

WPOTAGENEVA - OCTOBER 2010 - No.5

WORLD
INTELLECTUAL PROPERTY
ORGANIZATION





DIALING FOR DEVELOPMENT



MILESTONES IN SOLAR AVIATION

Facilitating Access to Culture in the Digital Age: Emerging Copyright Licensing Modalities

Geneva, Switzerland - November 4 and 5, 2010

This global meeting will address front-line copyright issues and bring together a wide range of stakeholders, including leaders in the field of public policymaking and business, to:

- explore the challenges confronting creators and users in accessing creative content and harnessing its commercial value in the digital environment;
- showcase emerging content distribution licensing models and consider how these can coexist with traditional licensing approaches in the online environment;
- examine the role of public authorities, and explore the way forward.

The issue of copyright licensing will be central to the discussion, the proliferation of new forms of on-line distribution having transformed practices in this area.

The need to ensure that copyright licensing transactions are underpinned by improved rights management information and documentation and copyright licensing practice in relation to competition rules, will also be explored.

The meeting offers an opportunity for the international copyright community to examine different approaches to licensing creative content in the rapidly evolving online marketplace.

Program details and online registration are available at: www.wipo.int/copyright/en/activities/copyright_licensing_modalities.html

CONTENTS

2	AN INTERVIEW WITH WIPO DIRECTOR GENERAL FRANCIS GURRY
5	DIALING FOR DEVELOPMENT - HOW MOBILE PHONES ARE TRANSFORMING THE LIVES OF MILLIONS
9	INDIA'S EVOLVING POPULAR MUSIC LANDSCAPE
12	MILESTONES IN SOLAR AVIATION
15	INNOVATION PROMOTION IN BRAZIL
17	FIVE STEPS TO PROTECT YOUR TRADEMARKS IN THE WEB 2.0 WORLD
20	ANYONE FOR COFFEE? THE STORY BEHIND THE COFFEE CAPSULE
23	UNCOVERING A THOUSAND YEARS OF SCIENCE AND TECHNOLOGY
25	MECHANISMS FOR PROMOTING GREEN INVESTMENT
27	PROFILING IP - WIPO LAUNCHES NEW IP ADVANTAGE DATABASE

AN INTERVIEW

with WIPO Director General Francis Gurry

Ahead of this year's meeting of WIPO Assemblies, WIPO Magazine sat down with Director General Francis Gurry to explore his views on a range of frontline IP issues.

Where have you seen most progress in the Organization's work over the past 12 months?

Among the many ongoing initiatives, I would highlight the progress in putting technical infrastructure in place to allow developing countries to participate more fully in the knowledge economy. Our focus is on practical areas, such as building, and expanding access to, technology databases, and the modernization of national IP offices. There are now modernization programs underway in 60 countries.

Development issues permeate the whole Organization's work. Good progress has been made, with some 17 projects underway, towards the fulfillment of the 45 Development Agenda recommendations.

culture, systems and structures, which will better equip us to meet the challenges in the changing external environment.

Which areas have proven most difficult and why?

In all international organizations norm-making is generally the most difficult area in which to achieve multilateral agreement. The asymmetry of information and resources around the world means we have to move at a pace that is comfortable for everyone in order to build the necessary understanding and confidence.

The Strategic Realignment Program highlights four core values. How do these play out in the Organization's work?

The four values reflect our aspiration to be a service-oriented organization, with staff who work together with pride and integrity to deliver results for our member states.

The value Working as One is well illustrated by the implementation of the Development Agenda. In order to mainstream development in the Organization's work successfully, the whole Secretariat needs to be involved. Project managers in relevant substantive areas across the Organization are collaborating, with the Development Agenda Coordination Division as the focal point, to implement the Agenda recommendations. The Organization needs increasingly to adopt this type of collaborative approach to be able to deliver on its complex agenda.

The value Service Orientation applies to all the different sorts of services provided by the Secretariat to member states and other stakeholders – from capacity-building and legislative advice to our Global IP systems. Dedicated customer service teams are being set up across the Organization to realize this value fully.

The third value, Accountability for Results, is intended to direct greater focus on the outcomes that member states want WIPO to achieve. The Medium Term Strategic Plan, which outlines high-level outcomes for the next six years, is an



2 SCT – Standing Committee on the Law of Trademarks, Industrial Designs and Geographical Indications



In the normative area, our member states achieved a breakthrough last year on traditional knowledge and folklore, and have kept up the momentum in the IGC¹; there is also progress on the issue of access by visually impaired persons to published works; and the SCT² has agreed to advance work on design law and to discuss issues surrounding trademarks on the Internet, such as the use of keywords and sponsored links.

Internally, the initiatives we are implementing within the Strategic Realignment Program (SRP) are bringing about changes in our organizational

example of our efforts to strengthen resultsbased management.

The new Ethics Office, and WIPO's commitment to reducing its carbon footprint, are two distinct elements of the fourth, multidimensional value, which we have termed *Environmental, Social and Governance Responsibility*.

What does the future of copyright hold?

Digital technology and the Internet have brought about technological change of an order of magnitude many times greater than that associated with the introduction of movable type and printing. It is revolutionizing social, cultural and economic behavior and transforming business structures. While we don't yet understand the full depth of the changes involved – they are unfolding all the time – it is clear that the institution of copyright is under severe stress. Copyright was designed to allow creators to extract some value from transactions involving their works (such as the sale of books or music), while ensuring the widest possible availability of creative content. This function has not changed, but the reality of achieving it has.

The Internet has created conditions which favor the diffusion and availability of content, but make the task of extracting value from it for its creators more difficult. The question is, how should culture be financed in the 21st century? If all content is free, we would have to find some other way of paying content producers. But, outside copyright, there are not many other models for doing this. The new models that have emerged, such as merchandizing or increased emphasis on performance, do not necessarily work for all creative industries, such as film or books. So we have to analyze carefully the value chains of production in the new digital environment.

What is WIPO doing? We are promoting international dialogue on the question. We are monitoring the approaches taken at national level, particularly in terms of new legislation. We are also working to develop and facilitate access to online collective management systems to enable creators, right holders and users to more effectively manage their respective interests.

How is WIPO helping governments tackle the massive backlog in unprocessed patent applications?

This is a question of increasing both efficiency and capacity. Efficiency is being tackled through

the PCT Roadmap, which is geared to ensuring that the PCT works in the manner for which it was designed – as a global, work-sharing arrangement, which preserves national sovereignty on decisions relating to the conditions under which patents are granted. The Roadmap promises to make the PCT an even better arrangement and is well supported by member states.

As for increasing capacity, we are, for example, working with developing country IP offices so they are better placed to deal with, and process, patent applications as demand increases.

What are the implications of the 2009 downturn in the use of WIPO's services caused by the economic crisis?

The decline in revenue received from WIPO's services meant that we had to reduce our personnel budget. We achieved this principally through a voluntary separation program. The reduced revenues also limited the opportunities for new initiatives to further member states' objectives. But the wind is changing direction. In the first half of 2010, the PCT saw a 2.4 percent increase in international applications, and the Madrid system a 10 percent increase in trademark registrations, as compared to 2009. We look forward to this trend continuing.

In the meantime, member states are continuing to examine legal and technical measures to make our Global IP systems more attractive to users. For example, one option – suggested by Norway – in the context of the Madrid system, would be for trademark owners to file their international trademark applications directly with WIPO. We are also developing and deploying information technology tools that are making our Global IP systems more efficient. These tools also promise to make the systems even more user-friendly by enabling online portfolio management, for example. Elsewhere, we are collaborating with countries to provide more comprehensive data on the status of protection at national level. This complements our office modernization program, which provides the practical tools to capture national data.

Will the Madrid and the Hague systems ever be as widely used as the PCT?

Yes, absolutely. I think that global IP systems are an essential element of the global economy. We have seen increasing interest in the Madrid system. The Indian Parliament recently approved India's accession to the Madrid Protocol. This is a

3 PCT – Patent Cooperation Treaty



4 The Hague System

Registration of Industrial Designs

for the International

major step forward. I am very confident that the Madrid system will expand from its current membership of 85 to well over 100 in the next three or four years.

As for the Hague system,⁴ to some extent designs have been the neglected cousin in the IP family. But there is now a heightened awareness of the value of designs in differentiating goods and in making products more attractive to consumers. This is good news for the Hague system and ongoing work promises to produce greater uniformity in procedural conditions for obtaining design protection, which will favor increased use of the system. Again, I think we will see membership of this system grow in the coming years. The timeline will be slightly longer than for the Madrid system, but I am confident that it will happen.

You have often referred to building "global IP infrastructure." What does this mean in practice?

Just as participation in the physical economy requires access to roads, bridges, and vehicles to transport goods, similar infrastructure is needed in the virtual and knowledge economy. However, here the highway is the Internet and other networks, bridges are interoperable data standards, and vehicles are computers and databases.

We are providing global IP databases. As an example, trademark data are produced by all the member states of WIPO (and by WIPO). An IP Office or a small or medium-sized enterprise should not have to search 20 databases to find out if and where a mark is registered. In today's global economy, there should be a simple global portal for search.

WIPO also assists developing countries in building their technical infrastructure and in increasing their capacity to participate in the knowledge economy.

How is IP of relevance to issues of climate change and public health?

To find solutions to challenges or problems, we need to innovate. Incentivizing innovation is a very important economic function and IP is there to do just that. It also provides a framework within which an idea can make the journey from the mind to the marketplace as Dr. R.A. Mashelkar of India said.

But the benefits of IP do not stop there. The patent system, for example, provides a wealth of information about new technology so that everyone can learn about it and build on it. WIPO is developing various practical platforms to help people take advantage of such opportunities. The WIPO PATENTSCOPE® portal, for example, facilitates public access to patented technologies and provides other tools to allow the monitoring of technological developments. We are also working with industry to develop new platforms for the development and diffusion of technologies in these areas.

What are the main challenges confronting developing countries in their use of IP?

Many developing countries are facing so many fundamental and pressing problems that, in a sense, IP seems like a luxury. But I firmly believe that innovation can help provide a solution to many of those problems. This is why WIPO is supporting developing countries in their efforts to create favorable conditions for the generation and deployment of innovation, including through the development of national IP and innovation strategies, which help create a policy environment to stimulate innovation and creativity. Another focus area is training on branding, so that countries can more effectively add value to their products and sell them globally.

If you had 30 seconds on a global TV network what would your message to the world be?

The knowledge component of production is steadily increasing (in the U.S.A., for example, investment in intangibles already outstrips investment in the physical economy). Rights related to knowledge – i.e. intellectual property rights – are therefore becoming increasingly hot property. WIPO helps develop the institutional framework to be able to manage the growing demand for IP and its complex interplay with our daily lives. As Premier Wen Jiabao of China has said, IP will be the basis of competition in the future.

And finally, what do you think about when you are not thinking about IP?

Like everyone else – the beauty of life!

DIALING FOR DEVELOPMENT

How mobile phones are transforming the lives of millions

Since the first cellular handheld telephone was invented by Martin Cooper and his Motorola team in 1973, use of mobile phones has grown at a staggering rate making them one of the most widely owned consumer assets. With over 4 billion mobile connections around the world and terrestrial GSM¹ networks covering over 80 percent of the world's population, mobile telephony is on track to becoming a near-universal technology, some suggest, by 2015.

The first handheld cellular phone was a rather cumbersome device weighing 2 kgs and with a battery life of just 20 minutes. Today's affordable, lightweight and versatile third generation (3G) models offer multiple means of communicating (by voice, fax and e-mail) and accessing information and entertainment. They are, in fact, steadily developing into handheld computers. Once considered a gadget for the wealthy, the mobile phone is increasingly becoming an essential part of our daily lives. In many parts of the developing world, wireless technology is being used to open doors to a wide range of life-enhancing services that hold great promise in spurring grassroots development.



The charger starts charging when the bicycle reaches a speed of 6 km/h and stops charging at 50 km/h. Cyclists can check the charging status from the screen of their mobile phone. The charger is resistant to humidity and dust.

In early June, Nokia launched a range of new products specifically designed for users with limited access to electricity. These include a model that accommodates two SIM² cards which may be

swapped and removed when the phone is switched on – a feature that serves the needs of multiple users. Another model offers a battery life of up to six weeks coupled with a bicycle-driven recharging device. News of these developments prompted *WIPO Magazine* to take a closer look at some of the ingenious ways in which mobile telephones are being used to connect the previously unconnected, and to improve the lives of individuals, particularly in isolated, rural areas across the developing world.

Mobile technology spawns innovative applications



Mobile phones are a substitute for fixed lines in many developing countries. They help drive economic growth, fostering business development and wider market access. They provide a more reliable alternative to roadways and postal systems for communities in remote and un-

derserved areas. As the technology advances, mobile phones not only enable users to make voice calls, they offer easy access to a stunning array of innovative applications. In developing countries, they are creating opportunities for users to access market information, monitor health care, transfer money and promote literacy.

Mobile phones are being used in a range of innovative ways. Fishermen in Senegal use them to obtain information on fish market stocks and prices before deciding in which port to unload their catch for a better return. They also use mobile phones to transmit and receive distress signals thereby improving the safety of local fishing fleets. In South Africa, farmers from the Limpopo province are avoiding the heavy losses associated with transporting perishable goods to market over long distances by using mobile

- 1 Global system for Mobile Communications
- 2 Subscriber Identity
 Module

The Nokia C1-00 can accommodate two SIM cards in a single device. It is also equipped with a flashlight, FM radio, alarm clock, is programmed to speak in local languages, and has multiple phone books. With a stand-by time of up to 48 days and talking time of up to 13 hours, it weighs just 72.9 g including the battery.



phones to deal directly with their clients within a focused area – again, significantly improving revenues (from an estimated US\$700 to US\$4,000 per month³).

A 2005 study by Leonard Waverman of the London Business School estimated that an addi-/foundation tional 10 mobile phones per 100 people in a giv-4 GDP – Gross domestic en developing country boosted GDP⁴ growth by product - a measure of 0.6 percent between 1996 and 2003.

> Ready access to financial services can be critical in stimulating local economic activity and in fighting poverty. Many people in remote, isolated rural areas do not have bank accounts, nor do they have access to conventional banking services. Mobile telephony is proving to be a particularly advantageous means of addressing these challenges while simultaneously reducing the operating costs of financial institutions.

> "A mobile phone is a gateway, and oftentimes the only means to knowledge, entertainment and communications for people in emerging markets. They have become vital to the lives and businesses of the people that use them."

> > Nokia

Banking at your fingertips

Kenya has led the way in mobile banking with the M-PESA ("m" for mobile and "pesa" for money in Swahili) money transfer system launched by Safaricom and Vodafone in 2007. In the words of Michael Joseph, Safaricom's CEO at the launch of the service in February 2007, the "M-PESA mobile money transfer service is an example of Kenya leading the way in the advancement of mobile technology and its uses."

This innovative system enables customers to transfer money between cell phone users rather than banks. The service is aimed at mobile users who do not have bank accounts, either because they do not have ready access to a bank or because they have insufficient funds to open a bank account.

Touted as "the world's first and most successful mobile money transfer service," M-PESA currently boasts 9.48 million registered users, over 17,000 agent outlets and 290 pay-bill partners. In its three years of operation, the system has grown to

offer a wide variety of services including salary and bill payments, convenient withdrawals through the ATM network and international money transfer.

M-PESA users simply register with an authorized M-PESA agent by providing their Safaricom mobile number and identification card. The M-PESA application is installed on a SIM card and works on all makes of handset. Once registered, customers can:

- put money into their accounts by depositing cash with a local agent;
- send money to other mobile phone users (even non-Safaricom subscribers) via text message;
- redeem the message for cash at a local agent
- buy Safaricom airtime for themselves or other subscribers

Only Safaricom subscribers can send money through M-PESA, but anyone with a phone that accepts text messages can receive money via the service. They do not need a bank account to do so.

Cash is paid into M-PESA and withdrawn at M-PESA agent outlets, typically, local Safaricom dealers, petrol stations, supermarkets or local shops.

Empowering communities

In 2008, Irish aid agency CONCERN Worldwide faced the challenge of delivering food aid to vulnerable communities in Kenya's remote Kerio Valley. Having heard about the M-PESA service, CONCERN was quick to recognize its potential in enhancing its emergency response. It linked up with Safaricom to develop a customized service and pioneered its use for emergency cash transfers.

For CONCERN this experience clearly demonstrated that "mobile phone technology offers a unique and empowering approach to efficiently deliver assistance to the most vulnerable people living in insecure and remote rural areas." This approach enabled it to better manage risks, significantly cut costs – M-PESA was 16 percent less costly than its conventional approach - and generate a range of additional benefits.

By providing mobile phones, SIM cards and chargers, beneficiaries were given an opportunity for communication as never before experienced, and were transformed from passive aid recipients to active participants in the process. In sum, CONCERN's experience demonstrates that mobile

- 3 www.manobi.ne
- a country's overall official economic output

phones can play a key role in delivering innovative solutions that enhance the impact of development assistance and support community empowerment.

The surging growth in the use of mobile phones in Africa is enabling governments, non-profit organizations and businesses to develop innovative solutions that address the needs of these communities and stimulate grassroots development.

Supporting disaster recovery efforts in Haiti

Mobile phones played a key role in supporting the relief efforts following the earthquake that ravaged Haiti on January 12, 2010. These and other citizen-driven technologies – such as online mapping tools, GPS and social networking served as important extensions of traditional communications services in supporting disaster recovery by facilitating the free-flow of critical information and raising much-needed funding. According to a report by the Huffington Post, donations from individuals made via mobile phones account for an increasing share of total contributions. In the U.S. alone, over US\$32 million were donated to the American Red Cross Haiti relief effort via text message. Vodafone's Red Alert mobile campaign raised more than €5.2 million (US\$8 million) for Haiti earthquake relief efforts.

Toll-free drug verification



Mobile phone technology is also proving an effective means of safeguarding consumers against the scourge of counterfeit drugs. While it is difficult to calculate exact figures, the World Health Organization (WHO) estimates that more than 10 percent of medicines on the global market are fake, and that 25 percent of those in developing countries are counterfeit or substandard. Not only do these products claim lives on a daily basis, they increase resistance to pathogens and, as a consequence, place an even heavier burden on resource-constrained public health systems.

In response to this alarming situation, and amid the growing concerns of drugs manufacturers and the general public, mPedigree, a non-profit organization based in Ghana, offers a free and rapid means for customers to verify the authenticity of the drugs they purchase at the point of sale, using a mobile phone.

The mPedigree platform is an "economically accessible, technically feasible and literacy-neutral" service of increasing interest to public authorities in Africa in combating counterfeit drugs. In June the West African Health Organization (WAHO) announced it had adopted the mPedigree technology platform as a regional standard in the fight against counterfeit drugs. Pharmaceutical manufacturers are also in discussions with mPedigree regarding deployment of the platform in their African operations.

mPedigree is proving a very useful means of raising awareness about counterfeit issues in the region. For Bright Simmons, President of the mPedigree Network, the system offers a mechanism for "bridging the public health and IP protection concerns of the public and private sectors and is a means for vendors to position themselves as quality suppliers and IP-compliant businesses."

First piloted in Ghana in 2008, mPedigree connects GSM mobile networks to a central registry (currently managed by Hewlett-Packard) which stores information on the branded medicines of participating drug manufacturers. The platform focuses on "authenticating the supply line from one level of the supply chain to the other, all the way to the consumer." It allows manufacturers to tag each unit pack of pharmaceuticals with a unique code that consumers can send via text message to a toll-free number for an almost instantaneous response regarding the legitimacy of the product. Only properly certified medicines can be verified in this way and the "one-time use" design of the codes prevents forgeries of legitimate medicines entering the supply chain.

Under the system, each pack of drugs is embossed with a unique alphanumeric code. Consumers scratch off a panel to reveal a code which they then send by text message to the toll-free number leased from telecom operators and directed to the mPedigree application. The cost of the SMS messages is borne by the manufacturers who benefit from discounted rates from operating telecom partners.



Where hologram technology has failed and radio-frequency identification (RFID) systems to identify and track drugs using radio waves are beyond the purse of many developing countries, mPedigree is proving an effective solution. According to Mr. Simmons, the mPedigree platform "provides all the security of RFID but comes at a tenth of the cost."

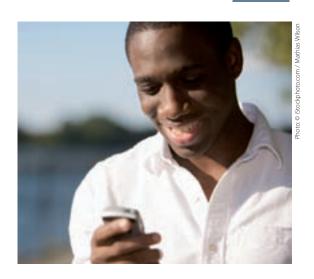
Empowering consumers

Mr. Simmons underlined the significance of this initiative, saying, "for the first time in recorded commercial history those with the greatest stake in pharmaceutical safety – patients and consumers – are being brought directly into the heart of the anti-counterfeiting agenda, thanks to the transformative impact of mobile phones in the developing world." In his view, the system "redresses an ancient injustice in the marketplace" and enables those who pay for a product to have a means to ensure they receive what they pay for – in this instance, life-saving drugs. It represents a "wholesale shift in thinking about... consumer rights."

Advances in mobile telephony and the availability of affordable handsets have brought millions of people into the Information Age and opened the door to many life-enhancing opportunities.

For the original inventor, Mr. Cooper, "the future of cellular telephony is to make people's lives better." His view is that "the cell phone in the long range is going to be embedded under your skin behind your ear along with a powerful computer who is in fact your slave."

As mobile operators continue to push through the frontiers of innovation to reach more subscribers, new innovative applications will emerge and continue to transform the lives of millions.



Vast market potential, broad social benefit

The rapid adoption of mobile phones by users in the developing world – an estimated 1.5 million consumers sign up for a mobile phone subscription each day – means mobile phone companies have the opportunity to expand their market share and generate profits, while at the same time delivering significant social benefit.

5 InfoEdge www.infoedge.com/ lanpag/mobile_phone_ market.asp) By 2011,⁵ the global mobile phone market is forecast to have a value of US\$211.9 billion (an increase of 103.1 percent since 2006) with an estimated volume of 1,804.1 million units (up 125.5 percent on figures for 2006).

Given the huge market potential, manufacturers are recognizing the importance of developing low-cost handsets and applications that match the needs and circumstances of consumers in emerging markets. These include:

- icons to replace names for use in communities with low literacy rates;
- long battery life and flashlights for use in areas with no electricity or frequent power cuts;
- rubber sides to enhance grip in highly humid areas;
- dust-protected key mats for dusty environments;
- radios with loudspeakers for collective entertainment;
- multiple phone books on one device;
- cost and call trackers to facilitate multiple users and contain costs;
- local language support;
- applications to support micro-entrepreneurs, e.g. calculators, alarms, calendars.

INDIA'S EVOLVING POPULAR MUSIC LANDSCAPE

Music producer, Atul Churamani, Vice President of Saregama India Limited, has been a driving force in developing the popular music market in India. This profile by Michael, P. Ryan, PhD, Director of the Creative and Innovative Economy Center of the George Washington University Law School, offers some interesting insights into the challenges associated with the evolving commercial landscape for popular music in India.

Atul Churamani is one of India's foremost popular-music innovators. In the 1980s, he helped international music sales take off in India by synchronizing the Indian release of albums by artists such as Michael Jackson and Madonna with their international release and by distributing them on high-quality, attractively packaged cassettes. With the arrival of MTV1 in India in the 1990s, he created Indian music videos for the channel and established the Indian pop-music marketplace. In 2005, his King Khan compilation album of Indian music remained in the German charts for 12 weeks and broke into the top 20 list of hits. That same year, the American band Black Eyed Peas adapted music by one of his songwriters to produce "Don't Phunk with my Heart." It became the most popular song in the world for that year. Mr. Churamani wants the world to listen to Indian music and he wants mobile phone makers and other businesses to be his distributors. He is one of India's B2B² music innovators.

Making and selling music has never been more challenging. As Mr. Churamani notes, "When I got into the business it was about selling recordings in particular formats. Who now cares about CDs? I sell our music on cell phones. But, it's not a catalog deal," he continued, "it's an exclusive deal – my best new music and artists are available only on one brand of cell phone. Now, we have a million sellers, again."

For a long time Mr. Churamani was an "A and R guy" in the music business that is, his job centered on selling the artist and the repertoire to consumers on physical formats like vinyl records, music cassettes and compact discs. "But," he notes, "my job has evolved to become very different now. I am bullish about artist concerts and events that sell our artists to consumers, but otherwise the B2C3 model no longer works. We in the music business are now in the B2B model."

An economics graduate from Delhi University, Mr. Churamani was initially a journalist, writing about sports, film and music for the *Weekly Sun*, a New Delhi-based youth magazine. But, he soon became more interested in getting involved in the business of music rather than merely writing about it, so in 1987 he joined Mumbai-based CBS Gramophone Records and Tapes India Ltd.

Having had a taste of life with an international record label, he went on to join a start-up that had acquired the Warner Music license for India to become one of a team of five at Magnasound India Pvt. Ltd founded by Shashi Gopal in 1988.

Innovator of the Indian music marketplace

Magnasound revolutionized the Indian market for Western music. "There were two basic problems in the Indian music marketplace: first, not just Indian music, but even international music was sold on poor-quality cassettes; second, music from Britain and the U.S. was released months after it was released in their home markets. By then the pirates had already saturated the market. We changed that," Mr. Churamani explains.

- 1 MTV an American network based in New York launched in August 1981.
 The original purpose of the channel was to play music guided by on-air hosts known as VJs (video jockeys).
- 2 B2B business-to-
- 3 B2C business-toconsumer



As the exclusive Indian licensee for Warner Music (then called WEA International), Magnasound's strategy was to release international music to the Indian market at the same time as it was released internationally and to distribute it on high-quality and attractively packaged cassettes at premium prices. This innovative business model paid dividends, for example, making Tracy Chapman's debut album a huge hit in India. The Indian market for legitimate international music rose dramatically.

In 1991, the News Corporation Star Network introduced MTV to the Indian marketplace. MTV had plenty of music videos featuring U.S. and British performers, but none presenting Indian performers. "At the time," Mr. Churamani explains, "70 percent of the music marketplace was film music. The Indian music market is still tied closely to Bollywood, for that matter. So, the opportunity was there to make Indian music videos, but that was only the beginning."

The following year Magnasound produced two music videos. "We did one video for Jasmine Bharucha, an Indian girl singing in English and a second one for India's first rap act in Hindi, a guy called Baba Sehgal. The videos were hits and Baba's album *Thanda Thanda Pani*, became a 750,000 seller because of the video. It was unprecedented; no Indian pop album had ever sold so many copies. We created the Indian pop music marketplace because of MTV and Channel V, the Star network's equivalent to MTV."

Mr. Churamani explains, "we introduced completely new sounds to Indian music. Cool grooves, fresh voices. We found good-looking young artists. Then we produced the music to Western music standards and sold it on high-quality cassettes in great packaging. Our album *Made in India* outsold the top-selling Bollywood film soundtrack of the time! We sold 2.5 million copies of the album. That number was unheard of in Indian music – legitimate cassette sales, anyway." A string of Indian pop music hits and stars followed and the pop music industry grew to occupy a significant segment of the music marketplace.

This success, however, was cut short by the fact that "the film industry took our music stars, the composers, producers, arrangers, lyricists and singers. Soon Bollywood film music began sounding like and, in fact, sounded better than the pop music being created. And so the recorded pop music business perished," Mr. Churamani explained. "Interestingly though, the singer loses out to the actor in the film who is seen on the screen singing the song. That is the power of Bollywood. So, we had to do something new with our artists to make them stars."

Mr. Churamani continued, "we focused on concerts, on live stage performances. We started by managing a couple of artists like Shaan and Shubha Mudgal, which helped us build profiles for the artists as well as earn revenues for the company at a time when physical sales were beginning to decline. The fact that concert earnings are a far greater revenue earner than CD sales wasn't news but as music companies we had never bothered with that part of the business. One of Magnasound's biggest stars, Daler Mehndi, earned a pittance in music royalties compared to his show income but Magnasound never got a share of that revenue stream," he explained.

B2B Indian music marketplace innovator

In 2002, after a stint with Virgin Records, Mr. Churamani joined Kolkata-based Saregama India Limited, founded by EMI music in 1901. With offices around India as well as in London, New York, and Kuala Lumpur, he began establishing a global network of sub-publishers to work with the company's rich and extensive catalogue. He was convinced that the world was ready to enjoy Indian music as never before. Today the company is publishing across all continents, reaching out to Western audiences through its licensing, sampling and publishing deals.

When commenting on the future of the music industry in India, Mr. Churamani remarked, "We must do 360-degree deals now. The business is about exploitation of the music in various ways... now music companies must look at making revenues from television, radio, and music publishing. That is why we sign the artist as a performing artist for concerts."

Having set up Saregama's digital business in both the Indian and overseas markets, this dynamic entrepreneur is looking for additional opportunities for monetizing the company's music assets. Mr. Churamani explains, "Though we have a good



Sonu Niigaam performs with the City of Birmingham Symphony Orchestra

Copyright Act, enforcement is an issue. People don't pay for usage of music. And today, this loss of revenue really hurts. So we have to stand up for our rights and file copyright lawsuits against hotels and radio for not paying for our music. But you can't live your life filing lawsuits against everybody," he said. "In addition, technology has changed the way people consume music and you can't fight technology. The worrying part is that there are too many people using music for free and, even when it is paid for, the music value chain has been lost. All along the chain there isn't enough money for people to make a living off music."

In spite of these challenges, Mr. Churamani is optimistic about the future of music in India and around the world. "It's a question of seeing the opportunities for sustained growth. Look at the number of mobile phone subscribers in India and the growth of those numbers by an astounding 12 million a month. Today, every handset is being advertised as a music player. So there's an obvious answer to the issue of not selling CDs in large quantities anymore."

He believes that mobile phone companies can personalize their music offerings to make handsets more attractive to consumers, "It's all about exclusivity," he said. "We recently had an album called *Time Travel* by one of our biggest acts, Sonu Niigaam, embedded on the Nokia 5130 model as an exclusive deal, before the release of his album on CD. It looks like we have entered the era of the

million-seller once again," he beams. "I'm really keen to do more like this with the mobile. I can sense huge numbers in the offing." He expressed his doubts about the ultimate viability of the subscription model that some think is the next big thing. "Nobody listens to millions of songs; I don't think people will pay to get access to a million songs that they don't listen to."

Mr. Churamani is keen for Indian music to crossover to other cultures in other countries rather than merely be sold in the Indian diaspora. In 2008, Saregama teamed Sonu Niigaam with the City of Birmingham Symphony Orchestra for a series of three concerts in the U.K. They sold out weeks in advance. As the broadcasting rights were licensed to Sony TV, the performances were watched around the world. The overwhelming success of these concerts prompted them to organize a four-concert tour of the U.K. with the same orchestra called "Remembering Nusrat." This too was a sell-out

Given its success in the U.K., Mr. Churamani is eager to extend this collaborative strategy globally. Pointing to the Oscars and Grammy Awards won by A.R. Rahman for best musical score for *Slumdog Millionaire*, he concludes, "we are now finding the right canvas for Bollywood music to go global – and for Indian music in general to appeal to the sensibilities of the Western ear."

MILESTONES IN SOLAR AVIATION

The first night flight by a solar-powered aircraft – a feat unimaginable only a few years ago, and accomplished by the elegant *Solar Impulse* in July this year. A few weeks later, the *Zephyr*, a solar-powered unmanned drone, returned to earth after 14 days in the air. These two historic, recordbreaking feats demonstrate the enormous potential of renewable energy and new technologies. They promise to transform our perception of what is possible.

"All that is impossible remains to be achieved"

Jules Verne

Launched in 2003 by pioneering adventurer Bertrand Piccard and entrepreneur and aviation enthusiast André Borschberg, the ambition of the Solar Impulse project is "to contribute to the world of exploration and innovation, to the cause of renewable energies. To demonstrate the importance of the new technologies in sustainable development and... to place dream and emotion at the heart of scientific adventure."

The inspiration

On March 21, 1999, after 19 days, 21 hours and 47 minutes in the air, Bertrand Piccard and Brian Jones touched down in the Egyptian desert in their hot-air balloon, the *Breitling Orbiter 3*. This, the first, non-stop circumnavigation of the earth in a balloon, was widely hailed as the last great pioneering feat of the 20th century. On landing, Messrs. Piccard and Jones had only 40 kgs left of the 3.7 tons of liquid propane with which they began their adventure (in the Swiss town of Château d'Oex). Frustrated by the constraints of fossil fuel, Mr. Piccard resolved to repeat the experience, but without using fossil fuels or polluting emissions. Thus was born the Solar Impulse project.

The Solar Impulse HB SIA, the first manned aircraft able to fly day and night propelled solely by solar energy, has the wingspan of a large airliner (63.40 meters), and the weight of a midsize car (1,600 kgs). It is covered by some 12,000 solar cells which run four electrical engines and charge 400 kgs of lithium batteries.

The mission of the flight on July 7 and 8 was to "demonstrate the feasibility of a complete daynight-day cycle propelled solely by solar energy."

After six years of intense effort, countless calculations and simulations and 11 test flights, the 70-strong Solar Impulse team completed this "unprecedented" and "revolutionary" aircraft. And on July 8, 2010, at 9 a.m., *Solar Impulse*, with cofounder André Borschberg at the controls, touched down after a flight of 26 hours, 9 minutes and 10 seconds. It was the "longest and highest" flight in the history of solar aviation – a milestone in the field.

On leaving the cockpit, Mr. Borschberg said, "I've been a pilot for 40 years now, but this flight has been the most incredible one of my flying career. Just sitting there and watching the battery-charge level rise and rise thanks to the sun... and then that suspense, not knowing whether we were going to manage to stay up in the air the whole night. And, finally, the joy of seeing the sun rise and feeling the energy beginning to circulate in the solar panels again!" He added, "I have just flown more than 26 hours without using a drop of fuel and without causing any pollution."

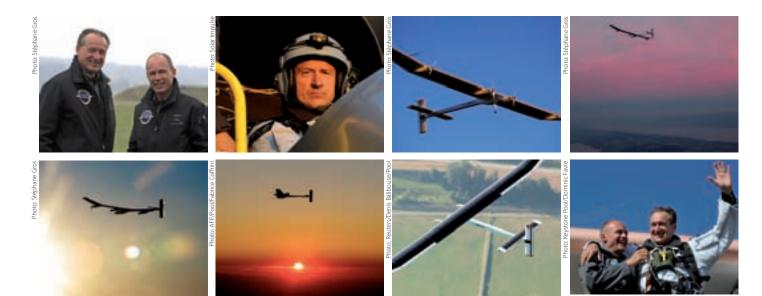
Flight Report

Pilot: André Borschberg, CEO and co-founder Take-off time: 07/07/2010 – 06:51 Landing time: 08/07/2010 – 09:02 Flight duration: 26 hours 9 minutes 10 seconds Maximum speed: 68 knots / 125.9 km/h Average speed: 20.6 knots / 38.2 km/h Maximum altitude: 8,720 m (above sea level)

For Mr. Piccard, the flight "was a crucial step forward" in lending credibility to the potential of renewable energy and clean technologies.

Following Solar Impulse's maiden flight on April 7, 2010, Mr. Piccard noted, "our future depends on our ability to convert rapidly to the use of renewable energies. *Solar Impulse* is intended to demonstrate what can be done already today by using these energies and applying new technologies that can save natural resources."

1 A high-altitude longendurance (HALE) unmanned air system (UAS)



[This feat] "allows us to get closer to perpetual flight without using a drop of fuel!"

Bertrand Piccard

When WIPO Magazine spoke to Mr. Borschberg after the July flight, he noted that it was "a major step forward. We have an aircraft able to fly day and night, and this opens the opportunity to fly longer distances." He explained that, over the next three years, the Solar Impulse team planned a range of flights of increasing difficulty. The next step would be to complete an international flight (in 2011), then a transatlantic crossing (in 2012) before embarking on a round-the-world trip (in 2013).

The *Solar Impulse* is bursting with the latest in cutting-edge, innovative technologies and new materials – from solar cells, batteries and state-of-the-art communications², to innovative adhesives, high-tech polymer materials and light-weight energy-saving products.

In relation to intellectual property (IP), Mr. Borschberg explained that the project had a dual approach. While the 70-strong team was committed to developing the know-how associated with building a solar-powered aircraft, this type of information did not lend itself to formal IP protection, not least because of the complexity and expense associated with enforcing such rights. The technological challenges associated with building the aircraft, however, had led to the development of technologies that have since been patented. Many of these patents, he explained, were held by the project's 80 official partners, such as Solvay, Omega, and Swisscom. The pro-

ject's extensive network of partners has enabled it to tap into a wide range of expertise and innovative resources. For example, its partnership with Bayer MaterialScience offers access to "innovative material solutions" that reduce energy consumption, just as the expertise of Swiss energy company SIG, helps to "optimize the energy chain and push the storage capacity of the batteries to their maximum." Mr. Borschberg noted that the team itself had developed an invention which it was in the process of patenting.

He underlined the importance of IP for the project, "because it involves the development of a lot of new technologies, many of which have broader applications. For example, the lighter-weight, more efficient batteries we need for the aircraft can be used in cars. Our partners need IP protection to make their research viable," he said. While licensing terms are included in the partnership agreements, Mr. Borschberg noted that the spirit and skills of the project itself lay in "developing innovative solutions" and that it was not commercially oriented.

The project effectively brings partners and suppliers together to come up with solutions to technical challenges. Mr. Borschberg likened the project to "a catalyst, if you like, for stimulating innovation."

The Solar Impulse team is now developing a second prototype, the *HB-SIB*, more suited to long-distance flight. Mr. Borschberg said, "we learned a lot and the aircraft performed better than expected; it was a gift, but we can still do better." This *HB-SIB* will integrate the latest technological developments, as well as an upgraded cockpit suitable for the round-the-world trip

This equipment cannot exceed 5 kgs or 50 watts and must be able to withstand temperature fluctuations between +80°C and -40°C.



planned to take 25 days (5 legs of 5 days each). The cockpit of the first prototype "is really only good for 48 hours. At first we built the cockpit for the plane; now we need to build it for the pilot," Mr. Borschberg noted.

Funding

The Solar Impulse project, with a 10-year budget of US\$100 million, is wholly funded by private companies, the Solar Impulse Foundation and the Project's Supporters Program. Enthusiasts can sign up at www.solarimpulse.com to receive real-time news, adopt a solar cell on the wing, reserve a visit to the Solar Impulse base or place their names on the aircraft's fuselage.

Solar Impulse is on track to achieve what many consider to be an impossibility, namely, "to produce a plane propelled exclusively by solar energy, which will take off under its own power and fly day and night, and achieve a round-the-world flight without fuel or pollution." The July 7/8 flight has redefined the limits of the attainable and opened the doors to a new era of solar energy usage.

A second solar aviation milestone was passed when the *Zephyr*, built by British company QinetiQ and billed as the "first eternal aircraft," broke the endurance flight record for unmanned aerial vehicles (UAV), or drones, setting a new world record for the longest non-stop UAV flight. On July 23, the *Zephyr*, an ultra-light carbon-fiber solar-powered unmanned aircraft, landed successfully after being airborne for 14 days (336 hours and 21 minutes).

The Managing Director of QinetiQ's U.K. Technology Solutions Group, Neville Salkeld, said, "We've now proved that this amazing aircraft is capable of providing a cost-effective, persistent surveillance and communications capability measured in terms of weeks, if not months. Not only is *Zephyr* a gamechanging technology, it is also significantly more cost-effective to manufacture and deploy than traditional aircraft and satellites."

The aircraft weighs a modest 54 kgs, and is powered by paper-thin solar cells that cover the upper surface of its 22.5-meter wingspan.

The Zephyr can fly non-stop over a general area for weeks or months at a time, without the need to refuel.



For QinetiQ, "IP is an important aspect of our business, and we continually file new patents." The company holds three patents in relation to the *Zephyr*, and has used WIPO's Patent Cooperation Treaty (PCT) to file for broad-based protection – e.g. PCT/GB2008/003890. The company also draws on "best available" technology from various suppliers, much of which is patent-protected. For example, that for the solar cells (or thin-film amorphous silicon technology) used to power the device is licensed from United Solar Ovonic LLC (Uni-Solar), which has also filed a number of international patent applications under the PCT.

While defense and security uses are its primary application, the *Zephyr* also has a range of other applications, such as environmental research, monitoring crops and pollution, providing tactical intelligence over disaster zones or forest fires and delivering mobile communications capabilities in remote areas.

These ground-breaking inventions have pushed the limits of what is technologically feasible. In generating new expertise and know-how about aircraft construction and alternative energies, they have opened the way to a new era of aviation, bringing us one step closer to achieving the "impossible" – perpetual flight.

INNOVATION PROMOTION IN BRAZIL

In this article, Mr. Ricardo Camargo Mendes, Partner/Manager, and Mrs. Claudia Mancini, Consultant, both at Brazil's Prospectiva Consultoria in International Business and Public Policies, highlight how Brazil is honing its IP policy to create a more favorable operating environment for business.

Over the last 20 years, emerging economies have generally benefitted from global trends in research and development (R&D) which have helped to boost national development and nurture broader international cooperation. An emphasis on innovation, its promotion and associated intellectual property (IP) aspects are key features of any policy that seeks to effectively promote economic growth and development.

Brazil's wealth of natural and human resources, its highly qualified researchers and the recognition earned by its research institutions over the last decade make it a key player in innovation circles (see, for example, "The Inova Success Story," WIPO Magazine 6/2009). Thanks to the government's commitment to promoting a culture of innovation, Brazil's domestic IP environment is increasingly primed to attract foreign investment and stimulate the full participation of its private sector and research institutions in international knowledge networks.

Brazil hones its IP policy

In 1996, Brazil undertook a major reform of its patent law – for the first time granting patents for pharmaceutical products and processes (see "Brazil harvests the wealth of its rain forests," WIPO Magazine 4/2007). This led to the implementation in 2004 of the Lei da Inovação (Law of Innovation) which facilitates private/public research partnerships and the transfer of innovation from public research institutions to the private sector. Shortly afterwards, Brazil's parliament passed the Lei do Bem (Law of Goods) providing the private sector with fiscal incentives to invest in R&D.

These measures were adopted as part of a government plan to increase the R&D:GDP¹ ratio to 1.5 percent by 2010. The government also aims to increase private sector investment in R&D. Currently, the bulk of Brazil's R&D spending – some 53 percent – comes from the public purse.²

In spite of these significant developments, there is scope to further enhance Brazil's innovation landscape. For example, the gap between the number of scientific articles published by Brazilian researchers and the number of patent applications filed suggests a general lack of awareness about the potential benefits to be derived from filing patents. Further incentives, therefore, may be needed to raise awareness about the patent system and to encourage individual inventors, researchers and companies to patent their inventions. A further fine-tuning of the IP legal framework, an enhancement of the services offered by IP institutions and tax incentives to stimulate R&D would also go a long way in encouraging broader use of the IP system and in generating increased economic benefits from innovation in Brazil.



- 1 GDP gross domestic product
- 2 See www.mct.gov.br/index. php/content/view/9058. html

There are, however, indications that awareness of the IP system and its use are expanding. Statistics from Brazil's National Institute of Industrial Property (INPI) show a net increase in the number of patent applications filed by residents in the last decade. Filings rose from 5,666 applications in 1997 to a peak of 7,502 applications in 2004, tailing off in 2007 to 6,975 applications.



As an emerging economy, Brazil's delivery of ground-breaking technologies to the global marketplace in areas ranging from aviation to medicine and bio-energy, clearly indicates its enormous innovative potential.

Brazil's future lies in its continuing commitment to foster the development of new technologies, especially in those areas in which it has already made a global name for itself. A fully-fledged domestic IP infrastructure that meets internationally-agreed norms will support the further development of Brazil's innovation landscape by protecting and serving the interests of Brazilian companies and by attracting foreign companies to do business there.

Innovation promotion in the region

The IP legislation of developing countries is often the subject of close scrutiny by wealthier nations. This detailed inspection is one of the primary reasons for the polarization of IP debates in international fora. Quite often these debates are split down the middle, with developed countries, the owners of much of the R&D and IP licensed around the world on one side, and developing countries seeking to create domestic environments conducive to innovation and facilitated access to foreign technologies on the other side.

Access to a balanced and effective international IP system is a "must" for emerging countries seeking to:

- attract foreign investment;
- integrate domestic companies into international innovation networks; and
- defend the interests of companies operating increasingly in the international marketplace, as is the case for Brazil.

Recognizing this, on May 31, 2010, Brazil's Minister for Science and Technology, Mr. Sérgio Machado, signed an agreement with the United Nations Economic Commission for Latin America and the Caribbean (ECLAC) to provide training programs for the promotion of new science, technology and innovation policies in Latin America. "The first priority of this plan is to heighten international cooperation in this field, especially in Latin America, and that is precisely what the agreement with ECLAC pursues," Mr. Machado said.

The agreement calls for the creation of country offices to train science, technology and innovation policy professionals. The aim is to strengthen national capacity in these fields and to facilitate dialogue among national and regional policymakers. Specialized training programs focusing on current issues and new challenges in science, technology and innovation are to be organized in cooperation with universities and scientific research institutions. Subsidies for designing and improving national policies in these fields will also be promoted.

Brazil's new Patent Act, its accession to the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) of the World Trade Organization (WTO) and the innovative dynamism of a number of sectors, send a clear signal that the country offers interesting investment opportunities in an increasingly volatile and competitive global marketplace.

Brazil and the PCT

The first international patent application filed by a Brazilian applicant under the Patent Cooperation Treaty (PCT/BR78/000010) was submitted in 1978, the same year in which Brazil became a PCT contracting state. The number of international applications filed under the PCT by Brazilian applicants has risen slowly over the years. This is attributed to the preference among researchers to publish their scientific articles rather than to file patent applications. The number of international applications filed under the PCT by Brazilian residents increased from 16 in 1997 to 29 in 2004, rising to 37 in 2007. INPI statistics indicate that patent filings by non-residents jumped from 8,741 in 1997 to 15,456 in 2007, evidence of the expanding commercial interest in Brazil. All international applications filed under the PCT in 2009 – some 155,500 – designated Brazil as one of the countries in which patent protection was sought.

FIVE STEPS TO PROTECT YOUR TRADEMARKS

in the Web 2.0 World

Liisa M. Thomas and Robert H. Newman, Winston & Strawn LLP, Chicago, Illinois, USA explore the steps that trademark owners can take to protect their marks on increasingly popular social networking websites. This article was adapted with permission from the INTA Bulletin (Vol. 65, No. 10, May 15, 2010; Copyright 2010 the International Trademark Association).

One aspect of Web 2.0 (a term often used to refer to the new features and interactivity available on the Internet today) is the growing popularity of social networking websites like Facebook, YouTube and Twitter, which allow content sharing and online interaction between individuals. These sites can also allow brands to interact directly with consumers presenting an incomparable branding opportunity. But, with every opportunity there are risks, particularly from a trademark protection standpoint. Having consumers communicate about brands is a benefit for companies; but what if consumers engage in unauthorized trademark use? A company is unlikely to be pleased if a Facebook user obtains a Facebook URL that contains its mark (www.facebook/com/ yourmark) or a Twitter account with the company name (www.twitter.com/yourbrand).

The five steps outlined below can help brand owners protect their marks on social networking sites so they can continue to leverage the power of these networks with some peace of mind.

Step one: Don't panic

When confronting new media, companies often presume that trademark problems caused by the media are as new as the media itself. Generally, however, while the media may be new, the problem is not. In the case of a user account on Facebook that appears to be your brand – but really is not – this may be a straightforward issue of trademark infringement. The question then becomes: what tool in a company's arsenal should be used to combat the problem?

It may be possible to bring a trademark infringement lawsuit based on a likelihood of confusion; or simply to send a cease and desist letter. However, most social networking websites offer

tools that brand owners can use to address infringement without going to the considerable time and expense associated with traditional trademark enforcement strategies.

The most important thing, when first confronting a trademark issue created in a social media network, is not to overreact. Just because someone includes your company's name or brand in a Facebook post or Twitter message (known as a "tweet") does not mean you need to send that person a cease and desist letter threatening to bring suit. Even in instances where litigation might be warranted, a company should think twice before suing their biggest fans – news of a lawsuit could bring bad press.

In many cases, threats may not be necessary. For example, when Coca-Cola discovered that a Coca-Cola Facebook page started by two fans had obtained millions of other fans, it contacted the two initiators and agreed to partner in the management of the Coca-Cola Facebook page. The page has since grown to be one of the most popular pages on Facebook.

Step two: Be proactive

Companies not yet familiar with social media networks should take the time to become familiar with these sites, and to consider how they can protect their brands. Since third parties can secure account names or "vanity URLs" through social network websites (www.facebook.com/mybest brand, for example), companies should identify the account names (and even defensive account names) they want to obtain through the sites before they are obtained by third parties.

A company that is set to release a new key product, for example, might consider creating both a



Step three: The proper party to pursue is not necessarily the website

Although the easiest party to identify is typically the social media website host, suing that entity may not be the wisest step. Most social media sites (typically located in the United States), will argue that they are shielded from liability because they were not the party involved in the creation of the infringing content. These arguments have often been upheld in similar circumstances. For example, in *Tiffany Inc. v. eBay*, Inc., the court concluded that although eBay had "generalized" knowledge of counterfeit sales of Tiffany jewelry on its website, such generalized knowledge was insufficient to impose upon eBay an affirmative duty to remedy the problem. 576 F. Supp. 2d 463, 504-06 (S.D.N.Y. 2008).

Trademark owners that have pursued social media providers directly have generally not advanced very far. For example, after he discovered a fake Twitter profile had been created for him, well-known U.S. baseball team manager Tony La Russa sued Twitter for trademark infringement, cybersquatting, invasion of privacy, intentional misrepresentation and misappropriation of name and likeness. La Russa v. Twitter, Inc., Case No. CV-09-2503 (N.D.C.A. June 5, 2009). Mr. La Russa voluntarily dismissed his complaint with prejudice shortly after filing. And when natural gas distributor Oneok, Inc. sued Twitter for trademark infringement for permitting a third party's registration of the user name ONEOK, the case was voluntarily dismissed the next day. Oneok,

Inc. v. Twitter, Inc., Case No. 4:09-cv-00597 (N.D.O.K. Sept. 15, 2009).

Step four: Leverage the tools provided by the site

So, if the party to pursue is not the website, what can a brand owner do, short of filing a John Doe¹ lawsuit, to find out the identity of the user who created the infringement? In some instances, the user may have left clues as to his or her identity in the account's publicly available content. Absent such clues, most major social networking sites have procedures in place to help address allegations of trademark infringement. Using these tools can be considerably more cost-effective than litigation.

Of particular help is the broad definition the sites often use for what constitutes a "trademark violation." A violation can constitute more than just traditional trademark infringement. For example, violations of Twitter's terms include not just trademark infringement, but also impersonation and name squatting (i.e., when one party creates a Twitter account using the name of a third party without the third party's permission). In particular, Twitter's Trademark Policy² states that "Accounts with clear INTENT to mislead others will be immediately suspended; even if there is no trademark infringement, attempts to mislead others are tantamount to business impersonation."

In assessing whether its policy has been violated, Twitter distinguishes between: (1) "News feed accounts," (2) "accounts created to help a community or provide information," and (3) accounts with a "clear intent to mislead people." News feed accounts are required to clearly designate that they are aggregating news about a company. They are not permitted to use the company's logos and "must clearly designate non-affiliation with the entity represented in the news feed to avoid suspension." Accounts created to help a community or provide information "will be contacted with the appropriate steps required to keep the account." If Twitter determines there is a clear intent

- 1 In a John Doe lawsuit, a plaintiff sues an anonymous defendant or "John Doe," and then uses the court's power to try to identify the defendant.
- 2 Twitter Support: Trademark Policy, http://help.twitter.com/e ntries/18367-trademarkpolicy (last accessed March 31, 2010).

to mislead people into believing an account is affiliated with a business that has submitted a complaint, the account will be permanently suspended.

Similarly, Facebook provides an "automated IP infringement form" by which an aggrieved trademark owner can report claims of trademark infringement by a Facebook user. Facebook states that it "will promptly remove or disable access" to the infringing content, "will also notify the user," and "will terminate repeat infringers when appropriate." Facebook also indicates that if a third-party application contains infringing content, the trademark owner should first contact the developer via direct message. If the problem persists the trademark owner should contact Facebook, which, "as a courtesy... will try to assist... when a developer does not comply with its legal obligations relating to content issues."

Step five: Use traditional enforcement strategies

As illustrated above, there can be limits to what a social media site will do in helping a company to protect its brand. There could be some situations where a brand owner will need to take more aggressive and traditional steps to ensure protection on social networking websites. These could include sending a cease and desist letter to the account holder, or even filing suit. To date, few lawsuits have been brought – and fully litigated – in the United States for infringement occurring in a social networking context.

For example, in *TDC International Corp. v. Burnham*, the defendant had been enjoined from using the plaintiff's mark, EZ MOVING/MOVING AND STORAGE, but nevertheless created a Twitter account under the name "EZMovingStorage," Case No. 08-CV-14792, 2010 WL 330374 (E.D. Mich. Jan. 21, 2010). The District Court for the Eastern District of Michigan characterized the defendant's use of this Twitter account name as "most troubling," and ordered the defendant to show cause as to why he should not be held in contempt. On March 3, 2010, the court ordered the defendant to pay the

plaintiff a civil penalty of US\$100 per day until the defendant fully complied with the injunction. When the defendant failed to comply with the injunction and did not attend a Show Cause Hearing, the court issued a warrant for the defendant's arrest on April 6, 2010.

Although traditional enforcement mechanisms can be effective, companies should always carefully evaluate the extent of the threat before filing suit against an individual, especially in the online context. The company has to be careful not to alienate its most committed fans and must weigh the possibility that significant negative publicity could result from taking an aggressive approach against an individual. In some cases, a lawsuit will give a problem the company is hoping to bury far greater publicity. For example, when Barbara Streisand discovered that photographs of her home had been posted online as part of an environmental survey, she sued the owner of the website for invasion of privacy. Streisand v. Adelman, Case No. SC 077257 (Cal. Super. Ct. Dec. 31, 2003). Prior to her filing the lawsuit, the website had received very few hits, but the publicity surrounding the complaint resulted in more than a million visitors to the website. See Andy Greenberg, The Streisand Effect, FORBES, May 11, 2007, available at www.forbes.com/2007/05/10/streisand-digg-webtech-cx_ag_0511streisand.html.

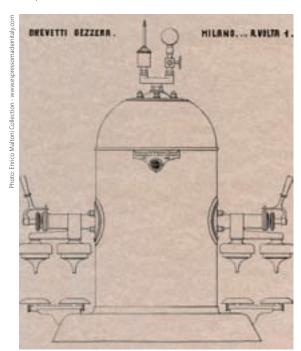
Conclusion

Companies that find themselves facing potential trademark infringements in the new online world of social media networks — or that wish to take proactive steps to avoid them before they occur — would be well served to familiarize themselves with the brand protection tools afforded by the social networking sites. Other proactive steps include obtaining branded accounts before an infringer does, and keeping in mind that traditional types of enforcement (such as trademark infringement litigation) may also be available if you discover that a third party has infringed your mark on a social networking site.

ANYONE FOR COFFEE?

The story behind the coffee capsule

The invention of the coffee capsule has revolutionized coffee drinking, fuelling the increasing popularity of one of the most distinctive beverages available – the small but strong black coffee known as the espresso. Coffee is brewed in many ways, but the espresso is fast becoming the connoisseur's cup of choice. An espresso coffee is brewed under great pressure by forcing hot water through finely ground beans in less than 25 seconds. The result is a concentrated shot of coffee crowned with its hallmark, delicate, chocolatebrown froth known as a crema. In June 2010, Eric Favre, a prolific and pioneering inventor in the field of portioned coffee, shared his insights and experiences as an inventor and entrepreneur with participants at a seminar organized in the context of WIPO's first Open Day. This article draws on his comments to trace the development of the technology that has transformed the coffee-drinking experience for millions.



The origins

Espresso originated in Italy – it means "fast" in Italian – in the early 1900s when Luigi Bezzera, frustrated at how long it took to make his morning cup, added steam pressure to his coffee machine. In doing so, he not only accelerated the brewing process but found that he obtained a

stronger, more robust cup of coffee. Although technically gifted, Mr. Bezzera enjoyed little success in marketing his product. It was Desidero Pavoni, an Italian businessman, who, having acquired the patent rights to Mr. Bezzera's machine in 1905, successfully introduced espresso to the Italian market and changed the way we drink coffee.

Evolving technology

The technology for brewing the perfect espresso has been constantly improved and fine-tuned over the years. In 1938, Mr. Cremonesi's development of a coffee machine with a piston pump eliminated the burnt flavor associated with using steam or boiling water. Mr. Achille Gaggia's spring-lever piston pump subsequently made it possible to apply pressure to the coffee independently of the boiler – earlier machines forced water through coffee using boiler pressure. In 1961, the company, Faema, created a machine with an electric pump to force the water through the coffee. This marked the beginning of the pump-driven machines from which modern espresso machines derived.

"When you are an inventor, you have to be an entrepreneur."

The birth of an invention

The son of an agricultural inventor, Mr. Eric Favre, was counseled early in his engineering career about the importance of inventing something that could sell. With this in mind, in 1975, he began his career in the packaging department of the Swiss headquarters of Nestlé. This enabled him to be in constant touch not only with the research and development (R&D) side of the company's work but also with sales, marketing and production. In the mid-seventies, instant coffee was all the rage, but Mr. Favre's coffee adventure was sparked by an ambition to make it possible for anyone to prepare and savor the best Italian espresso in the comfort of their home.

Eureka!

Together, he and his Italian wife scoured Italy in search of the perfect espresso, which they felt they had found in Rome at the Café Sant'Eustachio where local Italians lined up to sample a cup of the barista, Mr. Eugenio's best. Not only was his espresso a cut above those they had sampled across Italy, its distinction also lay in the way it was prepared. "Mr. Eugenio still used the old classic four-piston coffee machines," he said, "to prepare a coffee, he didn't pull the piston down once like everybody else; he pumped it three or four times." By doing so, Mr. Eugenio was in fact aerating the coffee; this was the key to Mr. Favre's invention. "Mr. Eugenio helped me to understand that for a good espresso coffee you need to introduce a maximum amount of air into the water before it comes into contact with the coffee. Air is 20 percent oxygen. This oxidizes the aromas or the essential oils and makes it possible to extract them more rapidly," he explained. "Espresso is made of a mix of air, water and coffee oils. It is very simple, but nobody had thought about it before. In fact, I didn't invent a capsule; I invented a formula, and that is much stronger," he said.

Following his "eureka" moment at home in Switzerland, Mr. Favre set about testing his idea. He understood almost instantaneously that "filtered coffee is to water what espresso coffee is to fizzy water." Espresso coffee is more densely aromatic and flavorsome because "the little air bubbles contained in the liquid burst on your palate and wake up your taste buds," Mr. Favre explained. While the concept was clear to him, one of the biggest challenges that inventors face, Mr. Favre noted, is communicating their vision to others: "the problem is that when you have understood everything and you know what your idea can become, nobody really understands what you are talking about because it is something new and there is no language to describe it."

Mr. Favre set about proving his concept and began work on creating an "extraction cell in which all the flavors are concentrated." Drawing on his engineering knowledge, he decided on a half sphere which enabled him to incorporate a filter

and a membrane at the base. He soon came up with a capsule that initially resembled a bowler hat and later evolved into its present form.

Having played a key role in establishing and commercializing the original Nespresso capsule, Mr. Favre established his own company, Swiss-based Monodor S.A. in 1991. Since obtaining a patent on his original capsule in 1976, over 30 years ago, Mr. Favre, has continued to innovate and to perfect his invention. Mr. Favre and Monodor hold a number of patents over their technology and have used WIPO's Patent Cooperation Treaty (PCT) as a means to file for international protection on a number of occasions.

The Monodor concept is a refinement of his earlier invention. His original capsule, commercialized up to 1994, weighed 3 grams; but the filter alone weighed 2 grams and was made largely of aluminum. As the filter was an integral part of the packaging, tons of aluminum were being thrown away. For Mr. Favre, in today's eco-conscious world, this "was an unthinkable loss of energy."



Ponte Vecchio à Montecchio, Brescia, Italia

Inspired by the architecture of a 2,000-year-old bridge in Italy, he developed a new capsule that creates a filter as it collapses under the pressure (some 150 kgs) that builds up during the extraction process. The capsule, or more precisely the extraction method used in the new capsule, eliminates the need for a filter inside the capsule. With this method (see PCT application number PCT/CH91/000222) the machine pierces the top



of the capsule, injects pressurized water causing the coffee grains contained in the capsule to swell to five times their volume. This creates pressure inside the capsule which builds until the membrane forming the bottom of the capsule is deformed and pushed against spikes located at the bottom the coffee machine where the capsule is placed. The liquid flows through this filter into the cup. In this way, "you get the totality of aromas, especially if the water is well aired during the infusion process," Mr Favre explained.

Monodor's capsule uses minimal packaging compared to many other capsules. It is made from seven different layers of polypropylene. The casing represents just 12 percent of the capsule – the rest is coffee.

The enormous commercial potential of the coffee capsule means Mr. Favre and his company, Monodor S.A., have to be vigilant in defending their patent rights. "It seems very simple, but it is a formula that we needed to patent," he said. "We need to protect it with great care... If we didn't have this protection there would be hundreds of copies," he added.

Monodor, a family-run business, is competing successfully in the market by working with some 400 experts specializing in each stage of the production process. "This has allowed us to achieve results comparable to big, commercial research laboratories... very quickly, and that is why we... have the possibility to expand," Mr. Favre said.

To date, Monodor has produced more than 500 million capsules under license. "Today, we are evolving. Monodor is (becoming a sort of Tetrapak²) giving other large groups the possibility to sell our product under various forms," he said. There is growing demand for these capsules in bars, restaurants and other high consumption locations, but this means thousands of machines need to be produced quickly. "That is why we have more and more large groups behind us," Mr. Favre explained. In 2000, Monodor – registered as a trademark under WIPO's Madrid system for the International Registration of Marks - signed a licensing agreement with Lavazza allowing them to manufacture, sell and distribute the Monodor concept internationally under the Lavazza Blue laPhoto: © Sockich hotocom / Adrian Baras

bel. In 2004, the company signed an agreement with Swiss company Migros allowing them to manufacture, sell and distribute the Monodor concept in Switzerland under the Delizio label.

With a largely untapped market – coffee capsules currently represent around one percent of the multibillion dollar coffee market and this is expected to rise to 20 percent over the next decade – the future looks bright for Monodor. Mr. Favre's ingenious invention has brought the art of espresso-making within the reach of millions of consumers. Where, once, a good espresso was a rarity, today, coffee drinkers can enjoy the pungent aromas and rich flavors of the world's coffees easily and conveniently.

Driven by his passion to invent, Mr. Favre continues to expand the application of his revolutionary concept with the launch of Tpresso³ in China (Beijing and Shanghai) in October 2010. This unique process of brewing tea involves a hermetically sealed capsule containing finely clipped tea leaves and is said to be very effective in retaining tea's subtle aromas and flavors.

The company's driving goal is to constantly innovate and research new and improved processes. It continues to search for new ways of optimizing the high-pressure extraction of aromas from food products and is focusing its research efforts on a range of areas including coffee (ristretto, espresso, cappuccino, etc.), teas and infusions (black, green, mint teas, etc.), milk products (chocolate and milk, etc.), culinary products (broths, soups, sauces, etc.) and baby food.

2 A global leader in food processing and packaging solutions

Tpresso is registered as a trademark under the Madrid system for the International Registration of Marks.

UNCOVERING A THOUSAND YEARS OF SCIENCE AND TECHNOLOGY

A colorful, fascinating and insightful exhibition – "1001 Inventions: Discover the Muslim Heritage in our World" – which ran in London's Science Museum from January to June 2010, has recently opened in Istanbul, Turkey. This unique overview of the dynamism of Muslim civilization, its ingenuity and diverse scientific and technological achievements, is set to visit 30

1 entions ®

JAMEEL FOUNDATION

major cities across five continents in the next four years.

The exhibition traces the "forgotten story of a thousand years of science in the

Muslim world from the 7th century onwards." It reveals some of the extraordinary social, scientific and technical achievements credited to the Muslim world and shows how many modern inventions in fields as wide-ranging as engineering, medicine and design can trace their roots back to Muslim civilization.

Shedding new light on a relatively little known period of history, the exhibition demonstrates how "medieval Muslims were trailblazers in fields as diverse as medicine and mechanics, cartography and chemistry, education and engineering, architecture and astronomy."

The exhibition features over 60 interactive exhibits and displays that showcase impressive feats of engineering. Electronic games and multimedia platforms bring to life a "Golden Age of Discovery" that had a vast but hidden and, until recently, unrecognized influence on the modern world.

Seven zones, each representing a different sphere of scientific and cultural achievement, are featured, including:

- home (the 1,000-year-old inventions that continue to influence everyday life);
- market (how influential ideas spread through trade and travel);
- school (pioneering developments in education);
- hospital (how ancient approaches to health care continue to influence modern-day medical practice);
- town (the influence of eastern thought on contemporary architecture);
- world (pioneering explorers who tested the limits of knowledge); and
- universe (how medieval astronomers influenced our understanding of the cosmos).

The "1001 Inventions" exhibition is an initiative of the British-based FSTC (see box), in association with the lameel Foundation

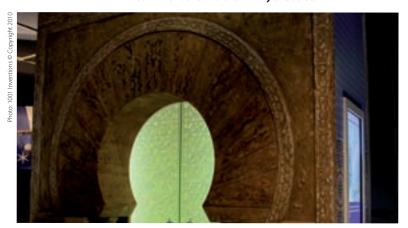


Artistic impressions of Abbas Ibn Firnas and his successful 9th century flight.

One of the key aims of the exhibition is to highlight how the people of many different faiths and backgrounds working within Muslim civilization, which stretched from southern Spain to China, made exceptional advances and greatly improved the world's understanding of science, technology and engineering. It underscores how ideas from many different cultures and societies have contributed to and influ-



Sir Ben Kingsley as Al-Jazari in the short film "1001 Inventions and the Library of Secrets"



The wide variety of the Muslim civilization's architecture – its designs of domes, vaults, arches and towers – was adapted in cultures all over the world.

enced contemporary science and technology and the way we live today.

The exhibition, and its extensively illustrated 370-page book entitled 1001 Inventions: Muslim Heritage in our World highlight the diverse ways in which Muslim scholars have influenced our lives – from the discovery of coffee, to the invention of perfume, not to mention carpets and shampoo. Professor Al-Hassani, Chief Editor of the book, noted, "if you ask the average person where their spectacles or camera or fountain pen come from, few people will say Muslims. This book takes you on a journey through a thousand years of Muslim contributions in medicine, mechanics, cartography, chemistry, education, engineering, architecture and astronomy."

Displays reveal the mechanical genius of inventors such as Al-Jazari (1136–1206), the

most outstanding mechanical engineer of his time. Al- Jazari is credited as a pioneer of some 50 mechanical devices, including water clocks, the use of a crankshaft in machines, a double-action pump that could raise water to a height of 12 meters and lamination of timber to reduce warping. These and many other inventions are described in scrupulous detail in his Book of Knowledge of Ingenious Mechanical Devices, which enabled future craftsmen to reproduce them.

A reconstruction of Al-Jazari's fabled elephant clock² – a weight-powered water clock³ in the form of an elephant – is featured. Not only is this extraordinary timepiece remarkable for its mechanical innovations, it is also seen as an early example of technological multiculturalism – the elephant representing the cultures of India and Africa, the dragon that of China, the phoenix that of ancient Egypt, the water technology that of ancient Greece, and the turban that of Islamic culture.

About the FSTC

The FSTC, an educational body with an extensive network of experts and researchers from wideranging fields, was formed in 1999 to raise global awareness about the importance of Muslim heritage and its contributions to contemporary life. It also seeks to promote better understanding between Muslims and non-Muslims through education, and to fill the void of knowledge about the history of Islamic science and civilization.

See www.MuslimHeritage.com.

Other featured inventors include Al-Zahrawi, the pioneering 10th century surgeon, scholar and physician who developed many of the medical instruments still in use today, including forceps, scalpels and catgut sutures to stitch internal incisions. Al-Zahrawi's illustrated 1,500-page encyclopedia of medicine and surgery greatly influenced progress in these fields in Europe, following its translation into Latin in the late 12th century and, subsequently, into other European languages. The book contains the earliest pictures of surgical instruments in

- 2 See wwwfull.com/blog/ technology-videos/ 7547/the-elephantclock-by-al-jazari.html
- A water clock is a timepiece in which time is measured by the regulated flow of liquid, typically water, into or out of a vessel where the amount is then measured.

history. They are strikingly similar to many of those used in hospitals today.

Visitors also learn that the 13th century Syrian doctor, Ibn al-Nafis, was the first to explicitly identify the pulmonary-blood circulatory system; that vaccinations were widely used at that time; and that the 900-page *Book of Water* is thought to be the first alphabetical classification of medical terms.

In the field of education, the exhibition showcases the first university, Al Qarawiyin, set up in 841 by Fatima Al-Fihri who used her inheritance to finance

it. The university still exists today. The exhibition also points to the many mathematical breakthroughs, from algebra to Arabic numerals and number theory, for which Muslim scholars were responsible. These in turn influenced architectural design and town planning as well as the decorative arts around the world. The feats of pioneering adventurers, such as Abbas Ibn Firnas who dared to dream of flying are revealed, as are the achievements of Al-Astrulabi whose astrolabes were the GPS of the day.

The exhibition also features an award-winning short film entitled, 1001 Inventions and the



A 12th century world map by Islamic geographer, cartographer and Egyptologist Muhammad al-Idrisi

Library of Secrets starring Oscarwinning actor Sir Ben Kingsley. In the movie, a group of schoolchildren visit an old library after their t e a c h e r challenges



Scale model of Al-Jazari's 13th century Elephant Clock

them to research the era known as the "Dark Ages" and to find its relevance for contemporary life. At first reluctant, the imagination of the students is soon captured when they meet a rather enigmatic librarian (Kingsley) who takes them back in time to reveal a thousand years of scientific and cultural eminence in the Muslim world from the 7th century onwards.

The 13-minute film – produced by the Foundation for Science, Technology and Civilisation (FSTC – see box) and the Edge Picture Company, and sponsored by the Jameel Foundation – has won multiple prestigious in-

dustry awards in Los Angeles, New York, Hamburg and London.

Did you know?

- ...that the fountain pen was developed in the 10th century in Egypt by order of Caliph Al-Mu'izz?
- ...that early Muslim perfume-makers extracted fragrances from plants and flowers using distillation?
- ...that the idea of a meal with three courses starter, main and dessert spread across Europe from Muslim Spain in the 9th century?

This engaging exhibition opens a door onto a little-known golden age of innovation and creativity, an age in which some of the most important discoveries and inventions known to humanity took place. As Professor Salim Al-Hassani noted, "it is a journey from the past, but it is for building and designing a better future."

MECHANISMS FOR PROMOTING GREEN INVESTMENT

Faced with the complex challenges of climate change, technological innovation offers the best hope of delivering solutions that are good for the planet, good for development and good for business. While the importance of innovation is widely recognized, how to actually stimulate it is less well understood. This article focuses on the role of investment in fostering innovation – from research and development (R&D) through to implementation and diffusion. Creating a favorable investment environment is critical in determining the pace at which technologies that support a sustainable planet become available in the marketplace.

Institutional funding

Institutional funding by the Global Environment Facility GEF¹ and Multilateral Development Banks (MDBs), and their finance arms, is playing a key role in cultivating demand for clean technologies, particularly in developing and least developed countries where the impacts of climate change are often most acute. They offer the governments of many countries affordable access to loans and grants for clean technology projects.

The GEF – a partnership for mainstreaming global environmental concerns into national sustainable development strategies – supports projects related to a range of environmental issues.² GEF has so far allocated US\$8.8 billion and some US\$ 38.7 billion in co-financing arrangements, to 2,400 climate change-related projects in over 165 countries.

Rather than funding R&D directly, MDBs focus on underwriting projects that use clean technology to mitigate or adapt to climate change in developing countries. In creating and building demand for clean technologies in this way, they are helping to make investment in R&D and innovation in these

technologies more attractive and generating significant spillover effects for home-grown innovation.

This positive impact has prompted MDBs to scale-up their lending in recent years. In 2005, annual bank lending rose to a total of US\$66.162 billion, with an average lending rate over the past 10 years of over US\$40 billion per year. The World Bank alone – through the International Bank of Reconstruction and Development³ (IBRD) and the International Development Association – increased funding for clean energy by 20 percent each year from 2004 to 2009.

While creating demand for clean technologies is crucial, risk and return are key factors in determining investment decisions.

On the face of it, investing in the development of climate change-related technologies is economically sound, because the social benefits significantly outweigh the costs of developing and implementing these technologies. Advantages could be curbed climate change impacts, modernized infrastructure, lower energy costs, improved manufacturing efficiencies and new jobs.

However, from the private investor's perspective investing in such high-risk ventures – particularly in an under-regulated market – is not necessarily such an attractive option. Commercial survival hinges on generating a return on investment and increasing profit margins to allow for further investment. This underlines the need for an effective regulatory environment to encourage investment in environmentally-supportive technologies. Consider, for example, the positive impact of stronger pollution controls on the development of cleaner, more fuel-efficient engines.

- 1 GEF, an independent financial organization active since 1991, provides funds to developing countries and countries with emerging markets for projects relating to, among others, climate change and biodiversity.

 www.thegef.org/gef/whatisgef
- 2 These include biodiversity, climate change, international waters, land degradation, the ozone layer, and persistent organic pollutants.
- 3 To qualify for an IBRD loan, a country's per capita income must be between U\$875 and U\$\$10,276.

In certain markets, such as the U.S. and China, private companies are beginning to recognize the commercial potential of investing in "green" technologies. In the first half of 2010, U.S. corporations invested US\$5.1 billion in green technology companies – a 325 percent increase over investment levels for the same period in 2009. General Electric, for example, plans to invest an additional US\$10 billion in green technology projects over the next five years. Investors in the expanding Chinese green technology market have also increased private investment, sinking some US\$1.73 billion into initial public offerings (IPOs) of green technology-focused companies in the second quarter of 2010 alone.

A further complication is that such investments often involve long-term financial commitments and can carry an even higher risk in lower income regions where purchasing power is limited, climate change impacts are greater and investment is most needed.

While market demand usually enables investors to anticipate the likely return on an investment, this is much harder to predict for long-term R&D initiatives, such as those in the area of clean technologies – even where investment results in a technology breakthrough.

Establishing a framework in which private companies can be confident they will receive a healthy return on their investment, would enable the resources and ingenuity of the private sector – historically, the major driver of innovative activity – to be more fully harnessed. The intellectual property (IP) system is a proven mechanism for doing this with the added benefit of enabling the widespread dissemination of the technologies developed.



Patents, for example, enable companies to obtain a return on R&D investment when new products are commercialized. Licensing agreements underpinned by IP rights also create opportunities for expanded business prospects and are at the core of many partnerships. The patent system also offers free access to a wealth of technological information on which to build for future innovation. Patent landscaping can be used to identify new business opportunities and can support national policy formulation by shedding light on emerging trends and clusters of related technolo-

gies. [See *WIPO Magazine* 01/2008 – Climate Change – The Technology Challenge].

Some commentators believe the IP system blocks access to mitigation and adaptation technologies because those countries with the greatest need simply cannot afford to pay market prices. However, denying the opportunity to use IP as a strategic business and policy tool would, in reality, diminish returns – technologically, economically and socially.

IP rights and the incentives they offer are essential elements of the investment equation. A balanced IP system that offers effective protection can help to attenuate the risks associated with long-term and costly R&D projects. It offers an assurance of a return on commercially viable investments, thereby strengthening the economic arguments for investors (both public and private). In facilitating the diffusion of technologies, it also serves the broader public interest – creating a wealth of economic opportunities and fulfilling an important social need.

Direct investments underwritten by MDBs have created increased demand for energy efficient technologies in developing and low-income countries and have made investment in clean technology R&D more attractive. National governments can play a pivotal role in ensuring public policy goals are met by establishing appropriate legal and regulatory frameworks. The private sector is an additional key player in sustaining investment in clean technologies and has enormous potential to efficiently drive innovation.

Climate change is a global problem requiring the commitment and ingenuity of humanity as a whole. While MDBs have been successful in catalyzing demand for "green" technologies, much more needs to be done if we are to successfully move to a low carbon, sustainable economy. IP rights and their protection will undoubtedly play a major role in enabling this transition.

The United Nations Framework Convention on Climate Change (UNFCCC) supports the creation of an attractive investment environment through various practical measures. These include technology needs assessments (TNAs) which:

- offer governments valuable insights in prioritizing climate-related technology projects;
- provide R&D investors with valuable market information;
- help strengthen the technical know-how and skills within countries to ensure efficient implementation of these technologies; and
- support the creation of a regulatory framework that encourages investment in long-term climate-neutral development projects. The UNFCCC's emerging Technology Centers & Networks approach promises to spur further developments in these areas.

PROFILING IP

WIPO launches new *IP Advantage* database

"Innovate or die" – such is the commercial wisdom of today's knowledge-based economy. Today, business success hinges on the delivery of innovative, attractive, high-value products and services that respond to a rapidly evolving consumer market. We hear a lot about how intellectual property (IP) in the form of patents, designs, marks and copyright and related rights can support business development, but for many, the question of how this works in practice remains a mystery. In an endeavor to shed light on this process, WIPO has recently launched a new database called *IP Advantage* which regroups the IP experiences of inventors, creators, entrepreneurs, and researchers.

This new database offers a kaleidoscopic view of the many different ways in which IP rights can be used to promote innovation in both developed and developing countries. The case studies featured in the database demonstrate IP in practice and offer many useful insights about how IP works in the real world.

The *IP Advantage* database is a gateway to a fully searchable and expanding range of case study materials. Based on a proposal from the Japanese government, the database showcases and streamlines the wealth of online case study material available on WIPO's website.

The case studies are presented in a standard format reflecting the various steps of the innovation cycle: innovation – IP protection – exploitation – further innovation. They feature a variety of actors from across the globe and cover a range of topics, including branding, financing, partnerships and research and development (R&D). Various case studies also highlight the different ways in which the IP system can support the development of solutions to the challenges of climate change, food security and public health.

The free-of-charge *IP Advantage* database makes searching easy. It offers an intuitive interface that allows for searches to be made according to type of IP (patents, trademarks, copyright, etc.) and/or the focus of the case study (branding, IP management, R&D, etc.). An advanced search interface allows users to fine-tune results using more specific search terms relating to, for example, the object of protection (inventions, commercial names, artistic

works), global challenges, organization type, industry and/or country.



IP Advantage opens the door on a world of innovation and creativity. Users can discover:

- how Uruguayan college student Roni Lieberman successfully commercialized his software and came to dominate the market for management and accountancy applications;
- why Ethiopian coffee growers fought to register the Harrar, Sidamo and Yirgacheffe names as trademarks:
- how design protection helped Philippine Nature's Legacy, Inc. combat infringement and become a market leader in high-end environmentally-friendly home furnishings;
- how focused R&D and patent protection are contributing to expanding international use of an attractive and innovative building material developed by Hungary's Litracon.

The database is a work in progress. While the search interface and case studies are currently available in English only, French and Spanish versions are in the planning. WIPO's Communications Division and the WIPO Japan Office, with the financial support of the Japan Funds-in-Trust for Industrial Property, will continue to regularly update the database with new case studies.

The database currently features over 100 case studies from across the globe. By continuing to update and expand the collection, the database will evolve into a fully comprehensive reference for IP in action.

IP Advantage is available at: www.wipo.int/ipadvantage Feedback and suggestions for new case studies may be sent to: outreach@wipo.int.

International Copyright Forum - "Music: Sounding Out the Future"

Beijing, China - November 18 and 19, 2010

This high-level event will showcase China's booming music market, bringing together a broad range of international stakeholders – government officials, content owners and industry leaders – to review and analyze the latest regulatory, market and technological trends in the global music industry.

The Forum will address key issues facing the industry, including:

- the future of digital music content and the challenges confronting creators and consumers in distributing and accessing it;
- new business models, value chains and emerging licensing and enforcement models;
- how to harness the commercial value of music in the digital age and how to remunerate content owners;
- the role of public authorities in an ever-changing technological landscape.

A series of events will take place on the sidelines of the Forum in the context of the International Copyright Expo. These include:

- the "Global Original Concert" featuring Chinese stars and international artists;
- the "Golden Award Ceremony of Creativity";
- the "Professional Industry Exhibition."

WIPO is co-organizing this event with the National Copyright Administration of China (NCAC), with the support of the Beijing Municipal Government, the Ministry of Industry and Information Technology, the State Administration of Radio, Film and Television (SARFT) and the General Administration of Press and Publication (GAPP).

Further information and a detailed program are available at: www.wipo.int/meetings/en/2010/beijing_forum/index.html

NEW **PRODUCTS**



Patent Cooperation Treaty (PCT) and Regulations under the PCT (as in force from July 1, 2010) German No. 274G 20 Swiss francs (plus shipping and handling)



Master of Laws in Intellectual Property, Post-Graduate Specialization Course on Intellectual Property (Turin, Italy) Collection of Research Papers, 2009

English No. 797E/09 Free of charge



Guide to the Copyright and Related Rights Treaties Administered by WIPO and Glossary of Copyright and Related Rights Terms Chinese No. 891C 55 Swiss francs (plus shipping and handling)



Le Système international des brevets - Revue annuelle 2009 French No. 901F Free of charge



Exchanging Value - Negotiating Technology Licensing Agreements Chinese No. 906C 30 Swiss francs (plus shipping and handling)



Hague system for the International Registration of Industrial Designs Report for 2009

English No. 930E French No. 930F Spanish No. 930S Free of charge



Madrid system for the International Registration of Marks - Report for 2009 English No. 940E

French No. 940F Spanish No. 940S Free of charge

Purchase publications online: www.wipo.int/ebookshop Download free information products: www.wipo.int/publications/

The above publications may also be obtained from WIPO's Outreach Services Section (see below).

Orders should indicate:

- (a) the number or letter code of the publication desired, the language, the number of copies
- (b) the full address for mailing
- (c) the mail mode (surface or air).

For more information contact WIPO at www.wipo.int

Address:

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

Telephone:

+4122 338 91 11

+4122 733 54 28

The WIPO Magazine is published bimonthly 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 by external contributors do not necessarily reflect those of WIPO.

The WIPO Magazine is distributed free of charge.

If you are interested in receiving copies, contact:

Outreach Services Section WIPO 34, chemin des Colombettes P.O. Box 18 CH-1211 Geneva 20 Switzerland Fax: +41 22 740 18 12

e-mail: publications.mail@wipo.int

For comments or questions, contact: The Editor, WIPO Magazine WipoMagazine@wipo.int

Copyright ©2010 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 Communications Division, World Intellectual Property Organization, P.O. Box 18, CH-1211 Geneva 20, Switzerland.

WIPO Publication No. 121(E) ISSN 1020-7074 (print) ISSN 1564-7854 (online)