than give up their rights.

There is also strong evidence that increased IP awareness is driving greater use of trademarks. For the last 14 years, China has filed the largest number of trademark applications in the world, and that is set to continue.

### ***What are the priorities for SAIC in 2016?***

Our first objective is to further enhance trademark registration procedures and strengthen our trademark service capability. This will involve greater automation to standardize and improve examination quality and efficiency. Further refinement of our trademark examination quality control system and deployment of trademark databases at local levels will support this goal and better serve applicants.

We will continue to reform China’s business landscape so that the use of trademarks continues to support the country’s development goals. That means, among other things, cracking down on trademark infringement by increasing the effectiveness of law enforcement teams and ensuring greater coordination between administrative and judicial systems and market regulators.

And we will continue to guide and support businesses in developing their own trademark and branding strategies through extensive IP awareness initiatives and training courses. Brand guidance organizations are being set up at local levels to help enterprises, including farmers, boost competitiveness through better use, protection and management of their trademarks at home and abroad.

### ***China now has specialized IP courts. What impact have these had on trademark abuse?***

In 2014, China established IP courts in Beijing, Shanghai and Guangzhou. Administrative rulings on trademark rights by the CTMO fall under the jurisdiction of the Beijing IPR court, which handles many cases and is playing a key role in clamping down on abuse of trademarks.

More generally, significant progress has been made by local industry and commerce administrations (AICs) across the country in tackling trademark infringement. With SAIC’s guidance, AICs have investigated around

65,000 trademark cases involving infringements worth 860 million yuan (around USD131 million), and fines and confiscations worth 720 million yuan (around USD110 million). Over 460 cases have been transferred to judicial authorities.

In addition, the national IP training programs offered by SAIC's Administrative Academy are improving the effectiveness of local law enforcement teams, enabling them to solve real-world trademark issues.

***What advice would you give to Chinese small and medium-sized enterprises (SMEs)?***

Build your brand. SMEs need to develop their core competitiveness to thrive in today's rapidly evolving and fiercely competitive market. Branding must become a strategic priority if they are to translate productivity into profits and expand market share.

Building a brand is a step-wise process that involves a sound understanding of the market and an emphasis on developing quality products and services. Quality is the basis of any brand: no quality, no market share. A comprehensive brand strategy supports business competitiveness and profitability.

***And what advice do you have for Chinese companies seeking to protect their trademarks abroad?***

Companies with international aspirations need to recognize the importance of protecting their trademarks in global markets. A forward-looking, comprehensive branding strategy helps avoid pitfalls as a company expands into new markets.

Chinese companies need to develop the confidence and strategic vision to build and manage their own brands. Effective management of their trademark assets will enable them to enter and compete in global

markets more rapidly and effectively. This will help boost international recognition of Chinese brands and add value to Chinese businesses.

Finally, when faced with trademark-related disputes, companies need to use the legal systems available to defend their rights.

***How about foreign companies seeking entry to the Chinese market?***

The most effective way for foreign companies entering the Chinese market to protect their trademarks, especially those with significant commercial potential, is to register them with the CTMO. To avoid any pitfalls, companies should think about this even before entering the Chinese market. It is the cheapest and most effective way to avoid trademark squatting. If their trademark rights are infringed, we would urge them to work with the relevant Chinese authorities to bring offenders to justice.

***Lastly, how do you see China's trademark landscape changing over the next decade?***

China's economic development strategy has entered a new normal – innovation lies at its heart. Brands represent a link between innovation and the market and play an important role in stimulating innovation, boosting quality, efficiency and competitiveness. So trademark and brand strategies will be an increasingly important driver of economic development in China.

Because of its huge size and potential, the Chinese market will continue to attract foreign investors, and an increasing number of Chinese enterprises will go global, fueling demand for international trademark rights.

# Unlocking design potential in developing countries

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



Photo: Courtesy of Distribidora, Argentina

The WIPO-led pilot project on Intellectual Property and Design Management for Business Development in Developing and Least Developed Countries (LDCs), launched in 2014, aims to unlock the vast untapped design potential of SMEs in Argentina and Morocco.

Good design is good business. It can spur innovation, improve the consumer experience, boost business growth and increase profitability. In the United Kingdom, for example, design contributes around GBP71.1 billion to the economy.

But in order to capitalize on the design potential of their companies, entrepreneurs need the confidence to invest in design and, crucially, the know-how to protect their valuable intellectual property (IP) assets and to leverage them in local and international markets.

In many developing and least developed countries, the huge economic and innovative potential of design and design thinking often goes unseen. That's why two years ago, building on a proposal from the Government of the Republic of Korea, WIPO launched a pilot project in Argentina and Morocco to promote awareness and use of design-led strategies supported by use of IP rights among small and medium-sized enterprises (SMEs).





After a rigorous screening process, 68 companies – 42 from Argentina and 26 from Morocco – were selected to participate in the pilot project.

## VAST UNTAPPED POTENTIAL

Launched in 2014, the Pilot Project on Intellectual Property and Design Management for Business Development in Developing and Least Developed Countries (LDCs) has been rolled out by WIPO in collaboration with the National Institute of Industrial Property (INPI) in Argentina and the Moroccan Office of Industrial and Commercial Property (OMPIC). The project aims to unlock the vast untapped design potential of SMEs in Argentina and Morocco. The role of SMEs in driving economic growth, generating wealth and creating employment is well documented, as is their capacity to innovate and create.

Argentina and Morocco are ideal candidates for the project. SMEs make up over 99 percent of the business sector in each country, employing 60 percent and 21.6 percent of their respective workforces. But amid low levels of IP awareness, the economic potential of these companies is largely untapped and ripe for development.

“This pilot project – the first of its kind – demonstrates how intellectual property rights, particularly industrial design rights, can support the economic development goals of all countries, especially developing and least developed countries,” notes WIPO Deputy Director General Binying Wang, who oversees the Organization’s Brands and Designs Sector.

## ABOUT THE PROJECT

To create awareness and understanding of the advantages of design thinking supported by effective use of IP rights, the project has adopted a new, holistic and fully integrated approach involving all relevant actors. A program with a single public-private partnership platform has been established in each country – Diseñar in Argentina and Namadij in Morocco – to ensure all

elements of the project are aligned, coherent and fully coordinated.

By bringing IP authorities and businesses together, these platforms are helping to ensure that national IP systems evolve and are responsive to the needs of the business community. They also help to inform businesses about the advantages of the IP services available to them and how they can be used to leverage the value of their IP assets.

“We adopted a novel methodology in rolling out the project, making every effort to bring all relevant actors together and to ensure that all institutional, regulatory and practical elements were fully aligned,” explains WIPO’s Maria Zarraga, responsible for managing the pilot project. “In the longer term, these platforms will make it easier for each country to take concrete steps to promote long-term strategic use of design rights in support of their national innovation goals.”

After a rigorous screening process, 68 companies – 42 from Argentina and 26 from Morocco – were selected to participate in the pilot project. Workshops and other events were organized to enable participating companies to exchange experiences and ideas among themselves and with experts and IP officials. Each company also received hands-on guidance from a multidisciplinary team of experts over a six-month period.

“Design can make a critical difference to business success. Well-designed products stand out in the market and translate into greater demand and increased profits. That is why we felt it was important for our multidisciplinary team of experts to work directly with participating companies,” says Ms. Zarraga. “The practical guidance they received has brought about a dramatic shift in the way many of them think about design and IP. Many of them are embedding design



Photo: Courtesy of Inspiration Ethnique, Morocco

Each participating company benefitted from hands-on guidance from a multi-disciplinary team of experts for six months.

thinking into their business strategies and are making greater use of the IP system. There is growing evidence that having participated in the project they are now better able to manage their IP assets, more competitive, and that the value of their businesses is rising. In sum, they are beginning to unlock their design potential.”

### REACTIONS FROM ARGENTINE PARTICIPANTS

“Since taking part in this program, the advice and support we have received from professionals has changed our approach to registering trademarks and industrial designs. We have seen a significant increase in the value of the Intorno brand and of the company’s market value,” says Gabriel Intorno, CEO of Intorno Argentina, one of the participating companies.

“Programs such as this provide early access to much-needed professional advice, which helps avoid future growth-related problems. I know of many cases where a company starting out did not think it was necessary to register its brand, only to find when its business did expand and it wanted to protect its brand, it could not because it had already been registered by someone else. The company lost its entire brand value after so much work had gone into it, and had to start from scratch to build a new brand,” he explains.

“Thanks to the program, we now have a realistic view of the value of our expertise in the field of water engineering,” notes Luis Chiodo, Managing Partner of Fish & Lakes. “We are now much more focused on protecting this value and have taken a more proactive approach to registering designs and patents. In 2016, we will seek patent protection internationally for a bioreactor to produce algae (spirulina). We also plan to register several designs for water treatment equipment. Through the program we conducted our first international patent searches. This confirmed that our work is innovative not only in Argentina and the region but internationally. This has changed our perspective considerably and is opening up new and interesting markets for us.”

### REACTIONS FROM MOROCCAN PARTICIPANTS

“The *Namadij* initiative has opened our eyes to a reality that is completely different from what we initially thought. The support we have received has shed light on the legal aspects of protecting our products and has allowed us to overcome a deep worry we had in this regard,” says Bassam Haddad, CEO of Inspiration Ethnique in Rabat.

“We have been investing in creating new, more contemporary designs, and our participation in the *Namadij* program is well timed because it has allowed us to integrate design thinking into our business strategy. We are now better equipped to protect our products and are thinking ahead about how to defend ourselves if ever they are copied,” says Driss Benchekroun, CEO of Puzzelige, a producer of decorative craft mosaic flooring and wall coating in Rabat.



Photo: Courtesy of Inspiration Ethnique, Morocco



Photo: Courtesy of Anjal, Morocco



Photo: Courtesy of Puzzlelge, Morocco

Photo: Courtesy of Iktoi, Argentina



Photo: Courtesy of Caiman, Argentina

Over 99 percent of the businesses in Argentina and Morocco are SMEs, but because of low levels of intellectual property awareness, the full economic potential of these companies is largely untapped.





## RESULTS

A survey has shown that the pilot project is having a significant impact on small design-intensive businesses in both countries. By November 2015, companies had registered or were in the process of registering 117 industrial designs, 29 trademarks and several patents. Critically, 95 percent of the companies surveyed indicated their willingness to continue to strategically protect their designs. Recognizing the advantages that can flow from effective use of IP rights, they also said they would continue to build their capacity to use and fully integrate IP rights into their long-term business plans.

### BUILDING TRUST IS KEY

A key aspect of the project's innovative methodology has been the emphasis placed on establishing relationships among all the actors involved. "From the outset we set great store on building trust among all the parties. This was particularly important among the participating companies as many of them believed that official channels had little to offer them in tackling their business challenges. Building trust has been the key to bringing about the cultural changes we are beginning to see," explains Ms. Zarraga.

"With the active support of the Ministry of Industry in Argentina and the Ministry of Industry, Commerce and New Technologies and the Ministry of Crafts in Morocco, stakeholders believe the project has been a force for change in Argentina and Morocco, spreading IP awareness and supporting the development of design industries and the national IP systems of both countries," says Ms. Zarraga.

Building on the momentum of the pilot project, Argentina and Morocco are planning to launch a second edition of their Diseñar and Namadij programs in 2016 and 2017 respectively. Other countries are also expressing interest in using the project's methodology and tools to unlock the design potential of their own design-rich companies, and to build on the know-how and experiences of Argentina and Morocco.

For more information on the project see:  
[www.wipo.int/meetings/en/details.jsp?meeting\\_id=38503](http://www.wipo.int/meetings/en/details.jsp?meeting_id=38503).

Public-private partnerships – Diseñar in Argentina and Namadij in Morocco – brought together national IP authorities and businesses. These platforms helped to ensure that the national IP systems of each country are responsive to the needs of the business community.



# Adding value to Chile's heritage products with the *Sello de Origen*

By **María Catalina Olivos** and  
**Francisco Carrasco**, Cabinet of National  
Institute of Industrial Property (INAPI), Chile

Chile's climate, geography and culture are as rich as they are diverse. The country is home to the world's driest desert, the Atacama Desert, to the north, and fertile grasslands to the south. A multitude of lush valleys nestle at its center between its 4,300 kilometer-long Pacific coastline and the snow-capped peaks of the Andean cordillera. But beyond the mainland, Chile's territory includes clusters of ocean islands and Antarctica, and spans three continents.

This unique landscape with its staggering natural resources is home to over 17 million people who over the years have forged a wide range of cultural expressions – a rich patrimonial identity that underpins the distinct traditions of each individual community.

#### **ADDING VALUE TO TRADITIONAL PRODUCTS**

In an endeavor to promote the many high-quality products developed by these communities, and to preserve and add value to local manufacturing traditions, in July 2012 the Ministry of Economy, Development and Tourism and INAPI launched the *Sello de Origen* (Seal of Origin) program.

The initiative complements long-standing efforts led by the Ministry of Agriculture to protect and enhance the value of Chile's high-quality wines and spirits.

The program's aim is to promote and protect unique traditional products through the grant of exclusive industrial property rights. The *Sello de Origen* itself is a certification mark designed to encompass a broad range of traditional Chilean products and to render them more easily recognizable in the market. Each product that bears the *Sello de Origen*, however, is protected in its own right by one of four types of intellectual property right used to protect distinctive signs, namely appellations of origin (AOs), geographical indications (GIs), collective marks and certification marks.

"The *Sello de Origen* serves first and foremost as a clear and easily recognizable guarantee that the products bearing it are genuine, high quality goods, with characteristics which are intimately linked to the place in which they are produced," says INAPI's Director General, Maximiliano Santa Cruz. "Today, customers attach increasing importance to the origins of the goods they consume and the way they are made. Thanks to the *Sello de Origen*, these links are becoming increasingly visible. Consumers are paying greater attention to these products and demand for them is rising, and this is helping to promote our local industries."

By organizing and bringing producers together to protect their origin-based products, the program is helping to create new value chains and business models to ensure that Chile's traditional products are more competitive and better protected against unfair competition. With the *Sello de Origen* on their products, it is easier for producers to take legal action against any misuse. The *Sello de Origen* gives them an extra layer of protection above and beyond their national registration of GIs and AOs. "We are convinced that the granting of exclusive rights makes it possible for rights holders to earn a return on their investment because it prevents unauthorized manufacturers from using protected products," says Mr. Santa Cruz.



Photo: Courtesy of INAPI, Chile



Photo: Agencia Uno - Imagen de Chile.

Through its *Sello de Origen* program Chile's National Institute of Industrial Property (INAPI) is seeking to boost production of, promote, and add value to its many high-quality origin-based products. So far 21 Chilean products have been granted protection under the program. These include the salt of Cáhuil, Boyeruca and Lo Valdivia (above) and Limachino tomatoes (left).

**IDENTIFYING CANDIDATE PRODUCTS**

Travelling the length of the country, it is hard to overlook the juxtaposition of flavors, aromas, customs and practices that mirror the unique identity of the communities from which they originate. Examples abound. They include hand-crafted products such as Quinchamalí's distinctive jet-black ceramic-ware in the south and the colorful, clean lines of the intricately woven blankets and *chamanto* cloaks worn by the *huaso* ranchers and made by the artisans of Doñihue in the central O'Higgins region. They also include the aromatic and flavorful olives of the Azapa Valley and the delicious Pica lemons. And for something really special, we must not forget the traditional pastries made by bakers in La Ligua (*dulces de La Ligua*) near Valparaíso, and the tuna from Easter Island which draws its exceptional flavor from the temperature, purity and plentiful food supply of the local waters.

While many of Chile's handmade and cultivated products are worthy of protection under the *Sello de Origen*

program, for practical purposes, and to get the project off the ground, in its initial phase only a fraction of these were identified for protection.

As a first step, INAPI launched an extensive consultation with key actors to determine how best to identify candidates for the project. This resulted in inviting representatives from the country's 15 regions to submit a shortlist of traditional products from their respective areas. In total, 52 products were singled out as potentially worthy of industrial property protection.

In a second phase, a public bid called for technical studies to examine the links between the hallmark characteristics of each product and their place of origin. The studies, along with the precise delineation of the geographical zones concerned and relevant governance regulations provided a solid basis for applying to INAPI for an AO, a GI or a certification or collective mark.

The whole process was supported by the private sector. The "*Hacer Chile*" Foundation, for example, is



actively supporting associations applying to protect their products with GIs, AOs, collective marks and certification marks.

### THE SALT OF CÁHUIL, BOYERUCA AND LO VALDIVIA: A SUCCESS STORY

The salt of Cáhuil, Boyeruca and Lo Valdivia acquired AO status under the *Sello de Origen* program in 2013. It is one of the program's success stories.

Cáhuil, Boyeruca and Lo Valdivia located in Chile's O'Higgins central coastal region, are well-known for their sea salt which has been produced there for the last 450 years.

While some claim the Spanish first developed salt extraction in these areas, others believe indigenous peoples produced it for their own consumption long before the Spanish arrived. Either way, the settlers understood that salt was an excellent preservative and started extracting and trading this rare commodity with other regions. The production methods first used remain unchanged today: the same ponds mixing salt and fresh water and where salt accumulates naturally, the same wooden tools and even the same structures to divide the ponds.

The salt trade sustained livelihoods in these areas for many generations. But by 2011, most of the salt produced was sold in bulk, typically to mining companies to clear snow-covered roads. With declining prices – a 50 kg sack falling to just USD4.00 – it became impossible to cover extraction costs. Many young people had to give up on the idea of following in their ancestors' footsteps. With the oldest salt miner celebrating his 80th birthday and the youngest already 45 years old, passing the baton to the younger generation seemed improbable.

But thanks to the *Sello de Origen*, salt extraction in these areas is taking on a new life. Salt producers are beginning to enjoy better returns as new trade horizons open up to them.

Things began to turn around when the local trade association secured funding to establish a processing plant, which, while not part of the historically and culturally significant extractive process, makes it possible to store the salt in suitable conditions.

## So far 21 products have been granted protection under the *Sello de Origen* program. They include:

### GEOGRAPHICAL INDICATIONS

- Pica lemons (2010)
- Juan Fernández lobster (2011)
- Easter Island tuna (2012)
- Juan Fernández golden crab (2012)
- La Ligua pastry (2014)
- Chilote lamb (2015)
- Lluta corn (2015)
- Paine watermelon (2016)

### APPELLATIONS OF ORIGIN

- Cáhuil, Boyeruca and Lo Valdivia salt (2013)
- Pomaire pottery (2013)
- Doñihue *chamantos* and blankets (2014)
- Quinchamalí pottery (2014)
- Capitán Pastene prosciutto (2015)

### CERTIFICATION TRADEMARKS

- Fresh Atacama table grapes (2012)
- Chiloé Globally Important Agricultural Heritage System (GIAHS) (2013)
- Quality standard of Aysén, Patagonia, Chile (2014)
- Limachino tomatoes (2015)
- Isla Negra embroidery (2015)
- Pacific black jewelry (coral) (2016)

### COLLECTIVE MARKS

- Corazón de Paine watermelon (2014)  
(N.B. The GI for *Paine watermelons* was previously covered by the collective trademark *Corazón de Paine*, which itself served to strengthen the technical instruments used to verify the links between the product, its reputation and its place of origin, as well as to enhance the regulation for use and limitations.)
- Casa Blanca Route winemakers (2016)
- *Valdiviana* beer (2016)



Photo: Agencia Uno - Imagen de Chile.

The salt of Cahuil, Boyeruca and Lo Valdivia acquired AO status under the *Sello de Origen* program in 2013. Thanks to the program, producers of this gourmet salt are beginning to enjoy better returns and a brighter future.

Today the salt is widely recognized as of gourmet quality and its market value has soared.

“Salt producers from Cahuil, Boyeruca and Lo Valdivia have realized that their product is not only distinctive and unique, but also historically rooted and firmly grounded in the region where it is produced. All of these qualities are highly prized by consumers and the *Sello de Origen* means that they have become visible and identifiable. In 2015, they received their first two export orders and the salt made its way onto the shelves of Chile’s largest supermarket chains. This was the cause of great celebration,” says Mr. Santa Cruz.

Now, local salt producers are looking to develop tourism in the area, aiming to capitalize on their traditional salt extraction activities, to encourage younger generations to get involved and help guarantee their future.

#### **POSITIONING THE SELLO DE ORIGEN**

So far, INAPI has awarded the *Sello de Origen* to 21 products and has built a close relationship with the beneficiaries, giving them practical guidance on how to use the GI, AO or trademark effectively.

Four years after the program’s initial launch, on September 2, 2015, Ms. Michelle Bachelet, President of the Republic of Chile, unveiled the new image of the *Sello de Origen*. It was designed with input from INAPI and the Image of Chile Foundation and aims to boost the brand’s strength and visibility. “The trademark echoes the dedication and care of Chilean producers and is a means to perpetuate tradition and quality,” Ms. Bachelet said at the event.

The campaign includes placing signposts in the areas that have acquired *Sello de Origen* for their products. The aim here is to attract tourists to the areas concerned and to add greater value to the work of local communities.

Finally, INAPI is encouraging producers to participate in national gastronomy trade fairs to take advantage of the interesting business opportunities they offer, proving once again the benefit of the *Sello de Origen* as a tool for adding value to the products of Chile’s rich heritage.

# Reggae: Jamaica's gift to the world

By Catherine Jewell,  
Communications Division, WIPO







International Reggae Day is a global invitation to celebrate Jamaica's creativity and to showcase Reggae lifestyle around the world.



Reggae first appeared as a musical term with the 1968 hit *Do the Reggae* by Toots & The Maytals (above).

International Reggae Day, which takes place every year on July 1, is a worldwide celebration of Jamaica's gift to the world, Reggae music. The event marries the power of music, media and technology and is a global invitation to celebrate Jamaica's creativity and to showcase the many dimensions of Reggae lifestyle around the world. **Andrea Davis**, who was instrumental in establishing the first International Reggae Day and who has been producing the event every year since it premiered in 1994, shares her views on the importance of Reggae music and the challenges facing Jamaica's creative sector today.

#### ***What prompted you to establish International Reggae Day?***

Reggae Day was inspired by Winnie Mandela's speech during her visit to Kingston in 1992, in which she spoke about the power of Reggae music to "uplift, inspire and unite" the people of South Africa in their struggle against apartheid. When Reggae Day premiered on July 1, 1994, the idea was to mobilize radio stations in Jamaica to showcase the roots and branches of Jamaican music; to promote quality standards in music and media; to establish a Jamaican Music Hall of Fame; to showcase the best of Jamaica; and to help the people of Jamaica overcome their own struggle for social equality. With the birth of the Internet in 1996, the event was recast as International Reggae Day™ and our goals expanded: to "unite, inspire and uplift" the global Reggae community through the power of music, media and technology; to showcase Kingston as the Home of Jamaican Music; to highlight the impact of Jamaica, Reggae and Rastafari on global pop culture; and to promote support for music and arts education in Jamaica.



Photo: International Reggae Day

Jamaica's brand identity and value are intrinsically tied to its music and culture. Few countries have had such a major impact on the global music scene over the past 65 years.

### ***What are the origins of Reggae music?***

Jamaica is known around the world for the diversity and rhythmic originality of its folk and popular music genres. These include Mento, Ska, Rock Steady, Reggae of course, Dub and Dancehall (see box). Few countries have had such a major impact on the global music scene over the past 65 years. Jamaica is the birthplace of the global Reggae lifestyle phenomenon, and the culturally authentic home of Reggae music.

Reggae grew from this exceptionally rich musical culture, and especially reflected the growing influence of Rastafari in urban Jamaica in the 1960s. The country's music scene became infused with Rastafari philosophy, drumming and style, including the signature dreadlocks that have become the image of Reggae music.

Reggae's heartbeat rhythm and lyrics about love, redemption and natural living continue to captivate audiences worldwide. Reggae music, which accents the second and fourth beats in each bar, has been the soundtrack for the "One Love" global movement led by Reggae king Bob Marley and artists such as Jimmy Cliff, Peter Tosh, Dennis Brown and Toots & the Maytals, whose recordings and international tours introduced Reggae music, Jamaican culture and Rastafari "livity" to the world.

Jamaica's distinctive sounds, fashion, style, dance and language continue to influence global culture as artists, musicians, visual artists and dancers showcasing the Jamaican sound travel the world, spreading the message of "One Love" through the power of Reggae music.

### ***How would you characterize its importance?***

Like other lifestyle genres, including Hip Hop, Country and Jazz, Reggae has its own sound, fashion, dance, language, philosophy, cuisine, visuals and attitude. "One Love", a philosophical affirmation inspired by Marcus Garvey and popularized by Rastafari, is at the heart of Reggae's worldwide movement, resonating across borders and generations. Arguably the first true world beat, Reggae music enjoyed a global audience well before the age of music videos and the Internet.

Jamaica's brand identity and value are intrinsically tied to its music and culture. Reggae music is its soundtrack and the signature genre in the diverse Sounds of Jamaica™. As a core part of Jamaica's creative industries, which contribute 4.8 percent of GDP, music is one of country's most valuable assets. Since the 1960s Jamaica's remarkably innovative and resilient creative entrepreneurs have independently added to the country's export value. And creativity continues to be a significant driver of inclusion and empowerment of young people and marginalized groups within the national economy. The economic, social, cultural and environmental value of Jamaica's music has strengthened Jamaica's brand value significantly and continues to add resonance to its brand internationally.

### ***What challenges did you face in establishing International Reggae Day?***

Building a 24-hour global celebration of Reggae with limited capital resources has had its challenges. Jamaica has had the good fortune to produce several distinct





Reggae's heartbeat rhythm and lyrics about love, redemption and natural living continue to captivate audiences worldwide.

Photo: International Reggae Day

genres of globally appealing music but has suffered from underinvestment in creativity, arguably its most valuable asset and greatest competitive advantage. One of our objectives in establishing International Reggae Day was to reinforce Jamaica's position as the culturally authentic source of the global phenomenon that Reggae music has become.

Chronic underinvestment in the country's human and creative capital has proven the biggest challenge to sustaining this vision. The creative sector is venture capital intensive so it is an uphill struggle to ensure that it flourishes in a country where venture capital is in short supply. Venture capital financing is a prerequisite to building Jamaica's creative economy and developing and marketing its creative assets.

### ***What role does intellectual property have in producing the festival?***

Intellectual property (IP) is the foundation on which to build value as ideas move from concept to reality. International Reggae Day was one of the first trademarks to be registered within Jamaica's creative industries sector. Our trademark rights enable us to issue event licenses to prospective overseas partners interested in hosting official International Reggae Day events on July 1 as part of the global Reggae party network.

International Reggae Day has been at the forefront of efforts to shape and strengthen Jamaica's copyright laws, especially with respect to amendments for the

extension of the copyright term, recognition of performers' rights, derivative works and modern filmmaking which is increasingly important in today's world where people "watch music".

### ***Have levels of intellectual property awareness improved in Jamaica?***

There is definitely an improvement in IP awareness in Jamaica and the region as a whole, thanks to efforts by the Jamaican IP Office (JIPO), local and regional collective management organizations, such as the Jamaican Association of Composers, Authors and Publishers (JACAP), and other professional organizations, such as the Jamaican Federation of Musicians (JFM). Compared to past generations, today's creative entrepreneurs are far more familiar with IP concepts and the importance of protecting their rights as well as the connection between IP protection and income generation.

### ***What are the main challenges facing Jamaica's creative industries?***

Like other developing economies, Jamaica faces many challenges in its efforts to strengthen its creative economy. These include limited access to financial resources, a fragmented public and private sector, gaps in the legal and regulatory framework and skilled management resources, an informal business culture, inadequate education and training opportunities and the absence of strategic industry focus, to name a few.

## Jamaica's rich musical tradition

**Mento** features acoustic guitar, banjo, hand drums and the rhumba box and emerged in the 1940s. Renowned Mento recording artistes include the mother of Jamaica's culture, the Honorable Louise Bennett (Ms. Lou), Count Lasher, Lord Flea, Lord Fly, Laurel Aitken and Harry Belafonte, a New Yorker of Jamaican origin. Belafonte's wildly popular 1950s hits from his "Calypso" album, the first to sell one million copies, included Mento songs *Day-O (The Banana Boat Song)* and *Jamaica Farewell*, originally recorded by Ms. Lou.

**The sound system movement** also emerged in the 1940s, led by the pioneering "Tom the Great Sebastian" sound system and others, such as Clement Dodd's Downbeat, Duke Reid's Trojan, King Edwards' The Giant, and Prince Buster's Voice of the People, where the latest recordings (initially from the US and thereafter from Jamaica) were played at local dances. Sound systems were the primary source of entertainment in Jamaica and are an integral part of Jamaican life, at home and abroad. The movement's distinctive heavy bass bottom and popular pop-up dance events fueled the expansion of Jamaica's recording industry and launched many successful music careers including that of Jamaica's first deejay, Count Matchukie. Leading sound systems including the "big three" – Coxson Dodd's "Downbeat Sound", Duke Reid's "The Trojans" and King Edward's "The Giant" – became top producers in the late 1950s and leading music labels by the 1960s. The movement had a significant impact on the development and internationalization of Jamaican music, playing a central role in the start of the Notting Hill Carnival and the rise of urban music in the UK, and of Hip Hop in the US. Today Jamaican-styled sound systems have gained global popularity, from King Jammy's to Stone Love, spawning international offspring like Japan's Mighty Crown, Germany's Sentinel Sound and the UK's David Rodigan.

The art of **toasting** – talking or chanting, usually in a monotone, over a rhythm or beat by a deejay – was introduced by Count Matchukie and later championed by artists such as U Roy, Big Youth, Super Cat, Shabba Ranks and Buju Banton. Like the sound system movement, toasting shaped the development of Rap and Hip Hop music in the US.

**Ska** music from Studio One and the legendary band the Skatalites exploded in the early 1960s. Jamaicans embraced the genre's infectious horns and hypnotic

dance beat. It became the soundtrack of the nation and rapidly gained popularity in the UK and the US thanks to innovative artistes like Desmond Dekker, Prince Buster and Millie Small, whose top selling "My Boy Lollipop" launched Island Records and introduced Ska to the world.

**Rock Steady**, which puts heavy emphasis on the bass line with the rhythm guitar playing on the upbeat, followed for a brief two-year period in the mid-late 1960s, producing a flood of singers and groups such as Alton Ellis, Delroy Wilson, John Holt, Ken Boothe, Phylliss Dillion and The Heptones. Amid the political turmoil of the 1960s, Rock Steady hits such as *No No No*, *Tide Is High* and *By The Rivers of Babylon* enjoyed broad appeal, and introduced a new cadre of talent that took Jamaica's music to the world stage.

**Dub music**, which heralded the dawn of the remix and has been credited with later shaping the evolution of punk rock, pop, disco, house, techno, trip hop, dub step, drum and bass, dance music and electronic dance music, emerged in the 1970s with innovators like Lee Scratch Perry, King Tubby and Errol 'ET' Thompson.

**Reggae** first appeared as a musical term in print with the 1968 hit *Do the Reggae* by Toots & The Maytals. Reggae, like many African beats, is characterized by a heavy backbeated rhythm known as the heartbeat, made popular globally by Reggae king Bob Marley. The 1973 release of *The Harder They Come* starring Jimmy Cliff introduced Jamaican music to cinema audiences around the world. Reggae music is synonymous with equal rights and justice and has earned Jamaica international respect and reinforced the country's image. It has also had a huge impact on international pop culture.

**Dancehall** evolved from its original definition as a place where music was played into a genre in the early 1980s with the introduction of King Jammy's Sling Ting rhythm first popularized by the artiste Wayne Smith. Dancehall music dominated in the 1980s as a minimalist approach to the new digital recording process gained traction. Like all genres of Jamaican music, Dancehall is a lifestyle experience with a diverse roster of talent including Beenie Man, Bounti Killa, Lady Saw, Sean Paul and Shaggy, to name a few.



International Reggae Day™ aims to “unite, inspire and uplift” the global Reggae community through the power of music, media and technology; and to promote support for music and arts education in Jamaica.



Photo: International Reggae Day

All too often, decision-makers are taken up with immediate day-to-day social and economic concerns, with little time devoted to the long-term vision of strengthening Jamaica’s creative economy and creating an enabling environment in which the country’s creative industries can thrive. The competitive advantages inherent in Jamaica’s creative industries, our considerable strengths in the areas of hospitality and wellness, our location and our burgeoning information and communications technology sector offer an opportunity for Jamaica to create wealth in the global knowledge-based economy where the country brand enjoys broad recognition and appeal.

### ***What message do you have for young musicians?***

Learn all you can about your craft and practice it daily because success comes when preparedness meets opportunity. It is an exciting time to be a creative entrepreneur. Music production, distribution and dissemination are more affordable and audiences are more accessible and mobile than ever before thanks to advances in and the convergence of digital technology, social media and global communication. Respect and value your gift but also listen to others and learn from their experience. Never take yourself too seriously. Surround yourself with a trusted team of professionals that you respect and who respect you, and always make sure your lawyer reviews any document before you sign it. Believe in yourself, tell your stories from your heart and through your art, and as we say in Jamaica: Walk good!

### ***What does Reggae music mean to you?***

Reggae music, like water, is life. It mixes well with everything and with it the world is a better place.



International Reggae Day was one of the first brands in Jamaica’s creative industries to register for trademark protection.

# Copyright and Museums in the Digital Age

By **Dr Yaniv Benhamou**, Attorney-at-Law, Lecturer,  
University of Geneva, Switzerland

Digital museums – museum collections and/or online content disseminated over technology platforms – are fast becoming the norm. But they raise a number of legal issues ranging from copyright to image rights and from data protection to contract law. Copyright, in particular, raises important considerations because it governs whether and how content can be used. This article explores some of the key issues facing museums involved in curating interactive online exhibitions and offers guidance on what museums can do to ensure their activities comply with copyright law.

## **DOES THE MUSEUM HAVE THE RIGHT TO DIGITIZE WORKS?**

When embarking on a project to digitize a collection, curators first need to determine the copyright status of the works involved. Does the museum already have permission to digitize the works? Or is the intended use covered by an exception under copyright law?

Digitizing copyrighted works and making them available online involves the rights of reproduction and of communication to the public, each of which usually requires permission from the copyright holder. Just because a museum is in possession of a physical copy of a work this does not necessarily mean it has the right to copy or display it digitally.

## **KEY PRINCIPLE: GET PERMISSION TO USE PROTECTED WORK**

Some works are not protected by copyright and can be freely digitized. For example, an old bicycle in an historical museum may not qualify for copyright protection because it lacks originality. Or an old manuscript once protected by copyright may now be in the public domain because the term of copyright protection has expired (the minimum term of copyright protection is the life of the author plus 50 years, but it is often longer – the life of the author plus 70 years – in many jurisdictions).

For other works that are protected by copyright, the museum needs to get the copyright holder's permission



Photo: Hutomo Wicaksono, Freer and Sackler Galleries, Smithsonian, USA

Digital museums are fast becoming the norm but raise a number of legal issues, particularly in relation to copyright law, which governs whether and how content can be used.



Photo: Huijiao Wicaksono, Freer and Sackler Galleries, Smithsonian, USA

In January 2015, the Smithsonian's museums of Asian Art released their entire collection online, offering unprecedented access to 40,000 artworks, many of which have never before been seen by the public.

to digitize and make the work available online (unless the copyright in the work has already been transferred to the museum by means of a contract, a donation or sale). This can be achieved through direct negotiations with rights holders or through a framework agreement such as the *Europeana Licensing Framework* of the Europeana project which allows for mass digitization.

### EXCEPTIONS TO THE RULE

If the intended use of a work qualifies as an exception under copyright law then it may be possible to digitize a copyright work without the right holder's permission. The Berne Convention, which establishes minimum international standards of copyright protection, states that a work may be used "in certain special cases, provided that such reproduction does not conflict with a normal exploitation of the work and does not unreasonably prejudice the legitimate interests of the author." This is known as the three-step test. In the Berne Convention this principle may be applied to the right of reproduction; it also applies to other exceptions through other treaties such as the TRIPS Agreement and the WIPO Copyright Treaty.

Laws on copyright exceptions vary from one jurisdiction to another. In the United States, for example, the copyright exception known as "fair use" is enshrined in Section 107 of the Copyright Act. It states: "fair use of a copyrighted work... is not an infringement of copyright". Similarly, European Union (EU) Directive 2001/29/EC outlines a list of compulsory and optional exceptions, and Directive 2012/28/EU sets out the principle of orphan works (where the author of a work has not been identified or located).

There are, in particular, four circumstances in which authorization from the right holder *may not* be required.

First, when a work is permanently located in a public place. While enshrined in the laws of many countries, the scope of this principle varies from one jurisdiction to another. For example, the *Panoramafreiheit* (freedom of panorama) exception in Germany – an exception to the copyright owner's exclusive right to authorize the creation and distribution of derivative works – allows for the publication of photos or video footage of artworks which are permanently located in a public place. This exception is particularly relevant to cultural projects

such as Google Street Art, which digitizes and puts online street art located in public spaces.

Second, when a work is part of an archive. In some jurisdictions, museums may benefit from a copyright exception when reproducing works for the purposes of preservation. Again, while enshrined in many national copyright laws, the scope of this exception varies from one jurisdiction to another, particularly with respect to format, intended use or the number of copies that may be made. In Europe, the Copyright in the Information Society Directive (Directive 2001/29/EC) allows for both the digitization and making available of works to the public on dedicated terminals (see *Technische Universität Darmstadt v Eugen Ulmer KG*). Case law relating to fair use in the United States suggests that digitization and making available to the public with full-text search functionality may be allowed (see Decision of the United States Court of Appeals for the Second Circuit, *Authors Guild, Inc. v Google, Inc.*, No. 13-4829-cv (2d Cir.2015) (cert. denied), which still stands after the United States Supreme Court declined the writ to review the decision).

Third, a copyright exception may apply when using images of exhibited works in exhibition catalogues. Again, the scope of this exception varies across jurisdictions. Directive 2001/29/EC allows for such an exception but some EU members have not included museums in their national laws while others do not specify whether online publishing is covered.

Fourth, when the authors of works cannot be found or contacted, in some jurisdictions museums may digitize the works and make them available online if a diligent search has been undertaken to identify the author (Directive 2012/28/EU). Again, this is not applied uniformly in all EU countries. In France, for example, the exception is limited to certain types of works, while in the United Kingdom it covers all types of works. In the United States, while there is no special law relating to orphan works, the *Google Books* lawsuit referred to above has helped to define the limits of this approach.

#### **DIGITAL MEDIA PRODUCTS ARE ALSO COPYRIGHT PROTECTED**

The media products developed for an online exhibition – website, video materials, apps – are also protected by copyright law. As such, museums need to ensure appropriate copyright arrangements are agreed upon.

If the designers are employed by the museum, their employment contract will normally specify that the

museum owns the copyright in all works created in the course of employment. But if the designer is an external contractor then the relevant contract needs to specify that the museum can freely use all relevant media outputs.

Similarly, good practice dictates that museums outline copyright arrangements – and the right to freely use outputs – at an early stage when developing media products in collaboration with technology partners, such as universities and industry.

#### **LEGAL STATUS OF COPIES**

An issue that is rarely discussed, but which merits attention, is whether a digital copy of a protected work qualifies for copyright protection in its own right. This is also an area in which the law varies by jurisdiction.

Generally speaking, if the digital copy is a simple reproduction of the original, it may not qualify for copyright protection because arguably it has no individuality or originality. But if a digital copy is an original artistic work, for example, by virtue of lighting effects or other camera work, it may be protected as a derivative work. That also goes for a digital copy of a public domain work provided it is sufficiently original. Any subsequent use of these derivative works requires the right holder's authorization.

This all seems straightforward, but is it? Do new high-resolution digital cameras, which enable users to adjust pixelation, light and contrast, allow them to express the individuality and originality of their work? In some jurisdictions, the standard for originality is low, such that even an image that is not obviously original may constitute a derivative copyright work.

The development of digital museums raises a raft of complex legal issues like these and others such as whether there should be an exception to moral rights when a work is digitized? Should these and other exceptions have dominance over contract law?

#### **USING THE PARTICIPATORY WEB**

Using websites – for example, MuseoGeek, Facebook and Twitter – for crowdfunding, crowdsourcing or promotional purposes and to encourage public engagement heightens the risks that users will upload content that is in breach of copyright or other laws. To avoid legal liability, museums need to make users aware of the general conditions of use of their website. They also need to be prepared to promptly remove any illegal content.

When it comes to user-generated content, museums must ensure they automatically obtain permission from users to reuse these materials. Museums also need to be aware that they too are bound by the general conditions of use when using social media platforms like Facebook and Twitter, which often provide that any content posted by them can be reused by the platforms concerned.

### **RECOMMENDATIONS AND ISSUES FOR REFLECTION**

It will take some years for the law to adapt to the new realities in which digital museums operate. But in the meantime, digital curators can get their digitization projects off the ground and ensure they avoid unforeseen intellectual property-related problems by taking a few simple steps.

First, when they acquire new works, they need to identify rights holders and obtain permission to digitize works and make them freely available online.

Second, technological partnerships with universities and industry enable them to benefit from a large pool of know-how and technical expertise, but they need to be sure to obtain the necessary copyright rights for the relevant media outputs.

And third, they should encourage open data solutions (free reuse of data published by museums through free licenses guaranteeing free access and reuse). Open data is now a critical consideration in cultural policy spheres because it allows for greater sharing and broader dissemination of information. It is also the subject of draft legislation in various countries, including France.

The gathering pace of the digital revolution, and the practical challenges it raises in the day-to-day operations of museums, underlines the need to develop best practices for the relevant open data formats (types and forms of digitized pictures, and related scientific information) and build consensus around an international legal framework to govern the use of works by museums. This is particularly important given the varying scope and application of exceptions to copyright law across jurisdictions.

# Getting a handle on Twitter

By **Rachel Nicholas**, Associate,  
Lewis Roca Rothgerber Christie,  
LLP, USA

Twitter has become indispensable for many businesses. With over 300 million active users, more than three-quarters of them located outside the United States, it is now one of the world's top social media platforms. Small wonder, then, that companies are keen to join the Twitter community, to engage existing customers and reach potential new ones.

But there are pitfalls as well as opportunities, and many of them concern intellectual property (IP). Here, we focus on two IP-specific challenges that businesses may face on Twitter: handles and hashtags.

## HANDLE HEADACHES

What's a business to do when someone is using its trademark as his or her Twitter handle (username)? A few years back, Chase Giunta registered and began using the @chase Twitter handle. Not surprisingly, J.P. Morgan took issue with this. As if it wasn't bad enough that the Bank missed out on the @chase handle, Mr. Giunta used its blue logo as his profile picture and began retweeting negative comments and consumer complaints about it. While Mr. Giunta's Twitter bio specified that he had no affiliation with Chase Bank or J.P. Morgan, Twitter determined that his use had violated its policy, and revoked his handle.

While handles are allocated on a first-come, first-served basis, "using a company or business name, logo, or other trademark-protected materials in a manner that may mislead or confuse others with regard to its brand or business affiliation" may violate Twitter's trademark policy. Twitter will investigate reports of trademark policy violations from holders of federal US or international trademark registrations, and may suspend an account for intentional misuse.

Under Twitter Rules, the platform also reserves the right to reclaim usernames on behalf of businesses or individuals with valid legal claims to those names. If an account appears to unintentionally confuse users, Twitter gives the account holder a chance to clear up the confusion, including by posting a disclaimer stating that there is no affiliation between the account holder and the aggrieved business.

Twitter allows newsfeeds, commentary and fan accounts, but the same rules apply here: if use of a trademark for a fan or a commentary account causes confusion, it is a violation of Twitter's trademark policy. Further, under Twitter's parody, commentary and fan account policy, an account name must not be the exact name of the account subject, and should be distinguished using "not," "fake" or "fan". Celebrities and prominent businesses can also become "verified," whereby their account features a blue check icon confirming the user actually is who they claim to be, to help distinguish their official account from parody or other accounts targeting them.

If someone is using your registered trademark as their Twitter handle, a review of the account should help determine if the use is likely to cause confusion. Do they have any rights in the Twitter handle – is it the same or similar to their legitimate business name, or their first name or surname? Are they tweeting about your business? Is there anything in their Twitter bio that refers to your company (including use of your company's logo(s) or trade dress)? Does their bio feature a disclaimer?

Basically, if it looks like consumers could be confused, you may consider taking action. While it is against Twitter Rules to buy or sell handles, there are several options available to prevent misuse of your company's IP and to ensure consumers are able to find and communicate with your company easily via Twitter. Depending on the particular circumstances, these options include contacting Twitter to inform them of a policy violation, reaching out to the third party directly to let them know of the infringement, or, as a last resort, filing a civil law suit.

## ARE HASHTAGS DESCRIPTIVE? HARD TO SAY!

While each tweet is limited to just 140 characters, this can convey a good deal of information, especially since tweets may include hashtags, images and videos. Hashtags (#) are used on Twitter and other social media sites to identify and facilitate a search for the keyword (the term(s) immediately following the hashtag). Hashtags are indexed and searchable, so that users can use them to search on a topic or theme of interest. For example, the FIFA Women's World Cup took place in 2015, and tweets using the hashtag #FIFAWWC were

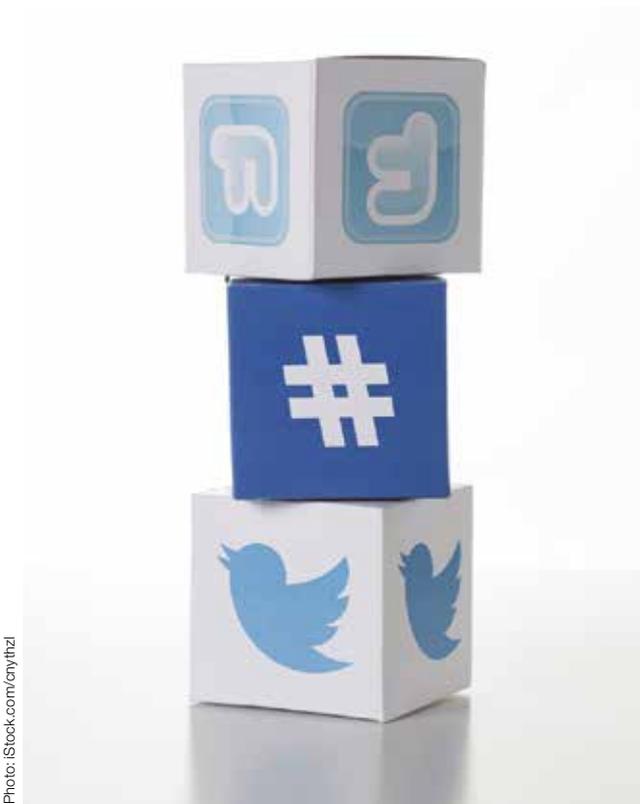


Photo: iStock.com/eny/thzl

While Twitter offers businesses a golden opportunity to engage with existing customers and to expand their client base, there are also a number of intellectual property-related pitfalls, in particular in relation to Twitter handles and hashtags.

viewed nine billion times between June 6 and July 5 (blog.twitter.com/2015/this-yearontwitter). Businesses have been understandably keen to capitalize on hashtags by using them to interact with consumers in new and often meaningful ways.

Many companies have even sought trademark registrations for hashtag-formative marks, seeking to stake a protectable claim in this new frontier. United States Patent and Trademark Office (USPTO) rules state that a hashtag may be protected as a trademark, if it functions as an identifier of the source of the applicant's goods or services (TMEP § 1202.18). However, the same USPTO rules further state that the hash symbol and the wording "hashtag" typically do not provide any source-indicating function because they merely facilitate categorization and searching within online social media; the addition of the term "hashtag" or the hash symbol (#) to an otherwise-unregistrable mark typically cannot render it registrable. In other words, the USPTO basically views the word "hashtag" and the hashtag symbol as descriptive.

However, a recent US district court case cast doubt on whether marks including hashtags are capable of trademark protection under US law. In *Eksouzian v Albanese*, No. CV 13-00728-PSG-MAN (C.D. Cal. August 7, 2015), the Central District of California found that hashtags may be merely descriptive devices, not source identifiers. The Court held that "hashtags are merely descriptive devices, not trademarks, unitary or otherwise, in and of themselves." The use of a mark including the hashtag symbol was merely "a functional tool to direct the location of Plaintiffs' promotion so that it is viewed by a group of consumers, not an actual trademark."

#### **TO PROTECT OR NOT TO PROTECT?**

What does this judgment mean for businesses interested in protecting marks including hashtags going forward? While the state of hashtag trademarks is a little unclear now, brand owners should review the mark and its use carefully, keeping in mind that marks that include hashtags can be hard or impractical to protect, given their widespread use on multiple platforms.

They need to consider:

- Does the phrase or word after the hashtag symbol serve as a source identifier in and of itself?
- If so, is there a need to protect the hashtag symbol combined with the word or phrase, or would protecting just the word or phrase suffice?
- Would use of the hashtag be limited to social media platforms?
- Would it cause confusion if another company were to use the hashtag?

If the review indicates the hashtag mark is serving as a source identifier, it may be worth protecting – at least until the law in this area is clarified.

#### **AVOIDING INFRINGEMENT AND PUBLICITY RISKS**

What if you don't want to protect a hashtag, but simply want to use one to engage in a conversation, or as part of a campaign? Be careful. Using a competitor's name or brand in your hashtag could result in a trademark infringement claim.

In *Fraternity Collection, LLC v Fagnoli*, 2015 WL 1486375, No. 3:13-CV-664 (S.D. Miss. March 31, 2015), a federal court in Mississippi observed that “hashtagging a competitor's name or product in social media posts could, in certain circumstances, deceive consumers,” and declined to dismiss an infringement claim on this basis.

After parting ways with a shirt manufacturer, a designer used the manufacturer's brand name in hashtags (#frat-collection and #fraternitycollection) on her social media accounts advertising her own clothing for sale. Perhaps unsurprisingly, the manufacturer took issue with this use, and its claim for trademark infringement survived a motion to dismiss. So while most hashtags are fair game on Twitter, avoid using competitors' marks in hashtags if consumer confusion could result.

Lastly, be aware of a related issue which, while not strictly a legal matter, is definitely a risk: an existing conversation may be linked to a hashtag – and not necessarily a positive one, or one that reflects the brand or desired image. For example, Entenmann's, a company known for baked goods, used the hashtag #notguilty to

promote their healthier baked options. Unfortunately, that hashtag was simultaneously being used in the wake of the controversial Casey Anthony “Not Guilty” murder verdict.

Similarly, there is a well-documented history of corporate Twitter hashtag campaigns turning sour. Consumers often “hijack” the hashtag to criticize the company. For example, McDonald's created the #McDstories hashtag on Twitter hoping its customers would share personal stories about their favorite McDonald's moments. However, the hashtag was quickly taken over by McDonald's-related horror stories and the #McDstories campaign was pulled after only a few hours.

To learn from others' mistakes, companies should review whether there is an existing conversation on a given hashtag and what the nature of that conversation is, and consider ways the hashtag could be hijacked before launching a hashtag campaign.

Using Twitter can help businesses engage with consumers in a way that was not formerly possible, and can also help brands expand and compete in new areas. Given the expansive reach of Twitter, setting up and maintaining an account can reap benefits for businesses. However, this powerful networking tool comes with some challenges that the savvy user should keep in mind. Equipped with this knowledge, you are on your way to avoiding some of the common pitfalls associated with Twitter use.

# Publishing and the digital economy





Photo: iStock.com/da-kuk

Publishers are embracing the opportunities afforded by digital technologies and are investing in developing the skills required to develop and maintain new digital resources and delivery mechanisms.

By **José Borghino**, Secretary General, and **Ben Steward**, Director of Communications and Freedom to Publish, International Publishers Association (IPA), Geneva, Switzerland.

Publishing can educate, entertain and inform, shape worldviews, make or break reputations and careers. With the right business model, it can also generate revenue by offering the work of talented authors and other creators at the right time, in the right place, at the right price.

Digital technology, with its new and enticing formats, has far extended the reach of book and journal publishing, allowing publishers to find more readers wherever they are and whenever they want to read.

At the heart of this global enterprise is copyright.

#### **COPYRIGHT: THE MAINSPRING OF A THRIVING PUBLISHING ECOSYSTEM**

It is sometimes claimed that copyright is “broken” when it comes to digital offerings of copyrighted works. In reality, proponents of this idea want to weaken copyright through ever-expanding exceptions and limitations, both nationally and by means of international treaties. The real beneficiaries of exceptions and limitations for digital uses of copyright works will be big technology companies whose prosperity depends overwhelmingly on hosting or delivering other people’s output. Those who work with copyright every day – authors, creators and publishers – know that copyright is



“Copyright...  
is the foundation  
and mainspring  
of a diverse  
and successful  
worldwide  
ecosystem of  
words, pictures,  
sounds and ideas  
that pervades  
our lives.”

flexible, robust and accommodating. It is the foundation and mainspring of a diverse and successful worldwide ecosystem of words, pictures, sounds and ideas that pervades our lives.

Yet as pervasive and ubiquitous as it is, this ecosystem is as vulnerable to the well-organized misdeeds of pirates and free riders as it is to unwitting undermining by well-meaning agencies.

#### **WHAT NOT TO DO: LESSONS FROM CANADA**

An example is the recent amendment of Canada’s copyright laws through the Copyright Modernization Act of 2012. The amendment expanded Canada’s existing fair dealing exceptions by adding “education” as a purpose that justifies unauthorized reproduction, distribution and other uses of copyrighted works. However, a recent study by PricewaterhouseCoopers (PwC) found that the incomes of Canadian writers, authors and illustrators will fall as a result, driving people away from the sector and eliminating jobs. PwC also predict that inadequate rewards for authors and publishers producing educational material will cause “the publishing of new content for schools in Canada [to] for the most part disappear”, with “lower competition, less content diversity, and higher prices for what is produced”.

The results of this apparently minor legal amendment sound a warning about the harm that can be done by unpicking copyright law. Doing so has already ransacked Canadian educational publishing: Oxford University Press Canada’s school division has closed down; Nelson has declared bankruptcy; McGraw-Hill Ryerson, Pearson and Wiley have all significantly scaled back their Canadian operations; and smaller Canadian companies are downsizing or folding. Today, there is a growing realization in Canada that foreign publisher subsidiaries may have to switch from being producers of original local content to being mere distributors of imported materials. But most worrying of all for Canadian lawmakers is that the broadening of copyright exceptions in the Canadian educational publishing sector is likely to damage national educational performance.

#### **HEALTHY COMPETITION ENSURES HIGH-QUALITY RESOURCES**

The IPA, through its well-regarded Educational Publishers Forum, believes that local authors and publishers producing relevant and engaging local materials are the engines of any well-functioning educational system. Governments must set curricula, but thereafter it is healthy competition between local and international

publishers that ensures high-quality resources are continuously improved by teacher feedback and editorial rigor. The beneficiaries of this virtuous cycle are teachers and students, and at its center is copyright – a simple, fair mechanism that allows content creators to be paid and publishers to invest with confidence.

The IPA continues to coordinate the efforts of the creative sector at WIPO to prevent the Canadian experience being replicated elsewhere. In this endeavor, the IPA brings senior publishing figures to Geneva to discuss how digital innovation is offering readers ever more choice by increasing availability and accessibility in educational and other forms of publishing.

### EMBRACING THE PROMISE OF DIGITAL

Publishers are sometimes unfairly decried as progress-averse when the opposite is true; they are avid early adopters at the leading edge of intelligent innovation, embracing the opportunities and evolutionary promise of digital. Like the authors they serve, publishers want their works to be universally accessible: available and readable across all platforms.

Publishers invest in and bring to market products and resources that are ingenious, experimental and risky. To give some examples:

1. Textbook and academic publishers are offering books in paper and digital formats to schools and universities. In France, all textbook publishers have been offering works in digital and print since 2008, with more than 2,000 digital textbooks now available through an array of licenses. They have developed digital platforms and portals such as *Canal Numérique des Savoirs*, *Kiosque Numérique de l'Éducation* and *WizWiz* which allow teachers and parents to consult, order, download and use these resources.
2. *TigerBooks* are ebooks for children that are digitally enriched with animated graphics, visual effects, games and more. *TigerBooks* is a product of the German publisher Verlag Friedrich Oetinger, which also provides “Tiger Create”, a tool enabling other publishing houses to create *TigerBooks* as well.

3. Publishers serving the academic and professional communities – scientific, technical and medical, social sciences and humanities, and legal – are committed to making the research they publish as accessible and discoverable as possible. Their initiatives include the Digital Object Identifier (DOI) for scholarly papers and the ORCID digital identifier for researchers. In addition, these publishers support *FundRef*, a service by Crossref which provides a standard way to report funding sources for published scholarly research. Similarly, they support Kudos, a web-based service that helps researchers, their institutions and funders maximize the visibility and impact of their published articles.

4. Lectory provides a way for schools to offer students a social reading experience. By buying books to be read in school from affiliated publishing companies, students gain access to an online library offering the ebook version as well as word definitions and the possibility to comment and ask questions.

5. Bloomsbury, Hardie Grant and Quadrille Publishing launched *Cooked* in February 2016 – the first recipe subscription site of its kind in the UK. Users can access full cookbooks and discover new recipes searching by cuisine, author or book and then curate their own recipe collections.

6. Indian publisher Juggernaut is building an app (called Juggernaut) to connect Indian consumers, authors and the publisher through reader book reviews and by enabling readers to interact with authors.

Publishers are investing big money in innovation – not just in technology but also in the skills base of the people who will devise, develop and maintain new digital resources, portals and other delivery mechanisms. Publishers add considerable value to the initial creative input and its dissemination across worldwide markets and sectors.

Nevertheless, whichever sector a publisher inhabits – trade, education, or professional and academic – a robust and stable copyright law framework is the fundamental prerequisite that enables them to invest and reinvest in often untried and innovative work.

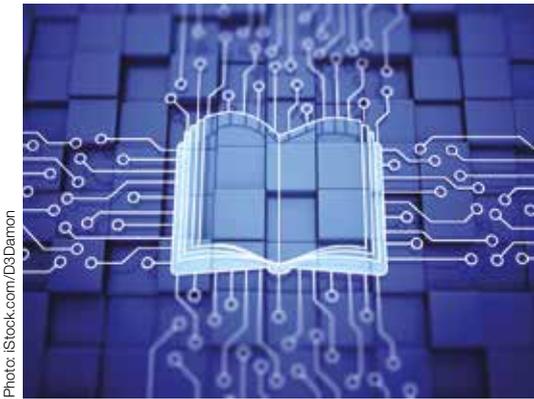


Photo: iStock.com/D3Damon

Publishers add considerable value to the initial creative input and its dissemination across worldwide markets and sectors.

## FREEDOM TO PUBLISH

The IPA believes that authors and publishers should be able to make a living from their skills and talents unfettered by interference. In that sense, the two ideological pillars upon which the IPA is founded – respect for copyright and freedom to publish – are inextricable. The link between a strong copyright regime and freedom of expression is clearest in countries where governments oblige authors and publishers to depend on patronage by curbing copyright – the key to financial independence. All too often, where government critics refuse to be silenced, freedom to publish is eroded, while journalists, bloggers and social media users are suppressed.

In addition, vaguely worded laws that criminalize incitement, defamation and rumor-mongering are routinely used to threaten journalists, writers and publishers, creating a climate of fear that fosters self-censorship.

Digital technology has brought with it immense opportunities for progress. It has empowered everyone to be a potential publisher. This shift is not just a matter of being able to put a novel, poem or family history into a virtual global marketplace and see what comes out; it also means that information crucial for our security and well-being can circulate beyond the confines of state censors.

Some governments are increasingly unnerved by this new-found digital liberty and have hardened their response to it. But the IPA stands firm in the conviction that in the digital age, more than ever before, writers, publishers and content creators need and deserve support and protection through extensive safeguards for freedom to publish and robust copyright laws.

# Patenting catalyst technology: activating change and overcoming challenges

By **Jennifer H. Roscetti** and **Jessica M. Lebeis**, Finnegan, Henderson, Farabow, Garrett & Dunner, LLP, USA

Catalyst technology is becoming increasingly significant in the energy and environment sectors. New techniques for identifying catalysts, which accelerate chemical reactions in chemical manufacturing processes, allow researchers to prepare and test myriad potential new catalyst materials at an unprecedented rate. That means new avenues for producing cleaner fuels, such as diesel fuels from higher-impurity feedstocks and renewable fuels. Cutting-edge research into these new catalysts continues to mature and will have a huge impact on the way we produce energy, power vehicles and tackle climate change.

Energy companies, in particular, have recognized the importance of advanced, high-performance catalysts. Strategic alliances between these companies and those that produce catalyst technology are on the rise. Such partnerships can help energy companies achieve greater efficiency in energy and raw-material usage, satisfy environmental standards and develop cost-effective technologies to produce clean and renewable fuels such as the conversion of biomass into biofuels.

Against this backdrop, it comes as no surprise that patenting activity in the field is on the rise. Patenting of fluid catalytic cracking (FCC) technology – one of the most important processes for converting crude oil into high-octane gasoline and fuel oils – rose significantly between 2000 and 2012. A 2013 study by Mitchell, Michels and Perez-Ramirez in the *Chemical Society Reviews* revealed that fewer than 10 patents featuring a new or improved preparation of an FCC catalyst were reported in 2000, rising to more than 80 in 2012. Similarly, according to a recent paper in the *Renewable and Sustainable Energy Reviews* by Faba, Díaz and Ordóñez, patenting of catalytic methods in the area of biofuels is also on the rise.

But as the patent landscape for catalyst technologies grows more crowded and becomes more complex, companies may find it more difficult to obtain patent protection for their innovations. They may also find existing patents ripe for attack by competitors.

## **OPPORTUNITIES AND CHALLENGES UNDER US LAW**

In the United States, recent changes to patent law may offer an attractive way of resolving such disputes. The America Invents Act (AIA) of 2011 introduced a new *inter partes* review procedure, overseen by the Patent Trial and Appeal Board (PTAB), to address challenges to the patentability of one or more claims in a US patent.

*Jennifer Roscetti is a partner in Finnegan's Washington, D.C., office and a former process design engineer for ExxonMobil Chemical Company. Jessica Lebeis is an associate in the firm's Atlanta office.*



Photo: iStock.com/MACIEJ NOSKOWSKI

As the patenting landscape for catalyst technologies becomes more crowded, the risk of patent disputes is on the rise.

The procedure offers a quicker and cheaper alternative to district court proceedings, and the PTAB, from a statistical viewpoint, appears to provide a favorable forum for patent challengers. As of August 2015, statistics from the United States Patent and Trademark Office show that in 68 percent of all the final written decisions issued, the PTAB had found all instituted claims not patentable. These data suggest that the *inter partes* review process is an effective mechanism for eliminating competing patents.

Activating an *inter partes* review challenge, however, requires a strategic focus and a targeted approach. A challenger needs to understand a competitor's entire portfolio to identify target patents and submit well-developed expert testimony in support of a petition.

The PTAB also presents challenges from the perspective of a patent holder and can prove a difficult forum in which to protect valuable intellectual property. Fending off a review requires foresight in patent drafting and

prosecution, and careful navigation of certain procedural minefields.

In short, *inter partes* review is complex for both petitioners and patent owners, and presents unknown issues. But both the statutory framework of the America Invents Act and previous PTAB cases provide invaluable and much-needed insight.

#### **ACTIVATING AN *INTER PARTES* REVIEW AS A PETITIONER**

To realize the potential procedural benefits of *inter partes* review petitioners need to approach the proceedings strategically and to think carefully when deciding which patents to challenge. Depending on their goal, petitioners may need to challenge more than one patent covering a blocking technology. They may need to review a competitor's entire patent portfolio to ascertain which patents have problematic claims in terms of infringement or freedom to operate.

Although *inter partes* review may be cheaper than traditional district-court litigation, individual petitions must be filed for each patent, and the attendant filing fees can add up to a significant expenditure. And while there is no standing requirement for *inter partes* review and anyone may file a petition, a challenger must identify the real-party-in-interest. Entering such a review therefore requires judicious assessment of the costs and the likely impact on the petitioner's competitive position and other business considerations associated with revealing an interest in, or entry into, a new technology area.

A major benefit of these proceedings for the patent challenger is the time available to review the prior art, develop a petition and plan an attack. Unless suit has been filed on the patent in district court, petitioners have no time limit within which they must file an *inter partes* review. This gives them time to develop strong positions with input from experts. Expert testimony is critical given the complexity of technologies emerging in the chemical sector. Previously, petitioners benefited from the fact that patent holders could not file new expert declarations in their preliminary responses and had to rely on attorney argument. The Board has tended to credit unrebutted expert evidence in a petition over attorney argument, particularly in the chemical area. However, the PTAB has recently amended its rules to allow patent owners to submit new expert testimony at the preliminary response stage.

Persuasive expert testimony remains key to the PTAB's decisions. In *Butamax Advanced Biofuels LLC v Gevo, Inc.*, IPR2014-00250, for example, the PTAB found all instituted claims of the challenged patent relating to renewable jet fuel not patentable, crediting the petitioner's expert throughout their Final Written Decision, even when the patent owner pointed out that the petitioner's expert had not supported his opinion with citations.

And the proceedings offer other potential advantages to petitioners. Challenged claims are given the broadest reasonable interpretation, making them easier to attack, while validity is assessed on a preponderance-of-evidence standard, with claims not entitled to a presumption of validity.

#### **INHIBITING AN *INTER PARTES* REVIEW AS A PATENT HOLDER**

Although it is almost impossible to stop a petition from being filed – particularly for a patent on a key technology that is widely used – companies can adopt strategies in patent filing, prosecution and claim-drafting to minimize the risk of review proceedings. For example, companies could file multiple patent applications in the same patent family while keeping continuations open, with variations in how the invention is claimed. A larger portfolio is more difficult and expensive for challengers to attack, and multiple claims make it more likely that at least one will survive. Now that patent owners may offer new expert testimony at the preliminary stage to rebut testimony



Photo: Courtesy of Finnegan, Henderson, Farabow, Garrett & Dunner, LLP

In the United States, the new *inter partes* review procedures enacted by the America Invents Act and overseen by the Patent Trial and Appeal Board (PTAB) may provide an attractive means of resolving patent disputes in the evermore complex catalyst technology landscape.

offered by petitioners, patent owners have a more robust opportunity to avoid institution of an *inter partes* review.

Even without submitting new expert testimony, patent holders can rely on previously filed and publicly available testimony in their preliminary response. For example, they may be able to buttress “unexpected results” arguments with declarations from inventors or experts when prosecuting the patent. The PTAB can give such evidence significant weight. For example, in *Omron Oilfield & Marine Inc. v. MD/TOTCO*, IPR2013-00265, the PTAB declined to institute the petition based in part on prior district-court expert testimony regarding commercial success.

Once an *inter partes* review is instituted, patent owners typically have three months or less to prepare and submit a full response, including expert declarations. This restricted timeframe underlines the importance of developing expert positions when preparing a preliminary response and before institution. Strong rebuttal testimony is essential, given the substantial advantages held by the challenger.

Despite the challenges faced by patent owners, *inter partes* review does offer patent owners the ability to amend patent claims. Initially, this was a theoretical

rather than a practical possibility because the PTAB denied virtually all motions to amend. But the PTAB has recently started granting motions, including one in the energy area. As the Law360 website reported, in an *inter partes* review challenging Neste Oil Oyj’s patent relating to renewable diesel fuel (*REG Synthetic Fuels LLC v Neste Oil OYJ*, IPR2014-00192), the PTAB granted a motion to amend, allowing Neste to substitute four claims.

Ongoing innovation in catalyst technology and increasing patenting activity suggest that an increased number of *inter partes* review challenges are on the horizon. Such reviews may offer a relatively fast and cost-effective way of resolving disputes, but both patent holders and petitioners need a carefully considered and well-crafted strategy for leveraging *inter partes* reviews.





34, chemin des Colombettes  
P.O. Box 18  
CH-1211 Geneva 20  
Switzerland

Tel: +41 22 338 91 11  
Fax: +41 22 733 54 28

For contact details of WIPO's External Offices  
visit: [www.wipo.int/about-wipo/en/offices/](http://www.wipo.int/about-wipo/en/offices/)

**WIPO Magazine** is published bimonthly and distributed free of charge by the World Intellectual Property Organization (WIPO), Geneva, Switzerland. It is intended to help broaden public understanding of intellectual property and of WIPO's work, and is not an official document of WIPO. Views expressed in articles and letters do not necessarily reflect those of WIPO.

For comments or questions, contact  
The Editor at [WipoMagazine@wipo.int](mailto:WipoMagazine@wipo.int). To order a print version of the  
WIPO Magazine, contact [publications.mail@wipo.int](mailto:publications.mail@wipo.int).

Copyright ©2016 World Intellectual Property Organization

All rights reserved. Articles contained herein may be reproduced for educational purposes. No part may, however, be reproduced for commercial purposes without the express written consent of the WIPO Communications Division at the above address.