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The future of intellectual property: opportunities and challenges

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Artificial intelligence and copyright

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The power of branding and design: Thailand's Quality goes global

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# The future of intellectual property: opportunities and challenges

Photo: WIPO / Berrod

“Many of the issues we face are multi-dimensional in nature, and together they pose a huge governance challenge,” notes Mr. Gurry.

WIPO Director General Francis Gurry recently met with *WIPO Magazine* to reflect on the future as revolutionary developments in information technology (IT) and the life sciences begin to test the premises and practices of the intellectual property (IP) system.

***What do you consider to be the main challenges facing the IP system?***

Today we are seeing the emergence of technologies that will have a radical impact on the existing IP landscape. While we do not yet understand their full dimensions, we can anticipate major challenges for IP administration, policy and governance. We can also foresee significant development challenges arising from the huge differences in technological capacity that exist across the world. But with every challenge there are opportunities. The developments that are creating these challenges are not negative in themselves. We simply need to try to understand how they will impact the existing IP system and its future evolution.

***What is driving the administrative challenge?***

It is linked to rising global demand for IP rights. As IP becomes ever more central to the knowledge economy, demand for IP rights continues to rise and this is likely to continue. In 2015, for example, 2.9 million patent applications were filed along with around 6 million trademark applications and 870,000 design applications. These are extraordinary numbers. Managing this rising demand is a big challenge for IP offices. But as new IT solutions come on stream, there will be new opportunities to better manage this demand and administrative IP processes in general.

***Is the existing IP system fit for purpose?***

The current IP system is fit for many purposes, but there may be areas in which it needs to adapt. Artificial intelligence (AI) and the life sciences are two major areas of technological and scientific development that will raise important challenges for IP, as well as for other policy areas, given their multidimensional nature. AI, for example, raises technological and economic issues ranging from incentives for the production of useful AI systems to employment displacement. And inevitably ethical

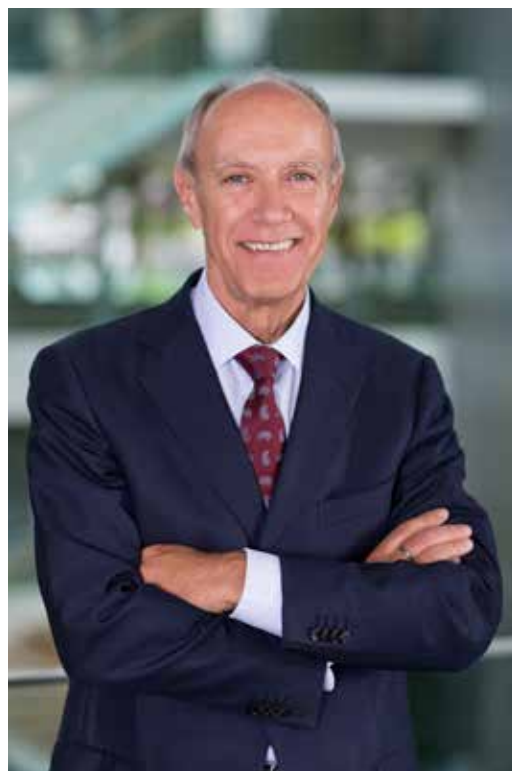


Photo: WIPO / Berrod

**“Today we are seeing the emergence of technologies that will have a radical impact on the existing IP landscape.”**

WIPO Director General Francis Gurry

and governance issues will arise from the application of IT in the life sciences, in particular. So we need to think carefully about what these rapidly evolving technologies will mean for the IP system and its administration.

***And the policy challenges?***

Policy challenges are a consequence of both globalization and the accelerating pace of technological change. Together, these forces are fueling the rapid development, uptake and use of new technologies around the world in a process of radical and continuous disruption. Rapid deployment presents an opportunity to ensure that all countries benefit from the diffusion and use of these technologies. In the policy sphere, these developments are already creating unprecedented practical opportunities for cooperation, for example through the establishment of multi-stakeholder platforms and other partnerships. Such opportunities will only expand.

The process of crafting policy, however, may prove rather more difficult because the existing international system was not designed to deal with the type of rapid change and radical issues we face.

***How might it be possible to overcome this policymaking challenge?***

One way might be for the international community to create a space for risk-free joint reflection, where countries can engage liberally in non-binding discussions. This would create opportunities for more even understanding across the world of the implications of these radical scientific and technological advances for the institution of IP. To achieve such understanding we need to open this space up to those who produce the technologies – the enterprise and innovation sectors – so that discussions are informed and relevant. Multi-stakeholder engagement is essential, both to clarify the role of the existing IP system and to identify the economic incentives required to encourage and sustain these technological developments.

Such an approach offers huge scope to improve the existing architecture of the international system, strengthen global cooperation and support more effective IP policymaking.

**“New technologies are being developed and diffused globally at unprecedented speed. The major challenge is to ensure that all countries benefit from the rapid diffusion of these technologies...”**



Photo: a-image / iStock / Getty Images

"In future, it seems inevitable that technology will increasingly dictate the shape of the international architecture and its governance," says Mr. Gurry.

***You also refer to a system challenge. What does that involve?***

This is an emerging challenge that relates to the fundamental principle of transparency upon which the existing IP system is built. Let me explain. Anyone can seek a patent, trademark, design or other IP right as long as they satisfy certain conditions. One such condition involves publicly disclosing certain information about the new technology, product or service. This makes it possible for others to find out who owns a technology, product or service, and the scope of the associated rights. The purpose is to facilitate the efficient exchange and use of these rights, in support of technological development, business growth and social progress. Transparency has always been a cornerstone of the IP system. But the trend toward the privatization of functions traditionally undertaken by the public sector and the emergence of new technologies such as blockchain, which, broadly

speaking, offers a secure means of record keeping, can be expected to further blur the lines between the public and private spheres.

***How exactly will these trends test the transparency of the existing IP system?***

A traditional function of IP offices is to maintain a public record of property rights in relation to knowledge, technology and cultural works. While blockchain technology, for example, may increase the system's efficiency and security, it will do so by means of a private technology rather than a public register. A lot of experimentation is taking place with blockchain in the copyright sphere, and one can easily foresee its application in all areas of IP licensing. We need to be aware that with blockchain technology the private sector may become an ancillary record keeper. And we need to consider what impact that will have on the transparency of the market for knowledge



Photo: a-image / iStock / Getty Images

Mr. Gurry foresees the application of emerging technologies like blockchain for secure transactions and record keeping in all areas of IP licensing.

goods. Will the use of such technologies boost the efficiency of that market? Will it improve IP rights management systems? It certainly has huge potential to do so.

### ***Do you foresee a redefinition of existing IP rights?***

Today, as big data gains traction and we move toward the Internet of Things, huge amounts of data are being generated. Much of it falls outside the traditional categories of the IP system. This is one of the reasons why researchers are increasingly turning to trade secrets to protect their pre-competitive laboratory work. We also see that major online platforms like Facebook and YouTube are creating vast quantities of valuable data from their activities. This gives them, and indeed all those who hold such data stores, a significant economic opportunity. There are, however, many complex questions coming to the fore about the ownership (in the traditional sense) of those data. These questions also touch on privacy and security issues. For example, who owns a person's data, or the data generated by a person's existence? Do we need to redefine ownership in relation to these data, and the rights and obligations that attach to them?

While some redefinition of property rights in relation to classes of data that fall outside classical IP categories

appears inevitable, any recasting of existing IP rights will depend on what policymakers want to achieve. For example, if the goal is to encourage the collection and exploitation of data to enhance understanding of human health, policymakers will need to consider a range of questions. Do existing IP arrangements provide the right set of incentives to encourage this? Are additional incentives required? Or are there sufficient incentives in the market? Does the behavior of "data collectors" need to be regulated? Laws governing trade secrets cover some of these questions, but our thinking really needs to develop around these evolving issues.

### ***What development challenges lie ahead of us?***

There are major asymmetries in the world. On the one hand, advanced economies are investing trillions of dollars in R&D, and on the other hand, low- and middle-income countries and transition economies are confronting myriad frontline demands with very limited resources. At the same time, new technologies are being developed and diffused globally at unprecedented speed. The major challenge is to ensure that all countries benefit from the rapid diffusion of these technologies and that the huge differences in technological capacity that exist are not exacerbated. This is a critically important issue that requires careful attention.



## About the “Oncomouse” patent

In 1988 the United States Patent and Trademark Office (USPTO) granted the world’s first patent on a higher life-form (patent number 4,736,866). Developed by researchers at Harvard Medical School, the patent for the so-called “Oncomouse” claimed “a transgenic non-human mammal whose germ cells and somatic cells contain recombinant active oncogene sequence introduced into said mammal.”

The invention was seen as an important development in understanding cancer and developing more effective treatments. However, it also raised deep ethical concerns which sparked intense policy debate about the desirability of patenting higher life-forms in the United States and many other jurisdictions.

### ***What are the implications of these challenges for the governance of the IP international system?***

Many of the issues we face are multidimensional in nature, and together they pose a huge governance challenge. The technologies that are creating these seismic shifts are cross-disciplinary – they touch on IP, ethics, privacy, security, biosafety and so on – but the existing architecture of international organizations was not designed to handle the multidimensional questions we face. Organizations currently tend to specialize in single issues, such as health, IP, labor or trade. And policy discussions are often exclusively State-driven. Issues may be addressed nationally, but they often benefit from broader discussion at bilateral or plurilateral levels, or within regional groups that share common interests. And, most broadly, they can be discussed at the international level. In future, it seems inevitable that technology will increasingly dictate the shape of the international architecture and its governance. While we can anticipate that any changes to the design of governance systems will be imbued with widely shared values of universality, balance and opportunity, we need to reflect carefully on how the international community can respond effectively to these rapid and potentially radical developments. A whole new world is developing and we can expect a very different ball game.

### ***What is the most appropriate forum to handle these issues?***

That’s a good question. It may be that a new organization is required to address them or it may be that we need to enhance cooperation between existing organizations. New organizations should only be created where there is an unfulfilled need. So thought has to be given to where an appropriate discussion on these issues might take place.

### ***How do you see the public debate changing around IP?***

In recent years we have seen vastly enlarged levels of public engagement, thanks in large part to the Internet, which has brought users into direct contact with IP issues. This is likely to continue.

There is, however, a tendency for IP to become the battleground for other issues. Take, for example, the controversy surrounding the patenting of the Oncomouse by Harvard University in 1988 (see box). People inevitably focused on the rights question because the publication of a patent application is generally the first public expression of a new technology. But in reality the more fundamental issue was whether it was acceptable or desirable for researchers to be able to manipulate higher organisms. Today we see a similar scenario playing out in relation to the application of CRISPR-Cas9 gene-editing technology, which increases the capacity to manipulate all organisms, and has huge implications for health, agricultural and industrial biotechnology.

### ***Are you optimistic about the future?***

In general yes. The stakes are high. We need to hone our risk management techniques.

# iROKOTv: delivering Nollywood content to the world

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



Photo: Courtesy of iROKOTV.com

iROKOTv has become a major producer of Nollywood content. The company's creative arm, ROK Studios, generates around 90 percent of the content featured on iROKOTV.com.

Nollywood films are now available on a screen near you. Increasingly, distribution is moving online, giving Nigeria's movie industry global reach.

Leading the way is iROKOTv. In just seven years, it has become a global media platform, boasting the world's largest online catalogue of Nollywood films, a clutch of TV channels and viewers in 178 countries. And it is also becoming a major producer of Nollywood content.

**Tope Lucas**, the company's Legal Counsel and Head of Content Acquisition, talks about its explosive growth, the role that intellectual property plays in its fortunes, and its plans for the future.

## ***How did iROKOTv get started?***

Our CEO, Jason Njoku, came up with the idea of starting a Nollywood film distribution business in 2010 at his family home in Manchester, United Kingdom. His mother was a great fan of Nollywood movies, but they were in short supply. The only way you could watch them at that time was on DVDs that people brought back to the UK from Nigeria or via odd pirate sites with low-quality films. Jason came over to Nigeria and met with producers to see if they were interested in putting their films online. They were hesitant at first. They had been "burned" in the past, and when they were presented with a genuine contract that would enable them to be paid for the use

of their work online it sounded too good to be true. But eventually they warmed to the idea, and thanks to that approach we are where we are today. iROKOTv started out as a YouTube company. We were the first company to put Nollywood content online legally. Then, in 2011, we moved to our own platform, iROKOTv.com, and began licensing in and developing our own content.

***What services do you offer?***

At first, we operated both a freemium and a subscription model, but now almost everything is based around subscriptions. Just over a year ago we expanded our TV presence and we now have partnerships with various TV stations. We also distribute content for in-flight entertainment and to TV stations in a number of French-speaking African countries.

***Where do you source your content?***

We recently started producing our own content. It has been challenging but super-successful. Over the past year, ROK Studios, the company's creative arm, has produced or commissioned 90 percent of the content featured on iROKOTv.com. We own the rights to that content.

We also have iROKO Global, which was originally established to handle distribution of third-party content licensed by iROKOTv from various content producers, but these days iROKO Global is concentrating on the distribution of our own content. We were paying premium rates for licensed content and it just wasn't financially sustainable. We realized we could actually produce better content ourselves.

***Can you tell us more about iROKOTv's distribution business?***

Distribution wasn't a priority until we realized we could make money from all the rights we hold in our content for use on the Internet, TV and in-flight. People began

**“iROKOTv has shown the world that Africa has a lot of great content and many talented producers.”**

buying content from us because it is easier than going to individual producers. We realized we were sitting on a goldmine and started investing in producing and distributing our own content. Many people now come to iROKOtv to source Nollywood content because we have a reputation for properly licensing our material. Distribution now accounts for around 40 percent of our business.

### ***And your TV channels?***

Television is a new area of our business. It is taking off and is now bigger than distribution. We have four ROK TV channels: one on DS TV (a Nigerian cable channel), one on Sky in the UK and two (iROKO 1 and iROKO2) on Nigeria's Star Time TV network. They all feature content that we own or license.

### ***What specific challenges do you face in the African market?***

Licensing work from some Nollywood producers can be a challenge, especially those who sell rights to multiple parties. And of course online piracy is a constant battle. No matter how well we protect our content online there are always those who try to take it and put it onto other platforms for free. These are daily frustrations that we generally overcome. We put a lot of emphasis on nurturing close relationships with producers, which helps. They are now coming to recognize that they need us as much as we need them, and are increasingly playing by the rules.

On the technical side, bandwidth is a big challenge. The majority of people here watch content on their mobile devices, so we have developed a mobile app and set up about 50 kiosks around Lagos. The kiosks allow any iROKOtv subscriber to access and download our content onto their phone. They simply download the app using the Internet access we provide in the kiosk – they don't need to use their data – and then select and download the content they want to watch. It's available on their phone for up to 30 days.

### ***Have you noticed any change in the way people view Nollywood content?***

Today there is a lot more respect for Nollywood content. Over the past two years there have been many positive developments. The quality of our movies has really improved. We now have better stories, better actors, production values, direction and cinema releases. Whereas in the past American movies were popular, today Nollywood movies dominate cinema in Africa. People are intrigued by them and want to watch them. I think things are only going to get better for Nollywood.





Photo: Courtesy of iROKOTV.com

As an internet company and an entertainment company, iROKOTV is constantly developing and running new technological solutions. To overcome bandwidth constraints in Nigeria, the company has set up kiosks around Lagos for subscribers to download content onto their phones almost data free.



***Why is iROKOTv recognized as one of Africa's leading tech companies?***

iROKOTv broke new ground and brought a totally new offering to the table. Technology made it possible to do this. We started out working with YouTube; now we have our own platform and payment model to deliver content to customers. In effect, we are both a tech company and an entertainment company. We keep evolving and bringing new technology on stream to ensure our customers have a smooth and seamless viewing experience. We are committed to innovation.

***How do you explain iROKOTv's explosive growth?***

Content and the technology. When your technology makes it easy for anyone to get the movie they want to watch, and when you do what you say you are going to do, you have a winning formula. Our consistency has enabled us to build trust. Our customers know they will always find something to watch. We release movies onto our platform at least three times a week. Imagine getting three brand new movies every week! That is enough to drive consumers to our platform.

***What role do social media platforms play in promoting your movies?***

Social media platforms offer a really cost-effective way to promote our content. Our social media team manages our presence on Facebook, Twitter and YouTube, and regularly shares short clips with our users. The great thing about social media is you can simply post a movie and if people like it, word spreads very quickly. People will watch it on the strength of comments posted. It's great!

***How do you keep up with the rising demand for Nollywood content?***

Keeping up with demand is not always easy because we don't just post any movie, we want *good* movies. Demand is high, but we have producers shooting movies for us all the time. And we also review material that other producers send to us. We try to close as many deals as possible and to have movies lined up well in advance.



Photo: Courtesy of iROKOTv.com

*Ovy's Voice* is one of iROKOTv's most popular commissions. It is a simple, touching love story about a mute make-up artist and the son of one of her favorite clients.

**“When we shoot our own movies we hold all the rights and can license them on our own terms. In the long run it's more cost-effective.”**

### ***Is iROKOTv supporting local filmmakers?***

Yes, for sure. If a producer sends us a movie – we receive movies from all over the country – we send it for review to our team in London. And on the basis of their evaluation, we reject or accept the movie. If we accept it we negotiate a deal. And if it doesn't make it to our platform, we offer a partnership deal whereby the movie is loaded on to our YouTube freeview channel, with any revenues generated shared. Eighty percent goes to the producer and 20 percent to iROKOTv.

### ***How many movies or series has ROK Studios produced so far?***

So far, we have produced around 200 movies and 30 TV series and are on track to produce around 100 feature-length movies in 2017. Our aim is to shoot as many movies as possible to avoid having to license content from producers. Content licenses have a shelf life and require periodic renegotiation. When we shoot our own movies we hold all the rights and can license them on our own terms. In the long run it's more cost-effective.

### ***Why is IP important for your business?***

IP is the core of our business. From licensing to movie production, everything we do is about IP. Sometimes it is difficult to put a value on creativity, but having been in this business for some years we are now able to put a value on a film and pay a fair price for it.

### ***What are the growth prospects for the African entertainment and broadcasting landscape?***

For many years, entertainment in Africa was not taken seriously, but that's changing. Africans are starting to appreciate African content, and this is fueling the fortunes of companies like iROKOTv. So if production values continue to rise, I think the sector will see exponential growth.

### ***What impact would you say iROKOTv has had on the African entertainment scene?***

iROKOTv has inspired many people to start creating and monetizing their own content by, for example, setting up their own YouTube channel. Indeed, our platform has become a go-to place for producers who want to showcase their work to an international audience in the hope that they will get financial backing for future film projects. We carved the trail and continue to lead the way. iROKOTv has drawn attention to Nollywood and has shown the world that Africa has a lot of great content and many talented producers. We are delivering brand

new content to viewers every week and people are now seeing that this is the future. Nollywood is the future. African content is the future. Nigerian movies are winning awards, and collaborations with international artists and producers are on the rise. Everyone is getting in on the act now.

### ***What gives iROKOTv the edge on competitors like Netflix?***

Netflix is predominantly a place to find American movies. They have great content, but for Nollywood and Africa, we are the specialists.

### ***What lessons have you learned?***

Consistency and focus are key. When you focus and do something repeatedly, you get better at it. At one point we thought about distributing other types of content, but realized our competitive advantage is Nollywood. That's why we remain firmly focused on Nollywood content.

### ***What are your plans for the future?***

For iROKOTv, the sky is the limit. The company has evolved beyond recognition since 2010 and I think this will continue. We now have a handful of TV channels, but I foresee that they will grow in number in the coming years. And every week we produce new high-quality content for which we hold the rights. All we need to do is to use them. We are only now beginning to gather steam.

# Artificial intelligence and copyright

By **Andres Guadamuz**, Senior Lecturer  
in Intellectual Property Law, University of  
Sussex, United Kingdom

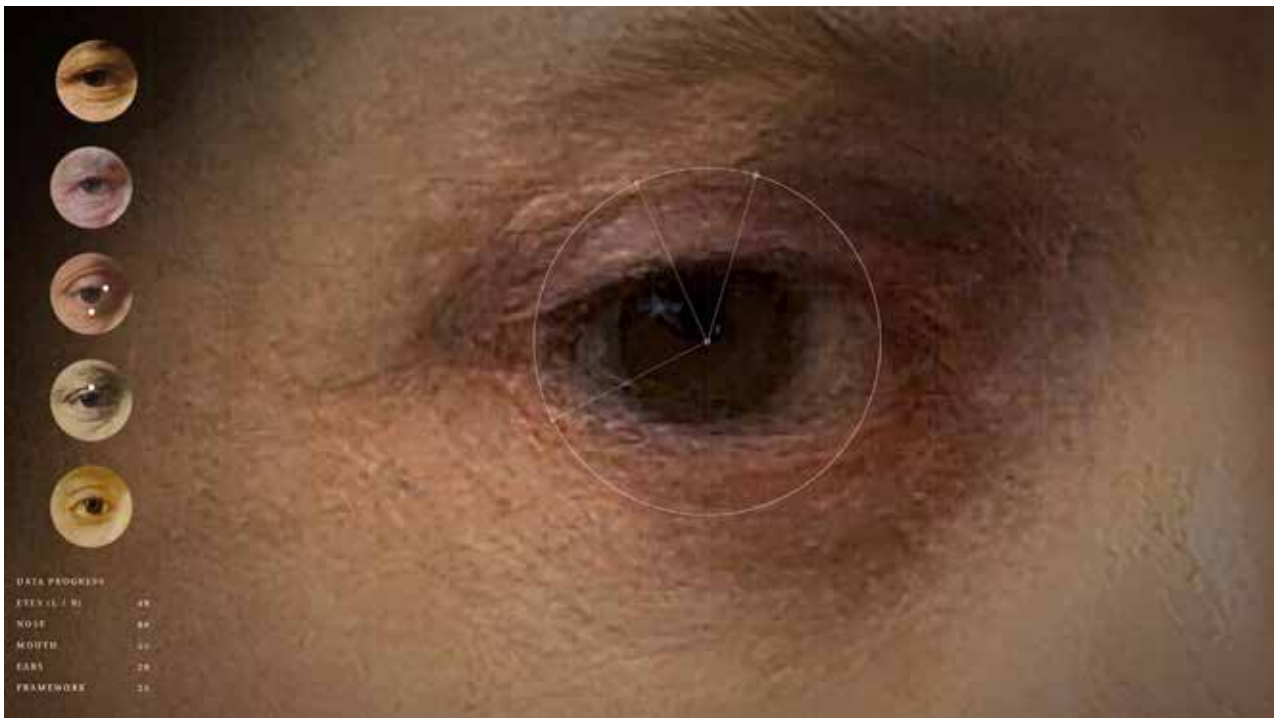






### **About The Next Rembrandt**

The Next Rembrandt is a computer-generated 3-D-printed painting developed by a facial-recognition algorithm that scanned data from 346 known paintings by the Dutch painter in a process lasting 18 months. The portrait consists of 148 million pixels and is based on 168,263 fragments from Rembrandt's works stored in a purpose-built database. The project was sponsored by the Dutch banking group ING, in collaboration with Microsoft, J.Walter Thompson marketing consultancy, and advisors from TU Delft, The Mauritshuis and the Rembrandt House Museum.



Photos: J. Walter Thompson Amsterdam

Blurring the lines between art and technology, researchers in the Netherlands challenged themselves to create a new Rembrandt masterpiece using cutting-edge information technologies.

The rise of the machines is here, but they do not come as conquerors, they come as creators.

Google has just started funding an artificial intelligence program that will write local news articles. In 2016, a group of museums and researchers in the Netherlands unveiled a portrait entitled *The Next Rembrandt*, a new artwork generated by a computer that had analyzed thousands of works by the 17th-century Dutch artist Rembrandt Harmenszoon van Rijn. A short novel written by a Japanese computer program in 2016 reached the second round of a national literary prize. And the Google-owned artificial intelligence company Deep Mind has created software that can generate music by listening to recordings.

Other projects have seen computers write poems, edit photographs and even compose a musical.

### COMPUTERS AND THE CREATIVE PROCESS

Robotic artists have been involved in various types of creative works for a long time. Since the 1970s computers have been producing crude works of art, and these efforts continue today. Most of these computer-generated works of art relied heavily on the creative input of the programmer; the machine was at most an instrument or a tool very much like a brush or canvas. But today, we are in the throes of a technological revolution that may require us to rethink the interaction between computers and the creative process. That revolution is underpinned by the rapid development of machine learning software, a subset of artificial intelligence that produces autonomous systems that are capable of learning without being specifically programmed by a human.

A computer program developed for machine learning purposes has a built-in algorithm that allows it to learn from data input, and to evolve and make future decisions that may be either directed or independent. When applied to art, music and literary works, machine learning algorithms are actually learning from input provided by programmers. They learn from these data to generate a new piece of work, making independent decisions throughout the process to determine what the new work looks like. An important feature for this type of artificial intelligence is that while programmers can set parameters, the work is actually generated by the computer program itself – referred to as a neural network – in a process akin to the thought processes of humans.

### IMPLICATIONS FOR COPYRIGHT LAW

Creating works using artificial intelligence could have very important implications for copyright law. Traditionally, the ownership of copyright in computer-generated works was not in question because the program was merely a tool that supported the creative process, very much like a pen and paper. Creative works qualify for copyright protection if they are original, with most definitions of originality requiring a human author. Most jurisdictions, including Spain and Germany, state that only works created by a human can be protected by copyright.

But with the latest types of artificial intelligence, the computer program is no longer a tool; it actually makes many of the decisions involved in the creative process without human intervention.

### COMMERCIAL IMPACT

One could argue that this distinction is not important, but the manner in which the law tackles new types of machine-driven creativity could have far-reaching commercial implications. Artificial intelligence is already being used to generate works in music, journalism and gaming. These works could in theory be deemed free of copyright because they are not created by a human author. As such, they could be freely used and reused by anyone. That would be very bad news for the companies selling the works. Imagine you invest millions in a system that generates music for video games, only to find that the music is not protected by law and can be used without payment by anyone in the world.

While it is difficult to ascertain the precise impact this would have on the creative economy, it may well have a chilling effect on investment in automated systems. If developers doubt whether creations generated through machine learning qualify for copyright protection, what is the incentive to invest in such systems? On the other hand, deploying artificial intelligence to handle time-consuming endeavors could still be justified, given the savings accrued in personnel costs, but it is too early to tell.

### LEGAL OPTIONS

There are two ways in which copyright law can deal with works where human interaction is minimal or non-existent. It can either deny copyright protection for works that have been generated by a computer or it can attribute authorship of such works to the creator of the program.

To my knowledge, conferring copyright in works generated by artificial intelligence has never been specifically prohibited. However, there are indications that the laws of many countries are not amenable to non-human copyright. In the United States, for example, the Copyright Office has declared that it will “register an original work of authorship, provided that the work was created by a human being.” This stance flows from case law (e.g. *Feist Publications v Rural Telephone Service Company, Inc.* 499 U.S. 340 (1991)) which specifies that copyright law only protects “the fruits of intellectual labor” that “are founded in the creative powers of the mind.” Similarly, in a recent Australian case (*Acohs Pty Ltd v Ucorp Pty Ltd*), a court declared that a work generated with the intervention of a computer could not be protected by copyright because it was not produced by a human.

In Europe the Court of Justice of the European Union (CJEU) has also declared on various occasions, particularly in its landmark *Infopaq* decision (C-5/08 *Infopaq International A/S v. Danske Dagbaldes Forening*), that copyright only applies to original works, and that originality must reflect the “author’s own intellectual creation.” This is usually understood as meaning that an original work must reflect the author’s personality, which clearly means that a human author is necessary for a copyright work to exist.

The second option, that of giving authorship to the programmer, is evident in a few countries such as the Hong Kong (SAR), India, Ireland, New Zealand and the UK. This approach is best encapsulated in UK copyright law, section 9(3) of the Copyright, Designs and Patents Act (CDPA), which states:

*“In the case of a literary, dramatic, musical or artistic work which is computer-generated, the author shall be taken to be the person by whom the arrangements necessary for the creation of the work are undertaken.”*

Furthermore, section 178 of the CDPA defines a computer-generated work as one that “is generated by computer in circumstances such that there is no human author of the work”. The idea behind such a provision is to create an exception to all human authorship requirements by recognizing the work that goes into creating a program capable of generating works, even if the creative spark is undertaken by the machine.

## **ADDRESSING AMBIGUITY**

This leaves open the question of who the law would consider to be the person making the arrangements for the work to be generated. Should the law recognize the contribution of the programmer or the user of that program? In the analogue world, this is like asking whether copyright should be conferred on the maker of a pen or the writer. Why, then, could the existing ambiguity prove problematic in the digital world? Take the case of Microsoft Word. Microsoft developed the Word computer program but clearly does not own every piece of work produced using that software. The copyright lies with the user, i.e. the author who used the program to create his or her work. But when it comes to artificial intelligence algorithms that are capable of generating a work, the user’s contribution to the creative process may simply be to press a button so the machine can do its thing. There are already several text-generating machine learning programs out there, and while this is an ongoing area of research, the results can be astounding. Stanford PhD student Andrej Karpathy taught a neural network how to read text and compose sentences in the same style, and it came up with Wikipedia articles and lines of dialogue that resembled the language of Shakespeare.

Some case law seems to indicate that this question could be solved on a case-by-case basis. In the English case of *Nova Productions v. Mazooma Games* [2007] EWCA Civ 219, the Court of Appeal had to decide on the authorship of a computer game, and declared that a player’s input “is not artistic in nature and he has contributed no skill or labour of an artistic kind”. So considering user action case by case could be one possible solution to the problem.

**THE FUTURE**

Things are likely to become yet more complex as use of artificial intelligence by artists becomes more widespread, and as the machines get better at producing creative works, further blurring the distinction between artwork that is made by a human and that made by a computer.

Monumental advances in computing and the sheer amount of available computational power may well make the distinction moot; when you give a machine the capacity to learn styles from large datasets of content, it will become ever better at mimicking humans.

And given enough computing power, soon we may not be able to distinguish between human-generated and machine-generated content. We are not yet at that stage, but if and when we do get there, we will have to decide what type of protection, if any, we should give to emergent works created by intelligent algorithms with little or no human intervention. Although copyright laws have been moving away from originality standards that reward skill, labor and effort, perhaps we can establish an exception to that trend when it comes to the fruits of sophisticated artificial intelligence. The alternative seems contrary to the justifications for protecting creative works in the first place.

Granting copyright to the person who made the operation of artificial intelligence possible seems to be the most sensible approach, with the UK’s model looking the most efficient. Such an approach will ensure that companies keep investing in the technology, safe in the knowledge that they will get a return on their investment.

The next big debate will be whether computers should be given the status and rights of people, but that is a whole other story.

The use of artificial intelligence by artists is becoming more widespread, blurring the distinction between works created by a human and those created by a computer. This has interesting implications for copyright law, which generally only protects works created by a human.

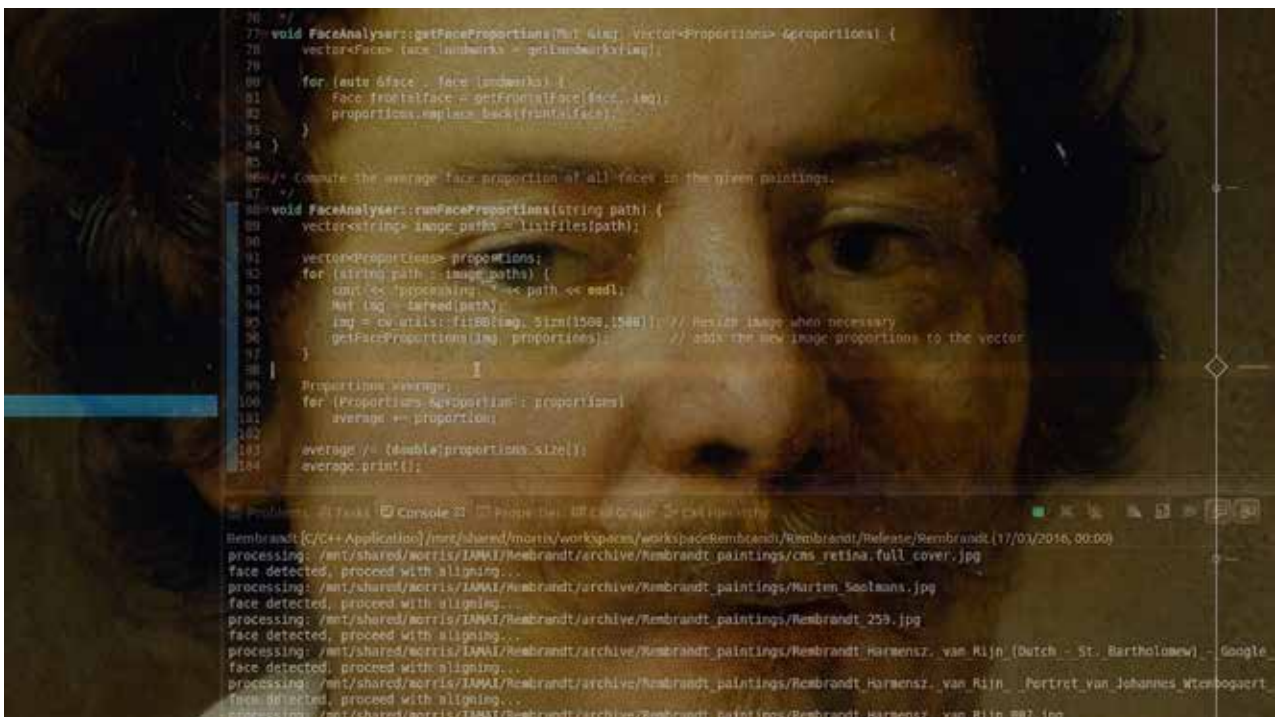


Photo: www.nextrembrandt.com

# Transforming Arab cinema with MAD Solutions

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



Photo: Courtesy of MAD Solutions

Alaa Karkouti (left) and Maher Diab (right), co-founders of MAD Solutions, a film promotion and distribution studio in the Arab region that is working to transform Arab cinema.

With a population of around 422 million people spanning 22 countries, the Arab film market is largely untapped and has huge growth potential. **Alaa Karkouti** is a renowned film analyst and CEO and co-founder of MAD Solutions, a one-stop shop for film promotion and distribution in the Arab region. He talks to *WIPO Magazine* about what the company is doing to support the development of Arab cinema at home and abroad.

## ***How did you get into the film business?***

I have always loved the cinema. But when I started out, film was not considered a serious career option, so I studied journalism and began writing for Arab newspapers

in London. Then I went to Cairo, the Hollywood of the Arab world, and got into film journalism. This gave me an in-depth understanding of the industry. At the time, the standard template for film distribution was a trailer, a poster and a film premiere. But it wasn't working. People were not going to the cinema. It was clear there was a gap in the Arab film market and we had to develop a new approach and to start making films that Arab audiences could relate to. To do this we needed to better understand the Arab film market and Arab audiences. That was the only way we were going to develop a cinema culture in the region. That's what prompted me to set up MAD Solutions with Maher Diab, who is now the company's creative director.

### ***What is MAD Solutions seeking to achieve?***

We want to see the Arab film sector flourish and reach its full potential. We want to change perceptions about Arab cinema and to create the space for Arab films to be seen at home and internationally. We also want to encourage people to broaden their viewing habits and experiment with different genres of Arab films. But this is a big challenge because for many in the region, cinema remains a luxury and people are generally unwilling to explore arthouse films. But thankfully the landscape is changing. A few years ago it was rare for an Arab film to be released in the region, but last year we distributed 10 feature-length Arab films to Arab cinemas.

### ***How does MAD Solutions stand apart from other film distributors in the region?***

MAD Solutions is the first pan-Arab creative studio dedicated to the creation, promotion, marketing and distribution of quality Arab content to and from the Arab region. We bring all aspects of film marketing, promotion and distribution under one roof, and have a long-term vision for the sector's development. This concept never existed in the Arab world before MAD Solutions. We work with all film genres – fiction, documentaries, features, shorts – but we only distribute Arab films (for now) in the Arab region. We have offices in Cairo and Abu Dhabi and work with filmmakers in most Arab countries. And sometimes we co-produce films – to secure distribution rights for the Arab region – but even here our focus is exclusively on marketing and promotion.

In its drive to transform cinema in the Arab region, MAD Solutions distributed an unprecedented 10 feature-length films to Arab cinemas in 2016.



Photos: Courtesy of MAD Solutions

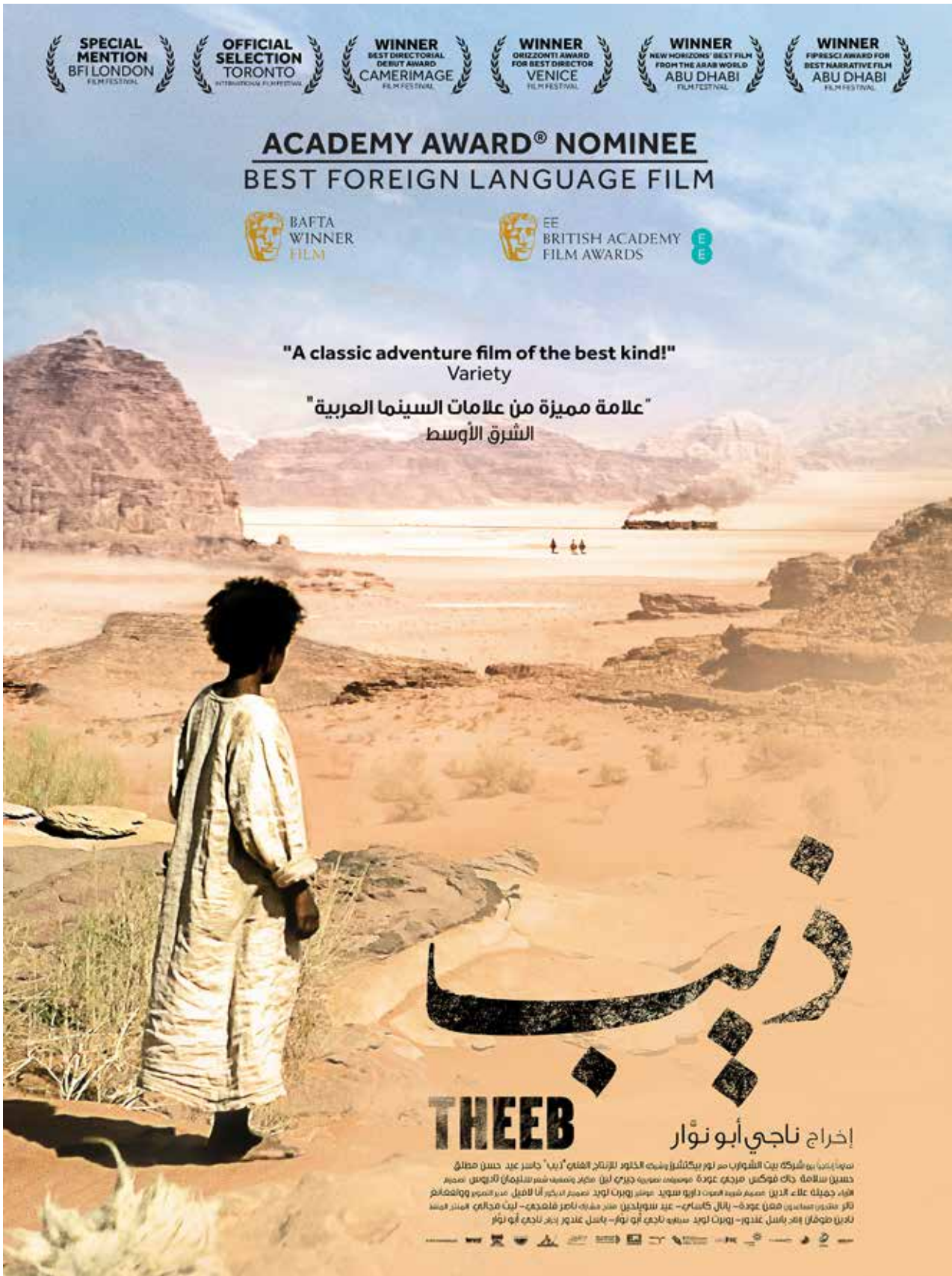


Photo: Courtesy of MAD Solutions

Naji Abu Nowar's award-winning *Theeb* is set in the First World War and recounts a Bedouin boy's experiences in guiding a British soldier across the desert to a secret destination.





Photos: Courtesy of MAD Solutions

MAD Solutions has been pioneering new film release strategies to boost cinema audiences and stimulate interest in Arab cinema within the region.

There are still so many unanswered questions about Arab Cinema, so we specialize in collecting industry data and in better understanding our target audiences. These data give us an accurate picture of the current state of the Arab film industry and its huge potential. For far too long, people have built film budgets around fake markets with no idea of the numbers. But if you are going to succeed in this business, attract investors, build credibility and track progress, you need to understand the size of your market, and your target audience.

That's why we have been pioneering new film release strategies, such as micro-releases supported by test screenings and social media to create a buzz around a film. This approach generates useful feedback that allows us to tailor our film promotion to target audiences for maximum impact at the box office. For example, we developed the promotional materials for the Oscar-nominated Jordanian film *Theeb* around feedback from cinemagoers at a test screening. Then when we launched it to Egyptian audiences we

booked just two cinema screenings. The producers were uneasy about this at first, but it paid off. Those who saw the film talked about it with their friends and on social media, and generated a lot of interest in the film, which ended up staying in the cinema for seven weeks. This was exceptional as Arab cinemagoers generally favor Hollywood, Egyptian and Bollywood movies over other Arab content. *Theeb* has since gone on to be released in 11 countries across the region. With this approach we have won the trust of cinemas and audiences alike.

We are the only company in the region that is looking at the big picture and taking a long-term view on the development of the Arab film industry. We are working with producers and film festivals around the world to develop our vision. We strongly believe that we have to join forces if we are to strengthen the Arab film industry; that's why MAD Solutions has been a driving force in setting up the Arab Cinema Center (ACC).

***Tell us more about the Arab Cinema Center.***

The Arab Cinema Center is a non-profit organization that Maher and I set up in 2015 to nurture and promote the Arab film industry and to connect Arab filmmakers with their counterparts and investors around the world. It brings together more than 30 partners from across the Arab cinema value chain. They are the sector's best ambassadors so we give them a platform, at major film festivals, for example, to showcase and promote their work in international film markets. Through our work with the Center we are also seeking to attract new talent – Maher plays a key role here – and to encourage filmmakers to come up with fresh narratives and visual styles that do well both at home and abroad.

With MAD Solutions the ACC has spearheaded various initiatives to put Arab cinema on the world map. We created the first ever English-speaking *Arab Cinema Magazine*, which highlights the quality and range of film content and talent in the region. We have also established the Annual Critics Awards, another first in the history of Arab cinema. Top international film critics identify the best Arab films and select nominees and winners for Best Film, Best Director, Best Writer, Best Actress and Best Actor. The Awards are yet another opportunity for us to highlight the depth and quality of Arab film talent. And we have launched the Arab Cinema Lab, a first-of-its-kind film financing incubator to accelerate new film projects and business ideas by bringing together a select group of filmmakers, creative producers, funders, distributors and broadcasters. The Lab is effectively laying the foundations for a more robust film investment culture in the region. The more we can draw investors to Arab filmmakers and their projects, the greater the chances of opening the door to new talent.

***What are the main challenges you face as a film distributor?***

In the film industry, for every success there is a disappointment so when things don't work out as planned you always need a plan B to push a film to a buyer. Travelling to film festivals in all corners of the world sounds like fun, but it can be tough.



Photo: Courtesy of MAD Solutions

In 2015 Alaa Karkouti and Maher Diab set up the Arab Cinema Center to give Arab filmmakers a platform to showcase their talent and to connect them with producers and investors from around the globe. The Center recently launched its Annual Critics Award to highlight the depth and quality of Arab film talent.

Although the quality of Arab films is improving, getting Arab audiences to see quality Arab movies remains a big challenge. That is why our focus on better understanding Arab audiences is so important and why we are pushing for more effective film festivals in the region. But if we are to succeed in creating a sustainable Arab film industry, policymakers and regulators need to take the film industry more seriously and recognize its huge economic potential. If we don't give more space to Arab films, the region's film landscape will continue to be dominated by Hollywood blockbusters. Only by boosting the profile of Arab cinema and ensuring that a broader selection of high-quality films is available will we change perceptions about cinema and give it the space to flourish.

Making a film that works for all Arab audiences and international cinemagoers is a big challenge. Although

we share a common language, there are many dialects and many differences in humor, culture and tolerance.

But the biggest hurdle we face is in the area of film financing. Returns on Arab movies are not great. So making high-end movies that play well at home and abroad is not easy. That is why there is growing interest in co-productions. They offer a range of benefits in terms of improving film quality and box-office returns. The region needs a sustainable film financing and distribution system supported by an investor community that recognizes the talent base as one of the region's great natural resources.

#### ***And opportunities?***

The upheavals and dramas witnessed across the Arab States in recent years have made people curious and



whetted audience appetites for more stories from the region. Platforms like Netflix and Amazon, which are relative newcomers here, are also creating additional opportunities to promote Arab films. These days, audiences are actively looking for films from different parts of the world. This is very exciting. In the past, seeing an Arab film on cinema screens outside the region was exceptional, but that is no longer the case.

***What role does copyright play in your work and why is it important?***

Copyright affects all aspects of our work. These rights ensure that all those involved in the process of making and distributing a film get a fair income. And the revenues they generate make it possible for filmmakers to reinvest in new film projects. Copyright really is central to the sustainability and growth of the film industry in the Arab region and beyond.

***Is piracy a problem in the region?***

Piracy is a big problem and it can be difficult to get a buyer to pay a reasonable price for a film when a pirated version already exists online. But some countries are making significant progress. In the United Arab Emirates, for example, pirates now face huge fines and hefty prison

Scenes from Mahmoud Sabbagh's first feature-length film, *Barakah meets Barakah*, screened at the Toronto Film Festival in 2016. The film offers a "fascinating glimpse of life in Saudi Arabia," according to *The Guardian* newspaper.





Photos: Courtesy of MAD Solutions

sentences. However, we do need the support of policymakers to raise public awareness and build respect for IP rights across the region. Government really does have a key role to play in supporting the sustainability of the region's film industry. The success of the French, German and Moroccan film industries demonstrates what can be achieved through effective government support.

***What advice do you have for aspiring filmmakers in the region?***

Today really is a golden age for filmmakers so if you have a passion for film go for it, but be patient and get used to disappointments. Keep learning all there is to know about the industry and you have a good chance of making it. There are no rules in art.

***What is it about cinema that you like?***

Cinema is a unique art form. It draws on all your senses and is really intense. As an emotional experience there is nothing like it. The good thing is there is still a lot of interest in cinema and with the emergence of new viewing platforms, its future prospects are very bright.

***What are your favorite Arab films?***

The Jordanian film *Theeb* and the Lebanese film *Where Do We Go Now?* are among my favorites.





# Breathing new life into Trinidad and Tobago's cocoa sector

By Catherine Jewell,  
Communications Division, WIPO



Photo: dimark / iStock / Getty Images

A century ago, Trinidad and Tobago was among the world's top five cocoa producers, exporting 30,000 tons of cocoa beans per year. Today, just 500 tons are produced annually. But a new generation of cocoa entrepreneurs has ambitions to revive the sector.



Making chocolate in the Caribbean – it sounds like a dream. But Trinidad and Tobago’s once-mighty cocoa industry faces many challenges. Annual production has plummeted from 30,000 tons of beans a century ago to just 500 tons in recent decades.

Now, a new generation of cocoa entrepreneurs is emerging with ambitions to reclaim the twin-island state’s place at the top table of global confectionery. And intellectual property (IP) is a key part of their strategy.

A leading example is Ashley Parasram (left), founder and CEO of the Trinidad & Tobago Fine Cocoa Company (TTFCC). His ambitions go far beyond running a successful commercial enterprise: his eyes are firmly set on developing a national cocoa ecosystem built around quality production standards that is both profitable and sustainable. A Trinidadian by birth, with a background in sustainable development, Mr. Parasram has the drive and experience to help breathe new life into the country’s cocoa sector.

“I started looking into the cocoa sector in Trinidad and Tobago and got really hooked by it. I was intrigued by this fantastic raw material which the Mayans originally mixed with pepper for a spicy, bitter drink. It has so many different flavor profiles and can be used in so many different ways. How could it be that this wonderful raw material was just dropping from the trees because nobody was picking it? I felt sure that there must be some way of incentivizing people to do something with it? Everything really stems from that challenge,” he says.

#### **UNIQUE GENETIC DIVERSITY**

Trinidad and Tobago produces some of the world’s highest-grade cocoa beans. “Trinitario is one of the most flavorful cocoa you can get,” Mr. Parasram explains. Bred for disease and pest resilience in the 17th century, Trinitario is a combination of Criollo and Forastero varieties. These three varieties are used to produce chocolate. Criollo and Trinitario varieties are generally considered high-grade, “fine” or “flavor” beans, and Forastero is considered a lower-grade “ordinary” or “bulk” bean for mass production. The genetic diversity of Trinitario in Trinidad and Tobago is second to none. “We have over 100 strains of Trinitario in Trinidad and Tobago. The plant’s genetic diversity on the islands is unique,” he observes.

Three years of careful research brought into sharp focus the many issues facing the country’s cocoa sector, not least a complex and highly competitive global market. But Mr. Parasram was undaunted. “There were no convincing reasons why the sector could not work. There were solutions to all the problems that surfaced,” he says. His research did, however, identify the one thing missing from the country’s 450-year history as a cocoa producer: a processing facility.



### TRINIDAD AND TOBAGO'S FIRST COCOA PROCESSING FACILITY

Recognizing this gap in the country's cocoa landscape and the significant potential for growers to add value to their high-quality raw material, in September 2015 Mr. Parasram set up the TTFCC and the country's first cocoa bean processing factory. He hit the ground running. "We went from nothing in January 2015 to having our steel pan chocolate selection on sale at *Artisan du Chocolat* in London in October and a visit to that shop by Trinidad and Tobago's Prime Minister in December the same year."

Eager to demonstrate the huge potential of Trinidad and Tobago's cocoa, TTFCC continues to pursue new marketing opportunities with celebrity chefs like Gordon Ramsay, hotel chains like Hilton Hotels & Resorts and luxury department stores like Harrods of London. The company is set to launch its first co-branded single-estate chocolate selection at Harrods in London this autumn. "Going from nothing to being part of the Harrods selection shows what the potential is and incentivizes people to take a look, but of course underneath that you have to sustain an economic model and identify potential market opportunities. We are still working that out."

### A PARTNERSHIP APPROACH

Recognizing the importance of securing the buy-in of government partners, TTFCC was set up as a public-private partnership. Establishing and maintaining a partnership with the government gives the venture much-needed continuity and helps ensure the delivery of key outcomes. "Signing an agreement with the Ministry of Agriculture – we use their land and share our processing facilities with local growers – helps ensure that things don't grind to a halt because of any change in government," Mr. Parasram explains.



Photo: Courtesy of TTFCC

The Trinidad & Tobago Fine Cocoa Company (TTFCC) operates the country's first cocoa bean processing factory. The company produces a line of products under its own brand and also works with other estates to help them develop their product range and brands.



Trinidad and Tobago produces some of the world's highest-grade cocoa beans which TTFCC is transforming into award-winning chocolate bars.



TTFCC began operating in January 2015. Ten months later, its iconic steel pan chocolate selection went on sale at *Artisan du Chocolat* in London.



Photos: Courtesy of TTFCC

In October 2017 TTFCC launched its first co-branded single-estate chocolate selection at Harrods in London.

The company is also riding on a wave of government interest in diversifying the national economy. “Right now, with falling revenues from oil and gas, the government is committed to diversifying the economy and to making efficiency gains, so they are taking our work quite seriously,” he notes.

TTFCC produces a range of products under its own brand – cocoa nibs, cocoa mass and couverture (a restaurant-grade chocolate), and chocolate bars for retail, but also works with other estates to develop their product range and brand. The factory can process up to 100 metric tons of cocoa per year at full capacity. “We are not a private company that just produces our own line. We actually give farmers the opportunity to bring their beans and walk away with chocolate. The whole idea of this operation is to add value to the raw material, to improve quality and raise brand awareness,” he says.

### A CHALLENGING MARKETPLACE

But like chocolate, TTFCC’s journey is proving bitter-sweet. Despite the sector’s huge potential, differences in the price of lower-grade “bulk” African cocoa beans, which sell at around USD 1,500 per ton, and higher-grade “fine” cocoa from Trinidad and Tobago, which sells at around USD 5,000 per ton, makes it much harder for the country’s producers to compete. “A lot of larger companies buy high-grade cocoa and blend it with cheaper cocoa to get a specific flavor profile,” Mr. Parasram explains. “That means the job of selling chocolate is four times harder for someone setting up a value added process in Trinidad and Tobago.”

This challenge is further compounded by a complex global cocoa market featuring big confectionery companies with a tight grip on trade, on the one hand, and a plethora of small-scale chocolatiers who risk flooding the market, on the other. “We have created a processing facility to give farmers access to the global market, which is far more complex than we anticipated. That is a real challenge.”

In such a fiercely competitive global arena, TTFCC has little choice but to focus on the luxury market. “We can’t compete with the bulk producers so we have got to target high-end, niche markets,” Mr. Parasram says.

But the even bigger prize is agro-tourism, working with cocoa estates to offer chocolate lovers a unique experience.

“People are always looking for unique experiences and there is real opportunity here to create a buzz around this amazing raw material,” he says. “In fact, we are not just selling chocolate – we are selling Trinidad and Tobago and the experiences and knowledge of the growers.”

Ultimately, the aim is to turn Trinidad and Tobago into the world’s premier chocolate destination. “Twenty years from now, we want people to associate chocolate with Trinidad and Tobago much like they associate whisky with Scotland and Champagne with France.” The beauty of agro-tourism, he notes, is that it pays off in more ways than one. “You are not just talking about the revenue from the raw material, you are also talking about the spin-off benefits from having tourist pounds spent. This is a key to building the sector’s long-term financial sustainability.”

### BUILDING SUSTAINABILITY

Beyond its core commercial operations, TTFCC is helping to drive improvements in cocoa production nationwide. In October 2016, it joined ranks with the Ministry of Agriculture, the Cocoa Development Company of Trinidad & Tobago, the Inter-American Development Bank and the Cocoa Research Center of the University of the West Indies to launch a project called Improving Marketing and Production of Artisanal Cocoa from Trinidad and Tobago (IMPACTT). A three-year program, IMPACTT is designed to promote jobs and rural livelihoods by helping cocoa growers improve yields and bean quality and ensure they have access to domestic and international value-added markets. “Essentially, IMPACTT focuses on the development of standards for quality management from farm to table,” Mr. Parasram explains. “It is also focusing on the development of certification and traceability systems along with a range of marketing tools to help growers get the best price for their beans in international markets and to generate much-needed foreign exchange to offset the impact of falling oil prices.”

Sustainability is the project’s overriding objective. “We are keen to make cocoa attractive to farmers, improve livelihoods, and in particular bring more women into both cocoa farming and value-added cocoa processing. That is why education, training and capacity building are so important,” he says. It takes five years for a cocoa plant to mature and bear fruit, so IMPACTT is also encouraging growers to cultivate multiple crops. “You need cash crops. You can’t have growers dependent on a single crop that requires a lot of processing,” he explains.

Opportunities also exist in developing flavorings for chocolate – think cinnamon, honey, mango, tonka bean, vanilla. “There are so many amazing flavors that we could grow here but we just don’t have the capacity to convert them into the required form, so we end up ordering them from France. But with a little investment there is huge potential.”

#### **WHAT ROLE FOR INTELLECTUAL PROPERTY?**

In the short term, the overriding goal is to find practical business models that generate concrete outputs that can be protected by IP rights. “We need to identify and develop practical models and realistic deliverables, and then devise systems where IP supports and protects those deliverables. That way, we avoid regulating where it is not really needed.” But part of that process involves building brand awareness among cocoa growers. They already have a good basis for building their brands. “All the products TTFCC and our partners produce feature the Trinitario bean, are high quality and traceable to a single estate. These are unique attributes around which to build our brands.”

Using IP rights to support the development of reputable global cocoa/chocolate brands can also enhance the competitive profile of Trinidad and Tobago as a whole in international markets.

To ensure that growers have a supportive regulatory environment in which to protect and enhance the value of their brands, TTFCC is working with the national IP office, WIPO and other partners on a range of issues, including in relation to traceability and provenance. “We still have a lot of thinking to do to work out the criteria by which people can claim that something contains Trinitario and is from Trinidad and Tobago. In the world of chocolate there are many misleading claims about provenance. When you create a niche brand that is known for quality, origin and flavor, you are going to have a lot of people claiming it’s Trinitario from Trinidad and Tobago. So issues of traceability, branding and intellectual property are going to become increasingly important. It’s really important that we get this right.”

Going forward, TTFCC is planning to work with the 80 cocoa estates under the IMPACTT project to establish common production standards and a collective or certification mark that guarantees provenance and quality. Using IP rights in this way is a useful strategic response to issues of cocoa blending and origin. It further helps to reinforce the origin-linked value of Trinitario cocoa and boost growers’ incomes.

Reviving Trinidad and Tobago’s ailing cocoa sector, and safeguarding the know-how accumulated by growers over generations, presents many tough challenges. The process requires the backing of investors and sustained buy-in from government, academia, growers and consumers. But success also hinges on broad recognition of the role that the intellectual property system can play in safeguarding the quality and integrity of the country’s high-grade cocoa products.

Only time will tell if TTFCC and its partners succeed in making Trinidad and Tobago the world’s premier mouth-watering chocolate destination.

# The power of branding and design: Thailand's Qualy goes global

By **Rattanyu Dechjejaruwat**,  
Development Sector, WIPO



Crises do not always lead to unfavorable outcomes. That was the experience of the New Arriva Company, a small family-run enterprise in Bangkok, Thailand, and its Qualy brand.

The company's Director of Design, Teerachai Suppameteekulwat, explains how hard times created an opportunity for business renewal and innovation. He discusses the company's changing fortunes and the central role that intellectual property (IP) plays in its business strategy.

## ***Can you tell us about how Qualy emerged?***

Our family business had been operating as an original equipment manufacturer (OEM) since 1977 under the name Saint Louis Plas-Mold. We produced plastic parts for companies in multiple sectors. But tough pricing competition meant the company became less and less profitable. We fell on hard times and realized we had to change our business model. That is what prompted my brother, Thossaphol, and me to set up a subsidiary, the New Arriva Company, to launch the Qualy brand. I had gained a few years of practical experience as an industrial designer and my brother had just graduated

from his marketing studies, so the time was ripe for us to build our own brand and to design and make products that matched our beliefs and our design thinking. We realized that if the company was to thrive, we needed to put innovation at the heart of our business strategy.

## ***How did you come up with the name Qualy?***

The name Qualy encapsulates our beliefs and values and our commitment to social, economic and environmental sustainability. It stands for:

- Q – Quality: we design, finish and produce our products to a high quality;
- U – Uniqueness: our products must stand out in the market;
- A – Aesthetics: we ensure our products are tasteful, functional and decorative;
- L – Long lasting: we place great emphasis on the sustainable use of our products; and
- Y – You: our design priorities are driven by the needs and lifestyles of our customers.

We target consumers with a modern lifestyle who have an eye for innovative design.

***What were the main challenges you faced in setting up Qualy?***

We had zero experience in marketing and selling products in this sector, but we recognized the advantages of working closely with our customers to develop the products they want to buy. This approach also enabled us to apply our “out of the box” approach to product design. One of the big challenges we face in this respect is that customers always remember our products but not our brand. So building brand recognition is a key priority for us, and we are making progress in this area. Today, we are selling our products in more than 50 countries around the world, including in Asia, Europe, America and Australia.

***What is the source of your inspiration?***

We take a lot of inspiration from nature and animals. Our aim is to make the world a better and happier place. We engage a great deal with our customers and take our cue from them when it comes to product development. People often smile when they come across our products, which are very practical and distinctive. Each one has a story. One of our aims is to get people thinking more about the environment. Take, for example, our Log&Roll kitchen paper holder, which is designed to draw attention to the link between paper, trees, the animals that live in them and the implications of deforestation. We pay a great deal of attention to detail at every step of production, from design, manufacture, and packaging through to marketing and distribution. We also recognize the importance of building meaningful relationships with all stakeholders, including suppliers, manufacturers, distributors, government authorities and of course our customers. This is an important part of our success.

***What role does IP play in the company?***

IP is central to the company’s business strategy. Our strength is the originality and uniqueness of our products. IP is very important in terms of both designing and branding them.

Trademark rights are essential for our business: to grow a business and to enter markets in Asia, Europe and the United States, you need to be protected. At present we have some 10 registered trademarks around the world, including in China, the European Union, Japan, the Republic of Korea, Thailand and the United States. Our trademarks underpin every aspect of our marketing activity and help ensure that our products are recognizable and stand out in the marketplace.

Industrial design rights are also important to us. Design is at the core of Qualy’s vision. We believe innovative design is the key to the success of our business. It is the basis on which we compete and drives the development of our products. Design enables us to create new business opportunities and attract new customers.

We put many resources into designing, developing and manufacturing each new product, and we safeguard that investment through IP rights. Without IP, all those efforts would be meaningless and we would be unable to protect our products and our business interests. At present, the company holds industrial design registrations for more than 200 products in Thailand, including for our Sparrow Key Ring, the Flip Cup, Autumn, Four Seasons, Lotus Cotton Bud and Night Owl.

Qualy's kitchen paper holder, the Log&Roll, seeks to draw attention to the link between paper, trees, the animals that live in them and the implications of deforestation.



The Qualy brand takes inspiration from nature and animals. Its aim is to make the world a better and happier place and to get people thinking more about the environment. Examples include: Qualy's Four Seasons seasoning shaker (above), its Sparrow Keyholder (above right) and its Lotus Cotton Bud Holder (right).



Photos: Courtesy of Quely



***How do these rights support your business interests?***

IP rights enable us to defend our market position and protect ourselves from being copied by others. Just recently, a company notified us that we had infringed their product design, but thanks to our design registration we were able to take remedial action and prove that it was in fact they who had infringed our design rights.

Our trademark registrations mean we can get our products into big department stores in Asia, Europe and the United States more easily. They also enable us to defend our brand. There are many companies out there producing low-quality imitations of our products, so our IP portfolio helps us prevent others from selling copies of our products.

Any company that wants to succeed in highly competitive international markets needs to safeguard its IP assets. I can't overemphasize how important it is for entrepreneurs to invest in protecting their IP rights.

***What impact has the Internet and social media had on your business?***

The Internet has both pros and cons. On the positive side, it is a quick and cost-effective means of promoting our products online and enables us to save on marketing and advertising costs. We actively use Facebook to promote our products. While sales vary from one year to the next, just recently we have seen strong growth in Europe, which accounts for around 50 percent of our business. Asia and the USA accounts for around 48 percent of sales, and Thailand only makes up around 2 percent of annual sales. But with more Thai consumers getting into design these days, we have huge scope for growth in our home market.

Access to the Internet also helps the product development process. For example, it enables us to easily search, check and verify the originality of our ideas before investing fully in their development. In this way we don't waste resources on developing products that already exist in the market.

But on the downside, wide use of the Internet means our product designs are infringed more easily and rapidly. Even the descriptions and photos of our products have been stolen for use on websites peddling counterfeit products. We spend a lot of time dealing with this type of infringement. It is a real challenge and is very costly. But I guess on the bright side it does underline the growing popularity of our products. The big risk is that we spend too much time tackling IP infringements and not enough developing new products. At the end of the day, creativity is our strength, and we need to keep developing new, more attractive, higher-quality products.

***How would you like to see the IP system evolve?***

Innovative businesses like Qualy help drive economic growth but if they are to really thrive, they need a supportive business environment.

**“Innovative design is the key to the success of our business. It is the basis on which we compete and drives the development of our products.”**





Photos: Courtesy of Qualy

Brothers Teerachai (top left) and Thossaphol (bottom left) Suppameteekulwat have put IP at the heart of their business strategy.

Governments can support small businesses by making it easier and cheaper for them to register and protect their IP assets in global markets by implementing simpler and more streamlined online IP registration systems, for example. I am delighted that Thailand recently joined the Madrid System for the international registration of marks. That will make it a lot easier for us to protect our brands internationally. Beyond this, given the importance of IP to business growth and the economy, it is really important to teach children about IP from a young age. This will promote greater respect for IP and ensure that it becomes a core social value.

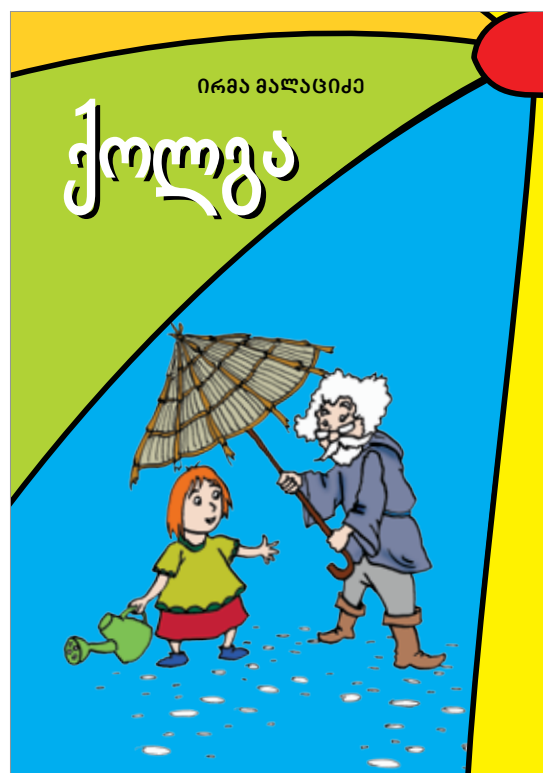
***What plans do you have for the future?***

We are very proud that we have created a Thai brand that is now competing with top global brands. But we

still have a long way to go. Our mission is to strengthen global recognition of the Qualy brand. That is why we are training our employees in all areas of production, from product design and manufacture to marketing and distribution. Our strength is our ability to develop new, high-quality, creative and innovative products that are distinctive, so we will continue to focus on enhancing our product range and introducing it to more customers. We recently set up a new distribution operation in the Netherlands, Qualy & Co., which will enable us to sell our products to retailers across Europe. Our ambition is to expand our product range, strengthen brand recognition and bring many other Thai brands to the world stage. In the meantime, we are having fun and are proud to be creating innovative products that thrill our customers around the world.

# Georgian schoolchildren have fun with intellectual property

By **Nikoloz Goglidze**, Chairman,  
National Intellectual Property Center  
of Georgia – Sakpatenti, Georgia



Photos: Courtesy of Sakpatenti

Under a special IP program for schoolchildren, Georgia's IP Office, Sakpatenti, has developed a series of colorful educational materials to raise IP awareness among young people.

Building intellectual property (IP) awareness is a priority for Sakpatenti, Georgia's intellectual property office. Ensuring that members of the public have an understanding of the IP system and the economic importance of IP rights is critical in helping to create an enabling environment for business and economic growth.

If we are to succeed in realizing the country's innovative and creative potential through effective use of IP, we need to change people's attitudes toward innovation and the incentives and safeguards that IP rights provide. And we

need to promote understanding of the concrete benefits that can flow from effective use of these rights. While laws, regulations and efficient enforcement mechanisms are all necessary, they do not in themselves cultivate respect for IP among the general public. We need to win their hearts and minds.

And what better way to do this than to reach out to schoolchildren? After all, it is far easier to build understanding of the role of IP in supporting innovation and creativity and to engender greater respect for IP rights

at an early age than it is to change deep-rooted misperceptions down the line. That is why Sakpatenti recently developed and launched a special educational project for primary schoolchildren. Our aim in doing so is both to inspire children about innovation and its limitless possibilities and to build respect for IP rights.

### HAVING FUN WITH INTELLECTUAL PROPERTY

We launched our special IP program for schoolchildren against a backdrop of ambitious educational reform by the Georgian Government toward a dynamic, learner-centered education model. We soon realized that communicating the right messages to schoolchildren in an appropriate way is no easy task. The real challenge is finding a way to craft and communicate key messages about intellectual property in a way that makes the children's learning experience enjoyable and fun.

That is why we teamed up with the United States Agency for International Development (USAID) and its Georgia Primary Education Project (G-PriEd). The G-PriEd team included professional school teachers and writers tasked with developing reading materials for primary schoolchildren (grades 1-6). With their help, and the invaluable contribution of children's author Irma Malatsidze and children's illustrator Zurab Zulakauri, we were able to develop a series of illustrated fairy tales along with in-class exercises and lesson plans for pupils in grades 3-5. And they have been a real hit!

The materials include five stories around the themes of copyright, trademarks and patents: *Doremus Solasi* (copyright), *Star Candles* (trademarks), *Umbrella*, *Washing Machine* and *Compass* (inventors and patents).

### ABOUT THE STORIES

The themes of innovation and creativity and their protection run through the stories, each of which plays out in a different fairy-tale land. The first country, *Intellectiana*, actively encourages innovation and creativity, and its inhabitants benefit greatly from cutting-edge technologies and a thriving cultural scene. The second, *Smartliana* (*smartali* means "law" in Georgian), is a country where innovation is valued and protected. Its citizens are widely recognized as fair-minded and ardent advocates of the rule of law. And the third, *Mokobriana* (*mekobre* means "pirate" in Georgian), is rife with pirates and other infringers of IP rights.

As the story unfolds, however, the Mokobianan citizens wake up to the importance of IP and its economic and social benefits. They even put in place an IP system that ensures inventors and creators can earn a fair living from their talent and members of the public benefit from their work. And as they raise awareness of and build respect for IP rights, everyone begins to benefit from the country's thriving economy. As with all fairy tales, each has a happy ending. And while they may oversimplify complex reality, they offer a useful and compelling way to get youngsters thinking about IP and its role in supporting innovation and creativity and in boosting economic growth.

The stories are now part of the supplementary reading materials made available to primary schoolchildren, and so far have been distributed to more than 500 public schools across the country. They are also available online at [www.kargiskola.ge](http://www.kargiskola.ge) and <http://Sakpatenti.org.ge/ka/publications>.

The materials also feature prominently in Sakpatenti's World Intellectual Property Day outreach activities. For example, for the 2017 World IP Day campaign, we launched a series of supplementary educational materials based on the tales around the campaign theme, *Innovation – Improving Lives*. These materials, which also featured landmark innovations from Sakpatenti's website, seek to increase pupils' understanding of the impact that inventions have on daily life and their contribution to technological progress.

### LESSONS LEARNED

Our experience in rolling out the program highlighted the importance of including teaching professionals in the development and implementation process as well as the need to agree on specific messages and content well in advance. Without our team of talented and highly skilled professionals, we would not have been able to deliver the full set of program materials.

We learned that simply developing reading materials and delivering them to schools is not enough. Complementary lesson plans are essential if teachers are to effectively communicate the messages embedded in the stories to their classes. Our experience also underscored the importance of ensuring that teachers have a basic knowledge of IP, its role and importance. Only when armed with such understanding are teachers able to effectively manage and conduct lessons on topics relating to IP and achieve desired outcomes.

### IMPACT AND OUTCOMES

The project's initial impact has been impressive. Students have actively engaged with these materials, which have sparked many lively discussions around innovation, creativity and intellectual property. They have been quick to understand why innovation and the IP rights that protect it are so important. But building respect for IP among young people is a continuous process that requires long-term commitment. That is why public outreach is among Sakpatenti's top priorities.

### PLANS FOR THE FUTURE

Sakpatenti continues to build on its recent successes and to expand the range of IP-related materials available to pupils of all ages. Board games, quizzes and various other activities designed to inspire students and help them learn about IP are being planned.

Through Sakpatenti's recently established National Intellectual Property Training Center, and in partnership with the WIPO Academy, we are working to further extend our educational outreach. For example, we are putting together various in-class and distance learning opportunities for college students, teachers and law enforcement professionals to enhance their knowledge of IP.

Young people are our future. Among them are tomorrow's inventors, creators, entrepreneurs and decision-makers. That is why it is so important for us to engage with them and cultivate their understanding of the role IP can play in fostering innovation, creativity and economic performance.

# Keeping track of domain name jurisprudence

By **Justin Soong-Hoon Chay**  
and **Brian Beckham**, WIPO  
Arbitration and Mediation Center

These days it is hard to imagine life without the Internet and domain names. They each serve as important online marketing tools for businesses of all sizes, with domain names increasingly seen as invaluable virtual real estate in an ever-expanding digital landscape. At the same time, brand owners face a constant threat from unscrupulous actors who misappropriate their trademarks by registering them as domain names. Their aim is often to hold brand owners to ransom, sell counterfeit goods, distribute malware, or engage in phishing campaigns. Such abusive practices can cause significant damage to brand owners and consumers.

The abuse of brand owners' trademark rights in domain names, often referred to as "cybersquatting," can be remedied by initiating proceedings under a mechanism known as the Uniform Domain Name Dispute Resolution Policy (UDRP).

WIPO's Arbitration and Mediation Center is both the author of the UDRP and the global leader in domain name dispute resolution services under the UDRP. In recent years, the UDRP caseload of the WIPO Center has continued to increase, with filing rates breaking new records. In 2016, the number of cases rose by 10 percent on the previous year, with trademark owners filing over 3,000 UDRP cases with WIPO. Since 1999 when the UDRP was first implemented, the WIPO Center has processed almost 40,000 UDRP-based cases, involving parties from nearly 180 countries and some 500 WIPO panelists of 65 nationalities.

In addition to handling UDRP-related disputes, the WIPO Center monitors decisions issued by the appointed external experts who weigh up the cases (referred to as "panelists") to identify areas of consensus in UDRP jurisprudence. In the 18 years since the UDRP's implementation, the WIPO Center has reported periodically on these consensus positions by panelists. *Version 1.0 of the WIPO Overview of WIPO Panel Views on Selected UDRP Questions* was released in 2005, and *Version 2.0* in 2011.

Since then – and in line with the broader evolution of online behavior – UDRP jurisprudence has continued to evolve, with consensus positions emerging on a wide range of issues that are common to many UDRP cases. *Version 3.0 of the WIPO Overview*, released in May 2017, outlines consensus positions on nearly 100 topics, providing nearly 1,000 case citations on issues ranging from whether a brand owner has standing to file a claim to procedural questions.

Image: JESS3



*WIPO Overview of WIPO Panel Views on Selected UDRP Questions (Version 3.0)* released in May 2017 offers invaluable information and guidance to anyone considering filing a claim or needing to defend themselves against a claim of cybersquatting.

## About the UDRP

In 1999, on WIPO's recommendation, the California-based Internet Corporation for Assigned Names and Numbers (ICANN), which is responsible for overseeing generic Top-Level Domains (or gTLDs) like ".com", and now ".blog", ".cloud", etc., implemented the UDRP to combat the bad-faith registration of trademarks as domain names, often referred to as "cybersquatting." Under WIPO's stewardship, the UDRP has since become widely recognized as a cost-effective and quick way to resolve domain name disputes.

Cited in nearly every UDRP-related pleading and decision, the *WIPO Overview 3.0* offers invaluable guidance for parties to domain name disputes, and is a go-to reference tool for WIPO panelists.

### NOTABLE HIGHLIGHTS

Notable highlights of the *WIPO Overview 3.0* include the companion issues of trademark rights and the test for "confusing similarity", the timing of domain name registrations, consolidation of claims against multiple respondents, and free speech defenses.

**Trademark rights.** A brand owner filing a UDRP complaint must, as a first step, adequately demonstrate that they own rights in a trademark or service mark. This is most often done by providing copies of trademark registration certificates. Put simply, without trademark rights it is not possible to file a UDRP complaint.

In some cases, a brand owner may seek to argue it has "common law" trademark rights because it has used its business name (often for a minimum number of years) in a way that consumers have come to exclusively associate with the brand owners' products.

To demonstrate such unregistered "common law" trademark rights a brand owner must provide substantial supporting evidence. This may include evidence of consumer, industry, or media recognition; sales volumes; advertising; or consumer surveys. Simply claiming that a trademark has been used for some time without any supporting evidence does not establish trademark rights. In other words, a brand owner claiming unregistered rights needs to demonstrate that the mark has "secondary meaning" in the minds of consumers. Failing to do so may result in a dismissal of their claim for lack of standing.

**Confusing similarity.** Another important consideration is the need to show that the disputed domain name misappropriates the brand name in a way that is "confusingly similar" to the corresponding trademark. This is often referred to as the UDRP's "standing" test. If the trademark is *recognizable* in some form in the domain name – even if it is an intentional typo, or uses "international" accented characters – panelists will find the domain name confusingly similar to the relevant trademark and the case will move forward.

**Timing of domain name registration.** Under the UDRP, a brand owner has to show the domain name was both registered and used "in bad faith". This has proven a somewhat controversial issue in a handful of cases in the past, but panelists now agree that a domain name cannot have been registered in bad faith if the registrant had no prior knowledge of the trademark. A brand

owner must ordinarily show that their trademark rights existed before the domain name was acquired by the registrant. A notable exception is where the registrant has insider information or has unfairly anticipated the future existence of trademark rights. This was the situation in a well-known dispute that involved the registration of a Wayne Rooney-related domain name while he was still an up-and-coming star footballer, before he had acquired any registered trademark rights; in that instance, bad faith was clear.

**Consolidation of claims against multiple respondents.** The UDRP Rules allow panelists to consolidate multiple domain name disputes. Case jurisprudence has established that to do so a panelist should be satisfied that: (i) the brand owners have a specific common grievance against the registrant(s), or the registrant(s) has engaged in common conduct that has affected the brand owners in a similar fashion; and (ii) it would be equitable and procedurally efficient to permit the consolidation. Panelists also look at whether the domain names or corresponding websites are subject to common control.

**Free speech defenses.** Once standing to bring a case is established by showing trademark rights and confusing similarity, a brand owner must also show that the registrant lacks “rights or legitimate interests” in the domain name. Often this is proven by showing that the domain name has been registered merely to piggyback on the brand owner’s reputation in a way that is misleading to consumers. One way a registrant can demonstrate its rights or legitimate interests is by showing that the corresponding website features noncommercial free speech, such as fair criticism of the brand owner’s activities. Often, such cases take the form of <[trademark]sucks.com> domain names. It is worth noting, however, that free speech cases are statistically insignificant in terms of the overall number of UDRP cases.

While appointed UDRP panelists are staunch defenders of legitimate free speech, in many cases a claim to free speech is merely an attempt to mask unfair commercial activity. UDRP panelists have no trouble seeing through such sham defenses. Likewise, UDRP panelists agree that except in limited circumstances, a domain name that exactly matches the brand owner’s name creates an unacceptable risk of confusion insofar as it may lead consumers to believe erroneously that such domain names are sponsored or endorsed by the trademark owner.

This is just a small sample of the many questions covered in *WIPO Overview 3.0*. Anyone considering filing a claim or needing to defend themselves against a claim of cybersquatting, will find it an invaluable source of information and guidance.

More information is available at [www.wipo.int/amc/en/domains/search/overview3.0](http://www.wipo.int/amc/en/domains/search/overview3.0) and [www.wipo.int/amc/en/domains](http://www.wipo.int/amc/en/domains).

Queries may be directed to [arbiter.mail@wipo.int](mailto:arbiter.mail@wipo.int).



# Hashtag trademarks: what can be protected

By **Claire Jones**, Trademark Attorney,  
Novagraaf, London, United Kingdom

Social media platforms have become indispensable marketing channels for brand owners. And in the 10 years since the #hashtag emerged as an online marketing tool, interest in registering #hashtag trademarks has taken off.

Recent research by Clarivate Analytics (formerly Thomson Reuters CompuMark) shows that while just seven companies submitted applications for trademark-specific hashtags in 2010, the number of such applications has been rising steadily, spiking in 2016 with a 64 percent annual increase and some 2,200 applications to register trademark-specific hashtags filed globally.

Social media have become wildly popular means by which to stimulate interest in and reactions to any imaginable event, product or service. They are built around a culture of sharing and openness, and “real-time” marketing. While these tools have become a normal feature of the digital landscape, the sharing culture on which they depend can present some intellectual property-related challenges.

## #WHATISREGISTERABLE?

The first is tied up with what may or may not be registered as a trademark. A trademark is a sign that is capable of distinguishing the goods and services of one company from those of another. In sum, it allows consumers to identify the source of a product or service. While a #hashtag alone is a generic symbol with no source-identifying significance, used in conjunction with a product name or campaign tagline it may function in the same way as a trademark and be registerable as such.

Used in this way, a hashtag is a simple yet powerful means of stimulating interest in or reactions to an event, product or service. But while such use can promote a brand, product or service, generate sales and boost brand recognition, it does not automatically turn a brand name or advertising slogan into a registerable trademark.

So when exactly is it possible to register a hashtag used in a marketing campaign as a trademark? Guidance from the United States Patent and Trademark Office (USPTO) states: “A mark comprising of or including the hash symbol (#) or the term ‘hashtag’ is registerable as a trademark of service only if it functions as an identifier of the source of the applicant’s goods or services.”

Hashtag trademarks that have been successfully registered as such in the United States include: #smilewithacoke and #cokecanpics (The Coca-Cola Company), #McDStories (McDonalds), and #makeitcount (Nike).

In the United Kingdom, a mark is registerable if it is distinctive and has the capacity to individualize the goods and services of a particular undertaking. If such a link exists and the mark does not communicate a message that could apply to any other undertaking then, as with other trademarks, a hashtag-based mark is registerable.



The hashtag has become a very popular way to promote a product, service or campaign online.



Photo: Courtesy of Wyke Farms

Wyke Farms was the first brand in the UK to successfully register a trademark for its #freecheesefriday social media campaign.

In 2014, Wyke Farms, the UK's largest independent cheese producer, became the first brand in the country to successfully register a trademark for its #freecheesefriday social media campaign. The weekly online competition is run through the Wyke Farms' Facebook and Twitter accounts and draws around 25,500 and 30,000 entries respectively every month. Each Friday, winners are selected from among all those who have engaged with Wyke Farms Facebook and Twitter presence and receive free cheese. The campaign's monthly reach on Facebook and Twitter combined is some 880,000 people, according to the company.

In order to register the trademark Wyke Farms had to provide evidence that the mark had acquired distinctiveness through use. The vast majority of the evidence filed at the UK IP Office was use of the wording as a hashtag on social media. This case shows that social media use of a hashtag can assist in proving acquired distinctiveness. It also highlights the willingness of the UK IP Office to accept social media usage as evidence of acquired distinctiveness.

#### #BEWARE

It is also worth noting that extensive use of a hashtag could also give rise in the UK to the common law right

of passing off. This right protects the goodwill of a trader from misrepresentation. However, proving that a company has acquired the required goodwill in the hashtag for the right to stop someone else from using it is likely to be a challenge.

#### #INFRINGEMENT?

How do things stand then when it comes to using a brand's hashtag trademark? Does including a brand's hashtag trademark in a social media post make you liable for trademark infringement?

If the use suggests that there is a connection or link with the trademark owner, or creates a likelihood of confusion or association with the trademark owner, then there may be grounds for infringement. This, however, is not the case if the post containing the hashtag trademark is simply promoting the intended social media message.

#### #THEBOTTOMLINE

So the bottom line is that while hashtags are a great way to promote a business and stimulate interest in a marketing campaign, as with all things, social media geeks are advised to #proceedwithcaution.





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