

Geneva, January/February 2006

ON CREATIVITY AND COPYRIGHT Amadou and Mariam



PCT PORTRAITS The Robot Creators



COUNTRY FOCUS Celebrating IP in Jamaica and Romania



World Intellectual Property – *It Starts with an Idea* Day

April 26, 2006 marks the sixth World Intellectual Property Day, an occasion to reflect on the role played by intellectual property in stimulating and safeguarding the forces of innovation and creativity.

Our theme this year is the celebration of ideas.

Ideas, inspiration, ingenuity – these are the seeds from which innovations and creations grow. From the eureka moments of great scientific advances, to the simplest ideas for problem-solving devices. From thoughts which inspire the latest musical hits, to the genius which produces literary masterpieces. Ideas to save lives, ideas to make wealth, ideas to uplift or entertain. It is man's inexhaustible capacity for new ideas which provides the raw materials on which technological, economic and cultural development depend.

WIPO will join IP offices, NGOs, schools, libraries and businesses around the world in celebrating the day with a range of activities, to be reported in WIPO Magazine and on the WIPO website.

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AUTHORS, COMPOSERS, ARTISTS

Amadou and Mariam

"The fizziest afro-pop blues ever bottled" is how The Observer described *Dimanche à Bamako* (Sunday in Bamako), the latest album by Malian duo Amadou and Mariam. Released in France in November 2004, the CD went platinum, shot to number two in the charts – the highest position ever achieved in the European music charts by an African act – and won the prestigious *Victoire de la Musique*. Transcending musical genres, *Dimanche à Bamako* has made waves in rock, pop, rhythm and blues and world music charts, and was recently nominated for a Grammy Award in the United States.

Drawn together through the shared passion for music, the couple first met at the Malian Institute for Young Blind People in 1976. Mariam Doumbia, blind from birth, had started out singing traditional music at weddings and local festivals. Amadou Bagayokou, a singer/composer who had lost his sight at 15, played guitar with well known Malian musicians, *Les Ambassadeurs*. The couple married and began performing together in

1980. While long popular in Africa and among aficionados of world music, it was not until 1998 that the release of *Je t'aime mon amour, ma chérie* (I love you, my dearest, my love) was to propel them to international stardom.

The path to success was not smooth, and the story of Amadou and Mariam is as much a testimony to their determination as it is to their undisputed artistic talent. Vocal proponents of copyright as the means for artists to earn a decent living, Amadou and Mariam struggled for years as rampant piracy creamed off the income from their music sales. While fame now enables them to support their family in comfort, the couple still live modestly and maintain an exhausting work schedule.

WIPO Magazine recently interviewed Amadou between concerts in Paris. In the following extracts Amadou reflects on his personal experience of creativity and copyright. A short film of the interview will shortly be available on WIPO's website.

On inspiration and creativity

"Inspiration comes from different sources. It comes from something inside you, your personal history, and, for me, the history of my country, which has marked my own life story. A lot of other creative artists – especially those I listened to when I was young like Jimi Hendrix, John Lee Hooker, Ray Charles, Stevie



Photos: Patricia Bailler

Wonder – have also influenced my work. French music has especially influenced my lyrics.

You can't program creativity, it comes instinctively – a sudden idea. But there is nothing magical about it, everyone is gifted in different areas.

Mariam and myself sing to be together, to affirm our identities. Music is a passion. It is our life. We sing of freedom, love, peace and solidarity among people, and mostly of justice."

On the path to success

"We started performing a long time ago and success came bit by bit. At first, it was just playing with some friends, then it became a neighborhood group, then a professional orchestra, then building a career with Mariam in Côte d'Ivoire, then West Africa, then Europe. It took a long, long time. But we never gave up hope. It took courage to keep moving forward, to keep looking, to keep working.

It's hard to get good recording facilities in Africa, and that makes it difficult for us as song-writers to get established in the music market-



“If you really like an artist and want him to go on making the music you enjoy, then why don’t you buy his CDs so that he can make a living and produce more music?”

place. That and, above all, the problem of distribution.

People like the fact that our music and our message are universal, and the simplicity of the lyrics. Our music is *Bambara** inspired from *n’goni* [traditional lute] music, and it is influenced by rock and blues. This mix is the essence of our success. We met different people, we played and sang with Colombians, Syrians, who did different things to our music and who all helped to make it original.”

On copyright

It is logical that copyright follows creativity to defend the creator’s rights. Copyright is vital for us. We can’t survive just on what we are paid for giving concerts. We also need our rights to be protected. When we compose pieces we hope in return to benefit from the fruit of that work. Rights are what enable creators to earn a living and to carry on producing. Copyright is the lifeblood of the cultural industries.

I have some involvement in the management of copyright. I set up the National Association of Malian Artists and am president of the Syndicate of Professional Musicians, both of which work with the Malian Copyright Office.”

On piracy

“People who listen to music without paying to buy CDs put a brake on production and creativity. The music industry works with artists, creators – who have their families to support like anyone else – who want to live from the financial fruits of their labors. And when that’s not possible, it is a problem.

In Mali, where there are many creators and a lot of musical genres, I think if the authorities understood that music is something that can be protected, that there is much to gain and that many people could live from it, they would take measures to curb piracy. The authorities, artists, everyone involved need to work together to find a solution.



To young people who copy and download music illegally, we say that they are killing the music, killing the creators, killing a part of the country’s economy. We tell them: “If you really like an artist and want him to go on making the music you enjoy, then why don’t you buy his CDs so that he can make a living and produce more music?” We want them to understand that artists live from their work just like they do, it is symbiotic system of survival.”

On being ambassadors of culture

“What I myself and Mariam would most wish for, apart from plenty of success, is that Malian music should become known as universal music – not just folk music, but music that everybody everywhere can appreciate, can listen to and dance to.

Through our status as musicians, creators, we defend a culture: We are Ambassadors of Malian and African culture.”

Acknowledgement: WIPO Magazine wishes to thank the Malian Copyright Office for their assistance in putting us in contact with Amadou and Mariam.

* Bambara is the name given to the people and language of the upper Niger River valley. Bambara music bears a noticeable resemblance to American blues.

JOINING FORCES TO COMBAT COUNTERFEITING



Nigeria's NAFDAC has publicly burnt some US\$80 million worth of counterfeit drugs in four years, following over a thousand raids on distribution outlets.

Photos: NAFDAC

that by early 2001 some 80 percent of the drugs distributed in major pharmacies in Lagos were counterfeit. Some contained nothing but chalk or oil; some had been relabeled long after their expiry date; others contained such a dilute quantity of the active ingredient, that they contributed to generating drug-resistant strains of, for example, malaria and tuberculosis.

If the global fight against counterfeit was seeking a champion, it has surely found one in Dora Nkem Akunyili, one of the key-note speakers at the November 2005 Second Global Congress on Combating Counterfeiting and Piracy in Lyon, France. A distinguished professor of pharmacology, she was appointed in 2001 to head the Nigerian National Agency for Food and Drug Administration and Control (NAFDAC). Since then, Dora Akunyili has waged war against the suppliers of counterfeit medicines with an unwavering commitment and integrity, which has made her a national hero and won tributes from as far afield as the Vatican and South Korea.

Dr. Akunyili's impassioned address to the Global Congress is a wake-up call to anyone who might think of counterfeit as a victim-less crime, or a problem of concern mainly to big brand owners. Her story illustrates the enormity of the challenges, while offering inspiration to those who seek to tackle them.

When counterfeiting kills

In 1988 Dr. Akunyili saw her 21 year old diabetic sister die of hyperglycemia. It was not the diabetes that killed her. It was the fake insulin she had been supplied to treat it. Through recent years, similarly appalling incidents have multiplied. Four children died needlessly on the operating table in one of Nigeria's top teaching hospitals in 2003 because the adrenaline drips contained little more than water. A survey published by the Nigerian Institute of Pharmaceutical Research indicated

On her appointment to NAFDAC, Dr. Akunyili threw herself into combating the scourge, investigating reports from all quarters, raiding premises, publicly burning mountains of fake drugs, and putting the suppliers behind bars. She convinced Nigerian banks not to process financial import documents or lend money to projects involving medicines unless these were NAFDAC certificated. With black market profits at stake, she became a target for the fake drugs barons. Unable to bribe her, they tried to kill her. NAFDAC premises were fire-bombed. As she drove home to her

IP Enforcement Case Book

The "Intellectual Property Enforcement Case Book," is a new WIPO publication, prepared by the Honorable Mr. Justice Louis Harms, Judge of Appeal, Supreme Court of South Africa.

A resource for judges and for use in training, the case book guides the reader through selected court decisions in countries with a common law tradition, with an emphasis on matters that typically arise in civil and criminal proceedings in the field of IP enforcement.

Available from WIPO's e-bookshop at www.wipo.int/ebookshop



*“Fake drugs are murder...Eradication of counterfeit drugs should be treated as an international health emergency program.” **

village in December 2003, six gunmen opened fire on her car; a bullet grazed her scalp.

Undeterred, Dr. Akunyili continued her mission – with impressive results. NAFDAC figures for 2005 indicate an 80 percent decrease in counterfeit drugs in circulation since she started. At the Global Congress she urged delegates to “start showing that you can do a lot with a little.”

International action

International trade in counterfeit and pirated products now affects nearly every market sector, and was estimated at over Euro 500 billion a year by the First Global Congress on Combating Counterfeiting. International cooperation to tackle the problem is more critical than ever. To this end, the 2005 Global Congress, hosted by Interpol and the World Customs Organization (WCO), brought together more than 500 participants from 66 countries. It is the only forum to rally on such a scale leaders from government, business, international organizations and enforcement agencies in order to develop concerted strategies against counterfeiting and piracy. Participants agreed the need for effective action in four focus areas: raising awareness; improving cooperation and coordination; building



Dr. Dora Nkem Akunyili - tireless campaigner

capacity; and promoting better legislation. WIPO, which currently chairs the Global Steering Committee, will host the Third Global Congress in January 2007.

WIPO assistance: building capacity

Meanwhile, demand continues to rise from Member States for WIPO assistance with capacity-building programs. During the last quarter of 2005, working closely with partner



A NAFDAC public information campaign helps consumers identify dangerous or useless counterfeit drugs.

organizations, WIPO ran enforcement workshops in ten countries, including two training courses in Japan funded by the Japanese Funds In Trust, and four workshops for police and customs officers in Caribbean countries. These incorporated practical training exercises, analysis of the obstacles to effective enforcement, and elaboration of strategies to address them. Discussion at the Caribbean workshops highlighted difficulties at the operational level resulting from insufficient participation by rights holders in the enforcement process. The enforcement workshop in Mozambique was notable in comparison for the enthusiastic engagement of the private sector, which combined with high level political support to pave the way to new cooperation agreements on IP rights enforcement.

Rising up the political agenda

2005 saw IP enforcement issues rising up the agenda in major international forums. Leaders of the G-8 countries, meeting at the G8 Summit in July, declared their determination to reduce IP rights piracy and counterfeiting through more effective enforcement, noting in the Summit Declaration: “The growing trade in pirated and

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* BBC interview with Dora Akunyili, 12 July 2005.

"We are seeing progress in increasing awareness of this issue – there are already important signs of a significant shift in perception and political readiness for action."

WIPO Deputy Director General Rita Hayes

Photos: L. Van Greunen



Police and customs officers at a WIPO workshop in Barbados work on strategies to improve enforcement.



Justice Minister, Senator Colin Derrick and Trinidadian Assistant Commissioner of Police Winston Cooper join high level officials at the WIPO enforcement workshop in Antigua.

counterfeit goods, which can have links to organized crime, threatens employment, innovation, economic growth, and the health and safety of consumers in all parts of the world." This was followed up in October by the first G-8 anti-piracy expert group meeting to discuss enforcement strategies. WIPO participated as an observer in this meeting, at which the Government of Japan proposed for consideration a new international Treaty on the Non-proliferation of Counterfeit and Pirated Goods.

Figures sometimes speak louder than words. And if policymakers are to be convinced to invest significant resources in combating counterfeit, they need to be supplied with hard economic data showing just how much counterfeit trade costs the country in lost revenues. In this respect, the Organization for Economic Co-operation and Development (OECD) has begun work on a Study on the Economic Implications of Counterfeiting and Piracy. A WIPO-OECD expert meeting in October, focusing on measurement and statistical issues, helped to prepare the ground.

With the pace of international action on enforcement accelerating, the third session of the *WIPO Advisory Committee on Enforcement* (ACE), to be held in Geneva from May 15 to 17 is set to be a productive meeting.



NOKIA – HONING IP TO BUSINESS NEEDS

Nokia filed over 850 international patent applications in 2005, making it one of the top five users of the Patent Cooperation Treaty (PCT). It ranks among the ten Most Innovative Companies in the World in a 2005 survey by the Boston Consulting Group. And it added several more iF more Awards in 2005 to its long list of design awards. One of the world's largest mobile phone manufacturers, Nokia's ability to stay at the cutting-edge of innovation and design has been essential to its success in this highly competitive industry.

In this interview with WIPO Magazine, Nokia's Vice President for Intellectual Property Rights, Mr. Iikka Rahmasto, explains how intellectual property (IP) is integrated into the company's business strategies, and how Nokia uses the tools of the IP system to protect and leverage its innovation-based assets.



Photo: Nokia

The Nokia Fashion Collection, the Nokia 2650, the Nokia 6630 smartphone with the Nokia Video Call Stand, all won iF product design awards in 2005.

"In [this] business no single company can rely only on its own innovation, and no single innovation is enough."

What does Nokia consider its biggest innovative break through?

Nokia has had a significant role in defining key elements of data downloading technologies into mobile devices, and easy-to-use mobile phones. We are now in a lucky position as no mobile phone manufacturer can make mobile phones without using several of our patents.

Nokia's signature tune is registered as a trademark

It is difficult to name any single breakthrough, because Nokia is in a business in which no single company can rely only on its own innovation, and no single innovation is enough. Nokia has been successful in relying on open standards, on the combination of good technologies from a number of sources and on some unique differentiation features that consumers have preferred.

Can you give examples of how the company uses the different forms of IP protection?

Nokia uses **patents** to protect innovative concepts, such as downloading ringing tones and the exchangeable phone covers developed in the 1990s; registered **designs** for the shape of the products, such as displays, batteries and keypads; and **trademarks**, such as **Nokia, Connecting People** and the Nokia ring tune.

We are an active proponent of open standards, and contribute a lot of our innovation to the development of the entire industry. Some IP rights, particularly in user interfaces, are used to protect the differentiation of our products and some to protect our end-users. For instance, design registrations are used in the fight against dangerous counterfeit batteries.

Companies are increasingly hesitant to invest in anything new without first understanding the IP terms. So in the early phase of a product cycle, it is important to encourage the industry to invest in the new technology by giving favorable IP terms. In the matured markets, the focus is on companies who want to copy products and to share the benefits of a technology without investing in R&D. In those markets, the key is to establish a fair distribution of R&D expenses through licensing.

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Groove on the go. The N91 in the middle is a jukebox which holds up to 3,000 stereo tracks, snaps quality photos and has other smartphone features.



Photo: Nokia

Can you say more about your use of licensing and cross-licensing?

We have an active patent licensing program for companies that manufacture mobile phones or network equipment for cellular standards, such as GSM, CDMA or WCDMA. We are also about to launch new licensing programs to enable others to benefit from some of our easy-to-use concepts, or mobility elements, in products other than mobile phones.

We rely on open standards in most of our products, which typically requires the use of IP rights. Nokia develops and contributes its own IP to the development of such standards, as well as licensing IP from other contributors. Network economy is one of the popular words in the industry. For Nokia it means that we use a number of component suppliers and developers to complement our own development activities.

How would you describe the focus of Nokia's IP strategy?

Our IP strategy is deeply integrated into Nokia's business strategy. Nokia's IP rights strategy in the early

1990s focused mainly on acquiring new IP rights, using them to defend the growing business. In recent years, the focus has increasingly been on understanding the role of IP in each Nokia business and on improving the return on our technology and IP investment.

IP assets are managed by a centralized IP department reporting to the Chief Strategy Officer, with very close links to Nokia business groups and technology groups to enable full strategic alignment.

What has been the trend in Nokia's patent filings over the years?

Nokia has undergone a major shift in its patenting activities over time. Nokia more or less started intensive patenting only in 1990, after some difficult experiences in the U.S. market. Thereafter, we increased our patent filings steadily, and currently make about 1,300 to 1,500 new first filings a year in very focused field of technology.

We filed our first PCT application in 1982. Growth in the telecom area in the 90's increased sharply the volume of our use.

What are the advantages and drawbacks of the PCT from Nokia's perspective?

One of the principal benefits of the PCT is that it delays incurring costs until the importance of the invention is known. Telecommunications is a standards-governed area. Standardization takes time and often the priority year is too short to see whether a patent application might be relevant for a standard, but the 30-month period offered by the PCT provides a longer opportunity to identify which applications are important, which not, and accordingly adjust the national phase filing program.

The PCT also provides a central location for the amendment of applications during the International phase. This is often necessary to get valid claims in countries where applications go directly to grant with no or minor examination in the national phase. Another advantage is that the PCT provides valid search/examination reports before the need to make further expenses in national phase filings.

The disadvantage is the added costs and that the PCT search/examination does not guarantee success in the national phase.

We also use the traditional Paris and the European Patent Convention routes because the time to grant is shorter, which is important when there is a need for a quick grant. We must also use alternative routes for non-PCT Contracting States.

How would Nokia like to see the IP system evolve?

For the prosecution of new rights, we see traditional issues such as cost, time and quality as key elements of further development. A globally evolving discussion around the challenges of the IP system calls also for new rules and thinking around how IP rights may be used. We see an increasing need for rule-making in the licensing markets. On one hand, rights owners need protection against copying and free-riding. On the other hand, the sustainability of interoperability and open standards require that the licensing regime be fair, and that any single part cannot demand higher royalties than its contribution to the development of the technology justifies. A long-term sustainability of the IP system requires that both of these aspects are secured.

Record Year for International Patent Filings

The international patent system is once again showing record growth with over 134,000 Patent Cooperation Treaty (PCT) applications filed in 2005, representing a 9.4 percent increase over 2004. While the five top users of the PCT remained unchanged (United States of America, Japan, Germany, France and the United Kingdom), the Republic of Korea overtook the Netherlands to move into 6th place, and China dislodged Canada, Italy and Australia to take the 10th.

In announcing the latest figures, WIPO Deputy Director General Francis Gurry highlighted that the most impressive rates of growth, for the second year running, had come from northeast Asia. "Since 2000, the number of applications from Japan, Republic of Korea, and China have risen by 162 percent, 200 percent and 212 percent, respectively," said Mr. Gurry. These three countries between them accounted for almost a quarter of all international applications. Other top filing countries showing double-digit rates of growth included Australia (10.1 percent), and Finland (11.6 percent).

Company	Country	PCT applications
1. Philips		
Electronics N.V.	Netherlands	2,492
2. Matsushita	Japan	2,021
3. Siemens	Germany	1,402
4. Nokia	Finland	898
5. Bosch	Germany	843
6. Intel	U.S.A.	691
7. BASF	Germany	656
8. 3M	U.S.A.	603
9. Motorola	U.S.A.	580
10. DaimlerChrysler	Germany	567

Applications from developing countries, representing 6.7 percent of all international patent applications filed, saw a 20 percent increase as compared to 2004. The top filers among the developing countries were the Republic of Korea (4,747 applications), China (2,452), India (648), South Africa (336), Singapore (438), Brazil (283) and Mexico (136).

Improved services and productivity

Mr. Gurry attributed the considerable overall growth not only to better economic conditions, but also to improved services and productivity gains within the PCT system, resulting particularly from expanded use of information technology (IT). Applications filed electronically more than doubled to exceed paper filings; and the number of international applications processed per employee in the WIPO PCT office increased by 18 percent.

PCT PORTRAITS

The Robot Creators

Since the Patent Cooperation Treaty (PCT) began operating in 1978, more than 1.2 million international patent applications have been filed, covering inventions and new technology of every description. This is the third in our series in which WIPO Magazine picks out a few innovations from among the profusion of PCT applications, and looks at the people behind the patents. This time it is the turn of the new robot creators.

Strap-on Strength

Featured among *TIME Magazine's* "Most Amazing Inventions of 2005" we found Professor Yoshiyuki Sankai's robot suit.



Courtesy of the University of Tsukuba-Cyberdyne Inc.

The story of Professor Sankai's invention began with typical boyhood dreams of bionic limbs capable of endowing their owner with superhuman strength. But unlike most small boys, his fascination with robotics was to grow with him. "As a child, I was thrilled at the possibility that technologies can help people expand their (physical) abilities. And I still have that feeling," he told *The Japan Times*.

At the Institute of Systems and Engineering Mechanics in Japan's University of Tsukuba, Professor Sankai has developed a strap-on robotic "suit" or exoskeleton. This he conceived not for

feats of fantasy, but to enable elderly or disabled people to perform everyday tasks with which they would otherwise struggle, such as walking, climbing stairs or lifting heavy objects.

"It's like riding on a robot, rather than wearing one," says Professor Sankai.

The suit, known as the *Hybrid Assistive Limb*, works through fine sensors on the skin, which pick up electrical impulses transmitted from the user's brain to his or her muscles. An integral computer instantaneously analyses and transmits these signals to sophisticated mechanisms, which gently power-assist the user to achieve the desired actions smoothly. Frames support the wearer's legs and provide stability. "The most difficult part was to develop a system to gauge the user's intention," explained Professor Sankai. "If the motors started moving one-trillionth of a second behind, it would become a drag to the user."

Professor Sankai believes that scientists have an important role in spurring the creation of new industries and encourages his young researchers to be proactive in launching business ventures. In 2004 he founded *Cyberdyne Inc.* at Tsukuba University in order to commercialize the robot suit rapidly. The price of the customized suit notwithstanding, orders are coming in steadily. And with problems of caring for the elderly becoming more acute in Japan's rapidly aging society, the demand for robotic home help is set to rise. (For more information see www.cyberdyne.jp)

Inside View



Courtesy of A. Mencias/IMC

What can be swallowed in a pill, then crawls through the large intestine taking video shots?

The thought alone might turn the stomach. But anyone facing the prospect of an intestinal examination or surgery will welcome news

of this micro robotic capsule, under development by a team at the Sant'Anna School of Advanced Studies in Pisa, Italy. The joint Italian-South Korean project is led by 34 year old biomechanical-engineer, Arianna

Menciassi, and supported by the Intelligent Microsystem Center in Seoul.

The concept of a camera-in-a-pill for use in colonoscopies is not new in itself. But devices currently available to doctors cannot be controlled externally, and are simply squeezed along the gut together with whatever else the patient has ingested. "It's like watching the view from a train window," explains Arianna Menciassi. "If you see something of interest, there's no way to turn back and get a better look." To solve the

The "endoscopic legged capsule" — inspired by the crawling movement of insects.

From Dust Busting to Bomb Disposal

As a student of computer science and mechanical engineering at the Massachusetts Institute of Technology (MIT), Helen Greiner used to enthuse to her parents about the role of robots in space exploration. Her work at NASA's Jet Propulsion Laboratory fuelled her passion. But her mother, pushing a vacuum cleaner round the house, was underwhelmed. "That's great, honey," she sighed, "but what I really want is a robot that can clean these hard-to-reach places."

Helen Greiner is now chairman of *iRobot Corporation*, the \$95 million company which she co-founded at aged 23 with two fellow MIT roboticists. Helen's mother has her vacuum cleaning robot, the *Roomba*. As do over 1.5 million other *iRobot* customers.

Building on the firm's proprietary technology, *iRobot* rapidly expanded beyond consumer products to robotics for government and industrial applications. The *MicroRig*, for example, is designed to carry out tasks deep inside oil wells. The *PackBot*, currently on active service with the U.S. military, is a remote-controlled reconnaissance and bomb disposal robot, which first made headlines when the prototype was summoned from the laboratory to search through rubble in the September 11 rescue efforts at the World Trade Center. In 2002 another *iRobot* robot conducted a televised search



Courtesy of iRobot Corp.

The Roomba navigates its way around a room, detecting and sucking up dirt. Dozens of sensors constantly adjust its behavior.

of the Great Pyramids of Egypt, in cooperation with the National Geographic Society.

"The great thing about robotics," says Helen Greiner, "is that the field is still in its infancy. It's totally creative." In an interview with PBS' *Ask the Scientist*, she evokes her favorite ideas, such as agri-bots, that would "live" in farmers' fields, constantly searching for and removing weeds and pests, thus eliminating the need for toxic pesticides and herbicides. As science fiction becomes science fact, "I am living my own dream," she says.

iRobot Corporation has 15 published PCT applications covering new robotics technology. (For more information see www.irobot.com/)



See also www.wipo.int/pct/en/inventions/ - for WIPO's PCT website Gallery of Notable Inventions and inventors.

problem, the team drew inspiration from the crawling motion of insects, and came up with a radio-controlled micro robot with hooked legs and tiny teeth to grip the intestinal wall. To direct it, the operator requires no more technical skill than for a video game. Minimally invasive, the capsule is expected to reduce the discomfort normally associated with a colonoscopy. Human trials will begin in two to three years.

Dr. Meciasci and the team were closely involved in the patent application process. "The PCT," she told us, "is the traditional process we follow in my Institute for knowledge protection. In this case we started with an Italian application and within one year we presented a PCT application." (For more information see www.microsystem.re.kr)



JAMAICA: CELEBRATING INNOVATION

A gala evening in Kingston on November 24 saw the launch of Jamaica's national Innovation Awards for Outstanding Achievements in Science and Technology. Philip Paulwell, the Minister of Commerce, Science and Technology, presented prizes for the winning entries in 10 categories, following a three-stage assessment by a panel of judges.

The triennial Awards Programme is the latest initiative in the Jamaican government's push to raise the profile of science and innovation in a country traditionally better known for its music. By show-casing the contribution of Jamaica's innovators, the Awards seek to foster better understanding of how innovation boosts national development, and to inspire the upcoming generation.

cable broadcasting. And the University College of the Caribbean will test the system to deliver two new degree courses under its distance education program. Cable and Wireless Jamaica Ltd. will provide classroom support by sending content to cell phones, while a television link facilitates real time interaction between students and teachers anywhere.

Photos: SRC



Executive Director of the SRC, Dr. Audia Barnett, presents first prize to Neil Rhule and David Cassanova, inventors of the Fire Stream Media Distribution System.

The development angle was prominent in the entry criteria. To be eligible for consideration all entries had to address a problem of national, regional or international importance; to offer a long term social or economic benefit; to demonstrate the economic use of locally available or indigenous materials; and to be environmentally friendly.

And the winners are ...

First prize went to the Fire Stream Media Distribution System (FSMDS), an integrated visual and data distribution system which seeks to extend the reach of distance learning in developing countries. The FSMDS is billed as a new solution for delivering voice, video and data for mass communication in places where the Internet is not easily or cheaply available. "What we have sought to do," explained David Cassanova, one of the three co-inventors, "is to use what is most available in Jamaica, the cell phones and the TV set, and fuse both technologies." The FMDS technology is being used by the Jamaica News Network in the area of

Second place in the Awards went to an advocate of healthy eating, Georgia Jefferson. A traffic engineer by trade, Ms. Jefferson developed a non-chemical process for the preservation of juice and drinks using a widely available local fruit. Her process has been in commercial use since 2004. The third prize was won by Frank Haughton for his Hybrid Solar Dryer system, designed for drying spice, nuts and fruits.

Minister Paulwell pledged the support of the Jamaica Intellectual Property Office to assist the projects in order "that their intellectual property can be adequately protected and safeguarded."

Scientific Research Council: pioneering projects

The Awards grew from Jamaica's Scientific Research Council (SRC) program on innovation and creativity, which was launched in 1988 and led to the establishment of a national



Inventors and Innovators Association. The SRC, a government agency, promotes pioneering work across a range of sectors with the goal of harnessing innovative science and technology for national growth.

The SRC has been particularly successful in developing cost saving methods of processing waste water to produce energy. By the end of 2005 the SRC had commissioned over 50 biodigester septic tanks, and over 200 biodigesters for residential and commercial purposes island-wide. The anaerobic technology uses bio-organic processes to break down organic waste, producing biogas, an alternate form of energy. Biogas can be used to power activities such as cooking, lighting and refrigeration, with potential for long term economic benefits.

New food products and processes

Other SRC projects seek to stimulate new commercial ventures based on products derived from the abundant local flora. "Nutraceuticals" – foods and dietary supplements which provide medical and health benefits – is a billion dollar global industry and continues to grow. Jamaica is well placed to increase its share in this lucrative world market. Figures from the Planning Institute of Jamaica indicate that 85 of the world's top-selling medicinal plants

grow in Jamaica. These include, for example, ginger and turmeric on which SCR has been conducting tests to determine optimum farming methods. Innovative technologies to extract active ingredients for nutraceutical products, combined with well-focused branding strategies, will help Jamaica to make its mark and increase export revenues in this area.

The SRC's Food Technology Institute promotes the development of new food products from indigenous raw materials for commercialization by the private sector. Successes include new composite flours comprising 20 to 30 percent indigenous material (yam, breadfruit, cassava, banana), for use as a substitute for imported wheat flour; and new technology for the crystallizing and syrumping of ginger.

WIPO assistance

The Jamaican government is employing a more systematic use of intellectual property tools as a means of increasing the competitiveness of the country's export industries. With active support from WIPO, the government has recently embarked on a comprehensive national branding program. The branding strategy aims to attract investment and boost exports by means of promoting a positive, well defined brand image of the country itself, and by associating this positive image with specific Jamaican products.



The SRC promotes the development of new products and processes using Jamaica's rich flora and fauna.

Fostering public awareness of intellectual property is another area in which WIPO collaborates closely with the Jamaica Intellectual Property Office (JIPO). Working together with the national media, the education system and the business sector, JIPO is planning a vigorous outreach campaign for 2006. The central message: that IP and innovation – be it artistic creation or scientific invention – go hand in hand; and that their contribution to individuals, to society, and to the national economy is great.



CENTENARY OF THE
ROMANIAN PATENT OFFICE

Romania has long been aware of the importance of industrial property protection to modern economic development. The Romanian Patent Office opened its doors one hundred years ago, following publication of Romania's first law on patents – on January 17, 1906. The Law was modern in concept in that it made no distinction between Romanians and foreigners, and provided tax breaks and other incentives to patent owners who “founded an establishment with the exclusive end of working out the patent object”. Thus technical creation was officially encouraged, especially in the small enterprise sector.

This progressive approach contributed to Romania's prosperity between the two World Wars. In the years since, when the Industrial Property Office often had to operate under difficult circumstances, it held on to the objectives set in 1906. Today, the State Office for Inventions

and Trademarks (OSIM) is focusing on keeping Romania's intellectual property laws up to date with most recent developments and aligning them to the European and worldwide standards. Furthermore, OSIM pays particular attention to widening its contact with the users and the public in general, and its program aims particularly at the small and medium-sized enterprise (SME) sector. The Program of Cooperation signed between Romania and WIPO in Bucharest in 2001 has contributed to OSIM's updating of laws, the training of its staff and improving its awareness program.

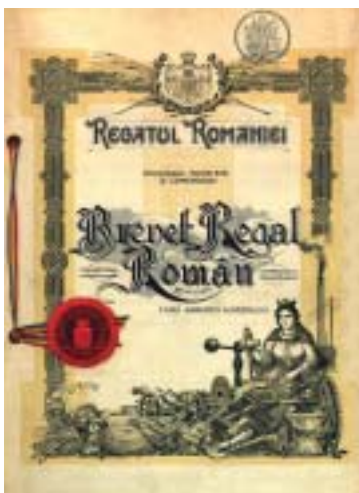
National strategy

Intellectual property has a high profile in Romania, where the Prime Minister himself coordinates the work the State Office for Inventions and Trademarks (OSIM). It is one of few countries to have a government-approved, comprehensive strategy in the field of intellectual property. The *Romanian National Strategy for the Intellectual Property (2003-2007)* aims “to promote a coherent policy,” and is underpinned by clearly stated strategic objectives together with the “specific actions” required. For example, the item on “Strategic measures for establishment of a proper administrative infrastructure” lists specific actions such as modernization of equipment and information technology systems, improved dissemination of information, increasing the competitiveness of R&D units and SMEs.

Following the National Strategy action plan, and working in cooperation with WIPO, the EPO and the European Union, OSIM has implemented many recent improvements. During the period 2004-2005, seven new laws pertaining to the field of industrial property or relevant to this field were adopted. Cooperation programs have led to the modernization of operations and processes, computerization and automated systems.

The Office introduced a new fee policy on January 1, 2006, which gives strong support to SMEs, researchers and individuals applying for patents, trademarks and industrial design certificates. It provides additional fee reductions for SMEs with annual revenues of under one million Euros: an 80 percent cut in fees compared to the 50 percent previous allowed. Also eligible for an 80 percent fee reduction are applicants/patent owners whose invention is the result of a publicly financed R&D activity.

A current top priority in the National Strategy is work to bring national legislation into line with the European Union norms regarding intellectual property rights in the areas of new plant varieties, trademarks and integrated circuits. The second priority is to boost the administrative capacity of all bodies involved in the enforcement of intellectual property rights, such as the prosecutor's office, police, customs and border police. The third is to



In Romania, patents were granted by Royal Decree and published in the Official Gazette.

Romanian Inventors: Some Historical Achievements



► **Traian Vuia** (1872-1950) invented the first flying machine to incorporate its own systems for taking off, propulsion and landing gear. In 1906 he made the first flight with a machine that weighed more than the air and was driven only by its on-board installations during its flight (unlike the Wright brothers' machines).

► **Ana Aslan** (1897-1988), doctor and scientist, patented the vitamin H3 (Gerovital) and other medicines to delay the signs of aging.



► **Anghel Saligny** (1854-1925), engineer and scientist, inventor of new solutions related to the construction of bridges and industrial buildings. In 1895 he designed and built a 4,088-meter long metallic bridge across the Danube – the longest bridge in Europe at that time.



Photos: State Office for Inventions and Trademarks

► **Aurel Persu** (1890-1977), one of the fathers of the aerodynamic shape of the car, patented in 1924 the first solution for integrating the four wheels within the aerodynamic line of the body of the car.



► **Henri Coanda** (1886-1972), owner of more than 250 patents, presented and flew the very first jet on the occasion of the 2nd International Show of Aeronautics in Paris, 1910. He discovered the "Coanda Effect" – a starting point in the mechanics of fluids.

► **Petrache Poenaru** (1799-1875), engineer and mathematician, patented in 1827 the "carry-on pen that is self-supplied endlessly with ink" - the ancestor of the fountain pen that was improved in 1884 by Waterman.

continue to raise the public awareness about the importance of the industrial property rights.

Outreach

The State Office disseminates information through its 14 Regional Patent Information Centers, which offer services to the general public, researchers, students, technical staff of SMEs and investors. Available free-of-charge at each center are the official industrial property bulletins, supplements containing the European patents valid in Romania, and the Romanian Industrial Property Review. The centers also have access to all publications edited by OSIM. Within the framework of a Cooperation Program with the European Patent Office, the Regional Centers have been equipped with state-of-the-art computers, which will soon be connected to the central OSIM network.

The *Creativity Trophy* is a public outreach initiative by the State Office, now in its sixth year. The competition awards trophies and diplomas to companies in each of six fields (R&D and high technology; agriculture, forestry and food; civil engineering; services; commerce; exports and tourism).



Photo: OSIM

OSIM's headquarters in the heart of Bucharest

OSIM makes a special effort reach out to young people. The *Invest in Education* program, carried out in 14 high schools and colleges in Bucharest, educates young people on the industrial property protection. Under the *One-Day Partners* scheme, college students visit OSIM and learn about its activities.

The office participated in over 40 national and international exhibitions in the last year, using every opportunity to promote the advantages of industrial property, but also informing audiences of the dangers of counterfeiting.



Many businesses re-invest a good portion of their revenues in research and development in order to remain competitive. As such, they need to ensure that relevant inventions resulting from these investments are protected and leveraged by patents that serve the objectives underpinning their business strategy.

This is not just a question of creating or acquiring a large number of patents in a technological niche. The quality of the individual patents counts. Quality in this sense refers to a patent's fitness for the business purpose that it serves, and is distinct from the quality or value of the underlying invention. This quality depends, among other factors, on skilled drafting of the patent application, and in particular of the claims. Regrettably, not all patent claims are drafted from a business strategy perspective. Far from safeguarding company investments and delivering profits, patents with poorly drafted claims can become financial burdens. This article seeks to make businesses aware of the pitfalls of filing patents without devoting sufficient attention to the importance of drafting good claims.

What are patent claims ?

Claims are the heart of a patent application. Whereas the *description* of the invention contained in a patent document teaches how to make and use the invention, the claims define the scope of legal protection. The claims demarcate in

words the boundary of the invention, much as a picket-fence defines the extent of land covered by a deed for a piece of land. Only the technology covered in the claims is protected by the patent. If the claims are not properly drafted, then any invention contained in the detailed description but not covered by the claims becomes part of the prior art when the granted patent is published. Anyone else would then be at liberty to use that unprotected information without the patent owner's permission.

Broad versus narrow claims

The claims may be broad or narrow in their scope. Most patent agents would prefer to draft claims that are as broad as possible to cover all aspects of the invention found in the detailed description, its equivalents or likely future versions. On the other hand, a patent examiner in an IP office will not allow broad claims that cover more than the inventor actually invented, and will seek to narrow the claims to the actual invention. Further, the patentability of

Tips on Writing Claims

The website of the Canadian Intellectual Property Office (CIPO) offers a clearly written, online tutorial to assist individuals and small businesses in writing patent applications. It includes the following practical tips for drafting claims.

- ▶ Decide which are the essential elements of your invention that you want to claim exclusive rights to. These elements should be the ones that distinguish your invention from known technology.
- ▶ Begin with your broadest claims and then progress to narrower claims.
- ▶ Start claims on a new page (separate from the description) and number each claim using Arabic numbers starting with 1.
- ▶ Precede your claims with a short statement such as "I claim: ..." In some patents this reads as "The embodiments of the invention in which an exclusive property or privilege is claimed are defined as follows: ..."
- ▶ Check to see that each claim consists of an introduction, linking word, and body.
- ▶ One way of ensuring that specific inventive features are included in several or all claims is to write an initial claim and refer to it in claims of narrower scope.

Reproduced courtesy of CIPO
For further information and examples, CIPO's online tutorial is at
http://strategis.gc.ca/sc_mrksv/cipo/patents/e-filing/menu.htm

Drafting patent claims demands careful consideration if they are both to serve business objectives and stand up in court.



Photos.com

IP AND BUSINESS

an invention defined by broad claims may be more easily refused based on a wider range of prior art. So, while broad claims are attractive to the business applicant because they cover a greater range of products or situations, it is more difficult to obtain and to enforce a patent with broad claims.

Narrow claims are generally specific to one particular invention in a product, and consist of more elements/limitations than broader claims. Patents with narrow claims tend to be easier to obtain and enforce. Conversely, they will prove less useful as a business tool since they allow competitors to gain easy access to the same market by producing products with only minor modifications to the patented product or service. From a business perspective, therefore, the most effective patent applications tend to include a large number of claims, including a mix of broad and narrow claims.

Patent claim construction

Under patent law, a patentee's exclusive rights depend entirely upon the claims of the granted patent. In disputes over the scope of these exclusive rights, the courts bear responsibility for all issues of patent interpretation. Claim construction is the interpretation of the words in the patent claims in order to determine the meaning and scope of the claims. Claim construction is important in patent litigation as it determines whether the patent fulfills the conditions and requirements of patentability, or whether the patent is being infringed upon.

Different countries have different approaches and legal principles in relation to the interpretation of patent claims. Though the European Patent Convention (EPC) harmonized a system for the grant of patents in EPC countries in 1977, variations still exist in the approach taken by individual courts towards claim construction. This article therefore refers to claims drafting as practiced in the United States America, or what is known as U.S.-style patent claim construction.

Determining patent infringement

In determining whether a patent claim covers an alleged infringement, the U.S. courts traditionally apply a two-step process: The first is to determine, as a matter of law, what the words in the claim mean. The second is to determine, as a matter of fact, if the claim covers the

alleged infringing product. Infringement exists when all of the claim's elements are found, either *literally* or *equivalently*, in the alleged infringement.

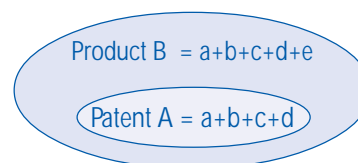
The U.S. courts established two categories of evidence for use in claim construction. The first, so-called *intrinsic evidence*, consists of the specification, the claims and the patent prosecution history. The second, so-called *extrinsic evidence*, includes all other sources that are external to the patent and the prosecution history, such as expert testimony, dictionaries, technical writings, etc. In recent years, the courts have changed position towards the use of extrinsic evidence, and the intrinsic evidence is usually sufficient to determine the meaning of disputed claim language.

In practice, courts have refused to confine the infringement inquiry to the precise choice of words of claims. Instead, the scope of the protection may be extended beyond the literal wording under the *doctrine of equivalents*. This arose to stop people from trying to get around literal infringement by introducing insubstantial differences into rival products based on a claimed invention. In recent cases, however, the courts have added restraints to the doctrine of equivalents by stressing that, if the accused infringement could reasonably have been foreseen by the drafter of the claims, then it was the duty of the drafter to have sought literal protection for this from the patent office.

Let us look at some simple representations in order to illustrate when infringement takes place. We will call the patented invention "A" and the elements contained in the claims a, b, c and d. The product accused of infringement we will call "B".

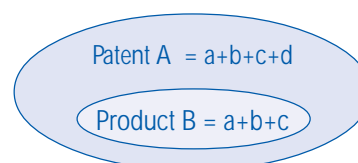
Case 1

- ▶ Patent A includes claims consisting of elements $a + b + c + d$.
- ▶ Product B has features covered by elements identical to $a + b + c + d$; with the addition of element e.
- ▶ In this case, product B would infringe literally on Patent A, because Product B has all features that are covered by Patent A, even though it has an additional element e.



Case 2

- ▶ Patent A includes claims consisting of elements of $a + b + c + d$.
- ▶ Product B has features covered by identical elements of $a + b + c$.
- ▶ Product B may not infringe on Patent A directly, because Product B does not include – literally or equivalently – element d of invention A.



U.S. courts have regarded *every* element included in the claims as being essential to the invention, even those elements which are only minor or peripheral parts of the invention. (This case only applies to cases of direct infringement).

So infringement arises when each element of a claim is shown in the accused infringement, either literally or equivalently. If all of the claim's limitations are found literally, such as in Case 1, then there is usually literal infringement. If one or more of the claim's limitations are found equivalently and the rest are found literally, then there is usually infringement under the doctrine of equivalents. Of course, while this illustration is simple, application of the rules has proven rather more difficult in litigation.

Conclusion

The effectiveness of a patent to protect a business's products and services depends on the claims. Aspects of the invention detailed in the description of the patent will not be protected unless included in the claims. The best way to draft the claims section of the patent application is to write broad generic claims as well as more specific claims. The scope of protection con-

ferred by a patent may be extended beyond the literal wording of the claims under the doctrine of equivalents. However, the US courts have become far less willing to allow patentees to obtain a scope of protection outside the literal scope of the claim. Patent claims must be drafted to stand up in court as well as to serve business purposes. It is advisable and highly recommended to use the services of an expert patent agent.

For more information on practical aspects of the IP system of interest to business and industry, visit the website of the SMEs Division at www.wipo.int/sme.



DECISIONS OF THE PROGRAM AND BUDGET COMMITTEE

WIPO Member States, meeting in the Program and Budget Committee (PBC) from January 11-13, took a number of decisions relating to the work of the Organization.

The PBC accepted the proposal that the recommendations of the United Nations Joint Inspection Unit (JIU) on budget transfers should be adapted to the specific needs of WIPO, and that this decision should not be applied before the 2008/09 biennium, and until after the completion of the desk-to-desk review of WIPO's human and financial resources.

Member States also agreed that work should start on a draft comprehensive review of WIPO's Financial Rules and Regulations for submission to its April 2007 session. The secretariat briefed the PBC on the actions taken since the September 2005 Assemblies on other JIU recommendations, most of which have now been implemented. (The JIU recommendations were part of the report carried out in early 2005 entitled "Review of Management and Administration in WIPO: Budget, Oversight and Related Issues.")

Following the decision of the 2005 WIPO Assemblies, the PBC conducted a preliminary discussion on ways to further involve Member States in the preparation and follow-up of the Organization's program and budget, and welcomed the document prepared by the Secretariat as a useful basis for further work. The PBC agreed that the Secretariat should convene two rounds of informal consultations and a session of the PBC in order to identify a mechanism to be submitted for approval at the 2006 WIPO Assemblies.

The secretariat briefed the PBC on action taken since the 2005 Assemblies to restart the WIPO new construction project, including arrangements for the project management, the establishment of a Selection Board comprised of Member States representatives, and the plans for the various tenders to be run in connection with the project. The PBC agreed that the Audit Committee should consider the organizational chart of the project prior to the meeting of the Selection Board scheduled for January 16.

The PBC elected seven independent expert members – from China, Jordan, the Netherlands, Nigeria, Russian Federation, Togo and the United Kingdom – to serve on the Audit Committee from among candidates nominated by Member States. The Audit Committee is expected to meet shortly to commence its work and to elect its two



remaining members who, in accordance with the Committee's terms of reference, should be senior oversight professionals or senior managers, one of whom should be from the UN system.



NEW WORK ON TRADEMARKS AND INDUSTRIAL DESIGNS

At a meeting of the Standing Committee on the Law of Trademarks, Industrial Designs and Geographical Indications (SCT), from November 28 to December 2, 2005, WIPO Member States identified a number of topics for future consideration.

At its previous meeting in April 2005, the SCT had invited members and observers to suggest topics on which the Committee should concentrate its future work. In response to that invitation, 14 members of the SCT raised relevant issues. After a full debate on the various proposals, the SCT decided to consider in more detail the following topics:

- ▶ Non-traditional trademarks, such as single color marks, sound, movement or shape marks; and, in particular, how such trademarks are registered and published, if at all.
- ▶ The relationship between trademarks, industrial designs and copyright, and the overlap between these different types of protection.
- ▶ Trademark opposition procedures, which are becoming ever more important as numbers of trademark applications continue to increase.
- ▶ Industrial design registration procedures and procedures for the protection of state emblems under Article 6ter of the Paris Convention for the Protection of Industrial Property.

The Organization will prepare working documents on these issues for consideration at the next session of the SCT, which will provide the basis for future deliberations.

Survey

The SCT also reviewed the results of a survey on trademark law and practice, in which more than 70 Member States had participated. The survey was based on a questionnaire containing 369 questions on the trademark laws and administrative office practices of Member States. The main purpose of the survey was to identify issues which could be addressed at the international level relating to the future development of international trademark law. The returned questionnaires offered some 22,000 responses, which were compiled into a summary document.

The SCT decided that this document (SCT/14/5 Rev.) should continue to be available to the public and be updated periodically (See www.wipo.int/meetings/en/doc_details.jsp?doc_id=53393).

The Diplomatic Conference for the Adoption of the Revised Trademark Law Treaty (TLT) will take place in Singapore from March 13 to 31.



NEWS ROUNDUP

Cybersquatting increases in 2005

WIPO's Arbitration and Mediation Center saw a 20 percent increase in the number of cybersquatting cases (abusive registration of trademarks as domain names) filed in 2005 as compared to 2004. The 1,456 cases filed represent the highest number of cybersquatting cases handled in a single year by the Center since 2001.

"Notwithstanding the unique effectiveness of the UDRP as a global remedy against cybersquatting, the fact that WIPO's caseload in 2005 was the highest in four years – and that many of these cases concern recently registered domain names – underlines the need for continued vigilance by intellectual property owners," said WIPO Deputy Director General Francis Gurry. He also noted that, while UDRP disputes have been heavily concentrated in the *.com* domain, attention must be paid to the establishment of effective preventive mechanisms against abusive registration in new generic Top Level Domains (gTLDs).

Since the inception of the Uniform Domain Name Dispute Resolution Policy (UDRP) in December 1999, WIPO's Arbitration and Mediation Center has handled more than 8,350 disputes, involving parties from 127 countries and covering some 16,000 domain names. The UDRP's popularity stems from its cost-effective-

ness, the predictability of the process and swift enforcement of the results. Frequent users of the UDRP include the entertainment industry, pharmaceutical companies, IT firms, and a significant number of small-to-medium-sized businesses who favor the UDRP over traditional litigation as a quicker and cheaper way of protecting their trademark rights against cybersquatting.

All domain name decisions handled by the Center are indexed and published on the Center's website ([//arbiter.wipo.int/domains/search/index.html](http://arbiter.wipo.int/domains/search/index.html)). The new *WIPO Overview of WIPO Panel Views on Selected UDRP Questions*, created to offer parties and panelists an overview of broad decision trends, is available at [//arbiter.wipo.int/domains/search/overview](http://arbiter.wipo.int/domains/search/overview).

Innovation will save the world, teenagers believe

American teenagers believe that new inventions will provide the answers to the world's greatest problems, according to a survey carried out in the U.S. for the *Lemelson-MIT* 2006 Invention Index*, which gauges attitudes towards innovation. The vast majority of teenagers questioned were optimistic that science and technology will solve the problems of clean water (91 percent), world hunger (89 percent), disease eradication (88 percent) and pollution (84 percent). The teenagers also predicted that much current, everyday technology would become obsolete within the next ten years, citing gasoline-powered cars (33 percent), compact discs (26 percent) and desktop computers (22 percent) as destined for the scrap heap.

The teenagers' faith in science and technology did not, however, appear to be reflected in their own career aspirations, with only nine percent of those questioned putting science as their top career choice.



Will gas-powered cars soon be a thing of the past?

* The Lemelson-MIT Program aims to make invention more accessible to young people.

MIDEM – Music industry cheered by digital sales

MIDEM, the international music industry event held each year in Cannes, France, celebrated its 40th anniversary with a splash from January 21 to 26 with concerts and fireworks every night. Sir Bob Geldof, music producer Harvey Goldsmith and International Federation of the Phonographic Industry (IFPI) Chairman John Kennedy, who organized last summer's *Live 8* ("make poverty history") concerts, jointly received the MIDEM 2006 Personality of the Year Award.

Despite a reported 1.9 percent fall in revenue in the global music market in 2005, the mood at MIDEM was generally upbeat on the news that booming demand for music on the Internet and mobile phones is offsetting the decline in demand for physical formats. IFPI reported that digital sales had tripled to 6 percent of industry retail revenues, totaling US\$ 440 million in the first half of 2005. The higher rates charged for mobile phone downloads also allows an increased return on investment for producers, distributors and artists.

Close to 10,000 music professionals from 92 countries spent the week discovering new sounds, negotiating deals, discussing tomorrow's issues, and hearing from expert analysts. WIPO, sharing a booth with the Swiss Society for Authors' Rights in Musical Works, used the opportunity to meet with collective management societies from around the world to discuss of the work done by the Organization in support of artists' rights.



The Finnish rock band Apocalyptica performing at the MIDEM opening night party.

Credit: © CATARINA / CA / MIDEM /

Brussels Eureka – Innovation from start to finish

The 54th edition of the Brussels Eureka innovation fair in November 2005 took a new approach to assist inventors looking to bring their products to market. The inventors were brought together with "business angels" offering advice on start-up financing, with organizations which facilitate administrative formalities in Belgium, and with university-business liaison groups; while *Energex* provided experts from across the field of conventional and renewable energies.

The combination worked well. Individual inventors set out their stalls alongside big businesses; raw ideas alongside tried and tested commercial successes; simple new energy-saving systems alongside displays of large scale energy production.

WIPO invention awards went to Fatemeh Omid Beirgani of Iran for her device to measure the stability of tooth implants using sound; and to Ku Hamid Ku Halim, Alwi Habsah and Ibrahim Norliza of Malaysia, who invented a treatment for spent coolant using banana stem extract.



EVENTS GALLERY



SINGAPORE, November 14-15

Top judges and IP officials from the Asia Pacific region attended the **Regional Colloquium for the Judiciary on Copyright and Related Rights** at WIPO's Singapore Office. The judges compared notes on the nuts and bolts of evidence-gathering and court procedures in copyright enforcement cases in the ASPAC region and beyond, and discussed important recent court cases such as those holding providers of peer-to-peer (P2P) software liable for copyright infringement in jurisdictions such as Australia, Japan, Korea and the United States. They heard presentations from Asian music-business figures such as the CEO of leading online music retailer

Soundbuzz, who described exponential growth in legitimate digital music distribution in the region. The colloquium was co-organized by WIPO and The International Confederation of Societies of Authors and Composers (CISAC) with assistance from the Japanese Copyright Office. ♦

LJUBLJANA, SLOVENIA, December 8-9

Over 80 participants, mainly from Eastern Europe, the Balkans and neighboring countries, attended the **Conference for Women Entrepreneurs: How to Use IP to Bring Value to your Business** held by WIPO and the Association of Slovenian Women Entrepreneurs, in cooperation with the Slovenian National Council, the Chamber of Commerce and Industry, and the Worldwide Network of Women Business Owners. Mr. Janez Sušnik, President of the National Council, opened the conference at the National Parliament of Slovenia. ♦



GUATEMALA CITY, November 10-11

A **Workshop on IP in University Policies** brought together representatives of universities and IP offices from Central America, the Dominican Republic, Cuba and Mexico to discuss the management of IP policy in research institutions. Participants shared experiences and discussed follow-up action with a view to improving understanding among university authorities of the income-generating potential of IP; increasing inter-university collaboration; optimizing links between universities and the private sector; and creating networks for the exchange of IP expertise. WIPO organized the Workshop with the Spanish Patents and Trademarks Office and the Guatemalan government in collaboration with the Higher Council for Universities of Central American (CSUCA). ♦

TOKYO, January 26-27

Some 130 senior policymakers from 37 countries met representatives from the private sector and academia at the **WIPO High Level Forum on Intellectual Property Policy and Strategy**, organized in cooperation with the Japan Patent Office. Discussions on an intensive agenda included the formulation of effective national IP strategies; the

management of IP offices; the creation of links between research institutions and industry; economic and legal aspects of IP protection; the role of governments in facilitating the strategic use of IP to promote economic growth. ♦

CALENDAR of meetings

FEBRUARY 20 TO 24

GENEVA

Provisional Committee on Proposals Related to a WIPO Development Agenda (PCDA) (First Session)

The WIPO General Assembly, at its session held in September – October 2005, decided to “constitute a Provisional Committee to take forward the IIM process to accelerate and complete the discussions on proposals relating to a WIPO Development Agenda and report with any recommendations to the General Assembly at its September 2006 Session”. It was also decided that the “Provisional Committee shall have two one-week sessions, and the deadline for submission of new proposals shall be the first day of the first session of the Committee”.

Invitations: As members, the States members of WIPO; as observers, other States and certain organizations.

MARCH 1 TO 3

CICG, GENEVA

Informal Open Forum on the draft Substantive Patent Law Treaty (SPLT)

The Open Forum will address various issues that have been raised in the draft of the SPLT or that Member States may wish to include in the draft SPLT.

Invitations: All State members of WIPO and/or the Paris Union, other States and certain organizations. The Forum is also open to the general public.

MARCH 13 TO 31

SINGAPORE

Diplomatic Conference for the Adoption of a Revised Trademark Law Treaty (TLT)

The Diplomatic Conference is convened in order to adopt the text of a revised Trademark Law Treaty. The main features of the revised Trademark Law Treaty are, *inter alia*, the creation of an Assembly of the Contracting Parties, the introduction of provisions concerning electronic communications, a set of harmonized and simplified rules for the recording of trademark licenses, and relief measures in case of failure to comply with time limits.

Invitations: As ordinary members, the States members of WIPO; as special members, the African Intellectual Property Organization (OAPI), the African Regional Intellectual Property Organization (ARIPO) and the European Community; and, as observers, the States members of the United Nations but not of WIPO, as well as certain intergovernmental and non-governmental organizations having permanent observer status with WIPO or *ad hoc* observer status with the Standing Committee on Trademarks, Industrial Designs and Geographical Indications (SCT).

APRIL 10 TO 12

GENEVA

Informal session of the Standing Committee on the Law of Patents (SCP)

The Committee will work towards the establishment of a work program. **Invitations:** As members, the States members of WIPO and/or of the Paris Union; as observers, other States and certain organizations.

APRIL 24 TO 28

GENEVA

Intergovernmental Committee on Intellectual Property and Genetic Resources, Traditional Knowledge and Folklore (Ninth session)

The Committee will continue its work based on the renewed mandate established by the General Assembly, will consider draft texts of policy objectives and principles for the protection of traditional knowledge and traditional cultural expressions/folklore, and other ongoing work.

Invitations: As members, the States members of WIPO and/or the Paris Union, and the European Community; as observers, certain organizations.

JUNE 26 TO 30

GENEVA

Provisional Committee on Proposals Related to a WIPO Development Agenda (PCDA) (Second session)

This session will continue discussions and consideration of the proposals submitted by Member States.

Invitations: As members, the States members of WIPO; as observers, other States and certain organizations.

JULY 3 TO 7

GENEVA

Standing Committee on the Law of Patents (Twelfth session)

The Committee will continue its work on further harmonization and other issues relating to patent law, as agreed at its informal session in April 2006.

Invitations: As members, the States members of WIPO and/or of the Paris Union; as observers, other States and certain organizations.

NEW PARTIES TO WIPO-ADMINISTERED TREATIES IN 2005

During 2005, 45 instruments of accession to, or ratification of, treaties administered by WIPO were deposited with WIPO Director General Kamil Idris. A significant development during the year 2005 was the entry into force of the Patent Law Treaty on April 28.

WIPO Convention

The Convention Establishing the World Intellectual Property Organization was signed at Stockholm on July 14, 1967, and entered into force in 1970. WIPO is responsible for the promotion of the protection of intellectual property throughout the world through cooperation among States, and for the administration of various multilateral treaties dealing with the legal and administrative aspects of intellectual property.

In 2005, Afghanistan and Comoros (2) adhered to the WIPO Convention, bringing the total number of States to 183.

IN THE FIELD OF INDUSTRIAL PROPERTY

Paris Convention

The Paris Convention for the Protection of Industrial Property was concluded in 1883 and is one of the pillars of the international intellectual property system. It applies to industrial property in the widest sense, including inventions, marks, industrial designs, utility models (a kind of "small patent" provided for by the laws of some countries), trade names (designations under which an industrial or commercial activity is carried on), geographical indications (indications of source and appellations of origin) and the repression of unfair competition.

In 2005, Comoros (1) adhered to the Paris Convention, bringing the total number of States to 169.

Patent Cooperation Treaty (PCT)

The Patent Cooperation Treaty (PCT) was concluded in 1970. The PCT makes it possible to seek patent protection for an invention simultaneously in each of a large number of countries by filing an "international" patent application. Such an application may be filed by anyone who is a national or resident of a contracting state. The Treaty regulates the formal requirements with which any international application must comply.

In 2005, Comoros, Libyan Arab Jamahiriya, Nigeria, Saint Kitts and Nevis (4) adhered to the PCT, bringing the total number of States to 128.

Madrid Agreement and Madrid Protocol

The Madrid system for the International Registration of Marks (the Madrid system) is governed by two treaties: the Madrid Agreement Concerning the International Registration of Marks (Madrid Agreement) and the Protocol Relating to the Madrid Agreement Concerning the International Registration of Marks (Madrid Protocol).

The Madrid Agreement was concluded in 1891, and the Madrid Protocol was concluded in 1989 in order to introduce certain new features into the Madrid system. These address the difficulties that prevent certain countries from adhering to the Madrid Agreement by rendering the system more flexible and more compatible with the domestic legislation of these countries.

In 2005, Bahrain (1) adhered to the Madrid Protocol, bringing the total number of States to 67.

Nice Agreement

The Nice Agreement Concerning the International Classification of Goods and Services for the Purposes of the Registration of Marks was concluded in 1957. The Nice Agreement establishes a classification of goods and services for the purposes of registering trademarks and service marks. The Classification consists of a list of classes (based on types of products and services) of which there are 34 for goods and 11 for

services and an alphabetical list of the goods and services.

In 2005, Bahrain, Egypt, Jamaica and Saint Kitts and Nevis (4) adhered to the Nice Agreement, bringing the total number of States to 78.

Vienna Agreement

The Vienna Agreement Establishing an International Classification of the Figurative Elements of Marks was concluded in 1973. The Vienna Agreement establishes a classification system for marks which consists of or contains figurative elements. The classification comprises 29 categories, 144 divisions and some 1,887 sections in which the figurative elements of marks are classified.

In 2005, Jamaica (1) adhered to the Vienna Agreement, bringing the total number of States to 21.

Locarno Agreement

The Locarno Agreement Establishing an International Classification for Industrial Designs was concluded in 1968. The Locarno Agreement establishes a classification for industrial designs which consists of 32 classes and 223 subclasses based on different types of products. It also comprises an alphabetical list of goods with an indication of the classes and subclasses into which these goods fall. The list contains some 6,600 indications of different kinds of goods.

In 2005, Latvia (1) adhered to the Locarno Agreement, bringing the total number of States to 45.

Budapest Treaty

The Budapest Treaty on the International Recognition of the Deposit of Microorganisms for the Purposes of Patent Procedure was concluded in 1977. The main feature of the Budapest Treaty is that a Contracting State which allows or requires the deposit of microorganisms for the purposes of patent procedure must recognize, for such purposes, the deposit of a microorganism with any "international depositary authority," irrespective of whether such authority is on or outside the territory of the said State. This eliminates the need to deposit in each country in which protection is sought.

In 2005, Georgia (1) adhered to the Budapest Treaty, bringing the total number of States to 61.

Nairobi Treaty

The Nairobi treaty on the Protection of the Olympic symbol was concluded in 1981. All Contracting States are obliged to protect the Olympic symbol (the five interlaced rings) against use for commercial purposes (in advertisements, on goods, as a mark, etc.) without the authorization of the International Olympic committee.

In 2005, Romania (1) adhered to the Nairobi Treaty, bringing the total number of States to 44.

Lisbon Agreement

The Lisbon Agreement for the Protection of Appellations of Origin and their International Registration was concluded in 1958. The aim of the Agreement is to provide for the protection of appellations of origin, that is, the "geographical name of a country, region, or locality, which serves to designate a product originating therein, the quality and characteristics of which are due exclusively or essentially to the geographic environment, including natural and human factors."

In 2005, Iran (Islamic Republic of) and Peru (2) adhered to the Lisbon Agreement, bringing the total number of States to 24.

The Hague Agreement

The system of international registration of industrial designs is governed by the Hague Agreement Concerning the International Registration of Industrial Designs which dates from 1925 and has been revised at various times, in particular in London (1934 Act) and the Hague (1960 Act).

The Geneva Act of the Hague Agreement Concerning the International Registration of Industrial Designs was concluded in 1999. The Act is aimed at making the system more responsive to the needs of users and facilitating adherence by countries whose industrial designs systems do not permit them to accede to the 1960 Hague Act.

In 2005, the Former Yugoslav Republic of Macedonia, Latvia and Singapore (3) adhered to the Geneva Act of the Hague Agreement, bringing the total number of States to 19.

Patent Law Treaty (PLT)

The Patent Law Treaty (PLT) was concluded in 2000. The purpose of the PLT is to harmonize and streamline formal procedures in respect of national and regional patent applications and patents. With a significant exception for the filing date requirements, the PLT provides maximum sets of requirements which the office of a contracting party may apply: the office may not lay down any other formal requirements in respect of matters dealt with by this Treaty.

The PLT entered into force on April 28, 2005.

In 2005, Bahrain, Finland, Romania and the United Kingdom (4) adhered to the PLT, bringing the total number of States to 13.

IN THE FIELD OF COPYRIGHT AND RELATED RIGHTS

Berne Convention

The Berne Convention for the Protection of Literary and Artistic Works was concluded in 1886. The Convention sets out and defines minimum standards of protection of the economic and moral rights of authors of literary and artistic works.

In 2005, Comoros, Nepal and Uzbekistan (3) adhered to the Berne Convention, bringing the total number of States to 160.

Rome Convention

The Rome Convention for the Protection of Performers, Producers of Phonograms and Broadcasting Organizations, concluded in 1961, secures protection of performers on their performances, phonograms of producers of phonograms and broadcasts of broadcasting organizations.

In 2005, Azerbaijan and Bahrain (2) adhered to the Rome Convention, bringing the total number of States to 82.

WIPO Copyright Treaty (WCT)

The WIPO Copyright Treaty (WCT) was concluded in 1996. It extends copyright protection to two additional subject matters: (i) computer programs and (ii) compilations of data or other material ("databases")

in any form, which by reason of the selection or arrangement of their contents constitute intellectual creations, and it grants new rights corresponding to the new forms of exploitation of works in the digital environment.

In 2005, Albania, Bahrain, Dominican Republic, Oman, Qatar and Singapore (6) adhered to the WCT, bringing the total number of States to 56.

WIPO Performances and Phonograms Treaty (WPPT)

The WIPO Performances and Phonograms Treaty (WPPT) was concluded in 1996. The Treaty deals with intellectual property rights of two kinds of beneficiaries: (i) performers (actors, singers, musicians, etc.), and (ii) producers of phonograms (the persons or legal entities who, or which, take the initiative and have the responsibility for the fixation of the sounds). They are dealt with in the same instrument because most of the rights granted by the Treaty to performers are rights connected with their fixed, purely aural performances (which are the subject matter of phonograms).

In 2005, Bahrain, Cyprus, Dominican Republic, Oman, Qatar, Singapore and the United Arab Emirates (7) adhered to the WPPT, bringing the total number of States to 55.



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The WIPO Magazine is published bimonthly by the Communications and Public Outreach Division, World Intellectual Property Organization (WIPO). It is not an official record and the views expressed in individual articles are not necessarily those of WIPO.

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