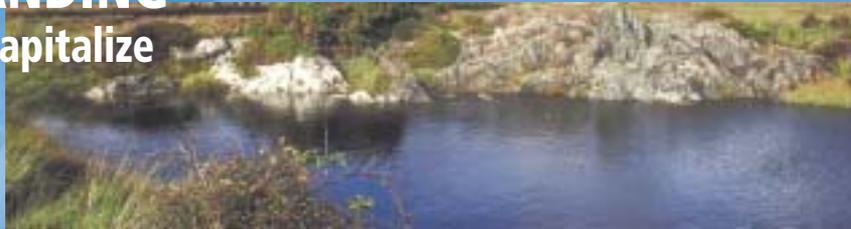


Geneva, July/August 2005

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Geneva,  
July - August 2005

# IP, NATION BRANDING AND ECONOMIC DEVELOPMENT

*“Simply announcing one’s existence will not attract tourism or investment; people need to be given motivating reasons for choosing to do business with a country... . Small states in particular find themselves competing with one another for attention from audiences that are not always well-informed about them.”* – From the Estonia Style brand book produced by the Brand Estonia project, which successfully changed the country’s brand image.

*This article is based on a paper contributed by Mr. Simon Anholt at the WIPO International Seminar on Intellectual Property, Geneva, May 2 and 3, 2005. Mr Anholt is an advisor on Public Diplomacy to the British Government, as well as to a number of other governments and UN agencies. His latest book, Brand America (Cyan Communications, 2004), will be followed by Brand China in late 2005. He is also Editor of the journal Place Branding and Public Diplomacy ([www.placebranding.com](http://www.placebranding.com)).*

Impeccable quality, performance and reliability are simply the cost of entry to most modern marketplaces – thus the brand has become a critical factor. Whether the product being sold is tangible or intangible, intellectual capital plays a vital role by adding value to the product: without a distinctive and attractive brand, few of today’s leading companies could have achieved, still less maintained, their profitability, their market share, or the loyalty of their con-

sumers and employees. The same basic principle applies to countries. Without a powerful and positive reputation or “nation-brand,” no country can consistently compete for consumers, tourists, investors, immigrants and the respect and attention of other countries and the world’s media.

‘Brand’ is a useful summation of the intangible competitive assets of an organization or a country: its vision, its genius, its distinctive character, its people, its promise to the marketplace. These are the factors which, when aligned around a clear strategy, give it sustainable competitive advantage, the right and the ability to charge a consistent premium, and customer ‘permission’ to constantly innovate and extend the range of products and services on offer. The market capitalization of many companies often puts a value on their brands which is many times greater than their tangible assets. For example, without brand value, the market capitalization of Xerox would be a mere US\$481 million rather than US\$6.5 billion. If it were possible to measure the brand value of countries, it would probably exceed their physical resources by an equally large factor.

There may be many reasons why the intangible assets of poorer countries have not been ‘set to work’ for the economic growth and prosperity of the country, but brand theory suggests a highly significant one: the lack of a powerful strategy for deploying them in a productive and harmonized way.

## Nation branding

The idea of *country of origin* (COO) effect – the power of an explicit or implicit Geographical Indication to add appeal to products and services, to create a price premium for them, and to stimulate customer loyalty towards them – is well known. If Sony, Nintendo, Toyota and Yamaha were not first and foremost *Japanese* brands, it’s hard to imagine that they would enjoy the same prestige, and the same applies to French luxury brands like Chanel and Moët & Chandon, and to German engineering brands like Mercedes, Bosch, Siemens and Audi.

The concept of nation-branding rests on the observation that COO actually affects far more than a country’s exported goods and services – it makes a significant difference to perceptions of the country’s

- ▶ people (whether as employees, investors, immigrants, politicians or media stars),
- ▶ sporting and cultural endeavors,
- ▶ political and diplomatic relations with other countries,
- ▶ tourism and heritage attractions,
- ▶ investment offerings,
- ▶ media and other intellectual and creative productions.

A country’s brand impacts virtually every aspect of its international engagement, and thus plays a critical role in its economic, social, political and cultural progress. When, as a result of clear leadership from central government, all of these stake-

holders share a common vision of the country's identity, and achieve some degree of harmonization between their actions and communications, there is a far greater chance of the country's image fairly and positively reflecting its present reality. This is because the international 'audience' is only likely to form a coherent and positive opinion of the country if the majority of the messages they receive from it are broadly aligned.

**Tourism** – Often the most visible aspect of a country's brand, tourism is usually also the most competent marketing force. The touristic 'idea' of the nation creates a visual image of the country which can impact many other areas of the nation's performance. Foreign investors, for example, may well be influenced in their choice of country by tourism images, so this particular aspect of the nation's IP needs to be seen as rather more than a simple sales channel.

**Exports** – In developing countries, products and services are all too often exported as unbranded commodities. This represents a failure to capitalize on the significant potential for enhanced market value through the IP of brand. A powerful, distinctive, broad-based and appealing national brand is the most valuable gift a government can give to its exporters. Today, branded exports are one of the most potent ways of building and sustaining national image.

**Governance** – Places are also judged by the part their leaders play in foreign and domestic affairs. "Political IP" is, for various reasons, one of the hardest elements of the nation's intellectual capital to control, but it has a particularly strong impact.

The brand image of good governance seems to exist independently of any detailed knowledge about it. In the first edition of the Anholt-GMI Nation Brands Index, for example, Sweden ranked highest in the world for stable and responsible governance despite the fact that only a tiny percentage of the international panel polled had any knowledge of the country's politics, which party was in power, or who was its head of government<sup>1</sup>.

**People** – When each ordinary citizen – not just diplomats, media stars and politicians – becomes a passionate ambassador for his or her home country or city, positive change can really happen. The human capital of the nation is the country's main source of intangible value: the skills, abilities, values and behavior of the people are its primary resource.

**Investment and Immigration** – Many of the best examples of rapid growth during the last century occurred because certain places became magnets for talent, investment and business ventures. A reputation for plentiful intellectual capital invariably attracts more of the same, creating a virtual circle of accelerating quality and innovation. A powerful and consistent place brand can help get places on the right shortlists.



*Prochile (an agency under the Foreign Ministry's Directorate General for International Economic Relations) together with public and private trade-related organisations, is developing a new strategy to strengthen Chile's image. The goal is to develop and broadcast common messages to position the country's products and services, attract foreign investment, and increase the inflow of tourists.*

**Culture and heritage** – The intellectual capital of the nation's heritage, history, culture and geography is well known but often inefficiently channeled into 'added value' for sellable assets. Places which treat growth as a purely economic issue run the risk of developing a two-dimensional brand image, of interest only to investors, tax exiles and currency speculators. Culture, heritage and sport provide the third dimension, giving places richness, dignity, trust and respect abroad, and quality of life at home.

>>>

<sup>1</sup> Source: [www.nationbrandindex.com](http://www.nationbrandindex.com)



*Slovenia produced catalogues, brochures, magazines and DVDs aimed at different sectors which helped to promote and change the country's image in the relatively short period of time since it gained autonomy.*

### Reality and perception: the benefits of nation branding

The brand images of countries, whether good or bad, are seldom an entirely accurate reflection of the reality of the country. In the case of developing countries, the most common reason for this is time: the country may change quite quickly, but its image lags behind by years or decades and sometimes even centuries.

Many 'transition economies' suffer from an image which was forged during an earlier and very different political era, and which now obstructs their political, economic, cultural and social aspirations. Slovenia is one example of a state which has succeeded admirably in recasting perceptions through successful promotion of branded exports (Elan skis, Gorenje appliances, Laško Pivo beer and others), comprehensive and well-funded tourism campaigns, and NATO and then European Union membership.

It is widely believed that little can be done to correct a country's image. But there are enough examples of 'best practice' – such as Slovenia, Chile, New Zealand, South Africa, South Korea, Ireland, Spain and Australia – to prove that a country's international reputation *can* be managed and changed to better represent the current reality and future aspirations of the place, as long as there is a clear strategy for doing so, leadership, and proper coordination between government, the public and private sector, and the population in general.

This message is of critical importance to developing nations, which simply do not have the time to wait until their image catches up with the rapid pace of their development. Place branding is a way of ensuring that their fundamental human qualities, their efforts, achievements and ambitions are seen, acknowledged, and properly interpreted in their own region and beyond<sup>2</sup>.

In short, nation branding ensures a faster and surer return on the investment which countries, their donors and foreign investors are making in their development. In a deeper sense, place branding also provides a way for newer, smaller and poorer countries to establish and broadcast their true cultural, social and historical identity, and carve out a 'perceptual niche' for themselves in the global community.

In a world dominated by the capitalist system, it is easy to conclude that real competitive advantage can only come from economic, political or military strength. However, as in any busy marketplace, there is room on the global stage for brands which play by slightly different rules, there is room for niche brands, and room for brands which compete primarily on cultural excellence, rather than on economic muscle. Haiti may have difficulty attracting tourists, but its primary source of foreign income is the export of naïve art, an industry which has found access to global markets through the Internet. Haiti is still the poorest country in the Americas, but a niche market may prove the beginning of a specialist cluster.

In this sense, national brand is national identity made tangible, robust, communicable and *useful*. A good brand represents a real competitive edge, and is the single most valuable item of IP which any nation possesses. Knowing how to protect, develop and exploit this asset is the key for translating the intangible wealth of developing countries into economic growth.

Physical products need physical distribution if they are going to generate income. Ideas need branding and marketing. In the knowledge economy, branding is both the strategic discipline and the distribution channel that can build success for smaller countries and turn ideas into wealth.

<sup>2</sup> See "Brand New Justice – How Branding Places and Products Can Help the Developing World" by Simon Anholt (Elsevier, Oxford, 2003/5).

## CASE STUDY

# Ireland: Build it first and they will come

Ireland today boasts one of the most vibrant high technology economies in Europe. Now referred to as “The Celtic Tiger,” it is a perfect example of building up a country before promoting it. Over a decade-long strategic effort (called the social partnership) between government, unions, employers, farming and community organizations, Ireland methodically built the economic infrastructure necessary to become a player in the new world economy.

- ▶ Over the last three years the economy has grown at an average rate of more than seven percent. It now records a large balance of payments surplus and current budget surplus.
- ▶ Exports account for three-quarters of national output, which is a level unique in Europe. It is the second biggest exporter of software in the world after the United States.
- ▶ It wins close to a quarter of all available US manufacturing investments in Europe, although it accounts for just one percent of the population.
- ▶ 45 percent of Irish workers are now employed by trans-national corporations, such as Intel, IBM, Hewlett-Packard, Compaq and Sandoz.
- ▶ 53 percent of immigrants are natives – people who left Ireland to work elsewhere and are returning.
- ▶ A decade ago, average Irish incomes were less than two-thirds of average British incomes; last year they surpassed them.



In many ways, Ireland is a perfect example of “policy-based branding”. Rather than spend millions on marketing communications in a probably futile attempt to make people change their minds about this country – which until recently had been uniquely associated in people’s minds with economic and social decline – the Irish government concentrated on *proving* the case that modern Ireland was a magnet for foreign investment, a cradle of new technology, a strategically positioned European business and transport hub and the home of a motivated, highly educated and entrepreneurial workforce.

By concentrating all their energies on attracting foreign investment and making the economic miracle a reality, the Irish government soon found that there was little need to spend money on marketing communications to get the message across: what was happening to Ireland was such a remarkable story that the international media needed little encouragement to tell it to the world. Rather than buy costly advertising space, the Industrial Development Authority (IDA) simply invited journalists to Ireland to show them what was going on – and the publicity came free.

Soon, something of the new atmosphere in Ireland, and the growing wealth of its people began to come out quite naturally in the way the country’s stakeholders carried out their regular communications – the tourist board, the national airline, the principal exporters – all began, quite unconsciously, to adopt a tone of confidence, of success, of a new self-respect and importance.

What the case of Ireland proves beyond doubt is that a reputation can only be earned, and a nation brand can only be changed when the nation truly changes its behavior.

Source: Tobin, Paul, “Ireland, The Celtic Tiger: A Winning Economy.” *CBS James Street*, 1997; Rushworth, Nick. “The Celtic Tiger and the Wild Geese.” *abc.net*, September 5, 1999; Hyland, Julie. “What makes the Celtic Tiger Run?” *World Socialist Web Site*, June 16, 1998; “In Step with the Celtic Tiger.” *www.ICEM.org*, Vol. 4, No. 1, 1999. Case study source: “The Brand Called Wisconsin”, a white paper by Marsha Lindsay

# INTELLECTUAL PROPERTY, INNOVATION AND NEW PRODUCT DEVELOPMENT

*"...Because its purpose is to create a customer, business has two—and only two functions: Marketing and innovation. Marketing and innovation produce results, all the rest are costs."* – Peter Drucker, management consultant and author of "Innovation and Entrepreneurship"

Technological innovation is one of the principal determinants of business success. Enterprises stand to reap greater benefits from innovation if they consider the full range of intellectual property (IP) issues in new product development. Effective use of the tools of the IP system reduces risk and facilitates the process of taking innovative technology to the market place, while at the same time enhancing the competitiveness of technology-based enterprises.

In order to explain the role of the tools of the IP system, this article explores technological innovation as an interactive process made up of a number of distinct stages, beginning with the formulation of a novel idea/concept, followed by research and development (R&D), ending in the launch of a new or improved product in the marketplace. It will highlight the practical IP issues relevant to each stage.

## Invention or innovation?

Innovation concerns the commercialization of new ideas, while invention is not necessarily directly associated with commercialization.<sup>1</sup> Invention is the generation of a new

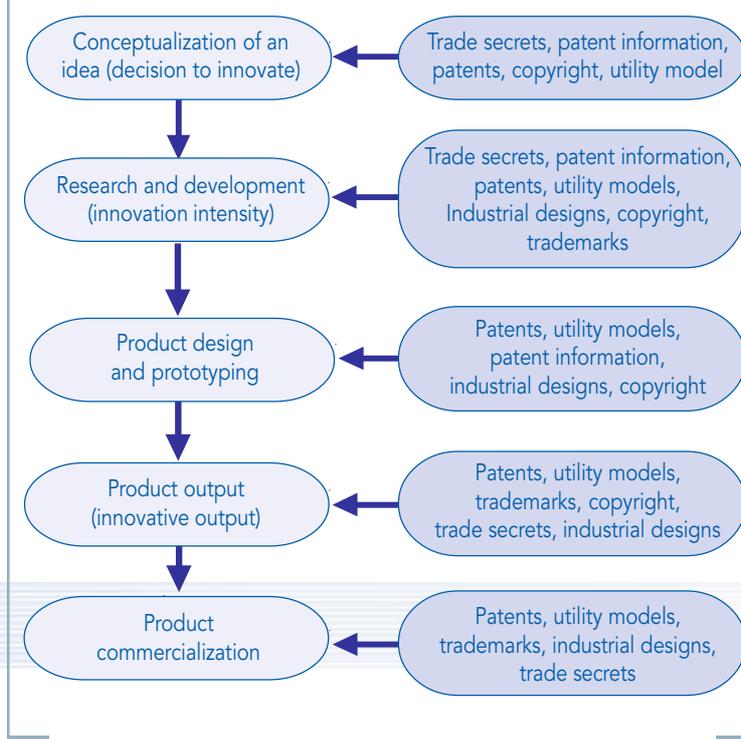
idea aimed at solving a specific technical problem. Innovation can be seen as a process of interaction and feedback during the various stages of product development. Not all inventions are commercialized, so it is clear that not all inventions result in innovation. Many new ideas are born but "most die a lonely death,

never seeing the light of commercial success."<sup>2</sup>

As is the case with inventions, so trade secrets, utility models/petty patents and patents are relevant for protecting, managing, exploiting and leveraging innovations. Economic studies have revealed that patents are the preferred IP right sought for the protection of technological innovations. This seems to reflect the use of the terms 'innovation' and 'invention' as synonyms. For example, the number of patents owned by an enterprise is often used as one of the main indicators for determining its *innovation intensity*,

## IP in the innovation process

Below is a graphic representation of the role of IP in the innovation process, identifying the types of IP tools that can be used at each stage of the process. The choice of the type of IP tool at each stage should be considered as part of the overall business strategy.



<sup>1</sup> Mark Rogers, 1998, "The Definition and Measurement of Innovation"

<sup>2</sup> Brandt, J. L., "Capturing innovation: Turning Intellectual Assets into Business Assets"

and patents are used as a measure of *output of innovation*. While such an approach is useful, it does not look at the role of the IP system as a whole in facilitating the successful introduction of innovative products in the marketplace.

## The idea stage

From the moment an enterprise has a potentially innovative idea, it is imperative that the idea or concept be treated as a secret. That is to say that the information surrounding the creation of the idea must be protected carefully as a trade secret. Not all commercially viable ideas can or will be patented, hence the importance of treating ideas as trade secrets, particularly at the inception stage.

For an idea that may result in a patentable invention, the final choice between either the trade secret route or the patent route for protection should be seen as a strategic business decision to be taken at a later stage of development when all the requirements of patentability are met. The choice depends on the nature of the invention, its business potential, the competition, how easy it is to reproduce and the ability of competitors to reverse engineer it from the final product. Whatever the ultimate decision, the idea must initially be protected as a trade secret in order to preserve the option of patenting at a later stage. Even after patenting, a part of the idea may remain an associated trade secret.



*The development of the vacuum cleaner since William Hoover's first model illustrates the strategic use of a combination of IP tools.*

Technical drawings, which are often made in the idea stage, should also be treated as trade secrets. They may in addition be protected by copyright. It is important for the drawings to be dated so as to establish the date of creation. Technical drawings could also, at a later stage, form an important part of the relevant patent application.

Information contained in existing *patent documents* also play an important role at this stage in the conception, screening and development of the idea. Patent documents can provide useful insight into whether an idea is new (state-of-the art) and worth developing. Furthermore, proper analysis of patent information may provide insight into the strategy of potential competitors and into technology trends.

## R&D stage

The IP tools used during the idea stage continue to be relevant during the R&D stage. Thus, a company must continue to guard its trade secrets, especially if it has yet to decide on whether to file a patent application. Competitors should not

have access to any vital information which could erode the competitive advantage of the final product.

Extensive research and consultation, important to the success of the project, is carried out at this stage. Many companies at this point fail to tap into the valuable technical information contained in published patent documentation. The European Patent Office (EPO) estimates that 70 percent of the information in patent documents is not available elsewhere. With more than 800,000 patents granted annually around the globe they offer a wealth of information, such as information on the state-of-the-art, which can help an enterprise to avoid wasting resources, in terms of money and time, during the R&D process. Patent documents may hold information that can lead to further improvements in the product or shorten the time taken to get the product to market. Small enterprises, particularly in developing and least developed countries, can use patent information in the public domain to

>>>

*Chester Carlson  
patented his  
xerography  
invention in 1942.*



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come up with innovative products adapted to local conditions.

Having decided on the type of IP protection it will use to protect its R&D output, the enterprise should immediately start the registration process. In the case of filing a patent, this will facilitate the establishment of a date for determining the priority and claiming exclusive rights over the output (even before a patent is granted – see the Jim Frazier case on page 10). As much R&D results in both functional and aesthetic improvements, enterprises should also consider registering industrial designs to protect the look and packaging of the product.

### **Outsourcing**

In most cases, innovative technology requires resources and technical development that are not available in-house. Ownership of the IP rights on the technology ensures that these are not lost while taking advantage of external technical resources and facilities owned by a third party. To avoid future conflict, IP ownership should be clearly es-

tablished and issues related to resulting IP resolved before embarking on any joint venture or outsourcing.

### **IP as a lifeline**

Taking a product to market is usually a big challenge for inventors, entrepreneurs, and enterprises, hence the concept of the innovation “valley of death,” which runs from the time the invention has been prototyped to the launching of the new product in the market. This is the period where most inventions collapse due to the absence of external support or because they are not commercially viable. During this stage IP, particularly patents, play a crucial role in facilitating access to providers of early stage capital, which may provide a lifeline to enable an invention to reach the marketplace. IP ownership strengthens the negotiating position when looking for investment partners, and makes a business more attractive to potential investors.

For example, Mr. Chester Carlson invented xerography in 1938 and patented it in 1942. It then took him five years to find the necessary funding to take the product to market. In

1947, the Haloid Company acquired the license to his basic xerographic patents. The first xerographic copier, Model A, was introduced in 1949. It would be fair to say that Mr. Carlson would not have been able to market the invention without external investment, and that the patent he held contributed significantly to Haloid’s decision to support the invention.

Most innovative ideas never come to market, but those protected by IP stand a greater chance. IP ownership plays an important role in influencing the decision of external partners as to whether to invest in a firm and provides the holder with more options, such as selling or licensing the patent, or forming strategic business partnerships and alliances for commercialization. Enterprises facing financial constraints but rich with IP assets will probably find it easier to establish joint ventures that allow them access to R&D facilities or to distribution channels and sales networks. An enterprise with a patented product or valuable trade secrets may also find it strategically beneficial to establish a joint venture with an enterprise with a strong trademark.

A well managed IP portfolio, accompanied by a business plan and strategy that demonstrates how the associated IP rights can be exploited to generate future revenue, to develop a strong market position, and to control the market is more than likely to attract venture capital.

## Marketing of innovations

In the phase where the product is finally brought to market, trademarks and industrial designs play an important role. These enable consumers to identify the products of a particular company and to distinguish these products from others.

A trademark is a useful tool in launching new product segments or entirely new products. In addition, trademarks can be very effective in penetrating new markets and extending commercial benefits beyond the life of a patent. The case of Aspirin is a good example. Developed in 1897, the drug was patented in 1899 by the Bayer Company. Knowing that patents have a limited duration, the Bayer Company embarked upon promoting a trademark for its new product. When the Aspirin patent expired, the company continued to benefit from the sale of the product through its established trademark Aspirin.

Technological innovation can also be supported by a combination of patent, industrial design and trademark protection. The invention and development of the vacuum cleaner

provides a good example of strategic use of a combination of different types of IP tools. In 1908, Mr. William Hoover produced the first commercial upright vacuum cleaner, but he was not its designer. He purchased the patent from Mr. James Spangler, an inventor who worked nights as a janitor. Over the years, engineers at the Hoover company (established in 1909) designed new and improved devices, and countless other features which were added to the vacuum cleaner. These included disposable paper bags, a vacuum cleaner headlight, a self-propelled feature and a side-mounted attached hose feature, for which Hoover received a patent in 1936. In less than ten years after the company was established, the Hoover trademark was a household name.

Trade secrets, patents, trademarks, industrial designs, and copyright may separately or simultaneously be used as tools of technology protection. Strategic use of a combination of IP tools in the innovation process can contribute to higher profits margins and maintenance of market position, enabling technology-based, innovative companies to have a better return on investment.

## Conclusion

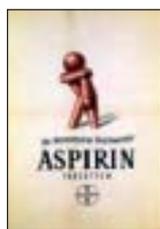
Few technological innovations are radically new products, most are improvements, which in some way make a product superior to its predecessor. Development of a new or improved product gives a business an opportunity to enter the marketplace without competition. The IP system plays a significant role in helping a business to gain and retain this advantage. The competitive edge that a business may gain with a radically new innovation is likely to be longer lasting than that obtained from a simple improvement. In the case of an improvement, not only are competitors for the class of product already in place, but the improvement is far more quickly understood and replicated.

IP strategy may differ depending on the type of innovation, but either way the IP system remains a valuable tool. Consulting IP experts will help enterprises to make optimum use of the system.



For more information on various practical aspects of the IP system of interest to business and industry, please visit the website of the SMEs Division at [www.wipo.int/sme](http://www.wipo.int/sme). The next article in the IP and Business series will discuss biotechnology.

CASE STUDY ON NEXT PAGE >>>



Early advertising created by Bayer to promote its ASPIRIN trademark to extend the product life cycle beyond that of the patent.

## CASE STUDY

# Australian invention dazzles Hollywood - Jim Frazier

Physicists said it was impossible, but cameraman Jim Frazier went ahead and invented a new lens which revolutionized the international film industry.

Mr. Frazier, who shot wildlife films for David Attenborough, was frustrated with the limitations of the lens available on the market. "Wildlife is very unforgiving – there is no time to set up the camera and position the shot the way you want it. As well, with small subjects, such as insects and spiders, it's very difficult to get both the subject and background in focus. I wanted it all in focus and I needed a versatile lens which would allow me to rapidly get the shots I wanted."

"In the late '70s, I began tinkering myself and started getting the results I'd envisioned. Over the next 10 years I kept rebuilding the lens and, with much trial and effort, formulated a lens with deep focus and a single swivel on the end. The optics to do this are very complex but I began to get positive results."

The new lens has three revolutionary features:

- a 'set and forget' focus which holds everything, from front of lens to infinity, in focus;
- a swivel tip so that, without moving the camera, you can swivel the lens in any direction, completing a sphere if need be; and
- a built-in image rotator. This allows the image to be rotated inside the lens without spinning the camera.

It was a brilliant invention and when Mr. Frazier began using it in his work it did not go unnoticed. Nobody had seen before the sort of depth and clarity of filming that he was achieving, which made his work unique. In 1993 he was invited to speak at Montage 93, an imaging conference in the U.S. Within days of the event, Panavision was knocking on his door.

"It was at this point that I thought I should get a lawyer", he recalls "Panavision sent me a standard three page contract which my lawyer advised me not to sign. He rewrote it and we sent back a document of 30 pages which not only protected my invention but helped me negotiate a very sweet deal."

The contract was structured so that Panavision, regarded as the best lens manufacturer in the world, could never come back and claim they had already known about the optics used in the lens. They met with Mr. Frazier on neutral ground in Hong Kong and the company had to sign a confidentiality agreement before they saw the lens. "The deal was that Panavision would patent the device, at their cost, but that I would own the patent."

When Mr. Frazier first showed the lens to Panavision they could not initially figure how it worked, but they recognized its value. At more than US\$1 million, this may have been one of the biggest patent ever taken out by Panavision, but the returns are already rolling in. Nearly every second commercial made in the U.S. uses Jim Frazier's lens, and many in the feature film area will not go on a set without it.

The benefits to the film industry are huge. Apart from the unique abilities of the lens itself, it has dramatically lowered production costs. What used to be a three day shoot now takes only one day because Mr. Frazier's lens has done away with the need for teams of people to rig up complicated setups every time the director wants a new angle. It is as simple as adjusting the swivel tip.



# PROFILE

## Professor Victor Anomah Ngu, Cameroon



### Biodata

**Born:** 1926, Buea, Republic of Cameroon

**Education:** Secondary schooling in Sasse, Cameroon, and Ibadan, Nigeria; University of Ibadan (1948–1950); St Mary's Hospital Medical School, University of London (1951–1954).

**Career:** Professor of Surgery, University of Ibadan (1965-1971); Professor of Surgery, *Université de Yaoundé* (1971-1974); Vice Chancellor, *Université de Yaoundé* (1974-1982); President of the Association of African Universities (1981-1982); Minister of Public Health, Government of Cameroon (1984-1988); Director of the Cancer Research Laboratory, *Université de Yaoundé* (1984); Founder - Hope Clinic Cameroon (1991)

**Awards:** *Grand Commandant de l'Ordre de la Valeur, Cameroun*; Albert Lasker Medical Research Award in Clinical Cancer Chemotherapy (1972); Dr. Samuel Lawrence Adesuyi Award and Medal by the West African Health Community (1989); Leon H. Sullivan Achievement Award, U.S.A. (2003).

This is the first in WIPO Magazine's series of interviews with distinguished scientists and researchers in developing countries. Intellectual property is a system designed to reward and stimulate innovation and creativity, and each scientist in this series embodies these characteristics.

The medical career of Cameroonian doctor Victor Anomah Ngu spans 50 years and three continents. His cancer research won him international acclaim, and he is currently working on a therapeutic vaccine for use in treatment of HIV/AIDS. At 78 years old, Professor Ngu retains both his joy in discovery, and his commitment to science in the service of mankind. We spoke to Professor Ngu at his Clinique d'Espoir (Clinic of Hope) in Yaounde, Cameroon.

***Professor Ngu, could you start by telling us how you first become interested in becoming a scientist?***

From childhood, I've always been impressed by nature, by things that happen around me. I remember that in the hills where I grew up in Bamenda I could see stars very clearly, and I was very impressed by this. And as I grew up I was always wondering about these stars? How beautiful they are and why do they shine? From then on of course, the rest was natural. I could not help but try to find out more about the wonderful things about me. I think all scientists must have an inherent sense of wonder.

Later, I went to a secondary school in a place called Sasse in the south west of this country. We were the first lot of students and we had no equipment. Our first science labo-

ratory had been in a horse stable. We had a science teacher, a man from Birmingham, England, who was a very good scientist and he inspired us about science. He made most of our science equipment, he made microscopes in front of us and they worked.

I think to know something, to understand something, can give more pleasure intellectually than any other thing that I can think of. If you won the lottery you could never get as much pleasure as knowing why something is.

***You have talked about moments of great discovery. Many people say that science today needs many millions of dollars in order to achieve such moments.***

I don't quite agree with that. Many great discoveries of the past centuries were made without a great deal of money. Science is concerned with the identification and the solution of a scientific problem. The definition of a problem is almost as important as the solution. Take mobile telephones, for example. The discovery of the mobile telephone came from the fact that somebody dreamt that we could have communications which are not fixed on the wall as they used to be before. That was a

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more important idea than actually finding the telephone. Most of the time, people try to solve problems without clearly defining or knowing what the real problem is. So when you say you're spending a lot of money in science and research, I think that some of that money may be badly spent because people don't have a clear idea of what they want, what the problem is. If you can't define a problem, you can't discover. Money is of course required to transform a discovery into a product; that is a different matter.

***How did your interest in cancer research evolve?***

Cancer was one of the things that hit me right from the start. As a surgeon I tried to remove the cancers. It was a very traumatic and very destructive process. I was convinced that surgery was not the answer. Then the Rockefeller Foundation in 1962 gave me a fellowship to train as a cancer chemotherapist. I became interested in treating a tumour called Burkitt's lymphoma<sup>1</sup>. The tumour was successfully treated with chemotherapy and so in 1972 I got this award<sup>2</sup> in America. When I came back to Ibadan in 1963 I was able to practice chemotherapy, but again the results were good in some cases but not very good with other kinds of tumour. And then it occurred to me that chemotherapy was not so good because tumour cells are in fact cells of the patient's body and a drug that would kill a cancer cell would also kill normal cells. Most cancer chemotherapeutic agents do this.



"For a long time, the diagnosis of HIV/AIDS, and in many cases cancer, was a kind of death warrant. This clinic provided hope because it provided treatment at a time when there were no drugs available." - Professor Ngu, who founded the Clinic of Hope in 1991.



Professor Ngu with the laboratory team and Maître Mary Anchang (holding baby), IP lawyer to the Clinic.

***How did this lead to your current work?***

After ten or more years of cancer work in Ibadan I became disillusioned with chemotherapy on tumours. I was left with the idea that because cancer cells behave differently from the patient's cells, there must be something that can distinguish them from the normal cells. This is why I went into what I will now call immunotherapy of cancer. Immunotherapy is to provoke the immune system of the patient so that it can recognise and act against the foreign element in the cancer cells. When I introduced the idea it was laughed at. To cut a long story short, the immunity of cancer patients is normal at the beginning of the tumour, but it becomes of course pro-

gressively worse. So having tried surgery, chemotherapy, I was now obliged to look at immunotherapy.

While I was working on this, the HIV problem showed up too and I think it was obvious to everyone that something of HIV was similar to the cancer patients. Patients have the virus, they cannot get rid of it. It multiplies and eventually kills the patients as cancers do! And yet both the cancer and HIV are different from the patient's own cells in some ways. So the question was to find out what the difference was. So in a sense I was doing what I said about solving the problem: identifying the problem first before setting to work on it. I say this because I know that some researchers have set out to find

<sup>1</sup> Burkitt's Lymphoma is a cancer of the lymphatic system. Rare in most of the world, it is the most common childhood cancer in West, Central and East Africa, and is one of the most aggressive of all human cancers. Identified in 1956 by a British surgeon, Dennis Burkitt, working in equatorial Africa. [www.burkitts.org/research.shtml](http://www.burkitts.org/research.shtml)

<sup>2</sup> Albert Lasker Medical Research Award in Clinical Cancer Chemotherapy.

a vaccine for HIV without knowing what the HIV really is as a problem as opposed to its manifestation.

***How important is it to invest more in research on the African continent?***

I think it is very important, because there are many good scientific ideas which die in Africa because they don't have a chance to develop. If we had the financial investment these ideas could then be developed with real benefits for the whole of mankind. Scientific discovery is not a personal affair, it is an affair for the whole world because everybody benefits. The ideas which lead to discoveries are not limited to certain regions, they are distributed throughout the whole world.

***Do you think that cures or vaccines against AIDS and cancer could come from researchers in Africa in our lifetimes?***

I'm working on research on vaccines for both cancer and HIV, and I've got good results. It's only a matter of time. I think that we are on the right track for both cancer and HIV because we understand what the problem is. Some of it is not yet clear, but we've got patients who are doing well.

***What are the greatest challenges you face in bringing these promising results to fruition?***

The main challenge would be the financial resources to refine some of the things we talk about. If I had

enough money I could put many scientists to work full-time, to refine some of our findings.

***If you had the opportunity, what message would you wish to convey to the world's leaders?***

I would say to them that ideas are the bases for discoveries and they come from any part of the world including Africa. The improvements in the world today are the results of the developments of simple basic ideas.

See what's happened in Asia, Japan and so on. Fifty or a hundred years ago those countries were underdeveloped countries, and now you cannot contest the scientific qualities of the Japanese. This telephone is made by Samsung, a Korean company. The Japanese are leading in science, but if they had not invested in science they would have remained an underdeveloped country too! The Chinese are now coming up. Most of the computer scientists in the world now come from India (my own son has gone to work for a company based in India). In Africa, good ideas exist also and, if you invest, African scientists can become as powerful as Japanese and Korean scientists.

***Finally, Professor Ngu, what would you say to a young person who was considering studying science?***

If you do science you can never be bored. In a sense I've lived well. I'm 79 years old and I think it's because I've been doing something scientific

that has kept me going so long. I wake up at two in the morning and I get an idea and I can't go to sleep. Isn't that wonderful?



# INNOVATION IN BOTSWANA

## The Botswana Technology Centre

A solar powered hearing aid, a method for bonding sand from the Kgalagadi desert to make construction blocks, a photovoltaic charge controller, a Masa lamp – these are a few innovations to have emerged from the Botswana Technology Centre (BOTEC) in Gaborone.

Set up in 1979, and funded by the Botswana government, BOTEC is a research and development organization, dedicated to the pursuit of innovative technology solutions that contribute to Botswana's social, economic and industrial development. Today the Centre serves as a national hub for the development and dissemination of research. Its 150 staff work to identify technological needs and provide expertise to develop solutions to these needs. In doing so, BOTEC seeks to help Botswana's innovators to overcome the difficul-

ties they face, such as the small size of the local market; the lack of venture capital to help bring ideas to fruition; and the limitations of the national intellectual property infrastructure to protect innovative ideas.

An early BOTEC initiative led to successful innovation in the field of solar-powered products for deaf people. Some 167 million people in developing countries suffer from deafness, or disabling hearing impairment<sup>1</sup>, which limits their opportunities for education and employment. Low cost hearing aids, while available, are not designed for conditions in impoverished communities, where batteries are scarce and costly. To address this problem, BOTEC set up a collaborative project in 1992 with Motse Wa Badiri Camphill, a charitable NGO offering training, employment and rehabilitation services to people with disabilities in Botswana. The aim was to design, manufacture and distribute a low cost hearing device powered purely by the sun's energy. BOTEC produced an initial prototype for a body-worn, solar-powered hearing aid. The Motse Wa Badiri Camphill team conducted field-tests, raised funds for design improvements, branded the device with the **SolarAid** name, and took it to market. The hearing aid won the Design for Development Award from the South African Bureau of Standards in 1998; and went on to win international recognition at the 2002 World Awards for Sustainable Energy in Austria.

The body-worn, solar rechargeable hearing aid generated considerable interest and was used in many developing countries. Yet the level of sales was not high enough to make it sustainable. So Motse Wa Badiri Camphill set up a separate organization, the Godisa<sup>2</sup> Technologies Trust, in order to focus the expertise necessary to develop the promising pilot project into a genuinely successful product. Drawing on the previous experience, a Godisa team of young product designers and technicians developed a stand-alone, solar-powered battery recharger for behind-the-ear hearing aids. The recharger, now being successfully marketed under the **SolarAid** brand, requires only 6 to 8 hours of sunlight to maintain a full charge for a week. It was awarded a WIPO prize at Botswana's 2005 National Design for Development Awards, which were hosted by BOTEC.

### Sustainable solutions

In line with broader government strategy, BOTEC's principal focus is renewable energy. Nine engineers work on renewable energy-related research and projects in the Centre. In 1998 BOTEC established a centralized solar (photovoltaic) power station, which provides power for a health clinic, primary school, street lighting and up to 14 households in the village of Motshegaletau. The project has improved the quality of life for the residents and facilitated growth in the local business community. BOTEC is now in discussion

*Solar-powered solutions to meet the needs of deaf people in developing countries.*



*A solar power station established by Botec supplies power to the clinic, school and households in Motshegaletau village.*



<sup>1</sup> World Health Organisation estimates (2002)

<sup>2</sup> Godisa translates broadly as "helping others to grow" ([www.godisa.org](http://www.godisa.org))

with the Botswana Power Corporation concerning a national strategy for solar power stations.

The Centre prides itself in renewable energy technologies developed by its staff, such as the Photovoltaic charge controller, which ensures that a solar battery does not over- or under-charge, and the Masa lamp, a PV lamp that works with any power source producing between 10 to 16 Volts. These and earlier technologies have been successfully transferred to local entrepreneurs.

Sustainable architecture is another area of expertise for which BOTECH has become known. The building which houses BOTECH, completed in 2001, is itself designed as a demonstration project, incorporating climate-friendly and low energy features such as evaporative cooling, a reticulated atrium, solar chimneys, rainwater collection and sewage recycling. The Centre is also researching new methods of producing building blocks from the widespread sand of the Kgalagadi desert. The aim is to enable people living in the sandy areas of Botswana to construct modern houses more cost effectively, using affordable, durable bricks and blocks.

### Intellectual property

Botswana's Industrial Property Rights Act (1996) provided a legal framework for the country's innovators to seek protection for their intellectual property (IP). But take-up was slow,



*BOTECH's expertise in the design of energy efficient buildings is demonstrated in their own headquarters building.*

and the industrial property office has had to grapple with a shortage of qualified staff, as well as high administrative costs of, for example, searching for patent information. BOTECH assists in on-going developments, by chairing an Indigenous Knowledge Task Force, which has been mandated to draft the indigenous knowledge section for the Industrial Property Rights Act in order to help Botswana's indigenous knowledge practitioners to benefit from their IP.

### An integrated strategy to build an innovative nation

BOTECH's mission is to take the lead in harnessing innovative science and technology for the transformation of Botswana into a globally competitive nation. To this end, its activities are aligned to the national development plan. BOTECH is seen as key player in the national framework for innovation, established by the new



*Using sand from the Kgalagadi desert to produce affordable, sustainable construction material.*

Ministry of Communications, Science and Technology. By integrating the country's intellectual, creative and entrepreneurial talent into the national development strategy, the Government is striking out in pursuit of Botswana's *Vision 2016* goal: "a prosperous, productive and innovative nation."



# ONLINE FORUM ON INTELLECTUAL PROPERTY IN THE INFORMATION SOCIETY

From June 1 to 15 WIPO offered to everyone interested the opportunity to take part in an open, online debate on issues related to intellectual property in the information society. Some 374 postings were received on the ten themes (see box) covered by the Forum ([www.wipo.int/ipisforum](http://www.wipo.int/ipisforum)), which broke new ground for WIPO. The conclusions of the Online Forum will form part of WIPO's contribution to World Summit on the Information Society (WSIS), which concludes with a summit in Tunisia in November 2005.

The forum is part of WIPO's continuing work to raise awareness about intellectual property (IP) issues, and to encourage debate among all stakeholders about IP-related issues in a rapidly changing information society. While membership of WIPO is limited to Member States, the Organization welcomes non-State observers and attaches importance to building collaborative relationships with representatives from across the private sector and civil society. The WSIS Declaration of Principles recognizes that *"building an inclusive Information Society requires new forms of solidarity, partnership and cooperation among governments and other stakeholders, i.e., the private sector, civil society and international organizations."* The online forum aimed to reach beyond WIPO's members, observers and partners in order to offer the man and woman in the (cyber) street a chance to have their voices heard on issues of wide interest and concern.

## The feedback

The postings on all the themes of the forum reflect the desire to be heard and to participate in global discussions on IP. Some, however, also express concern as to whether their voices would reach policymakers, or make a difference. Toby Bainton writes: "As in so many matters, policy is set by government delegations whose opinions are influenced mostly by the needs of businesses. (...) But governments should remember that information in a civilised

society is like the air we breathe, and its circulation should not be unduly restricted. (...) A true information society would be in accord with the whole of society's needs." Taran Rampersad recognizes the difficulty of the task, writing "The role of international organizations is not to have easy jobs – but hard ones, where real problems are dealt with... Balance requires discussion – which is something in which Civil Society needs to have a more active role and that role must have more weight."

Questions relating to the public domain and open access (Theme Three) received the most postings. Introducing the theme of open source software, the WIPO commentary states: Software innovation is a powerful tool for economic development. IP plays a critical role in promoting research and development in this field and in protecting and rewarding creative software development, whether based on open source or proprietary models. The choice between open source and proprietary models of software is therefore not a decision antagonistic to IP, but rather a business decision, based on strategic and policy choices, to be made according to the circumstances of each case.

Opinions expressed by the forum's participants were mixed. Heather Morrison, an author and Creative Commons advocate, wrote, "There is a need to promote the public domain... The public domain should



become the de facto standard, in terms of sharing, rather than “all rights reserved,” at least with regards to distribution and use. ...maybe work should automatically be considered public domain, except for moral rights, unless stated otherwise, and anyone who wishes to make a restricted-access version available would need the approval of the rights holder.”

Compare this with the comments from Paul Crowley: “Imagine a world without copyright. (...) A world without copyright would be owned by those with the biggest distribution pipeline. Period. 10 minutes after a band recorded a song, it would be available in stores. Not from the band – they wouldn’t have the ability to distribute it that quickly. It would be from Sony or WalMart directly. The ideal of open Internet distribution assumes that all distributors are created equal, but we know that not to be the case. Without copyright the largest distributors would receive all of the revenue from creative works. The artist, author or performer would receive nothing. While a “no copyright” system would appear to remove restrictions, it would simply change the landscape to be even more in favor of large distributors.”

Alan Tam comments; “Giving the world free of charge my own invention and creative work is my freedom. (...) ‘Public domain’ is a good example of how to maintain the freedom. (...) WIPO, as an international

organization, should recognize the need for more ‘constitutional freedom’ of such form.” In a similar vein, a posting from the International Intellectual Property Alliance states: “The public domain is enhanced by strong protection of intellectual property rights. (...) In addition, intellectual property protection does not preclude creators from dedicating their works to the public domain. If some creators do not rely upon the revenue from their works or inven-

tions to provide for themselves and their families, there is no intellectual property law preventing them from utilizing a Creative Commons license or some other form of ‘some rights reserved’ license. In fact, creators may abandon their rights entirely if they so choose. To the extent that Creative Commons licenses provide creators with choices, they are supported by everyone in the creative community.”

### The ten themes for discussion in the online forum

1. The WSIS Declaration of Principles sets out a vision for the information society – how can the intellectual property system support this vision?
2. The intellectual property system and freedom of expression and creativity: Help or hindrance?
3. The public domain and open access models of information creation: at odds with the intellectual property system or enabled by it?
4. What is the impact of copyright law, both at international and national levels, on education and research?
5. What are the rights and responsibilities of intellectual property rightsholders?
6. Global partnerships to achieve the United Nations Millennium Development Goals: what role for intellectual property?
7. How is intellectual property policy made for the information society: and who makes it?
8. How can cultural and intellectual diversity of traditional communities be respected in the information society?
9. Emerging business models for distributing intellectual property online: opportunity or threat?
10. What are the challenges for enforcement of intellectual property rights in the digital environment?

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A recurring point under most discussion themes is the term of IP protection, copyright in particular, and the need for more balance between the rights of authors and the public good. Shyamala posted: "The original intent of copyright was to enable authors/creators to enjoy the fruits of their labour, but also to quickly return the works to the public domain, so that society at large may benefit from creative works. The copyright term has been increased absurdly. What is the meaning of having copyrights for 50-60 years after death? (...)developing countries need access to materials so that they may have a chance at competing fairly in the information era. If texts written today are to be available only after 100 years or so, forget about the weaker economies catching up ever!" A posting from the International Federation of Phonographic Industries (IFPI), on the other hand, states: "In many developing countries, the marketplace has been so dominated by piracy that there is no viable mechanism for private capital to be employed in facilitating the creation and distribution of creative works. In such instances the creative voice is silenced. Communities throughout the globe – particularly in parts of Asia, Latin America, the Middle East and Africa – bear witness to the devastating impact that lack of effective copyright protection has on the ability to create."

WIPO provided background information, introductory commentary and suggested questions to consider under each of the ten discussion themes, but did not moderate the forum. Nor was formal registration required for participation, in order to give contributors the freedom to comment anonymously in their individual capacities.



# INTERNATIONAL YEAR OF PHYSICS – EINSTEIN AND PATENTS

Einstein at  
the Swiss  
Federal  
Patent Office



Photo: Lucien Chaven

2005, the International Year of Physics, marks the centenary of Albert Einstein's "Miracle Year" and the fiftieth anniversary of his death.

It was in 1905 that Einstein published four articles in the German monthly *Annalen der Physik*, which not only revolutionized physics and our understanding of the universe, but also changed our world. *On a Heuristic Viewpoint Concerning the Production and Transformation of Light* postulated the hypothesis of light quanta. *On the Motion of Small Particles Suspended in a Stationary Liquid According to the Molecular Kinetic Theory of Induction* explained Brownian motion. *On the Electrodynamics of Moving Bodies* is regarded as the seminal text of the theory of relativity. *Does the Inertia of the Body Depend Upon Its Energy Content?* looked at the consequences of the theory of relativity and introduced the most celebrated equation in physics:  $E = mc^2$ . In April of same year Albert Einstein finished writing his thesis *A New Determination of Molecular Dimensions* and defended it successfully in July.

The Miracle Year came in the middle of the period – from 1902 to 1909 – in which Einstein, possessing an undistinguished educational record, and unable to obtain a teaching job in a university, was working as a technical assistant at the Swiss Federal Patent Office in Bern. Examining patent applications clearly did not absorb all Einstein's energies, as in the course of those seven years Einstein had some two dozen articles on theoretical physics published in the *Annalen*. Some commentators have even suggested a connection between his work on relativity and the problem of synchronizing clocks, a thorny one at the time, which accounted for a large number of Swiss patent applications. Later, Einstein was to write: "A profession with practical purposes is a delight for a man such as I; an aca-

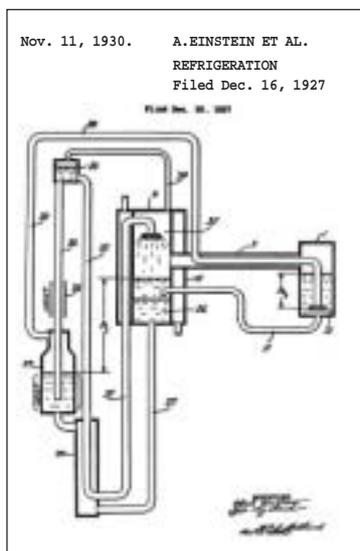
demical career requires young researchers to produce science, and it takes a strong character to resist the temptation of superficial research."

## Einstein the inventor

Einstein's outstanding contribution to science needs no further words from WIPO Magazine. Less well known is that Einstein was himself an inventor with many patents to his name. Among other inventions, he and his pupil, Leó Szilárd, motivated by the death of a family from toxic fumes from their gas refrigerator, patented new types of refrigerators.

The patent rights sold to companies such as Electrolux in Sweden provided Einstein and Szilárd with a livelihood for a few years. Einstein's refrigerator was never commercialized, however largely because of the Depression and the invention of chlorofluorocarbons. But recently there has been renewed interest in the system, as certain features could potentially suit it to use in remote locations or developing countries: it cannot wear out as it has no compressor nor moving parts; it can operate without electricity, requiring only a source of heat; and the cost of manufacture would be relatively low.

Time will tell whether Einstein's and Szilárd's invention ever sees commercial exploitation. It stands today as intriguing example of a little gem preserved by the patent information system, providing an insight into the practical side of one of the greatest minds of the modern age.



Einstein's U.S. patent application for a method of refrigeration has attracted renewed interest. As a former patent examiner, he appreciated the benefits of the patent system. Source: Swiss Academy of Technical Science



# SYMPOSIUM: IP EDUCATION FOR HUMAN RESOURCES IN DEVELOPING COUNTRIES

*Professors, deans and directors from universities in Africa, Asia, Australia, Europe, the Middle East, and South and North America were among the symposium's panelists.*



The potential of a nation's creative and innovative resources in promoting economic, social and cultural development is increasingly recognized in today's world. Many countries, however, lack qualified personnel with the knowledge and skills of the IP system required to transform these resources into valuable economic assets. This can often prove a barrier to development. Representatives from 42 countries participated in an event to address this topic at the WIPO International Symposium on Intellectual Property Education and Research held in Geneva on June 30 and July 1.

At the WIPO symposium, major players in the area of research and education assessed the current situation, identified the challenges ahead, explored the possibilities for enhancing international cooperation and suggested appropriate actions for further development of IP education and research. Participants agreed that much needs to be done to foster partnerships and international cooperation among academic institutions in order to promote the full integration of IP into teaching curricula. This is of particular impor-

ance given the cross-cutting nature of IP and the need for an interdisciplinary approach to IP education and IP research.

The students of today are the decision-makers of tomorrow. To ensure that these future leaders are well equipped for the challenges ahead, educators need appropriate and effective mechanisms to boost understanding of IP and ensure that its application mirrors the specific IP needs of individual countries. Emerging situations in different countries require nationally focused and tailor-made solutions. IP research has a major role to play in ensuring the integration of effective IP strategies into the overall national policy framework.

## **Solutions and opportunities**

The symposium explored ways to improve international cooperation to tackle some of the emerging challenges. It identified coherent approaches and opportunities, such as how a multidisciplinary approach could be reflected in the IP curriculum of universities; and how universities could overcome the scarcity

of IP lecturers through international cooperation and using more "virtual" professors to service distance learning courses via the Internet. Participants agreed that ongoing efforts should be enhanced to strengthen and expand partnerships and strategic cooperation among academic institutions. The cooperation between academic institutions and different stakeholders – for example private enterprise and government agencies – will also have to be developed and expanded since there is a growing need for an interdisciplinary approach to IP research capacity.

There was unanimous agreement that the allocation of resources for IP education and research at universities, as well as at secondary education institutions, is insufficient, and in many respects is "isolated" from other operations relevant to IP. Governments and users of IP need increased support for human resources development – a critical element, if nations are to benefit from the IP system, its incentives and infrastructure, and thus accelerate the creation of wealth.

Panelists strongly supported an enhanced and more comprehensive approach to IP education and research and suggested more integration of IP into such disciplines as economics, business, trade, sciences, engineering and culture. IP education and research was strongly recommended as a way to leverage

the sharing of information and resources among the stakeholders, institutions and governments.

The following actions were among suggestions from panelists:

- ▶ to encourage and advocate at the highest policy level the strengthening of governmental support for IP education and research in the context of development;
- ▶ to help developing countries establish institutional bases (e.g., IP research centers) and more effective mechanisms to collect and disseminate current and relevant documentation for IP education and research (IP libraries);
- ▶ to reflect the interdisciplinary nature of IP in IP curricula, and to bring other areas, such as the field of economics, business management, engineering, science and technology, culture, environment and sociology into that process;
- ▶ to conduct IP research from the nation's strategic perspectives in developing countries in order to facilitate national debate and policy formulation;
- ▶ to start IP education at an earlier stage, covering the younger generations, with a view to fostering a culture which respects creativity and strives to curb piracy;
- ▶ to explore various new and different sources of funding to enhance IP education and research;
- ▶ to provide IP researchers in developing countries with opportunities to publish their work, both in their country and externally;
- ▶ to conduct joint research operations involving researchers from both developed and developing countries, in an attempt to find common grounds for further developing the IP system, taking into account different needs and interests;
- ▶ to suggest various models of IP curricula for different target groups such as engineers and business managers; and
- ▶ to develop mechanisms allowing universities to collaborate internationally through, for example, programs for exchanging teachers and students and for sharing teaching materials and useful information about IP issues.

The participants recommended that WIPO and the WIPO Worldwide Academy should reflect the outcome and the suggestions from the Symposium in Academy programs and in its collaboration with partners in future initiatives.



For further information, please see the WIPO Worldwide Academy website at [www.wipo.int/academy/en/meetings/iped\\_sym\\_05/](http://www.wipo.int/academy/en/meetings/iped_sym_05/).

# WORK ON TRADITIONAL KNOWLEDGE AND FOLKLORE RECEIVES BROAD SUPPORT



WIPO Member States, attending the June 6 to 10 meeting of the Intergovernmental Committee on Intellectual Property and Genetic Resources, Traditional Knowledge and Folklore (IGC), affirmed broad support for this key Committee's work on the protection of traditional knowledge (TK) and expressions of traditional culture/folklore (TCEs). They recommended that the WIPO General Assembly extend the IGC's mandate to continue this work.

The meeting opened with a panel, chaired by indigenous leader Stanley Jones of the Tulalip Tribes, during which indigenous and traditional community representatives from Indonesia, Papua New Guinea, Peru, Sweden, Ukraine, the United States of America and Zambia presented their communities' experiences and recommendations to the IGC. The IGC has agreed to begin each of its sessions with such an indigenous-chaired panel. The Committee accredited 12 more NGOs, raising to over 110 the number of NGOs accredited to the IGC. Many of these represent the interests of indigenous peoples or traditional communities. The IGC broadly supported a proposal for a WIPO Voluntary Contribution Fund to enhance the participation of representatives of indigenous and local communities in its work. The WIPO General Assembly will consider a revised version of this proposal.

## TK and TCEs

The IGC reviewed sets of draft provisions outlining objectives and principles for the protection of TK and TCEs. The provisions aim to frame the policy and legal space for protection against misappropriation

and misuse, and help define the legal measures for this protection. The approach to protection that is being explored would potentially apply indefinitely for TK and TCEs which are the products of intellectual activity, whether communal or individual, and which are characteristic of a community's cultural and social identity and cultural heritage. The principal beneficiaries would be communities in whom the custody of the TK or TCEs has been entrusted under customary law and who still maintain, use or develop them. The draft provisions are neutral as to legal form and could be used as a basis for a national or regional law, a recommendation, model provisions, a treaty or other form of outcome. Many WIPO Member States have called for the development of binding international law in this area. The current IGC mandate refers to an international instrument as a possible outcome, but Member States are yet to reach a common position on the legal status of the outcome of the IGC.

These provisions were a second draft, following an open commenting process established at the previous session of the IGC in November 2004, when the earlier drafts

were accepted by all IGC participants as the basis for its substantive work. The texts, and the comments received, are available as documents WIPO/GRTKF/IC/8/4 (TCEs) and WIPO/GRTKF/IC/8/5 (TK) at [www.wipo.int/tk/en/consultations/draft\\_provisions/comments.html](http://www.wipo.int/tk/en/consultations/draft_provisions/comments.html).

Delegates welcomed the progress made so far by the IGC. Several reported on current regional and national processes, many of which were prompted and guided by the discussions in the IGC. Delegates also recognized the complexity of the issues raised, which required careful consideration and reflection. Diverse views were expressed on the substance of the drafts, as well as on the pace, nature and expected outcomes of future work in these areas. There was broad support for continued work, leading to the consensus recommendation to extend the IGC's mandate.

## Genetic resources

The IGC reviewed several documents on genetic resources issues, including submissions from various Member States, but drew no specific conclusions. The European Community tabled a paper on the disclosure of origin or source of genetic resources and associated TK, which proposed a 'binding disclosure requirement that should be applied to all patent applications.' Peru and Portugal tabled papers on their national measures concerning genetic

# CALENDAR of meetings

resources and *sui generis* protection of TK respectively. A submission by the United States of America dealt with the relationship between TRIPS (Trade-Related Aspects of Intellectual Property) and the Convention on Biological Diversity (CBD) and the protection of TK and folklore. Delegates recommended that the IGC's future mandate continue to address genetic resources issues.

Work on related genetic resources issues was advanced by a separate Ad Hoc Intergovernmental Meeting on Genetic Resources and Disclosure Requirements, just prior to the IGC. This meeting was convened to consider a draft study on the relationship between genetic resources and disclosure requirements in the IP system. The study was prepared at the invitation of the Conference of Parties of the Convention on Biological Diversity (CBD), as part of a continuing dialogue between the two organizations on these issues. Participants reviewed the draft (document WIPO/IP/GR/05/3), many stressing the need for WIPO's work in this area to be supportive of the goals of the CBD, including its objectives of the conservation of biodiversity, sustainable use of its components, and equitable sharing of benefits.



## SEPTEMBER 19 TO 23

(GENEVA)

### *Standing Committee on Information Technologies (SCIT) - Standards and Documentation Working Group (SDWG) (Sixth session)*

The Working Group will continue its work in the adoption of new WIPO standards and the revision of existing WIPO standards, as well as in related matters, and will receive reports from the different SDWG task forces that have been established for that purpose.

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

## SEPTEMBER 26 TO OCTOBER 5

(GENEVA)

### *Assemblies of the Member States of WIPO (Forty-first Series of Meetings)*

All Bodies of the Assemblies of the Member States of WIPO will meet in their ordinary sessions.

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

## OCTOBER 10 TO 14

(GENEVA)

### *Committee of Experts set up under the Nice Agreement Concerning the International Classification of Goods and Services for the Purposes of the Registration of Marks (Twentieth session)*

The Committee of Experts will decide on the adoption of proposals for amendments and other changes to the current (eighth edition) of the Nice Classification, which should enter into force on January 1, 2007, along with the authentic English and French versions of the new (ninth) edition of the Classification.

**Invitations:** As members, the States members of the Nice Union; as observers, all States members of the Paris Union which are not members of the Nice Union, and certain organizations.

## OCTOBER 17

(GENEVA)

### *Domain Name Panelists' Meeting*

A meeting of WIPO panelists to exchange information on precedents and procedures in WIPO domain name dispute resolution.

**Invitations:** Restricted to WIPO domain name panelists.

## OCTOBER 18 AND 19

(GENEVA)

### *Workshop for Arbitrators*

An annual event for all persons interested in WIPO arbitration procedures, both as potential arbitrators and as potential party representatives.

**Invitations:** Open to interested parties, against payment of a fee.

## OCTOBER 20 AND 21

(GENEVA)

### *Advanced Workshop on Domain Name Dispute Resolution: Update on Practices and Precedents*

An event for all persons interested in receiving up-to-date information about the trends in WIPO domain name panel decisions.

**Invitations:** Open to interested parties, against payment of a fee.

## NOVEMBER 2

(GENEVA)

### *Seminar on the Hague System*

A Seminar, in English and French, for all parties interested in increasing their knowledge of the Hague system for the international registration of industrial designs and their practical experience of procedures applied thereunder.

**Invitations:** Open to interested parties against payment of a fee. Government officials of Members of the Hague Union are exempted from the payment of the fee.

## NEWS ROUNDUP

### A new web portal for patents

WIPO launched a new portal on its website in mid-July for patent-related information and services concerning the international patent filing system (Patent Cooperation Treaty (PCT) System) at [www.wipo.int/patentscope/](http://www.wipo.int/patentscope/). The new portal centralizes all WIPO's patent and PCT-related activities to provide users with better services.



Existing information on PCT filing, electronic filing and other patent-related resources is available through this new portal as well as new sections on patent data and statistics. The patent data section provides access, through an enhanced PCT Electronic Gazette, to the complete collection of published PCT International Applications – now more than a million – from

1978 to the present day in image format and with fully searchable description and claim texts for applications filed as from July 1998.

The portal will form the basis for new services that will be made available in the coming months, such as an online file inspection system for applicants and the general public, tutorials and other resources for patent information retrieval.



### Asia-Pacific Regional Symposium on IP and Development

Officials representing the intellectual property (IP) offices of 25 countries in the Asia and the Pacific Region joined the ongoing international debate in the field of IP and development at a Symposium held in Singapore on June 7 and 8. WIPO organized the event in cooperation with the Government of Singapore through the Ministry of Foreign Affairs, the Intellectual Property Office and the Ministry of Law.

The Symposium focused on the following themes:

- ▶ effective IP strategies in the fields of science and technology, culture, youth awareness, knowledge-based businesses and busi-

ness development that could optimize the impact of IP on economic growth;

- ▶ national IP comparative advantages in the areas of traditional knowledge, health, information technology, and small and medium-sized enterprises and the process of deciding on the competing priorities in IP; and
- ▶ the new business role of IP offices in the 21st Century.

The Symposium also provided an opportunity to share experiences on various initiatives aimed at regional cooperation in the IP field, particularly in the context of sub-regional groups such as the Association of South East Asian Nations (ASEAN),

the Asia-Pacific Economic Cooperation (APEC), Pacific Islands Forum Countries and the South Asian Association of Regional Cooperation (SAARC).

The Symposium coincided with the inauguration of WIPO's Singapore Office, which was set up earlier this year as a result of a contribution by the Government of Singapore. The Singapore Office will contribute to the timely, effective and efficient delivery of WIPO's programs in the region.



## Arbitration and mediation: a new electronic case facility



To further enhance efficient resolution of intellectual property and technology disputes, the WIPO Arbitration and Mediation Center is now offering a new tool, the WIPO Electronic Case Facility (WIPO ECAF).

WIPO ECAF is a simple and practical web tool that allows parties involved in a case administered by the Center to conduct the case via a secure electronic facility. Parties submit communications electronically into a secure online docket, which prompts e-mail alerts to other actors in the case, who can access this docket at any time from any location through

the Internet. The online docket incorporates a search function to facilitate access to case documents and to allow easy organization of the documents by chronology or by party.

In addition to online communication and storage, WIPO ECAF provides at a glance core case information, such as a case summary, overview of timelines, including upcoming deadlines, contact details for all parties, and the financial status of the case.

WIPO ECAF functions under the WIPO Mediation, Arbitration, and Expedited Arbitration Rules. In order to safeguard the confidential nature of WIPO arbitration and mediation procedures using WIPO ECAF, the stored information is firewall protected and encrypted by using modern Secure Socket Layer technology. Users are authenticated through username, password and a changing pass code.

WIPO ECAF may be used by party agreement and does not rule out submission of paper documents outside the facility. A brief WIPO ECAF users manual including sample views is available at <http://arbiter.wipo.int/ecaf/help>.

## Mexico honors Dr. Kamil Idris

Ambassador Luis Alfonso de Alba, Mexico's Permanent Representative to the International Organizations in Geneva, presented WIPO Director General Kamil Idris with Mexico's highest honor for foreigners, the order of the Aztec Eagle (*Orden de Aguila Azteca*), on June 22. The Ambassador stated that the Director General's commitment to a culture of intellectual property had strengthened the relationship between WIPO and Mexico's IP institutions. "This relationship has increased economic growth and development for Mexico and in recognition of his endeavors, it is my distinct privilege to confer to his Excellency Mr. Kamil Idris the decoration of the Aztec Eagle, in grade of Band, bestowed upon him by Mr. Vicente Fox, President of Mexico."



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