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In January 2021, Sheika Bodour bint Sultan Al Qasimi began her two-year term as President of the International Publishers’ Association (IPA). Ms. Al Qasimi, the mother of four, founder of the Kalimat Group, a pioneering United Arab Emirates (UAE)-based publishing company, and ardent champion of diversity and inclusion, discusses the work of the IPA and the challenges confronting publishers in the post-COVID era.

**What does it mean to you to be the first woman from the Middle East and only the second woman ever to lead the IPA?**

I feel very honored, yet I’m mindful of the big responsibility that comes with this role. It is important for me to bring greater diversity and inclusion to publishing, so my aim is to lead by example. Imbuing the IPA with different voices, experiences, and cultures is crucial for its relevance and success. This means listening, collaborating, and responding to our members and partners worldwide. When we are united in our objectives, our voice is stronger and we are more likely to reach our goals. This has never been truer than in the post-COVID world.

**What role does IPA play in the world of publishing?**

I think the IPA is at its most relevant today. When COVID-19 hit, the IPA led a collective response and recovery plan that captured and shared publishers’ experiences and innovative countermeasures. Now, we’re unifying the...
The voice and vision of the publishing ecosystem through our International Sustainable Publishing and Industry Resilience (InSPIRe) plan and the IPA Academy, an online learning portal, which is under development. These initiatives will enable publishers to upskill and take better control of their digital transformations. IPA’s unifying umbrella has made this positive, collective approach possible.

The new normal presents a challenge for many publishers. While many have responded to the shift to online learning and reading, a full understanding of new publishing trends requires good data. We are working closely with WIPO to gather quality global publishing statistics, but more cooperation on research and data gathering from all markets will allow a firmer grasp of new currents.

The move towards digital formats requires publishers to make big investments and entails risks because online piracy is a major problem worldwide. That’s why we support our members in petitioning governments to strengthen copyright protection and enforcement. We also represent all publishers at WIPO and other relevant international forums.

**What has been the impact of the pandemic on the publishing industry?**

The IPA’s 2020 report, *From Response to Recovery*, clearly shows that markets with existing ecommerce infrastructure and a developed reading culture weathered the storm far better than those without them. The pandemic has exposed a large gap that we must bridge if we are to secure the future growth of the industry. There is clear agreement across the global publishing ecosystem that we are stronger when we work as a cohesive whole. Markets where authors, publishers, booksellers and governments came together during the pandemic to stabilize and strengthen the publishing ecosystem are showing signs of a faster recovery. Supporting the coalitions built during adversity is central to the industry’s ongoing recovery and future resilience.

**How is IPA supporting the development of a more innovative and sustainable publishing sector?**

During the pandemic, many governments saw publishing as a “non-essential” sector and denied publishers vital state aid. This was a wake-up call for the industry and underlined the urgent need to redouble efforts to educate policymakers about the deep contribution that publishers make to education, research and cultural development. Our sustainability depends on it.

We also need to manage the industry’s recovery with an even hand. The pandemic exposed weaknesses in some markets and strengths in others. By offering targeted support to the worst hit countries through our InSPIRe plan, we will all benefit.

Identifying longer-term consumer trends will be key to the sector’s enduring viability. That is why we are developing reliable data-gathering systems to better understand market trends. This will enable publishers to build more effective strategies and future-proof their businesses. This challenge is tied to the urgent need to support publishers, especially small and medium-sized publishers, which make up the majority of our sector, in digitizing their operations.

IPA is also proud to have developed the Sustainable Development Goals Publishers Compact, which allows publishers to signal their commitment to sustainability.
“Digital is clearly the way of the future.”

How do you see the publishing industry evolving over the next few years?

Digital is clearly the way of the future. Our report, *From Response to Recovery*, shows that digital workflow and distribution made all the difference in enabling publishers to weather the pandemic storm. Digital transformation is also key to enabling publishers to produce books in accessible formats. Yet many regions lack the know-how to make the leap to digital. Through the IPA Academy and initiatives like WIPO’s Publishers’ Circle, we are sharing best practices and helping publishers around the world make the transition to digital.

However, the rise of digital doesn’t necessarily spell the death of print. In response to compelling evidence that people learn differently from digital and paper resources, educational publishers have been producing hybrid resources to support every kind of learner for some time now. Our 2020 report, *Paper and Digital: Current research into the effectiveness of learning materials*, takes a detailed look at this.
Defending copyright is one of the pillars of IPA's work. What for you are the most important copyright issues that need to be tackled?

Copyright and its effective enforcement are vital to a sustainable publishing industry. One brake on publishers going digital in Africa, for example, is their fear that the devastating print piracy they face will be even worse if they transition to digital publishing. Our industry is constantly shifting and adapting, and publishers need a clear legal framework to do this with confidence. The appropriate exclusive rights set out in WIPO treaties are essential to enable publishers to produce and distribute books in all formats, and effective enforcement proves that those rights are inalienable.

Tell us about IPA's work in the area of literacy.

Literacy has always been important to the IPA. We have a literacy taskforce, overseen by Gvantsa Jobava from Georgia. Our Reading Matters report features many of the literacy initiatives being run by individual IPA members around the world. Literacy applies to so many things. It goes well beyond learning to read and write. It is vital to understanding the world and making informed decisions. Literacy gives people agency.

What prompted you to set up PublisHer?

I started PublisHer in 2019 because I saw a clear need for an organized effort to address the inequalities facing women in publishing. Publishing employs far more women than men – women make up around two thirds of employees in publishing businesses in the West – yet men occupy a disproportionate share of the most senior, higher-paying roles.

A 2018 survey in the UK revealed that the gender pay gap was as much as 30 percent in some companies. These disparities are all the more galling given the deep pool of talented women from which to choose and promote.

PublisHer is an attempt to marshal the will and innovative spirit of the many smart and competent women in the book business for the collective good. I want PublisHer to stand at the center of a global network where women find and give support, and where good ideas can be aired, peer reviewed and refined.

The WIPO event in 2019, Empowering Women in the Publishing Industry, was a very positive step. The IPA and I hope we can build on that.

How did you get into publishing?

I've always been very interested in literature, in part because of my upbringing in Sharjah, which is recognized as the cultural capital of the UAE. Sharjah is steeped in books and learning, so I think it had a big impact on my life choices.
I first got into publishing and started the Kalimat Group publishing house after a conversation with my young daughter, who had complained that Arabic children’s books were old-fashioned. She was right in many ways. That conversation prompted me to start creating beautifully illustrated children’s books in Arabic. Since then, we have moved into literature for young adults and older readers.

I’m delighted to say that the Group continues to grow and has published over 400 books in 15 countries. Many of them have also been translated, which is very rewarding as it shows we are sharing our creativity and culture – something that’s very important to me. We are now also publishing early learning books for children, comics, and cookery books. Going forward, Kalimat will be focusing more on its digital content, ecommerce and online marketing. At the same time, we will continue to build on our success, expand into new markets and continue to support and promote talent from the region.

What is your greatest achievement to date?

I am inspired by my work as a mother and as a publisher, and most recently by my role as IPA President. These are separate achievements of course, but I see them as a journey, with literacy and learning at its heart. Books and reading are the cornerstone of knowledge, understanding, education and imagination. Having these roles has allowed me to highlight the importance of books, reading and publishing, not simply for my own children, but I hope for a wider global audience. This work is significant to me because it means I am in a position to help others, and to ensure that literacy, reading and education remain at the core of the publishing industry.

In 2018, the Kalimat Foundation signed an agreement with the Accessible Books Consortium (ABC) to produce born-accessible books. What prompted you to do this?

This initiative ties in with the Kalimat Foundation’s defining role to make books a fundamental right, anywhere in the world, irrespective of circumstances. All children should have access to books to acquire knowledge and gain an education. The scarcity of Arabic books in braille, large print and audio formats further prompted us to sign this agreement. Kalimat’s partnership with the ABC enabled us to identify Arabic-speaking children who needed our help across the Middle East and North Africa in particular, but also those who have been displaced to other parts of the world. So far, the Kalimat Foundation has produced 30,000 accessible books and distributed 5,000 of them locally, regionally and internationally. More importantly perhaps, in collaboration with the ABC, we were the first organization in the region to facilitate training and technical workshops for Arab publishers. Sharing know how and expertise is invaluable, and has made publishers in the region reflect on how to make their books accessible to everyone. Our activities assert this universal right and help people shape their own future and become productive members of their communities.
What do you most like about being a publisher?

Books are my passion, so I feel very fortunate to work in this industry. Their importance and the industry’s role in education, in giving voice to the voiceless, and empowering millions of people to dream, cannot be overstated. Books have the power to create understanding and harmony between cultures, which are only achieved through dialogue and mutual respect. In this sense, publishing has a role to play in peace and stability. I am also passionate about how publishing is leading the way in diversity and inclusion. Although there is still room for improvement, compared to other sectors, our industry offers a positive example of diversity and inclusion and is helping to create a better and more just world.

Who is your favorite author and what are you reading at the moment?

I am currently reading Frantz Fanon’s *The Wretched of the Earth*. As an international publisher, I am exposed to a variety of authors and subjects, and my reading tastes are eclectic. I enjoy all genres, and I try to keep up with the latest releases. I recently published Arabic translations of a number of African authors whose books I had enjoyed in English. I also read a lot of literature about mysticism and spirituality. I love reading fiction by female authors in particular, as it often gives me an insight into other cultures and lives, which I find fascinating.
For years, video game development has been one of the fastest growing sectors of the entertainment industry — and it’s safe to say that the COVID-19 pandemic hasn’t slowed that down. On the contrary, according to Newzoo’s assessment from October 2020, the global games market for 2020 will have generated revenues of USD 174.9 billion, a 19.6 percent increase on 2019 figures. Significantly, this late 2020 assessment is USD 15 billion higher than the one made ahead of the pandemic in March.

The global number of gamers also continues to grow and, according to Newzoo’s Global Games Market Report for 2020, is expected to exceed 3 billion by 2023. Over the past year, it has become clear that video games are an incredibly important field for social interaction. Newzoo’s research
shows that socializing is the second most popular reason for people spending more time playing games during the pandemic. As more people gather on gaming platforms, games themselves are starting to offer features and experiences similar to social media or real-life events — even replacing the latter. This was seen in April 2020, when 12 million viewers gathered inside *Fortnite Battle Royale* to watch a live, in-game Travis Scott concert. This was a landmark moment for social interaction within video games.

Thanks to the development of technology, the design, complexity and diversity of video games are changing rapidly. Players can now choose from a wide range of formats and genres to engage with, and it is common for AAA games (those developed with the highest budgets in the industry) to offer dozens, or even hundreds of hours of story content. Graphically, too, video games are becoming more realistic. They can capture every minute detail, such as the personal image of protagonists, which are more and more frequently using famous Hollywood actors or influencers.

Similarly, as is the case for other artistic creations, the core of video games has always been their intellectual property (IP). Compared to traditional copyright-protected works, video games are generally much more complex. They are a conglomerate of many different elements, such as computer programs, audiovisual content, pictures, designs, literary works, voiceovers, music, artistic performances, trademarks and many others. Managing the specifics of video games presents a real challenge when it comes to IP protection.

An even greater challenge has emerged as a result of the rapid development of the video game market, and the revolution in video games themselves. Also of note is that video games are generally distributed worldwide, meaning that, as a rule, specific regulations in all relevant jurisdictions should be taken into account. However, from an IP law perspective, numerous aspects of video games remain unclear. These can be a problem for video game developers, publishers, and even players in some cases. Let’s take a look at some of the most interesting IP-related issues that the industry has seen so far.
Video games are leaning further towards deeper realism; a trend which, in part, has been facilitated by the technical ability to realistically render even the minutest details. It’s natural, then, that developers choose to include elements from the real world, such as real-life objects, brands, or landscapes in their games. You can see this in warfare-based games; to create a more immersive experience for players, developers often base these games on historic events, using replications of actual weapons, military vehicles, aircrafts, uniforms and equipment. Many of these objects come into the game together with trademarks, which can protect their product name or logo, for example. This raises the general question as to whether the artistic creation of a video game justifies the use of those trademarks.

The example of warfare-based games is not coincidental; this genre has come under heavy scrutiny and seen multiple disputes regarding the depiction of real-life objects. For example, a landmark IP case in 2020 involved a dispute regarding the use of Humvee military vehicles in the Call of Duty series. The case received a first instance settlement by a New York district court in March 2020. The court ruled that the use of AM General’s Humvee-related trademarks by developer Activision Blizzard is protected by the United States’ First Amendment right to freedom of expression. In its analysis, the court used the Rogers test established in the Rogers v. Grimaldi case in 1989. That test allows the rejection of trademark infringement claims if the trademark is used for artistic purposes and doesn’t mislead consumers. As the district court concluded: “If realism is an artistic goal, then the presence in modern warfare games of vehicles employed by actual militaries undoubtedly furthers that goal.”
Although the Humvee case is a definite breakthrough for the gaming industry, its effects can only be extended to the United States, where the Rogers test applies. Most other jurisdictions across the globe lack provisions that expressly allow the use of trademarks for artistic purposes. However, this lack of direct legal exemptions does not automatically mean that using trademarks in video games anywhere outside the United States constitutes an infringement. There are other legal means of doing so, but their outcome is more difficult to predict. For example, in 2012, a Parisian court found that the use of Ferrari’s logo in a model of car in the Grand Theft Auto series is admissible on the grounds of freedom of expression and absence of risk of consumer confusion.

EASTER EGGS

Another interesting IP aspect concerns Easter eggs, the term used to describe secret content hidden in a video game by its developers — typically as a joke or reference. The most common Easter eggs refer to other video games, but they can also reference other cultural works, real-life events, people, previous games created by the developer or literally anything else. They can take many forms, from conceptual references in dialog, quote paraphrases, names, direct quotes, replication or parodic alteration of an item, image or secret feature in the game. An example can be found in The Witcher 2: Assassins of Kings, where players can find a dead, white-robed body next to a haystack. This is a tongue-in-cheek reference to the Assassin’s Creed series of video games. In another example, Diablo 3 has an option of combating giant My Little Pony-style unicorns, and in Call of Duty: Black Ops 2, after completing a specific action in a certain time frame on a specific map, the player can choose to play some old-school Activision games on an Atari 2600.
Due to their very nature, Easter eggs usually involve some level of appropriation from another’s copyright-protected work. Their legal assessment (and the determination of whether not they are infringing) often varies and depends on the amount and substantiality of the portion taken. In general, where appropriation is only conceptual, no infringement risk should occur as IP law does not protect mere ideas. Conversely, each time a specific portion of another work is used, Easter eggs will most probably interfere with the exclusive rights of the copyright owner. Whether such an interference will constitute an infringement is another question, and the answer to that depends on the ability to classify the particular use of copyrighted work under established exemptions from copyright protection.

A well-recognized copyright exception is the fair use doctrine, which is established in the US copyright system but used here as a collective term encompassing similar legal institutions in different jurisdictions. The principles of fair use, however, vary substantially from one legal system and jurisdiction to another. In common law countries, fair use limitations are typically defined by a set of open norms — such as circumstances to be taken into account by a court when deciding whether the use is indeed fair. Such circumstances can include the purpose and character of use, scope of use, nature of the copyrighted work, and amount and substantiality of the portion used. Whereas civil law legal systems do not incorporate such principles and usually use narrow, specific exceptions, such as citing small portions of another’s work for the purposes of explanation, critical analysis, education, parody, or use customarily justified by the particular genre.

Speaking very generally, it is usually easier to find a justification for a typical video game Easter egg in jurisdictions using open norms like the fair use doctrine, as such an approach is much more flexible and open to new technologies. However, not every Easter egg can avoid a copyright infringement accusation even in this system — which presents video game creators with some risk.

**USER-GENERATED CONTENT**

Socializing within video games does not end with communication between players or with attending online events. Like social media, many video games encourage players to create and share so-called user generated content (UGC). UGC may take numerous forms, including fan art, let’s play videos, or mods (modifications of a video game’s features), including new characters, objects, constructions, stories, any many more. Sharing such content may take place on platforms associated with the game, either owned by the developer or by third parties, as well as within the video game itself. Some video games are even based on the idea of player participation.
On the one hand, UGC helps to build strong communities around a game, which brings value for players and developers. On the other hand, it can be a legal minefield for both sides. From the player’s perspective, creating and sharing video game-based UGC always involves using the game’s IP in one way or another. Players have to comply with regulations on the use of IP listed in the “end-user license agreement” or terms of service, which vary between games and, in most cases, leave some room for doubt. In turn, developers have to design around all the regulations to prevent the sharing of unlawful or undesirable content on their platforms and also bear the risk that their own IP will be associated with potentially undesirable content. A main risk related to opening up your own product to UGC is the potential infringement of the IP rights of others, i.e. players mixing together IP-protected content from different video games. In a recent example from March 2020, Sony was forced by Nintendo to delete UGC featuring Nintendo’s famous protagonist Mario from the Sony-published video game Dreams. As it would be virtually impossible for developers to clear the use of every piece of UGC, the industry will certainly see many more of these kinds of cases.

**SUMMARY**

From this rather narrow set of potential issues alone, it is clear that creating a video game is an IP challenge and that video games are a huge challenge for IP law itself. As is the case for other quickly developing industries, it is difficult for legal norms to keep pace with changing technology, so some level of legal uncertainty is unavoidable. However, the more that legislators and courts recognize that the creative features of video games are as important to protect as those of traditional cultural works the easier it will be for creators to assess potential legal risk in advance, and – to create.
Empowering SMEs to leverage IP for innovation

Frank Tietze, Head of IP Management (IIPM) Laboratory, Department of Engineering, University of Cambridge, United Kingdom

Small and medium-sized enterprises (SMEs) make up a large share of economies, whether in developed or less developed countries. They contribute substantially to GDP and are a critical source of innovation across all sectors, markets and aspects of life. In the current COVID-19 pandemic, SMEs have contributed to the development of crisis-critical products. Examples include the German-based SME BioNTech in the area of vaccines and BenevolentAI in identifying a COVID-19 treatment that recently secured Food and Drug Administration (FDA) approval. SMEs are also behind many of the digital communication tools that we now use on a daily basis.

Intellectual property (IP) in its different forms, ranging from patents and trademarks to design rights and copyright, is of great importance to SMEs. A number of studies show that firms in general, and SMEs in particular, perform better when they pay attention to their IP. Arguably, IP makes all the difference, in particular, to the fortunes for Gazelles (ambitious, high-growth SMEs); startups when they are younger; and large firms, when they are successful. Let’s take a few examples to illustrate how IP has made a difference.

SWIFTKEY

SwiftKey is an artificial intelligence (AI) company founded in 2008 by alumni from the University of Cambridge. In 2016, the then-SME was acquired by Microsoft for USD 250 million. Of course, there are many reasons for this huge valuation, but I find it hard to imagine that the founders would have achieved such an exit if they had not paid attention to IP. Interestingly, in 2013, SwiftKey hired Gareth Jones, an experienced IP manager who brought experience from two IP savvy companies, Vodafone and IBM. Some might have questioned SwiftKey’s decision to hire an IP person at great cost at the time, but I would argue that it was a really smart decision; the investment certainly paid off. Mr. Jones was hired to look after SwiftKey’s IP so it could withstand the due diligence processes
that multinationals run to scrutinize acquisition targets. When I heard about this case, it reminded me of a visit to the Venture Unit of the Volvo Group in Sweden in my student days. During the visit, the head of the Venture Unit at that time told me that they quickly lost interest in acquiring an SME if it could not demonstrate that it had secured its IP in relevant markets globally. So, while difficult to prove, my guess is that although SwiftKey may have managed to sell its company to Microsoft or another multinational without its IP in order, it certainly would have done so at a much lower price. My guess is they would have been able to sell it for around USD 50 million. That’s five times less than Microsoft paid to acquire it.

NUTRISET

You might say this is a single case from the “trendy” AI sector, so let me give you another example of how SMEs can make good use of IP. For our Belmont Forum-funded Intellectual Property for Accelerating Sustainable Transitions (IPACST) research project (www.ip4sustainability.org), we recently interviewed the CEO of Nutriset, a French company that operates in the humanitarian

Understanding the power of IP, Nutriset, which aims to provide nutrition to vulnerable groups in least developed countries, established a franchising model through which local manufacturing plants have been established in West Africa, creating 400 permanent jobs. In 2020, alone, Nutriset benefitted 1 million children.
sector. This fascinating, mission-driven company aims to provide nutrition to all, particularly vulnerable children and pregnant women in less developed countries, predominantly in Africa. It seems clear that Nutriset understood the power of IP and put it to use successfully in a number of different ways. Nutriset did not want to produce a humanitarian product in a highly efficient and automated manufacturing plant in Europe and ship it to less developed countries. Rather, the company developed a business model that aims to create sustainable impact and enable local job creation and skills development. For that to work, Nutriset used patents to protect local franchisees in southern countries from competitors from the global north. The latter could have produced copycat products at scale for costs below those that Nutriset’s franchisees could achieve. This would have undermined Nutriset’s mission to create sustainable impact in developing countries by establishing local manufacturing capabilities. In fact, today Nutriset has about 20 competitors, of which only two are from the global north. Nutriset used its patents to secure sufficient lead time to establish a franchise model through which it shares patent-protected IP and complementary knowledge, such as process knowledge and licenses for the use of its trademark. Through this model, local manufacturing plants have been established in West Africa, creating about 400 permanent jobs. In 2020 alone, Nutriset’s products benefited about 1 million children, and have had a positive indirect impact on local industries.

**IP-RELATED CHALLENGES THAT MANY SMES FACE**

These examples demonstrate that IP can be put to use both for economic success and positive social impact. However, many SMEs face IP-related challenges. First, we hear that SME executives perceive that patents are costly. It’s true, they do cost money, but that cost needs to be put into perspective. First, it’s important to bear in mind that these days, intangible assets typically make up at least 70 percent of a company’s core assets. Second, statistics show that an average patent family, covering up to 10 counties and maintained for just 10 years (out of a maximum of 20) accumulates total costs of about GBP 50,000 (approx. USD 70,000). With these factors in mind, if a particular patent protects a company’s core assets, isn’t it worth spending a sum equivalent to a senior R&D engineer annual salary to claim ownership for your invention, the cost of which is spread over several years? Costs aside, SMEs create and own patentable IP assets, as well as various copyright-protectable assets in the form of software code, webpage content and other business materials, such as manuals and brochures, confidential knowledge, algorithms and data, and in very many cases, trademarks. Even today, after venturing into the knowledge economy for many years, SMEs often lack a general understanding of IP rights and how they can be used.

Although creating IP and being able to claim ownership are important, one has to keep in mind that the granting of IP rights does not predetermine how the assets they protect should be used. This is up to the owner. IP rights enable their owners to make decisions about how they are used and by whom. The following anecdote
is illustrative. Imagine you own a house without a front door. It would be difficult for you to prevent strangers from entering and helping themselves to your fridge, enjoying movies on your couch or taking a nap in your bed, wouldn’t it? IP rights put the front door on your house. They allow you to make decisions about who you like to have around. If you so wish, you can keep the door shut and not let anyone in. Or, you can operate an open house policy inviting friends and family to visit. You may even decide to list your property on Airbnb and make some money from it. Without a front door, putting these options into play would be difficult.

Moreover, while SMEs can find a lot of IP information online, unfortunately, few effective tools are available that help executives explore the strategic options for achieving certain business objectives. At the same time, while there are many capable patent attorneys out there, SMEs often find it difficult to get truly independent advice, at least without having to commit substantial financial resources. As part of our research in the Innovation and IP Management Laboratory at the University’s Engineering Department, we set out to develop toolkits with low access barriers for SMEs and startups. One example is the IP road-mapping tool that was co-developed with more than 20 companies, most of them SMEs and startups. It is designed to help SME executives to have structured conversations about the best use of their company’s IP. The IP road-mapping approach is run in a workshop format, making use of visual templates that guide participants through a four-step process.
MANAGING IP IN THE CONTEXT OF OPEN INNOVATION

The management of IP in open innovation projects raises another set of important IP-related challenges for SMEs. More and more companies engage in collaborations, including with large multinationals and universities to jointly develop innovative products, services and solutions. In fact, as governments, including the European Commission, embrace open innovation, SMEs might find themselves involved in bilateral or multilateral open innovation projects, such as the EIT-funded Horizon consortia. While developing IP and putting it to use remains challenging for SMEs, such open innovation projects come with their own specific IP-related problems. For instance, when engaging in open innovation projects, SMEs have to negotiate collaboration agreements with their partners, which may be a large multinational with a large team of lawyers. When involved in such collaborations, SMEs must conduct IP risk assessments, determine and specify their background IP and negotiate who will own any foreground IP, which the partners set out to develop together.

In our ongoing POINT project for the European Commission (www.ifm.eng.cam.ac.uk/research/innovation-and-ip-management/research-projects/easmepoint) my team has been interviewing SMEs across Europe to build a view of the challenges SMEs face when innovating in collaborative partnerships. This project aims to identify best practice interventions and to put forward recommendations for how the European Commission might help address them. Our preliminary results show that SMEs lack tailored support in addressing particular IP-related challenges when engaging in open innovation. Offering more support in this respect seems like a better investment in helping to scale the next generation of successful SMEs than making available online licensing templates for or guides to develop contracts.

“SMEs lack tailored support in addressing particular IP-related challenges when engaging in open innovation.”
Julius K-9®: harnessing innovation to meet dog lovers’ needs

By Catherine Jewell, Information and Digital Outreach Division, WIPO

The Hungarian brand Julius K-9® is renowned among dog owners for its high-quality harnesses, leashes and other accessories. The founder, Gyula Sebő, started the company in his garage in Budapest, Hungary, back in 1997. Despite some highs and lows, the company has since become a leading manufacturer and distributor of harnesses and accessories supplying dog lovers around the world with innovative equipment. Gyula Sebő explains why it is so important for companies like Julius K-9® to have a carefully crafted IP strategy in place from day one.

"Twenty-five years ago, we recognized a need for well-designed gear that allows owners to spend the best possible time with their dog and we remain committed to that goal," says Gyula Sebő, founder and CEO of Julius K-9®.
"The main take-away from my experience in launching new products over the past decade is to protect innovation on all fronts, if possible, especially in terms of their design and technical content," explains Gyula Sebő.

Julius K-9® recently opened a new manufacturing facility in Tiszaújváros, Hungary.
Tell us about how you came to set up Julius K-9®.

I set up the company with my wife, Anikó Bakos, in 1997. We started from our garage in true start-up style. I had worked as a volunteer dog trainer for some time in Austria, training police dogs. During that time, I noticed that while the training was highly professional, the equipment was rather basic. Although a niche area at the time, I realized there was a gap in the market. I trained as a saddler to learn how to make harnesses and that’s how I got into manufacturing dog harnesses and came to set up the company. Our first customers were the police and security companies. Working with service dogs meant that we could develop special equipment. In fact, we were the first company in Europe to manufacture bulletproof dog vests. But later on, we decided to focus on the consumer market. We didn’t want to be seen to profit from conflict situations and we also recognized the emotional power of dogs and the companionship they offer people. I’m convinced that if our four-legged canine friends could speak they would tell us that people deserve to be loved! I have dedicated my life to pet welfare innovations. In my eyes, dog ownership is about caring and taking responsibility. In return, dogs bring joy to our lives. Twenty-five years ago, we recognized a need for well-designed gear that allows owners to spend the best possible time with their dog and we remain committed to that goal.

How did you come up with your company name Julius K-9®?

Choosing a name for your business is extremely important. We went about it in a very simple way. As we were exporting from Hungary to Austria and Germany, we chose Julius, the German version of my name, Gyula, and combined it with K-9, which refers to Kele Street 9, in Budapest, where we lived and where I got my first dog.

What have been some of the biggest challenges you faced in developing your company?

There have been many ups and downs. In the mid-2000s for example, the Hungarian textile and leather industry collapsed for a couple of years, which meant that the price of the materials we use for our harnesses skyrocketed. And on top of that, we were caught up in years of litigation, not least because we had the bad luck of an unscrupulous overseas representative who basically had our entire range copied by a low-cost manufacturer and replaced our entire stock in some 1,700 stores across Germany. This cost the company millions of Euros in losses. That’s why we made a conscious decision to invest in our brand, implement a robust intellectual property (IP) strategy and focus on continuous innovation.

Why is it important for companies like Julius K-9® to think about IP protection?

When you start a business in today’s market, you find yourself in the middle of a global trade war and you can’t enter this battlefield unarmed. That was what we experienced when we started our business in 1997, and it’s even more the case today. When we started developing our products, we had many technical innovations, but we didn’t know which ones we needed to protect
or which ones would later become global successes. We saw that our competitors were eyeing our name, so we took the first opportunity to register our trademark and protect our brand. We submitted a figurative mark, which contains the Julius K-9® brand name. I think we made a mistake. We should have protected “Julius” and “K-9” separately as well. Had we done so, we would have far fewer legal problems today. When setting up a company, it is really important to have a solid IP strategy in place and a clear idea of the IP assets you are going to protect and how you are going to protect them. In my experience, the first blow comes when you have already created value in your products and your competitors and other market players see an opportunity to profit from it. That’s why companies need to have an IP strategy in place to protect and defend their business interests from an early stage.

How are you using IP in your business?

After we protected our brand name, we started focusing on protecting our technical content. This was important because copycats were starting to use our designs and our technical elements and were effectively reducing our market share. We then started protecting our second largest product line with utility models, which are similar to patents but easier to secure. As the IP attorneys we approached didn’t fully understand what I wanted, I took different training courses and immersed myself in the field of industrial property and learned how to write applications for patents and utility models.

Patents are important. We use them to protect our core technology in multiple markets. In fact, to do this, we used the Patent Cooperation Treaty, which simplifies the process. But in general, the patenting process is complicated and expensive and you have to wait a long time for a patent to be granted. So in our fast-moving market, we are protecting the new technical elements we create – some of which wouldn’t qualify for patent protection anyway – with utility models and design rights. Securing these rights takes less time and is cheaper.
Our focus is on developing high-quality innovations and designs whether we actually use them or not. We then launch the best, most relevant designs and technical content to the market. We usually make sure that our new products have striking designs, as this makes a big difference to their performance in the market. In fact, our designs have won many awards. With design rights, we can provide our retailers with products they can't get from other sources, safe in the knowledge that we are protected.

For many years, we were a victim of our own success. The extraordinary success of our traditional product line and the high production volumes involved in supplying that demand meant we couldn’t launch any new products. That’s why, two or three years ago, we changed direction and started to automate production. This has allowed us to improve our productivity, expand our product range and respond to dog owners’ hunger for innovation, which is important because they are our main clients. We have also implemented a three-pronged approach to IP protection; we protect the brand, the design and the technical elements of our innovations. We have used both the Madrid System and the Hague System to protect our trademarks and designs, in different target markets. These systems offered us an easy and cost-effective way of doing so.

Is infringement a problem?

Yes, it is something we take very seriously. We have a small team that constantly monitors the largest 50 or so online retail platforms to identify products that may be infringing our IP rights. We have to do this to prevent lower-priced products identical to ours, and perhaps even bearing our name, from flooding the market. As our online sales increase, we need to ensure our IP strategy is effective and easily enforceable in the online world. So, for our online markets, we are focusing on trademark and design protection, which are the best way to defend ourselves against counterfeit goods.

How is your IP strategy enabling you to grow your business?

Our focus on IP protection creates new opportunities in terms of the company’s valuation. The fact that our product lines are protected on all sides and can be distributed without risk is of great strategic value to us. Our IP rights mean we can actively prevent our competitors from selling similar products with comparable technical content or innovation.

What are your plans for the future?

We recently opened a new manufacturing facility in Tiszafüred in Hungary. That brings our staff numbers up to around 500. There is no shortage of ideas at Julius K-9® so we will continue to innovate. I feel sure that our innovations will continue to gain support and that our products will prove themselves in the markets of the future. Take for example, our smart-dog harnesses with built-in sensors to measure an animal’s vital functions and track daily activity.
What are the main lessons you have learned in commercializing your products?

The main take-away from my experience in launching new products over the past decade is to protect innovation on all fronts, if possible, especially in terms of their design and technical content. Failure to do so makes you vulnerable. We’ve also learned how important it is to be well-informed about the markets in which we want to sell our products given the perils of global online trade. Before we launch any new product, we thoroughly research the market to have a clear understanding of the available products. We also research existing patent and design rights to avoid infringing any pre-existing rights.

If you were to start again, what would you do differently?

If I had to start over today, I would probably have started developing customizable products far earlier. We’ve learned that as securing IP rights can be very costly, the most efficient approach is to protect our core technologies and to supplement them with customizable accessories and variations, which may also be eligible for protection. This is our current approach and it’s working well. The diversity of our IP portfolio is one of our strengths, but we don’t have the capacity to translate all of our ideas into products. That’s why our goal is to develop and expand our licensing program. We have already concluded a number of successful licensing deals and will do more in the future. Licensing is a good option for companies that don’t have the capacity to convert their ideas into innovations. By advertising licensing opportunities on the appropriate platforms, we hope to attract potential investors.

“Our IP rights mean we can actively prevent our competitors from selling similar products with comparable technical content or innovation.”
GI protection revives caper production on Pantelleria

By Michele Evangelista, Lisbon Registry and Catherine Jewell, Information and Digital Outreach Division, WIPO

The small island of Pantelleria, which lies off the southern coast of Sicily, is home to what some consider to be the world’s best capers.
The small island of Pantelleria, which lies off the southern coast of Sicily, is home to what some consider to be the world’s best capers. These intensely flavored aromatic flower buds are a gastronomic delight and a favorite garnish for many dishes and appetizers. For many years, they were the only capers in Italy to be protected as a geographical indication (GI). Gabriele Lasagni, who heads up Bonomo&Giglio, the sole company in Pantelleria to continue operating as a caper farm, processing plant and specialty food laboratory, explains how GI protection has supported caper production on the island and enabled his company to thrive, and shares his plans for the future.

Tell us about Bonomo&Giglio and its origins.

Two cousins, Antonio Bonomo and Girolamo Giglio from Pantelleria, set up the company in the aftermath of the Second World War. In September 1943, when Italy signed the Armistice of Cassibile with the Allied Forces, Antonio Bonomo, my wife’s grandfather, was serving as a soldier in northern Italy. Following the Armistice, he decided to quit the army and return home to Pantelleria. However, as it was still too dangerous to travel across Italy, he decided to stop for a time in Reggio Emilia. In fact, that’s where he met his wife and settled. In the post-war years, he began arranging shipments of traditional products, such as capers and grapes, from Pantelleria to Reggio Emilia. He saw that his relatives and friends delighted in their quality and unique flavor and that prompted him to set up a company with his cousin, Girolamo Giglio. They called the company Bonomo&Giglio. At first, they sold grapes and capers, but in the 1970s, they decided to focus exclusively on capers. After the two cousins passed away in 2004, as the husband of Antonio Bonomo’s granddaughter, I took over the family business.

Tell us about your products.

Today, the company produces and sells capers under the La Nicchia brand. We offer capers in many forms - salted, in oil, dried, and as creams. We also sell a selection of other high-quality products from the island, including honey, marmalade and wine. At first, we only produced capers that were cured in salt. That’s the form of caper that is protected as a geographical indication (GI), the intellectual property right that certifies
Capers are the unripened buds of the flowering caper bush (*Capparis spinosa*), also known as Flinders Rose.
Pantelleria’s well-drained, fertile and mineral-rich volcanic soils and its Mediterranean climate create the unique taste of the island’s capers.

Pantelleria’s GI-certified capers are selected according to their size and preserved in sea salt to enhance their flavor.
that the quality of a product is linked to its geographical origin. Then, I began producing and marketing capers in other forms, for example, capers in oil and dried capers. We also began producing derivative products, such as creams and sauces, to meet the needs of a broader range of consumers and increase our sales. Although the GI status of Pantelleria’s capers has been pivotal in strengthening the company’s market position, I wanted to explore different routes and invest in new projects that would allow my company to grow and enhance its reputation, but also give value to the products of other local producers.

**How has the GI status of Pantelleria capers helped your business?**

Aware of the uniqueness of the island’s capers, my company – perhaps more than any other producer on the island – has taken advantage of the GI since it was first registered. We understood that we needed to invest in the quality of our product to strengthen our position in the market and regain our competitiveness.

In the 2000s, large Italian supermarket chains launched an initiative that had important consequences for our business. They decided to create a line of regional and local premium products that reflected the excellence of Italian gastronomy. Their aim was to remind consumers of Italy’s long-standing culinary traditions and its high-quality products. As you can imagine, producers of GI-certified products were very happy about this because GI status is an irrefutable guarantee of origin, method of production and quality linked to the product’s place of origin. For the Italian supermarket chains, GI quality and certification schemes were the easiest way to offer trusted authentic products to their consumers. Their initiative opened the doors for our GI **Cappero di Pantelleria** to the distribution channels of Italy’s largest supermarkets making our product more widely available, at least in Italy and elsewhere in the Mediterranean.

**How did the capers of Pantelleria come to acquire GI status?**

In the 1960s and 1970s, the business of capers was one of the main sources of revenue for islanders. We produced our own capers and supplemented our crop with those of other local producers and sold them on to wholesalers, suppliers and canning companies. At that time, we had not yet started building up our company brand and Pantelleria capers were not yet protected as a GI.

Then in the mid-80s, with the abolition of custom duties between Italy and other Mediterranean countries, we saw a steep decline in sales. The island’s producers just couldn’t compete with capers from Greece, North Africa and Spain. Many islanders abandoned caper production and agriculture all together and moved into the island’s booming tourism sector.

With caper production in decline, producers decided that one way to rekindle the caper business would be to register the island’s capers as a GI. We understood that we needed an official label to certify the origin, the
The capers on Pantelleria are the best in the world. Pantelleria lies between Sicily and Africa. Its well-drained, fertile and mineral-rich volcanic soils and Mediterranean climate (low rainfall and hot summers) come together to create the unique taste of the capers we grow here.

Since the capers of Pantelleria were registered as a GI, we have remained committed to producing them to the highest standards to deliver a quality product to consumers. This commitment paid off in 2007 when, as I mentioned, large Italian supermarket chains included GI-certified Cappero di Pantelleria among their premium product lines. This was great news for us because, at that time, Bonomo&Giglio was the only player in the market that could supply them. That year, we received orders well beyond our production capacity. I had to buy-in capers from local farmers and the following year we had to increase our own production capacity. The GI has been pivotal to the renaissance of Pantelleria capers. Without the GI, we would not have been able to supply the supermarkets. Still today, demand for GI-labelled capers from Italian supermarkets is the bulk of my business and allows me to cover costs and to invest in other projects.

While GIs are often used to preserve local specialties and traditions, they are not immutable and can be adapted to new production and consumption trends. How would you like to see the Cappero di Pantelleria GI evolve?

There are aspects of the Book of Specifications that need to be reviewed to give better value to the quality and reputation of the Cappero di Pantelleria. The last revision took place in 2010. The Book of Specifications sets out the rules of production for the GI-certified product as agreed by the producers. It is not immutable and can be updated when needed, in line with any new knowledge and techniques unveiled by producers, as long as they remain true to the origin, specificity and tradition of the GI.

In my view, we need to amend the Book of Specifications to relax the rules that producers have established regarding the use of the GI. This would enable us to keep pace with new production and consumption trends, while continuing to preserve the specificities and authenticity of Pantelleria capers. At present, the GI label only allows a certain volume of capers per plant per square meter to be commercialized. When the Cappero di Pantelleria was registered as a GI, no other capers in Italy were protected in this and producers took inspiration from the Book of Specifications of the Passito di Pantelleria, a GI for local wines, when setting the rules for using the GI Cappero di Pantelleria. When producing grapes, the quantity of pruning carried out on plants is inversely proportional to the quality of the grapes. In other words, the fewer grapes that are produced, the better their quality.
However, capers are not grapes, and over the years, we have realized that with capers there is no real link between quantity and quality. On top of that, when producers developed the Book of Specifications for the GI *Cappero di Pantelleria*, they referred only to salt-cured capers. Today, it would be helpful for us to clearly mention the GI *Cappero di Pantelleria* as an ingredient in other preparations that are made exclusively with them, such as capers in oil and as creams. Taking advantage of the possibility that the island's caper producers have to update the Book of Specifications would allow us to capture greater value from the GI *Cappero di Pantelleria*.

I would also like to help establish an association of producers for the GI *Cappero di Pantelleria*. In Italy, such associations traditionally support producers of GI products and work to safeguard their rights by promoting and marketing the product, enforcing producers' rights against imitation, misuse, evocation or other acts of misappropriation and of unfair competition, and by interacting with national and international public authorities on behalf of producers. Discussions are underway among the island's caper producers to try to set up such an association to manage our GI.

**What can public authorities do to support businesses like yours?**

More rigorous controls in the market against acts of imitation, misuse, evocation, and other acts of misappropriation and unfair competition would
be of great help, including on processed goods. In my experience, while public authorities do in-depth controls within the value chain of the product to make sure that production complies with the Book of Specifications, national and European legislation, fewer controls take place outside of the value chain to protect the GI against free riders. If you search on the Internet, you will find lots of capers that claim falsely that they come from Pantelleria.

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

These days our capers are attracting the attention of many new market actors. For example, gourmet chefs are using them because when they use GI-certified products they add prestige and value to their menus. This growing demand for capers in different forms is another reason that it is becoming urgent for us to modify the Book of Specifications. This will allow us to meet this new market demand without losing the unique qualities and characteristics of the GI *Cappero di Pantelleria*. I am convinced that the strategic development of the GI will continue to benefit my business and other producers on Pantelleria.

I would also like to create partnerships with other local producers, including producers of honey and saffron to expand my offering under the *La Nicchia* brand. The agreement I am proposing will allow them to focus on growing and developing their businesses while I take care of buying and distributing their products. It’s a win-win arrangement. By working together in this way, we can add value to each other’s products, create jobs and generally boost the island’s economy.

“These days our capers are attracting the attention of many new market actors.”
How startups and SMEs should think about IP: an investor’s perspective

By Jag Singh*, Managing Director, Techstars, Berlin, Germany

It’s all about the exit strategy; how you and your investors go about getting a return on the time, energy and money invested in your business. Thinking about exits is important; after all, that’s when most of the returns are realized – both for entrepreneurs and investors.

Over the last 15 years, first as an entrepreneur and now as an investor, I’ve seen many award-winning ventures end up in the global startup graveyard. Why? In large part, because very few of them secured intellectual property (IP) rights to protect their business assets. That’s why startups and SMEs need to pay attention to, or at the very least, think about IP at the earliest opportunity.

IP: A BUNDLE OF RIGHTS THAT CAN SUPPORT YOUR BUSINESS

When thinking about IP rights, patents often come to mind first, but they also include copyright, design rights, trademarks and trade secrets. Each protects a different aspect of your product or service. Trade secrets and/or patents protect inventions or new technical solutions, copyright and design rights protect original creative content and trademarks (and designs) protect and help build your brand. IP rights enable inventors and creators: to transform their intellectual outputs into tradeable commercial assets. IP rights create options for a designated period of time for IP rights owners to either prevent third parties from using an invention or creative work without authorization or to negotiate profitable business deals.
IP laws impose penalties for unauthorized use of protected IP assets. But more importantly, they allow companies to claim ownership over and derive value from their innovative and creative outputs. This is achieved, for example, by licensing IP rights in exchange for payment of royalty fees to prevent similarly named competitors operating in the same geography and potentially confusing customers.

**IP: A KEY CONSIDERATION FOR INVESTORS**

IP rights are key economic assets in today’s knowledge economy. That’s why startups and SMEs need to build an IP strategy in the early stages of their development. Such an approach will enable them to leverage their IP assets for growth.

As investors, my colleagues and I tend to examine a company from its inception. That’s when they make many promises with little evidence to back them up. In the modern economy, IP assets often drive current and future revenues, so investors like to see that entrepreneurs have integrated IP rights into their business plans. Evidence of some kind of convincing approach to IP will, at the very least, mean that companies are better aligned with investors on the big question of how to sell the company for billions of dollars one day.

Many startups and SMEs acknowledge that IP assets can enhance corporate value and increase the chances of a lucrative exit, but few protect and grow their IP assets. A poor understanding of IP and an expectation that IP protection is expensive makes...
it easy for startups and SMEs to push IP considerations to one side. Their failure to carefully consider IP protection can come with an enormous price tag.

CREATING AN EFFECTIVE EXIT STRATEGY

To create a good exit strategy, startups and SMEs need to consider which IP rights are relevant to their business, and at what stage to protect their IP assets.

In many ways, entrepreneurs are also investors. They allocate their precious time and money into building and growing their business. When it comes to IP, all companies need to take a broad view of their business and how it fits into the wider commercial landscape; they need to ensure IP is fully integrated into their business plans, and they need to think about what they need to do to ensure their IP assets are managed effectively by their people.

The people component involves enhancing IP awareness and the acquisition of IP skills and expertise. This can be done by engaging qualified IP counsel or consultants; they often start by putting into place simple measures to ensure that sensitive business information is protected and by inserting clauses into employment contracts that clarify how IP rights are assigned and who owns them.

On the business side, business owners need a basic understanding of how different IP rights can be used to advance business goals and how to secure them. Certain types of IP rights require that very specific steps are taken before they can be secured. In the case of patents, for example, the ability to claim patent rights for an invention hinges on its novelty, among other factors. So a business should take steps to avoid any leakage of information about their new technical developments before they have submitted a patent application.

The way claims are written in the patent application is also critical. Claims define the scope of the patent and can determine whether a competing product or service infringes the patent. All too frequently, applicants define their technology too narrowly when drafting the claims in their patent applications. As a consequence, the resulting patents can’t be used to block competitors because others can easily design around the patented technology. Investors want to see that a company has secured IP rights for all relevant assets and that management of its IP portfolio is fully aligned with its objectives and processes.

“Investors like to see that entrepreneurs have integrated IP rights into their business plans.”
"Early-stage investors see the process of securing IP rights as a risk-allocation exercise."

FIVE COMMON PITFALLS

All too often, as SMEs charge ahead with building their business, they make decisions with unforeseen, but potentially far-reaching, consequences in relation to the following:

1. Open-source issues: Startups and SMEs often ignore the total cost implications of the computer system and software choices they make in the early days of their business. Many overlook the fact that open-source components are “free,” but only under certain conditions. These conditions often include a requirement to make the resulting code freely available to the public. Investors running a due-diligence check on a potential investment would see this as an IP risk stemming from potential non-compliance with a third party’s rights.

2. Trade secrets: SMEs are often unable to take advantage of trade secrets protection because they cannot prove they have taken reasonable steps to prevent the public disclosure of relevant confidential information. These companies fail to restrict how their key information is shared internally and externally. It’s a common mistake and is avoidable with careful planning.

3. Managing and monitoring IP assets: Startups and SMEs need to think about how they are going to manage their IP assets; how they are going to defend them against abuse or infringement; and how they are going to exploit them to generate new income streams and expand market share. Ever more frequently, investors are engaging IP consultants to navigate complex IP portfolios. Implementation of a robust IP strategy ensures there are no deal-breaking surprises.

4. Timing is always a factor when implementing an IP strategy. Many investors require that IP protections are put in place before they invest, especially when a company is considering international expansion through licensing or franchising agreements. Investors usually want their capital to be put to the most efficient use, on things like product development and scaling up sales - so it’s always worth thinking about the exact sequencing of your IP strategy.

5. Companies with an eye on foreign markets should always carry out country-specific clearance searches to determine their freedom to operate in those markets. In general, such searches are the easiest way to de-risk expansion into a new geography. When conducted by an IP expert, they can lead to insights around competitors and how they are approaching different markets. Where relevant, they can also identify public domain works on which new creations or products may be developed. SMEs can benefit from the information gleaned from publicly available IP databases such as WIPO’s PATENTSCOPE and the Global Brand Database when positioning themselves for acquisition.
Early-stage investors see the process of securing IP rights as a risk-allocation exercise. To acquire IP rights, you need to be the first to file an application to secure those rights, otherwise you may lose out. Speed is of the essence. In a crowded marketplace, securing IP rights is all about minimizing the risk of being challenged with an infringement claim.

For any company interested in harnessing IP opportunities, the first steps are to identify and quantify existing IP assets (e.g. know-how, client lists, inventions, website, creative content, and more). Then they need to understand their value and how best to protect them.

Startups and SMEs should take advantage of government schemes to encourage them to use IP rights. Many countries offer tax rebates and other IP-related deductions. For younger companies, these can determine their ability to take on another employee or even make it through a difficult quarter.

FOUR REASONS TO GET PROFESSIONAL IP ADVICE

First, doing an audit of your IP assets is a useful way to identify work that can actually be used or even repurposed. It can also surface IP assets that your business is using, but which belong to others. IP diagnostic tools (e.g. www.wipo.int/ipdiagnostic) can help kick-start this process, but it almost always makes sense to hire an IP consultant for this purpose. Why? Because IP assets may never come to fruition if relevant application procedures are not adhered to correctly. And when acquired, they can lapse if not properly maintained or managed.

Second, a conversation with an experienced IP practitioner about how your IP is currently used, how to protect any unregistered or new IP assets and
an optimal IP plan that best serves your exit strategy is a key to success. This can also serve as a starting point for a conversation with potential investors who are keen to show how they can add value to your business, beyond the cash they inject.

Third, IP laws and the interpretation of them are constantly changing. A qualified IP expert will be aware how such changes will affect your business.

Fourth, startups and SMEs also need to think through their approach to litigation, which can be costly but is avoidable, almost always. Many law firms offer startups and SMEs attractive pricing packages; some even offer free initial consultations and deferred payment plans.

WHAT INVESTORS LOOK OUT FOR

Just as entrepreneurs learn from their predecessors’ mistakes, investors are becoming more streetwise. Through bitter experience, we have learned the importance of due diligence and the need to ensure that companies own what they think or say they own and can use those assets as intended. We check whether appropriate IP assignments have been made; we validate measures to protect trade secrets, infringement notices and other internal policies.

The fall-out that comes with the heightened levels of competition our portfolio companies face is clear to us. We now expect that the number of IP infringement claims against them will grow as their profile rises. This is just a fact of life and one that companies need to be able to manage.

As investors, we have learned that while IP is a valuable asset, there are no guarantees of the financial value or utility of a company’s IP portfolio. That said, in general, IP assets increase corporate valuations or add significantly to the company’s actual and perceived value. In the merger and acquisition context, they strengthen the exiting company’s negotiating position.

I leave you with two takeaways. First, be proactive in making your IP strategy central to your pre-launch business strategy. Work on a plan before you’ve even spoken to your first real customers. And second, seek the advice of a qualified IP professional to ensure your IP strategy is tailored to your specific situation and goals. Sometimes, you can even get this advice for free.
Opportunities to finance innovation with IP*

By Alfred Radauer, IMC University of Applied Sciences, Krems, Austria

The “pro-IP era” of the last 30 years has been characterized by steady growth in patent and intellectual property (IP) filings with major IP offices across the world and greater use of IP in business. With the transition towards knowledge-based economies, increasingly, the value of firms is determined by intangible assets, such as know how, brands or technological skills.

A study by the IP merchant bank Ocean Tomo, shows that 84 percent of the value of firms on the S&P 500 Index in 2015 was attributable to intangible assets and just 16 percent to tangible assets such as physical property—a reversal of the situation four decades ago, when in 1973 the corresponding shares were 17 percent and 83 percent, respectively.

Unsurprisingly, public policymakers are working to boost business awareness about the importance of protecting intangible assets against unauthorized use and/or unlawful copying by competitors. And they are advocating the use of IP rights as an important means of doing so. As a consequence, many firms are starting to understand that IP rights are a “should have” form of insurance. While for many that may be enough, such a narrow perspective obscures opportunity to proactively use IP rights to finance further innovation and generate new sources of revenue.

HOW IP CAN HELP SECURE FINANCING

Corporate finance specifically focuses on bankrolling decisions of businesses with a view to maximizing company (share) value. As such, it typically focuses on different sources of funding—be it equity, such as investors buying stocks of a company, or debt, such as loans. Arguably, grants for research and development (R&D) also have a financing function. IP rights can play an important role in leveraging finance and funding innovative activities in each case.

*This article draws on Chapter 16 (Opportunities to Reap Financing Through IP for Innovation) of the Global Innovation Index 2020.
IP AND EQUITY

In the case of equity, IP can be particularly important in raising investments and investor interest. IP rights, especially patents, are significant for startups seeking to attract venture capital.

Numerous studies show that venture capitalists are more likely to fund companies with an IP focus. They appeal to investors in various ways. First, startups—which typically lack large sales records—can prove their ideas have value insofar as they met patentability criteria during patent examination. Second, patents provide assurance that the inventions behind a startup may not be copied easily by other firms. Third, should the startup go bust, the patents remain and can be sold or licensed to others, thereby limiting possible losses for investors. And fourth, the patents may enable the startup to stand out in the market and successfully attract investors’ attention.

The suitability of different IP rights to support finance depends on the industry in question. In the life sciences or other high-tech industries, for example, patents are the currency for business formation, growth, and sustenance. In other industries, IP rights like trademarks, which protect brands, may be significant. And in some instances, entire business models may be built on top of IP rights. Take franchising, as a form of IP commercialization, for example.

IP RIGHTS IN DEBT FINANCING

IP rights may also play a role in debt financing, serving as collateral for loans. While the rationale for using IP rights to underwrite loans may be similar to those used to back equity investments, their use for debt financing is far less common than for IP-backed equity scenarios. That said, it may still be a surprisingly buoyant market. Some estimate that venture lenders such as Silicon Valley Bank and other specialist non-bank lenders, supply around USD 5 billion annually to startups. However, some commentators dismiss the use of patents as collateral to access debt finance as purely anecdotal. These viewpoints can be interpreted in two ways. First, there may indeed be opportunities for using IP in debt finance. Second, there may also be challenges ahead, which explains why the market for such finance is small. That said, there is a clear need for more research and data on the use of IP-backed collateral for debt financing of firms.
“The suitability of different IP rights to support finance depends on the industry in question.”

Challenges in accessing finance have prompted some governments to foster markets for IP-backed debt finance. China, for example, operates government programs that promote the use of IP rights as collateral by subsidizing interest rates, specific bank funds, and valuation guidelines and tools to lower the lending risk. Between 2018 and September 2019, reports suggest that in the Guangdong province alone, patent-collateralized loans worth some RMB 30 billion (more than USD 4 billion) were granted, with “thousands” of companies benefitting from the schemes.

**IP IN THE CONTEXT OF R&D GRANTS**

While often overlooked, IP rights can be useful in attracting government-funded R&D grants. Here, we see two main strands in how IP rights are handled.

In the first strand, many government R&D subsidy programs require that patents and other forms of IP are filed or registered as a result...
of (successful) R&D projects. Governments want to foster research that results in the successful commercialization of products and services, for which having IP rights is a requirement. However, policymakers and firms need to carefully consider how these grant schemes are designed and to recognize that an applied-for IP right is not the same as a marketable R&D result. In fact, considerable follow-up R&D is often required to reach, and move beyond, the prototype stage after a patent has been filed for an invention.

In the second strand, grants for research consortia, and in particular, transnational research consortia, are growing in popularity. The IP in consortia-based R&D funding lies in the contracts (or agreements) that govern the consortia. Here, participants must know the conditions for using or sharing background IP (what each party brings to the table), in other words, what each contributing partner may or may not do with the background IP. Similarly, there must be an agreement as to how jointly developed research results that convert into patents, for example, (so-called foreground IP) are to be shared among partners. Such IP management requires registration and filing of IP as well as strategic thinking and negotiating skills to conclude consortia contracts. The potential benefits—including network formation, access to additional funding and know how by the consortium partners, and learning—may go well beyond the formal legal terms of these contracts.

EXCHANGES AND MARKETPLACES FOR IP—A SOURCE OF INNOVATION FINANCE?

If IP can be used for both equity and debt finance, can it be used to leverage financing opportunities through exchanges and marketplaces in the same way firms use stock and/or bond exchanges for capital finance?

"Numerous opportunities exist for firms to use IP to finance innovation simply by viewing IP rights not just as an insurance policy, but more broadly as a tool to secure finance," explains Alfred Radauer.
The terms “assets” and “property” suggest that IP shares a number of characteristics with financial securities and that there is an ever-increasing supply of IP, which, in turn suggests liquidity (i.e., that it is easy to find buyers and sellers to turn IP assets into cash at well-defined market prices). Even if IP ownership is not transferred, there is clear evidence (mostly bi-lateral) that licensing is an increasingly significant activity to raise money for many companies.

The answer to this question is that, indeed, there may be opportunities, but the issue is complex and requires nuanced thinking.

One major difficulty for developing IP markets is that not all patent/IP licensing is the same. A crucial distinction lies in that there are two different market segments — “stick” licensing and “carrot” licensing.

- “Stick licensing” is where a company is already using a technology and the holder of the underlying IP rights (a different firm) wants that company to obtain a license. Such licensing, also known as enforcement or assertion licensing, relies heavily on litigation—or the threat of it—against alleged IP infringers. In discussions on patent/IP monetization markets or brokered IP/patent markets, this type of licensing and market segment comes into play.

- “Carrot licensing” describes a situation in which parties actively pursue a license for the knowledge or technology they are interested in. This often involves the licensing of patents, and know how, or technology licensing. With such licensing, a transfer of technology occurs.

The distinction is important as both types of licensing have different characteristics and potential public support needs—even if the boundaries between the two markets are, to an extent, fluid.

**COMMON ISSUES FOR ALL FORMS OF IP-SUPPORTED FINANCE**

Generally, neither stick nor carrot licensing markets are highly liquid. Successful carrot licensing agreements are less commonplace than their enforcement-related counterparts. One barrier to all types of IP finance activity—whether debt or equity finance—is valuation.

IP differs from real property in that its value is context specific. For example, by definition, a patent protects a unique invention, so patents cannot be a uniform commodity, like iron ore. Moreover, the value of the same IP may vary for different companies. One IP portfolio may be valuable for a company in a given technology or market position, while, for another firm, the same IP portfolio may be worthless. One particular piece of IP by itself may be worthless, but as part of a portfolio of rights, it may be extremely valuable. There is no universally accepted standard method for valuing IP.

Challenges relating to the valuation, liquidity, and enforceability of IP rights are also major hurdles to using IP as collateral in debt finance. There are also barriers unique to IP-based debt financing, such as banking regulations. Standards like Basel-III set a strict framework of requirements on how much capital a bank needs to set aside to match the risks associated with certain types of collateral. IP may not meet these criteria. While venture funders take
As IP asset holdings are specific to a particular company operating in a specific market, it is imperative that all proposed approaches and strategies cater to such context-specific issues.”

a look at the company and its future prospects as a whole, debt funders are restricted to solely assessing the collateral—the IP. This may be an important factor in explaining why equity-based IP finance is currently more successful than IP-backed debt finance, which remains nascent.

RECOMMENDATIONS

Numerous opportunities exist for firms to use IP to finance innovation simply by viewing IP rights not just as an insurance policy, but more broadly as a tool to secure finance. A sound understanding of how the IP system works, the potential value of different types of intellectual assets and IP rights a company owns, and excellent IP management skills are keys to success. While it is evident that some uses of IP finance are quite challenging to implement, others—such as IP in consortia agreements—constitute untapped potential.

Against this backdrop, a bundle of measures may be recommended to policymakers and firms. These include fostering the use of IP audits by firms to increase general awareness of the value of their IP rights. They also include implementing measures to improve the know how of (financial) intermediaries, in particular, for using IP rights in collaborative settings. Measures to improve IP finance markets must be designed with care to avoid failure. Simple electronic marketplaces are unlikely to be able to handle the complexity of IP rights as a specific class of assets. Ultimately, as IP asset holdings are specific to a particular company operating in a specific market, it is imperative that all proposed approaches and strategies cater to such context-specific issues.
Small and medium-sized enterprises (SMEs) are critical to the ever-expanding innovation economy. They create new technologies and make significant improvements to existing ones. They also develop, manufacture, and market products that embody these new and improved technologies, and in so doing give rise to well-paying jobs. For these reasons, SMEs are a crucial pillar of economies across the globe. These businesses currently account for around 90 percent of the world’s businesses and employ around 70 percent of the global workforce, according to the 2020 ILO SCORE Programme survey.

The central importance of SMEs to national economies is clear; the big question is how to help ensure their success. In this regard, building awareness among small businesses about how to protect and manage their intellectual property (IP) assets is a crucial first step.
Needless to say, protecting IP rights is not a simple undertaking. In many cases, the technologies deployed by SMEs flow from collaborations with other entities, including government agencies, universities and other companies, a fact that raises complex considerations.

Fortunately, in leveraging the potential value of their intellectual assets, SMEs can draw on a range of IP rights. These include patents, trade secrets (including know how), copyright, design rights and trademarks.

PROTECTING INVENTIONS: PATENTS

Patents are a key way to protect research and development (R&D) outputs. With patent rights, an SME can prevent others from using the patented invention in their products. An SME can also in-license its technology to preserve its freedom to operate in a market, and can generate royalty revenue from licensing such technology to other organizations.

With R&D activities, from the outset, it is critical to establish internal programs to manage the processes of creating an invention, obtaining patent protection for it, and managing and maintaining a corresponding patent portfolio.

R&D teams need to understand the general need for their technical work to remain confidential, because any public disclosure of an invention prior to submitting a patent application jeopardizes its patentability.

R&D teams also need to understand the importance of documenting every stage of their work, from an idea's conception to the implementation of the invention (known as "reduction to practice"). Such documentation is invaluable if disputes arise over questions such as who invented the technology or who is entitled to own the patent rights for it.

On top of a rigorous documentation process, companies also need to establish an invention-disclosure and evaluation procedure. This typically involves an invention-disclosure form to capture the invention’s key attributes in sufficient technical detail for other technical staff to evaluate it for potential patent protection. Ideally, this process is closely monitored by an invention evaluation team of senior technology experts and an IP attorney, which identifies the best options to protect the invention (for example, with a patent or as a trade secret). This team will consider the similarity of the invention to other technologies and ask whether other firms are likely to use it. For example, is it a game-changer that others will have to implement to remain competitive? The team will also look at the invention's potential market size (especially if licensing the patent is part of the business plan), and where products that embody it will be sold or manufactured.

Finally, SMEs would do well to establish a strategic patent portfolio development and management program. These programs can be handled by patent attorneys or in-house technical and/or business staff. As a patent is only enforceable in the country that granted it, and since maintenance fees are payable throughout the life of a patent, such a program helps to determine where to seek patent protection and for how long. These variables will depend on the market for the invention and the life expectancy of the invention in a product. While the patenting process can be onerous for SMEs, the WIPO-administered Patent Cooperation Treaty (PCT) offers a cost-effective option when seeking protection in multiple countries. For example, by filing a single international application under the PCT, an applicant can defer the payment of some significant patent filing fees relating to internationalization by 2.5 years, allowing time to assess the commercial value of an invention. In addition, a growing number of countries offer discounts to SMEs, to make the process more affordable.
TRADE SECRETS

Alternatively, SMEs can protect their innovative outputs and other non-public information as trade secrets.

Most countries provide some form of legal protection for confidential information, including trade secrets. That’s why a trade secret protection program sits comfortably alongside the patent-protection program, and is a critical part of any company’s IP strategy. Trade secrets are a form of unregistered right, meaning there are no formalities before an IP office to secure them.

Trade secrets programs identify confidential technical and business information and ensure that non-disclosure agreements are in place when sharing such information with potential partners, suppliers, and others. They also ensure that employee contracts contain clauses obliging staff to maintain the confidentiality of any sensitive technical and business information they come into contact with at work.

Only written information that is truly confidential should be marked as such. It may be tempting to mark all documents as confidential, but an overly-inclusive confidentiality program may result in truly confidential information being rendered unprotectable. It is, therefore, extremely important to distinguish between confidential and non-confidential information.

A trade secrets program also ensures that only employees who need to know about the confidential information to conduct their work have access to it. This reduces the risk of disclosure of such information beyond the company.

Close coordination between trade secrets and patent protection activities is critical, especially as some inventions may be best protected as trade secrets and others, which may be patentable, also need to be treated as trade secrets until the relevant patent applications are filed.

The central importance of SMEs to national economies is clear. The big question is how to help ensure their success. Building IP awareness among smaller businesses is a crucial first step.
COPYRIGHT AND CREATIVE CONTENT

SMEs also need to carefully consider how copyright protection can support their business. Copyright, which allows the owner to prevent others from copying relevant works without permission, covers a broad range of original creations including, for example, computer software and promotional materials.

Copyright is immediate and automatic at the point of creation of any original work. In other words, registration is generally not required. It is, however, still good practice to place a copyright notice on any creative work leaving the company. It informs the public that the company intends to enforce its copyright and means that an alleged infringer can’t claim that they didn’t know the work was protected. While there is no formal requirement to register copyright, voluntary registration systems may exist in some countries, and in others, registration may be a prerequisite for enforcing those rights. It is therefore advisable to seek legal advice on these matters.

Alternatively, an SME can use a digital time stamping service to prove that a work had already been created—and was in the creator’s possession—at a given time and date. Such services are user-friendly and affordable.

TRADEMARKS AND BRANDING

SMEs can also derive significant benefits from establishing a robust branding program with the support of marketing teams.

Trademarks are at the core of any branding program. They help to create a relationship of trust with customers, enable businesses to distinguish their goods and services from those of their competitors and build their commercial reputation.
Trademarks only offer protection in the markets where they are granted. That’s why marketing teams need to work closely with trademark specialists to determine the availability of a given trademark in target markets. In managing trademark rights, it is good practice to create internal guidelines to ensure the appropriate usage of trademarks on products and services and marketing materials, in particular, to prevent them from becoming generic terms, which are unenforceable.

WIPO’s Madrid System for the International Registration of Trademarks offers a cost-effective and user-friendly way to register – and subsequently manage – trademark rights in up to 124 countries by filing a single application.

Again, as private rights, it falls to the trademark owner to monitor any abusive or infringing behavior. Enforcement of trademark rights must be pursued in the courts of the country where infringement occurs, and in accordance with national trademark laws, which typically prescribe specific notices of trademark registration on products and services. SMEs need to follow these requirements to maximize damage awards in infringement cases.

**DESIGN RIGHTS**

SMEs can also strengthen their brand and market reputation through their designs. Design is a key determinant of commercial success of any product and is an important focus for all companies. Good design adds market value to a product and makes it stand out in the crowd. SMEs can protect their investment in design with design rights, also known as design patents in some jurisdictions. Design rights protect the ornamental aspects of a product, including shape, form and color. For SMEs, applying for design rights in many individual countries and then subsequently managing those rights can be a real challenge. The WIPO-administered Hague System for the International Registration of Industrial Designs offers a unique international mechanism to quickly and easily secure, manage and renew design rights simultaneously in more than 90 countries through one international application.

**TACKLING INFRINGERS**

As noted, it is the SME’s responsibility to tackle any abuse of its rights. What are the options? If it’s clear that IP rights have been infringed, the SME may actually be able to turn the situation into a new business opportunity. How? By negotiating a license agreement. Alternatively, the company can enforce its rights in court. To get started, it is worth getting professional legal advice. In some jurisdictions, marking a product with a notice of the relevant IP rights can maximize damages if an SME wins in court. This marking starts the clock for damages earlier, moving it from the time the infringer gets noticed to when the infringement of a marked product actually starts.

Where sales are threatened by imports of counterfeit or pirated goods, an application can be made to request Customs to detain suspected infringing goods at the border, pending infringement
proceedings. Where criminals counterfeit or pirate on a commercial scale, civil enforcement may not be effective and the police or market inspectorate may need to get involved.

COLLABORATIONS

SMEs often collaborate with others to acquire capital, participate in R&D activities, bring products to market, or license their patented technology to others. Typically, such collaborations are underpinned by IP rights.

In negotiating these relationships, IP owners need a clear understanding of the value of the IP assets they bring to the collaboration. An independent IP valuation can provide a clearer picture, and potentially increase the amount of available financing or investment. A growing number of companies are using IP rights as collateral. This can open up new avenues of financing for SMEs but also carries risks of losing the company’s most important assets if there is a default on the loan. Similarly, when licensing IP assets, SMEs need to take care not to permanently encumber their patent with a given license, and thereby decrease the patent’s value (for example in the event of bankruptcy).

GOVERNMENT-FUNDED RESEARCH ACTIVITIES

Many SMEs enter contractual arrangements with government-funded academic institutions to support their R&D activities. Such relationships can generate significant benefits; however, SMEs need to consider various factors before engaging in them.

First, they need to understand the government’s policies on ownership and management of IP arising from the venture. SMEs need to ensure they can freely use this IP, either through assignment of ownership or by license. This analysis should consider an SME’s exit strategy including whether the IP could be used by an acquirer.

Second, SMEs need to ensure that R&D collaboration contracts address all forms of IP, so they have all the rights they need for commercialization. For example, if there is a unique manufacturing process created through the collaboration, the SME may want to refer to it by name. If that process is protected by a trademark, the SME will need the right to use it in its marketing materials.

Third, the contract should carefully define the scope of the license, its duration, products covered, and so on, so the licensee can make, use, and sell the products in question.

Fourth, parties to government-funded research contracts need to agree on how improvements to the licensed product will be treated, and provide parties with sufficient access to any IP that is embodied in those improvements.

FINAL THOUGHTS

Various types of IP rights provide SMEs with the opportunity to protect their technical innovations and the flexibility to optimize their business pursuits. To maximize the benefits of IP rights, it is critical for SMEs to develop a disciplined and strategic IP protection program from the outset. Such an approach facilitates alternative business approaches and options. With IP rights, SMEs can create clear boundaries that support successful collaborations, commercialization, and other positive outcomes as their businesses evolve.

To get started, check out WIPO’s IP Diagnostic at www.wipo.int/ipdiagnostic/.