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All bets are off

There's no doubt that litigation funding is becoming a bigger deal in intellectual property as financiers eye up big cash prizes in infringement suits. What remains to be seen, however, is where funders will be taking their business in the next few years.

The US has always been a hotbed for those looking to win big from IP lawsuits (and lawsuits more generally), but Europe is emerging as a new contender now the Unified Patent Court (UPC) is inching closer.

The problem for funders, however, is that the UPC is a complete unknown and therefore untested. And that's not forgetting companies themselves are generally wary of the new court and probably won't opt their patents in, at least at first, so funders might not have much to bet on anyway.

But despite the uncertainty, there is a growing feeling that Europe and the UPC might be worth watching from a funding point of view. Several sources have told us they are keeping a close eye on things and that the UPC might even be a game changer.

Anyone with an interest in this area should take note and be thinking about where to place their bets. Helpfully, the cover story of this PDF gives you everything you need to know, while also discussing how US judges are demanding more transparency when it comes to outside funding.

Elsewhere, we have a primer on the Russia-Ukraine conflict that assesses a range of IP implications. The fallout from the invasion led many Western brands to pull out from Russia, which in turn issued several retaliatory measures, some of which targeted IP. The primer includes anything and everything you might want to read on that topic.

The rest of the PDF contains plenty of expert analysis, sponsored articles and local insights, as usual, as well as updates on our research and rankings. We hope you enjoy reading everything on offer.

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ISSN 0960-5002
Managing IP is published 4 times a year for $2,980 per year by Euromoney Trading Limited.

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Follow the money

The dynamics of litigation funding are changing. In the US, funders are facing greater scrutiny from patent judges while, in Europe, they are just getting started. Rani Mehta and Patrick Wingrove report.

PART ONE Why Delaware's order to disclose litigation funding matters

It's well known that patent litigation funding has become a bigger deal in the US.

Managing IP reported earlier this year on how COVID, lucrative tech, big-ticket damages awards and virtual litigation had spurred an uptick in the number of large corporates seeking lawsuit investment over 2021 and the first part of this year.

But amid this funding rise, some attorneys have argued that there ought to be more transparency around outside money sunk into patent cases – and it seems some high-ranking judges agree.

The District Court for the District of New Jersey amended its rules to require parties using third-party litigation financing to file disclosure statements in June 2021. The District Court for the Northern District of California made a similar change long ago in January 2017.

And in April 2022, chief judge Colm Connolly at the District Court for the District of Delaware released a standing order using similar language to New Jersey's updated rules. This order, issued on April 18, required litigation funding disclosures for all cases assigned to him.

"We view this as a positive because it will disabuse people of misconceptions that funders exert control unduly or enable frivolous suits."

Sarah Tsou, investment manager and legal counsel at Omni Bridgeway

Connolly succeeded Leonard Stark – who went to the Court of Appeals for the Federal Circuit earlier this year – as chief judge in July 2021.

Unlike the rule changes in California and New Jersey, Connolly's order doesn't affect the other full-time district judges in Delaware (both of them).

Nonetheless, Connolly is the chief judge, and the fact that this order has come down from the top might encourage the other judges to eventually issue similar standing orders or get behind a wider rule change.

Wendy Verlander, CEO of non-practising entity (NPE) Blackbird Technologies and managing partner of Verlander LLP in Boston, says it doesn't surprise her that the issue came up in Delaware given that it already arose in New Jersey.

But she notes that Connolly's order is important because a lot of patent cases are filed in Delaware, much more than in New Jersey. Delaware is the second most popular court for patent litigation in the US behind the District Court for the Western District of Texas.

Not just size

Litigators and funders say there are several other reasons this order matters, however.

For one thing, having access to information about third-party funders can help shape defendants' settlement strategies.

Richard Hung, co-chair of Morrison & Foerster's intellectual property (IP) litigation group in San Francisco, says it's helpful for defendants to know whether they're dealing with a plaintiff they can fend off with a smaller settlement or whether said defendant has the cash for a longer haul.

If a plaintiff is being financed by a sophisticated funder, the defendant would have to adjust its strategy accordingly, says Hung.

Attorneys say the standing order could also affect discovery strategies and compel parties to file in courts other than the District of Delaware.

Sources add that they're not sure whether these types of standing orders will multiply across the US and form a larger trend, but that they wouldn't be surprised if more judges followed suit.

Parties could prepare for this possibility by avoiding certain problematic funders that would be likely to be subjected to extra scrutiny under these standing orders, they add.

Under the latest standing order from Delaware, parties using funders must disclose the identity, address and place of formation of the third party, as well as reveal whether any funder's approval is necessary for litigation or settlement decisions.

They must also include a brief description of the nature of the financial interests of the third-party funders.

Connolly's order also specifies that a party can seek additional discovery of an opponent's arrangement with a funder if that funder has decision-making authority, the interests of the funded parties aren't being protected by the arrangement, the arrangement causes conflicts of interests, or there's other good cause.

Why it matters

One way this change could affect litigants' strategies in the immediate term is by allowing them to spend less time on certain types of discovery – at least when they're in front of Connolly – say counsel.

Matt Rizzolo, partner at Ropes & Gray in Washington DC, points out that defendants usually seek access to material related to lawsuit investments and plaintiffs often don't want to disclose said information.

"But these sorts of standing orders take all of that off the table," he says.

That being said, parties could still butt heads over other funder-related discovery issues, say counsel.

Verlander at Blackbird notes that the standing order requires a brief description of the nature of the financial interests of the third-party funder, yet it's not clear how broad that might be or why that would be relevant if the funder had no decision-making authority.

"It could be fodder for additional unnecessary discovery, which is a waste of time at best," she says.

Driving away

Verlander notes that she doesn't expect this order to have much effect on her company's strategy because it would never use a funder that would have any authority over any decision-making in court.

But attorneys say some NPEs may feel differently.

Rizzolo at Ropes & Gray says it's certainly possible that this order could dissuade some entities from filing in Delaware if they could file elsewhere.

Syed Fareed, partner at Baker Botts in Austin, adds that some entities may be uncomfortable with the fact that they must disclose whether any funder's approval is necessary for litigation or settlement decisions, and that this factor could lead to a decrease in the number of cases backed by such funders in Delaware.

Some funders don't agree this would be the case, however.

Sarah Tsou, investment manager and legal counsel at Omni Bridgeway in New York, says she expects this process will show that a lot of claimants, including large corporate clients, use funding and that funders are appropriately investing in cases with merit.

"We view this as a positive because it will disabuse people of misconceptions that funders exert control unduly or enable frivolous suits," she says.

Not everyone in the litigation funding industry is as pleased with this standing order though.

Gary Barnett, executive director of the International Legal Finance Association in Washington DC, says he understands the need to review these agreements in limited circumstances, such as in instances of conflicts of interest or when it's needed to determine standing.

"But without a particular need present, disclosure requirements risk revealing sensitive legal strategies or unnecessarily increasing motions, legal costs and the duration of cases," he says.

Tricky trends

Some sources say it's likely that this standing order could spur similar ones, although probably from other Delaware judges to start.

Rizzolo at Ropes & Gray points out that Delaware litigants only have to disclose investment information if they get Connolly as a judge. At some point, he adds, the other Delaware judges may look at this inconsistency and make their own orders to help lessen the burden of discovery across the court.

"I would expect that to happen sooner rather than later," he says, adding that there's a good chance that judges outside the District of Delaware will also follow suit.

Attorneys add that this standing order could be relevant even if more judges don't adopt similar policies.

Hung at Morrison & Foerster says counsel could still cite this standing order in front of other judges when trying to get discovery on third-party litigation funding information.

Perfect prep

If this standing order becomes part of a wider trend, litigants will have to prepare and adjust.

Counsel say that because the order allows additional discovery when third-party funders have control over cases, litigants should try to stay away from funders that want to have a say over their disputes.

Verlander at Blackbird says a lot of the issues should go away if litigants avoid such investors.

Sources add that these funders might also want to rethink their strategies.

Tsou at Omni Bridgeway says reputable funders won't have anything to hide, but those that put in controlling provisions should take this new order as a wake-up call and avoid using such clauses in the future.

Attorneys should also be prepared for the fact that defendants and plaintiffs may disagree on whether juries should have access to information about third-party litigation funding.

Verlander says she expects defendants may try to get this information in front of juries if they have access to it.

"I don't think it should be in front of a jury though. It could be prejudicial, particularly if the jury has no similar information about the defendant, such as its litigation budget, or has negative feelings about funders," she says.

Litigants will have to contemplate this issue, among others, as they grapple with the implications of Connolly's standing order and look to see whether other courts follow.

PART TWO

UPC could create litigation finance hub to rival US, say funders

It's easy to see why the US is the undisputed centre of patent litigation finance in the world.

It's a rich country with a market of 330 million potential consumers – which means that when patents are found valid and infringed by juries, the payouts tend to be large. Lex Machina reported last year that US courts awarded a total of $4.67 billion for damages in patent cases in 2020.

There are plenty of patent matters filed there too. Patent owners lodged 3,555 infringement actions in the US district courts in 2019. By comparison, they brought just 593 such matters in Germany – Europe's most popular patent litigation jurisdiction – in the same year.

No other jurisdiction even comes close to the US in terms of litigation funding opportunities for IP cases, and especially not in 2022 – but according to US-based sources at five litigation funders, that might be about to change.

Counsel at Burford, Omni Bridgeway, Curiam, Woodsford and The Judge say once it does, Europe could fast emerge as a second finance hub for patent litigation that might grow to rival or even surpass the US.

"We have partners with global patent portfolios, and we know they're looking at the UPC as a potentially major additional option for IP enforcement and monetisation," says Eric Carlson, director at Burford Capital in Chicago.

"The devil is in the details, of course. But in terms of options on the table, it's something our partners are considering and something we're very excited about."

Stephanie Southwick, investment manager and legal counsel at Omni Bridgeway in San Francisco, adds: "The UPC will be a game changer for patent litigation and global campaigns. I've actually heard that some US litigators are a little worried about it."

Anup Misra, director at Curiam in New York, agrees, adding that funders will probably start to get serious about financing UPC litigation over the next two years, so long as the court is set up when it's predicted.

His doubt on the projected timing is understandable. The UPC had been on the cards for some time but kept getting held up. Until recently, two constitutional complaints prevented Germany – a mandatory signatory state – from ratifying the UPC Agreement (UPCA).

Germany's Federal Constitutional Court dismissed these complaints in July 2021, however, and its government ratified the UPCA the following September. Austria then ratified the agreement protocol last January, clearing the way for the UPC and unitary patent project to begin.

Geo trends giddiness

Funders have good reason to get giddy about the UPC.

Litigation finance sources point out that they currently don't have much interest in funding Europe-based litigation.

James Blick, director and head of US operations at The Judge in Los Angeles, says funders tend to focus on the US when it comes to patent lawsuits because they know the system and that they can get significant returns on investment there.

He adds that they've traditionally paid less attention to the EU because patent litigation is still done country by

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country, confining it to much smaller markets and restricting the potential for large damages awards.

Even in Germany, the EU's largest country in terms of population, a court could only base damages on a market of up to 83 million people, just a quarter of the potential US market – ignoring for the moment that Germany tends to award injunctions instead of large damages awards.

The system also makes it much harder for funders to get behind multi-jurisdictional litigation campaigns in Europe. If one were launched it would be much more complicated because of the different rules involved, more expensive because of the different legal teams needed, and a lot riskier in general compared to in the US.

"There's been less focus on European patent litigation funding from the industry as a whole because there's a sense that a European campaign would have to involve a bitty strategy of litigation in lots of different jurisdictions that they're less familiar with," says Blick.

Robin Davis, chief US investment officer at Woodsford in New York, agrees, adding that while her firm does invest in European patent cases, said funding is usually complementary to larger US campaigns.

But she adds that the UPC could alleviate industry hesitancy and open up a whole new continent to patent litigation funders by creating something similar to the US in Europe – a single venue with one set of rules and case law where a plaintiff could bring one lawsuit and collect damages for a market of 330 million people.

"To have one single venue in the EU where one could potentially bring patent litigation that's funded in addition to or instead of the US is a big deal," she says. "It's very exciting."

Davis adds that it remains to be seen whether UPC damages will be as high as those given by US district courts, but notes that even if the court based damages on awards from European national courts and expanded them to account for market size, it would "change the dynamic substantially".

Extra opportunity

There's a good chance that Europe could become an even hotter bed than the US for patent lawsuit investment if a few things go the right way, say sources.

Southwick at Omni Bridgeway points out that a lot of law firms will have to change their operational dynamics to adapt to the UPC in one way or another. The most common change will be the hiring of more attorneys or the setting up of larger litigation teams.

US firms, for example, will likely look to ramp up their European operations. German firms, which are used to litigating in a bifurcated system with much smaller teams, will have to do the same because the UPC will have a blended system.

"Larger teams will mean higher fees and bigger budgets. When you combine that with the fact that a lot of European lawyers can't take contingency fees, we think there's going to be a much larger need for funding," she says.

Southwick adds that the court costs at the UPC are likely to be more substantial than those in national courts. On top of that, expert costs may be higher and adverse costs may even be required.

"All of that lends itself well to litigation funding opportunities," she says.

Funders and patent owners might also seek to take advantage of the initial lack of certainty surrounding UPC case law, which is currently non-existent.

Davis at Woodsford says that in the short term, this uncertainty could drive more defendants to settle earlier, which would reduce the risk for funders.

Of course, there's at least one factor that funders will want to clear up quickly – whether or not the UPC will

offer injunctive relief. Should the court offer such a remedy, that development would probably make Europe even more attractive for patent litigation finance than the US.

Injunctions are tough to get in the US, after all, since the US Supreme Court held in *eBay v MercExchange* in 2006 that an injunction shouldn't be automatically issued based on a finding of infringement.

Misra at Curiam says: "If you could get injunctive relief at the UPC, that could be a big game changer because the potential to bar products from such a large market would put a lot of pressure on defendants to settle sooner rather than later."

He adds that Europe might also get an edge over the US for funders if its fees were lower.

"I don't know what sort of procedures they're envisioning for the UPC, but if they end up being similar to those used in Germany, that could give investors the ability to fund a case for significantly less than a corresponding US matter.

"In the US, for example, the big cost factor is discovery because you have to do so much of it before you go to trial. If the UPC didn't allow so much discovery, that would make things more cost-efficient," he says.

Lingering questions

There are still plenty of unknowns when it comes to the UPC, of course, and investor interest could rise or fall depending on particular developments – the availability of injunctive relief being just one, although a big one.

Misra says it will be important for funders to find out how UPC judges treat validity, for example, and to gauge their patent friendliness.

"If you use the US as a comparison, you have a lot of competing philosophies in the different patent venues. The Patent Trial and Appeal Board sees everything as obvious, while the California courts tend to be much less friendly to patent owners than those in Texas.

"The question is: where will the UPC fall on that spectrum?" he asks.

There's a long way to go before that question and many others are answered. The UPC isn't expected to come into being until the end of 2022 or the beginning of 2023 – an optimistic estimate according to more sceptical onlookers.

Until the court is established, and probably for a few years after, the US will maintain its status as the undisputed centre for patent litigation finance in the world. But clearly, if a few things go the right way in that time, Europe will be hot on its heels.

Primer: Russian IP law and practice rules post-Ukraine invasion

Sukanya Sarkar summarises the IP-legal developments in Russia following its invasion of Ukraine and Western brands' subsequent withdrawal

Since the onset of Russia's Ukraine invasion on February 24, the Russian government has introduced several measures to limit the scope of rights granted to intellectual property owners from foreign countries.

These measures included allowing compulsory licensing, permitting parallel imports, prohibiting foreign owners from unilaterally cancelling foreign licences, and much more.

The government has brought the measures to revive Russia's economy after hundreds of global brands pulled out of the country or stopped producing in and exporting to Russia in response to its aggression.

Apart from global brands, several law firms have suspended their operations in the country, and prominent IP offices including the UKIPO, the EUIPO and the USPTO have cut ties with Rospatent – Russia's IP office.

As a result, a few courts in Russia have supported the government and refused to enforce IP owned by foreign owners in the country, even though no existing law allows it.

Other judicial and quasi-judicial authorities, however, have decided disputes solely on the merits without considering the sanctions issued by foreign countries against Russia.

"A few courts in Russia have supported the government and refused to enforce IP owned by foreign owners in the country, even though no existing law allows it."

Compulsory licensing of patents and copyright

The first blow to IP owners came on March 6 when the Russian government passed a decree stating that rights owners from "unfriendly" territories were entitled to 0% of the proceeds from the production and sale of goods, performance of work, and provision of services if their IP has been used without their consent.

Russia's prime minister Mikhail Mishustin confirmed the news in an announcement on March 7. The decree covered inventions, utility models and industrial designs.

The government also approved a list of 24 foreign unfriendly states and territories, which included Australia, EU member states, Iceland, Japan, New Zealand, Norway, Korea, Singapore, Switzerland, Taiwan, Ukraine, the UK, and the US.

"Unfriendly" territories referred to jurisdictions that had sanctioned Russia or supported sanctions against it.

According to IP lawyers in Russia, the decree effectively allowed the Russian government to invoke Article 1360 of the Civil Code of the Russian Federation, which permits compulsory licensing by the government in the interest of national security.

More recently, however, the government has been planning to broaden the scope of Article 1360 through legislation.

Russian news publication *Vedomosti* reported on April 20 that the government was formulating a bill to extend the compulsory licensing provision's ambit to include copyright.

It seems to be a reaction to foreign studios closing or suspending operations in Russia, which has caused substantial losses to the movie and video business in the country.

Under the proposed legislation, a Russian licensee would be able to apply to a court to obtain a compulsory licence if a business from an unfriendly country terminated a licence agreement arbitrarily.

Screenings of pirated movies have already begun in Russia, with a Moscow theatre holding an unofficial premiere of 'The Batman' in April, after Hollywood film studio Warner Bros cancelled the official one in Russia.

Exempting goods from IP protection

Another blow to foreign IP owners came when Russian president Vladimir Putin signed a bill on March 9 that empowered the government to exempt certain goods from IP protection.

An English translation of Article 18.13 of the legislation says: "The Russian Federation has the right to make decisions providing for a list of goods (group of goods) in respect of which certain provisions of the Civil Code of the Russian Federation on the protection of exclusive rights to the intellectual activity expressed in such goods, and the means of individualisation with which such goods are marked, cannot be applied."

The law covered all types of IP rights, including trademarks, copyright, and patents, so was much broader in scope than the law on compulsory licensing.

The government, however, didn't publish the list of goods sought to be exempted when it passed the legislation.

IP lawyers in Russia expected the new law to apply to goods such as medicines and software but noted that the broad wording allowed the government to interpret it however it wanted.

Irina Shurmina, IP counsel and head of digital law at CMS Russia, told Managing IP that the law could be interpreted to support parallel imports – purchasing branded goods from other territories and reselling them in the domestic market.

Allowing parallel imports and piracy

Shurmina's prediction turned out to be somewhat true, with Russia's prime minister Mishustin signing another decree on March 29 that allowed the parallel import of certain patented and trademarked products in Russia.

The decree aimed to counter the supply shortage of imported goods in the country by allowing Russian businesses to import such products from foreign countries without seeking the consent of rights owners.

Under the decree, parallel imports into Russia were allowed only for goods that were already put in circulation outside of Russia with rights owners' permission.

Russia's competition authority, the Federal Anti-Monopoly Service (FAS) – which drafted the parallel import decree – said the measure "will develop competition between brands through an increase in the number of businesses that import goods to Russia, which will lead to a decrease in retail prices for these goods".

Following this, the Russian government released a list of more than 50 categories of goods and their customs tariff numbers on April 19 that could be legally brought into the country through the parallel import route.

The goods include mineral fuel, pharmaceuticals, cosmetics, soaps, chemical products, paper and cardboard merchandise, wool, textiles, medical devices, electrical machines and equipment, and toys.

The list was not just limited to products – it also named several brand owners whose goods that fall under these categories could be brought into Russia under the parallel import route.

These include major international companies, such as Apple, Bosch, Samsung, Siemens, Volvo, ABB, Electrolux, Philips, IBM, Lenovo, Schneider, 3M, Nintendo, Hitachi, and Western Digital, from so-called "unfriendly" countries.

China's Huawei was also included in the list, even though the Chinese government has avoided taking a stand against Russia.

The list of goods has been sent to the Ministry of Justice for approval.

Ending arbitrary licence termination

The Russian government also took steps to stop foreign owners from terminating their IP obligations in the country.

The government's position on IP licensing is reflected in at least two bills drafted by the government.

One of the bills, currently before the State Duma, would allow the government to seize IP and other assets of some foreign companies that have decided to leave or scale down operations in the country.

The proposed law would apply to foreign companies with more than 100 employees or a valuation of 1 billion rubles ($9.1 million) in which individuals from "unfriendly countries" own at least a 25% stake.

The proposed legislation would allow the external administration to take control of and use IP belonging to the foreign company, as well as IP licensed to it.

On top of that, the government could also reinstate any IP licences that were revoked or cancelled on or after February 24 – when Russia began its Ukraine invasion.

On March 22, the government tabled another bill before the parliament to stop foreign companies from unilaterally terminating IP agreements, including licensing contracts.

The bill proposed revising several Russian laws given the "unfriendly actions of foreign states and international organisations associated with the introduction of restrictive measures against citizens of the Russian Federation and Russian legal entities".

It prohibited unilateral termination of, and amendments to, IP agreements for the period during which Western sanctions against Russia were pending, unless the non-terminating party breached the agreement significantly.

Even if a right to terminate or alter the terms of an arrangement was provided statutorily or contractually agreed between the parties, a party would not be able to exercise such a right once the new law enters into force.

On top of that, all IP agreements would be extended for as long as sanctions against Russia remain in force.

The government also proposed that the new law should take effect retroactively from February 24.

"The proposed bill would allow the government to seize IP and other assets of some foreign companies that have decided to leave or scale down operations in the country."

Conflicting court decisions

The Russian government's actions to limit or curtail IP owners' rights have also received significant support from some courts in the country.

The first and the most infamous one was probably a March 3 decision delivered by Judge A P Slavinsky at the Arbitration Court of the Kirov Region.

In this case, the court dismissed claims that the 'Peppa Pig' and 'Daddy Pig' trademarks had been infringed, without looking into the merits of the plaintiff's arguments.

The court said that sanctions issued by Western countries had "prejudicial significance" on the dispute.

The order said that the actions of the plaintiff – Canada-based entertainment company eOne's UK arm – constituted an abuse of rights because of the sanctions issued by Western countries, including the UK, against Russia.

However, eOne managed to secure victory in another IP dispute against a Russian individual on March 18, easing foreign rights owners' concerns that arose from the earlier decision.

In this case, eOne had filed an opposition against a trademark application for a logo with an element similar to eOne's 'Gaston the Ladybird' character from the popular children's show Ben & Holly's Little Kingdom.

Rospatent had sided with eOne in August 2021 and refused registration, prompting the Russian applicant of the disputed trademark to file an appeal before the IP court.

The court solely considered the merits of the case, and not the home jurisdiction of eOne, holding that eOne's petition to protect its violated IP rights could not be an abuse of rights and dismissing the appeal.

There have been few other decisions in IP cases and domain name disputes by courts and Rospatent in the past couple of months upholding foreign rights owners' IP claims.

However, some other courts in Russia continue to deliver politically coloured decisions.

For example, the Commercial (Arbitrazh) Court of the City of Sevastopol, Crimea, recently rejected a lawsuit for trademark infringement filed by a US company for the same reason as the Kirov Court.

It noted: "Taking into account the restrictive measures against Russia and location of the plaintiff (the US), the court finds that plaintiff's actions aimed at obtaining financial compensation while Russian residents do not have the same opportunities in the US constitute abuse of rights."

While there is nothing to support the "abuse of rights" proposition adopted by the Kirov and Sevastopol courts, Russian lawyers believe some decisions will continue to be affected by geopolitics while others will be decided fairly.

As the war continues, the measures taken by the Russian government and the uncertain IP enforcement environment might help local players and the Russian economy in the short run but will likely affect the return of global brands to Russia in the longer term.

Driving forward: the automotive tech fuelling IP interests

Kevin Rodkey, Kathryn Judson and Kara Specht of Finnegan discuss trends in automotive IP protection and enforcement around emerging technologies

Automobiles are many things to many people. At their heart, they're a core mode of transportation that ferry passengers to and from places, including cities, states, countries, and even continents, providing a sense of identity for some and essential utility function for others.

In this way, cars and other automobiles have become vital to modern life – and because of new innovations, they're becoming even more integral.

Automobiles have become more than just a mode of transportation; they have integrated themselves with our digital lives and automated everyday functions. Technological advancements that once seemed largely theoretical to much of the public more than a decade ago have quickly become a reality.

In a previous article, we examined various IP challenges confronting automotive companies related to patenting AI-related inventions, including patent eligibility, inventorship, and trade secrets.

In this article, we consider advancements in automotive technologies, both from patent filings and from the perspective of historical litigation trends in emerging technologies, touching on aspects of autonomous vehicles, connected vehicles, and design patents.

A wave of technological innovation has pushed the IP footprint of car manufacturers beyond the basics of au-

"A wave of technological innovation has pushed the IP footprint of car manufacturers beyond the basics of automotive design and into realms that had previously been recognised as high tech."

tomotive design and into realms that had previously been recognised as high tech.

But history has shown that the potential for litigation increases as companies stake positions on innovation, market share, and differentiation from competitors in fast-growing tech – as evidenced by the advent of the electric light, heavier-than-air flight, and the so-called smartphone wars.

In recent years, there has been a marked increase in patent filings surrounding autonomous vehicles, AI, and connected automobiles, which may signal the potential for increased litigation as these technologies integrate into the marketplace.

As technology becomes more integrated and continues to cross industry boundaries, automobile companies will need to grapple with standard essential patents (SEPs), which have seen historically increased litigation for cellular, smartphone, and computer manufacturers, and less so for automotive companies.

In addition, trends in obtaining design patents to protect designs of replacement parts may offer additional avenues for automotive companies to prevent counterfeit products, allowing them to strengthen brand images, ensure quality of parts, and maintain safety standards.

A recent federal appeals court's decision upholding the use of design patents for replacement parts has brought increased attention to the potential that design patents may offer.

Expanding tech

It's no secret that automotive firms are developing technologies at an incredible pace and investing significant resources to do so.

Patent applications filed for autonomous vehicles and connected automobiles continue to rise globally and are among the fastest growing technologies in the automotive industry.

Notwithstanding core technologies in driving operations, increased connectivity and user experiences – such as infotainment systems, 5G integration, and other traditionally non-automotive technologies – are now integrated throughout the industry.

The recent increases in patent filings for autonomous vehicle patents will affect both passenger cars with self-driving modes and fully autonomous vehicles, such as autonomous ride sharing and taxi services.

Late-stage testing deployments and early rider programmes are already bringing such technology into the mainstream of public life. For example, artificial intelligence is now a driving force behind autonomous vehicle development and is one of the fastest growing segments in the automotive industry and patent filings.

While the continued growth and technological development of driverless vehicles is seen as a positive advancement in the consumer driving experience, it also raises issues related to SEPs and 5G.

One benefit of SEPs is the potential for simplifying licensing when declared and licensed under the standards setting bodies' policies.

An IPlytics study in January 2020 determined that more than 95,000 patents were declared standard essential with respect to 5G.

Of those, nearly a quarter of the patent families declared were also declared essential to previous 2G, 3G, or 4G standards.

Some patent owners not subject to SEP declarations

have tried to enforce patents they believed were essential to standards as technologies came to market. Such litigations surrounded 802.11 Wi-Fi standards, 3G, and LTE in the late 1990s and 2000s.

Recently, although not specifically targeted at 5G technology, Conversant sued Tesla over Tesla's integration of 3GPP and 4G/LTE standards at the District Court for the Western District of Texas.

This case was dismissed in December 2020 but may signal the potential for litigation surrounding SEPs and automotive companies in the future.

SEPs may also become important to bring autonomous vehicles into the mainstream, not just to communicate over mobile networks, but also with vehicle manufacturers to ensure that autonomous vehicles form a cohesive ecosystem.

Outside automotive

As automobiles become more connected, they may also become more reliant on traditionally non-automotive providers' technology to be free of IP issues.

One example is the integration of infotainment systems that are compatible with other electronic devices. Patent plaintiffs do not always allege infringement of the source of technology but can assert their patents against the ultimate consumer product.

For example, since 2011, more than 40 district court patent infringement complaints have specifically alleged infringement related to automobile infotainment systems, such as Bluetooth or supplier software, that may not have been developed by the automobile manufacturer. Nearly half of those cases were filed in 2020 or 2021.

High tech companies in the consumer electronics space are now moving into the automotive space and developing patent portfolios on various technologies used in cars and trucks. IP litigation in consumer electronics may, therefore, bleed into the automotive realm.

Historically, patent litigation has increased after periods of intense technological innovation and could be perceived as a marker for competitive innovation.

Some of the earliest ground-breaking technologies were met with high-profile IP litigation. For example, the commercially viable electric lightbulb was litigated between Edison and Westinghouse in a bid to garner the emerging electric light industry and to determine not just market shares, but whether the nation would adopt alternating current or direct current technologies.

Heavier-than-air flight also saw an IP war between the Wright Brothers and Glenn Curtiss in the budding aviation industry. The rise of smartphones led to heavy litigation in the smartphone wars.

Given the potential of autonomous vehicles, AI integration, and other rapidly growing automotive technologies, history suggests that increased litigation may be on the horizon.

While automotive industry players may not want to relive the smartphone wars in competitor suits, future litigation risks may not come from traditional automotive competitors.

Instead, they may begin in non-automotive fields, including AI, SEPs related to 5G, and electrical infrastructure.

RPX recently published a study finding a 182% rise in automotive patent litigations filed by non-practising entities (NPEs) between Q3 2020 and Q3 2021.

Although many other industries also saw rises in NPE litigation, the rise in automotive was the largest of any sector analysed in the study.

This rise correlates with a general uptick in litigations since 2018, but it is worth noting that the period between 2010 and 2015 also marked the high point in litigations filed against automotive entities, according to LegalMetric data.

Government gears

Although patent litigation is driven by many factors within the market, external factors, such as governmental decisions, may shape the market and the development of technologies.

For example, California recently set a goal to have all light-duty autonomous vehicle sales be zero-emission vehicles by 2030, and all personal automotive sales be electric vehicles (EVs) by 2035.

Several countries and governments outside of the US have also set or proposed goals for increasing electric vehicle sales and setting standards for autonomous vehicle safety guidelines.

Such directives, if held to, may direct innovation, including patent filings and litigations.

They also require future investments in infrastructure and may result in a greater demand for certain types of vehicles in the market.

As such, EV charging infrastructure, fuel cell technology, and EV technology – already near the forefront of patent filings – may find itself as an emerging area of litigation as companies invest in these technologies to meet governmental and regulatory requirements.

"Given the potential of autonomous vehicles, AI integration, and other rapidly growing automotive technologies, history suggests that increased litigation may be on the horizon."

Government directives may also have ripple effects in non-automotive utility industries that dovetail with automotive.

As the number of and need for electric charging stations increase, the power grid must bear the additional load, potentially crossing over into grid infrastructure patents.

A 2020 California Independent System Operator report noted that increased utility usage from high temperatures, resource adequacy, and planning processes were likely contributors of rolling blackouts.

Investments in electric vehicle technology may, therefore, touch not only on the technology of the charging stations themselves, but also the greater infrastructure supporting those technologies.

Design dilemmas

Design patents have become a strategically important IP asset for automobile makers to, among other things, prevent counterfeit parts and provide quality control over the design and appearance of their products, when utility patents or trade dress assertions may not be feasible.

Design patents allow automakers to protect non-functional elements of components and to bring suit against infringers who make, sell, or offer to sell a product using a protected design.

Design patent litigation concerning automobile parts has received increased attention in the courts during the past few years.

In two recent opinions, the Court of Appeals for the Federal Circuit held that design patents may protect designs for replacement automobile parts – see *Ford v New World International* from 2020 and *Automotive Body Parts Association v Ford* from 2019.

Such confirmation could serve to bolster protection for manufacturers and pave the way for possible enforcement against counterfeiters and knock-off products.

Design patents may be a generally defensive or protective area at this time, but the recent appeals court decisions could strengthen automotive manufacturers' confidence in the importance of design patents in protecting their brands and consumer reputations.

Notably, one of the most watched patent litigations in recent history involved design patent assertions from Apple against Samsung covering the design of graphical user interfaces.

As automotive companies continue to integrate technologies and improve user experiences, many of which are driven by graphical user interfaces, including infotainment systems and the replacement of traditional, analog gauges with enhanced digital displays, design patent protection may further differentiate and provide protection for automotive manufacturers looking to provide unique and identifiable user experiences to consumers.

As time goes on in the fast-evolving automotive industry, advanced automotive technologies will continue to influence not only patent filings but also the potential for IP litigation.


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Why IP lawyers should pay attention to the EU's draft Data Act

Katharine Stephens and Toby Bond of Bird & Bird examine the horizontal data access aspects of the EU's draft Data Act and their impact on IP rights

The EU's draft Data Act proposes a radical intervention in the relationship between manufacturers and users of internet of things devices. Intended to stimulate the development of innovative data-driven services, the draft act grants users of connected devices the right to access and re-use data generated by their devices.

It also provides users with the right to share such data with third-party service providers and addresses the terms under which this data must be provided by the manufacturer. The draft law proposes fines of up to 4% of total worldwide annual turnover for non-compliance.

However, it also makes significant incursions into the IP rights that control access, use, and dissemination of data, including a proposal to remove database rights protection for all databases containing machine-generated data.

Data access proposals

Chapter II of the draft grants users of connected products or related services the following access rights relating to the data generated using those products or services:

- Article 3 imposes an obligation for products to be designed and manufactured (and for related services to be provided) so that the data they generate will be directly accessible to the user. It also imposes an

"Trade secrets holders are likely to be concerned regarding the scope of the data caught by the access rights, and whether it extends to derived data processed using their proprietary technology."

obligation to provide users with certain information, including the nature of the data generated, how to access it, and how it will be used.

- Article 4 provides a right for users to access and use data generated by their use of products or related services. It also provides that a data holder shall only use any non-personal data on the basis of a contract with the user, and prohibits the data holder from deriving "insights about the economic situation, assets and production methods of or the use by the user that could undermine the commercial position of the user in the markets in which the user is active".
- Article 5 gives users the right to also have this data provided to a third party "without undue delay, free of charge to the user, of the same quality as is available to the data holder and, where applicable, continuously and in real time".

A "user" for the purposes of these articles is a natural or legal person who owns, rents, or leases a product or receives a service. A data holder is someone with the right to make non-personal data available through control of the technical design of the product or related service.

Chapter III sets out the proposed conditions on which a data holder is obliged to make data available to "data recipients":

- Article 8 requires that data provided to a third party under Article 5 (or any other EU law that requires a data holder to grant access to a data recipient) must be made available on fair, reasonable and non-discriminatory (FRAND) terms and in a transparent manner, with the obligation being on the data holder to demonstrate that there has been no discrimination.

- Article 9 limits the compensation that a data holder can claim for making data available. The draft states that the compensation must be reasonable and, in the case of data provided to SMEs, limited to the costs of making the data available. In either case the data holder is required to explain the basis for the calculation.

Impact on IP rights

Data can be protected by a range of IP rights in the EU, including database rights, copyright, and trade secrets, although the rights which apply to a specific data set will depend on the nature of the data and the way it has been collected or created.

Database rights

The biggest impact on IP comes late in the draft. Article 35 states that, in order not to hinder the access rights set out earlier in the draft, the sui generis database right "does not apply to databases containing data obtained from or generated by the use of a product or a related service".

It is no surprise that the draft law contains a provision seeking to balance the sui generis database right and the access to and use of data. Uncertainty over the application of the database right to machine generated data had been raised as a concern in several studies, including the commission's 2018 Review of the Database Directive.

In November 2020, the European Commission stated in the Intellectual Property Action Plan that it would review the 1996 Database Directive with a view to facilitating the sharing and trading of machine-generated data and data generated in the context of the IoT.

It is worth stepping back to see what harm this provision was intended to prevent. Database rights protect databases if the producer makes the necessary investment in obtaining, verifying, and presenting the data.

In the 2004 *British Horseracing Board v William Hill* decision, the Court of Justice of the EU ruled that the database right protected the investment in the collection of data, but not the creation of data as a by-product of another economic activity.

Despite this decision, uncertainty remains over the distinction between creation and obtaining data in the context of machine-generated data. For example, if

sensors are set up to measure meteorological data, that data could be said to be collected. But on the other hand, data internally generated by, for example, a machine in a manufacturing plant recording its own performance, could be said to have been created.

The distinction can, in some circumstances, be a fine one. In 2013, the England and Wales Court of Appeal found that database rights applied to investments necessary to record live information from football matches – goals, times, scorers – qualified as investments in obtaining the data, and therefore the sui generis right applied.

A draft of the Data Act leaked to the media in February 2022 proposed that the sui generis right could not be invoked against databases containing machine-generated data to "hinder the effective exercise of the access right provided for" in the draft law.

However, the official draft published shortly thereafter goes far beyond what is necessary to protect the right to access and use data set out in Article 4 and the right to share data under Article 5. It sweeps away protection for a very large number of databases in stating that the sui generis right does not apply if a database contains data obtained from or generated by the use of a product or a related service.

Specific issues which are likely to come under scrutiny as the draft act progresses are:

- Definition of product: The Article 35 exclusion applies to databases containing data obtained from or generated by the use of a product or a related service. A broad definition of product will therefore exclude more databases from protection than a narrower one.

- Investment in verification or presentation: Database rights require substantial investment in obtaining, verifying, or presenting the contents of a database. The draft's introductory text suggest that the exclusion from protection is premised on the view that databases of machine-generated data result from an investment in creating data, rather than an investment in obtaining pre-existing data. However, it is not clear why the substantial investment in verifying or presenting the contents of a database containing machine-generated data should not give rise to protection.

- Mixed or aggregated databases: Databases containing machine-generated data and non-machine-generated data will be caught by Article 35 and will no longer receive protection. This was recognised by a study for the commission, which bluntly stated that this policy will encourage companies to keep their databases separate and incentivise companies to invest in technologies that can categorise and track data after collection.

- Incentives to avoid automation: In certain contexts, organisations may decide to rely on manual data collection techniques rather than automated ones to ensure they still obtain protection for their investment.

Trade secrets

The inner workings of a product (or related service) are usually the result of substantial investment in R&D. Manufacturers of products and suppliers of services will take steps to protect this information as a trade secret to prevent others taking advantage of it.

While the draft provides that trade secrets shall only be disclosed to users and third parties where measures are in place to preserve their confidentiality, the only prohibition on the use of the trade secret by the recipient under the current draft is that they must not use it to develop a competing product.

Trade secrets holders may therefore be concerned that a user or third party could, for example, use a trade secret they obtain through access to data to develop a competing service or a different category of product. Similar questions arise with respect to third parties who receive data following a user's request to give them access.

Trade secrets holders are also likely to be concerned regarding the scope of the data caught by the access rights, and whether it extends to derived data processed using their proprietary technology. Data processed in this way is more likely to embody their trade secrets than "raw" sensor data. While the introductory text to the draft (in particular recital 17) suggests that processed data be excluded, this is not clearly reflected in the draft articles.

The draft law also raises a more fundamental question regarding the protection of trade secrets. Aggregated data sets held by manufacturers may be secret, have commercial value due to their secrecy and have been subject to reasonable steps by the manufacturer to preserve their secrets, qualifying them for protection under the EU's 2016 Trade Secrets Directive.

A tension clearly exists between a user's right under the draft Data Act to access a small set of data relating to their use of a product or service (which may not in itself qualify as a trade secret), and the value to the manufacturer of protecting the aggregation of data across many users as a trade secret.

This tension is most acute where a manufacturer is required to provide access to a third party pursuant to user requests. If many users ask for a single third party to have access to their data, the net effect is that the third party will acquire the value of the manufacturer's trade secret in the aggregation of data.

The only limits on the ability of third party to extract the value of that trade secret through use of the data

"It comes as no surprise that the draft Data Act provides that certain IP rights have to give way to the requirements for data access, as this has been signalled for some time by the commission."

appears to be (i) using the data only in accordance with the purpose requested by the user; (ii) specific, necessary measures agreed between the data holder and third party to preserve the confidentiality of the trade secret; and (iii) the prohibition on developing a competing product.

If the third party can agree broad usage terms with users, they would appear to be free to extract the value of the manufacturer's trade secret, provided they don't use the data to create a competing product.

The interaction between the draft Data Act and trade secrets will clearly be a hotly contested area as the proposal progresses.

Copyright and related rights

Recital (15) indicates that products such as cameras and sound recording systems primarily designed to record content based on human input are not intended to fall within the scope of the draft act.

While the draft contains a broad definition of data – "any digital representation of acts, facts or information and any compilation of such acts, facts or information, including in the form of sound, visual or audio-visual recording" – recital (15) will generally exclude from this human-created works which are protectable by copyright.

However, it is not clear how far recital (15) goes and whether, in particular, it will exclude devices which capture content without direct human input, such as acoustic sensors capturing sound recordings. Films and sound recordings captured by this category of device may be protected by related rights and the draft act does not expressly require these rights to be licensed to a user or third party where they accrue to a data holder.

There is also an interesting intersection with discussions regarding rights in AI-generated works. For example, should photographs captured by an AI-controlled camera fall within the scope of the draft law in circumstances where photographs captured by humans would not?

Data formats, structures, and databases may also be protected by copyright owned by a data holder. For example, data collected by a device may be stored in a particular file format which is sufficiently original to qualify for copyright protection.

On one view, this may be the processed data which recital (17) suggests be excluded from the act. However, it is possible to envisage situations where the obligation under Article 5(1) to provide data "of the same quality is available to the data holder and, where applicable, continuously and in real time" could create a tension with copyright in a data format or structure owned by the data holder.

One example is where the only technically feasible way to comply with Article 5(1) is to provide data in a proprietary format or structure which is protected by copyright.

It comes as no surprise that the draft Data Act provides that certain IP rights have to give way to the requirements for data access, as this has been signalled for some time by the commission.

However, in some instances the draft lacks clarity and will only lead to uncertainty. In the case of Article 35, the draft goes much further than is necessary to ensure access rights to the data, and endangers the very considerable investment that many companies have made in their databases.

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The case for AI inventorship flounders

After some initial successes last year, the DABUS appeals look to be running out of steam, says Tom Furnival of Mewburn Ellis

Artificial intelligence or machine learning techniques are fast becoming ubiquitous in many aspects of the modern world. They provide accurate modelling and, on occasion, original insight into problems which might otherwise be missed by researchers.

An issue arises where an AI tool provides one of these original insights, and where this leads to an invention which is subject to a patent application. This is because it is an established feature of patent law worldwide that the inventors of an invention be identified to the relevant patent offices. In part, this is to ensure that the owner of the patent application (who oftentimes is not the inventor) can indicate their legal right to the application.

However, who is the inventor where an AI system has contributed? This issue had been mostly neglected previously, with a general assumption that the controller/instigator of the process would be the inventor. That changed when Stephen Thaler, orchestrator of the Artificial Inventor Project, submitted patent applications worldwide (21 in total, over 17 jurisdictions) listing no human inventors. Instead, the applications identified the AI system DABUS as the sole inventor.

The processing of these applications by various patent offices has sparked debate over whether it is a requirement that the inventor listed be a human.

Recent decisions

UK

The UKIPO deemed the DABUS applications withdrawn in December 2019, because of their failure to identify an inventor. Its reasoning stemmed from the wording of the Patents Act which requires in Section 13(2) that the "person or persons" whom the applicant believes to be the inventor is identified. The hearing officer found the complete lack of contemplation by the European Patent Convention (EPC), the Patents Act, and the Travaux Préparatoires (preparatory documents for the EPC) that the inventor might not be a natural person to be a key factor in the UKIPO's decision.

This decision by the UKIPO was then appealed to the High Court. Mr Justice Marcus Smith upheld the UKIPO's decision, based in part on the wording of the Patents Act and also on the 2007 Court of Appeal decision *Yeda Research and Development Company v Rhone-Poulenc Rorer International* where Lord Leonard Hoffman referred to the inventor as the natural person who came up with the inventive concept.

Thaler then sought, and received, permission to appeal Judge Smith's decision to the Court of Appeal. In its September 2021 decision, the Court of Appeal dismissed Thaler's appeal by a 2-1 majority. However, the Court of Appeal was unanimous in concluding that the inventor must be a natural person capable of legal capacity. Where Lord Justice Colin Birss dissented was on the UKIPO's finding that the application was deemed withdrawn due to the failure to identify the inventor. In Birss's view, the UKIPO should limit itself when assessing the validity of information provided about inventorship.

This isn't the end of the tale – Thaler has made an application to the UK Supreme Court, which will have the final say.

EPO

The EPO has also refused an application naming DABUS as the inventor. Its reasoning was that the legal provisions which govern this aspect of the process require that the inventor be a natural person. In the EPO's view, the laws of its constituting states make clear that an AI 'entity' or system cannot be considered a natural or legal person.

These decisions were appealed, and the Legal Board of Appeal held a hearing in December 2021. The board issued a joint decision, *J 8/20andJ 9/20*, finding that, under the EPC, an inventor must be a person with legal capacity. An AI 'entity' or system does not have legal capacity, so cannot be considered an inventor. The board also decided on an ancillary point, where the owners of the DABUS applications submitted the following statement:

"The applicant identifies no person or persons whom he believes to be an inventor as the invention was conceived autonomously by DABUS, an AI machine. The applicant has the right to the European patent by virtue of being the owner and creator of DABUS."

"The majority opinion being formed among courts and patent offices is that an AI system cannot be classed as an inventor."

Here, the board found the statement to be non-compliant with the requirements of Article 60(1) EPC, which explicitly states that the right to a European patent shall belong to the inventor or its successor in title.

The board's detailed reasoning has yet to be published.

USPTO

Continuing the theme, the DABUS applications did not fare well before the US authorities either. The USPTO refused to process them as Thaler had failed to identify a natural person as the inventor.

The decision was appealed to the US District Court for the Eastern District of Virginia, which affirmed the USPTO's decision. The court relied on the plain statutory language of the US Patent Act, which requires an inventor be "an individual".

The court specifically noted that policy changes in this area must come from Congress. It also pointed to the failure to contemplate AI inventors in the 2011 America Invents Act, when such systems were already known, as a strong indicator that there have been no positive policy decisions in this area.

The matter has been referred to the Court of Appeals for the Federal Circuit.

South Africa

Of the 21 DABUS applications filed worldwide, only one has resulted in a grant by a patent office. The South African Companies and Intellectual Property Commission (CIPC) issued a notification of grant for a DABUS application in its July 2021 journal.

However, the system for obtaining patents in South Africa is markedly different to that of the EPO, USPTO, and UKIPO. South Africa operates a registration system where patent applications are automatically granted, provided they fulfil rather minimal formalities.

Notably, where a South African patent application originates from a PCT application, the CIPC's position is it will not assess the bibliographic information provided during the international phase. This includes the designation of the inventor.

It is clear the CIPC did not consider whether an AI system can be an inventor during the application process. Interestingly, it is still a requirement in South Africa's patent law that the right to the patent belongs to the inventor or someone who has acquired the right from the inventor. On that basis, it seems that the validity of the South African patent is open to challenge.

New Zealand

In January 2022, the New Zealand Patent Office found that an AI tool cannot be an inventor under the relevant national legislation. In its decision, it relied on the Patent Act's definition of an inventor – the "actual deviser of the invention" – as well as other parts of the act which supported an interpretation that an inventor must be a natural person.

The assistant commissioner of the Patent Office noted that, even if DABUS was regarded as the inventor, it was not at all clear that Thaler could derive the right to the invention. This is because, as an entity with no legal capacity, DABUS would not have been able to hold the right to the invention in the first place.

Australia

Australia was the first jurisdiction to find that an inventor need not be a human, although this decision was overturned by the Federal Court of Australia in April 2022.

Initially, the deputy commissioner for IP Australia deemed Thaler's application withdrawn due to a failure to identify a natural person as the inventor. This decision was appealed at the Australian courts, leading Justice David Beach to conclude that only a human or other legal person (such as a company) can be an owner of a patent.

The judge noted that if it is true that the invention was purely devised by an AI system, there is a class of invention for which no application can be granted. In his view, this outcome is not justified by the act.

The decision goes on to use the wording of Part 2 of Chapter 2 of the Australian Patents Act, specifically:

"Subject to this act, a patent for an invention may only be granted to a person who:

…

(c) derives title to the invention from the inventor or a person mentioned in paragraph (b)…"

Justice Beach then noted that while a "person" is defined in law, there is no definition of "inventor" given. He also noted that the PCT provides no definition of inventor. Absent these, Justice Beach decided that "inventor" can be considered an agent noun and therefore merely the person or thing which "invents". His reasoning also referred to the Patent Act's objective of promoting economic wellbeing through innovation and the transfer and dissemination of technology, and that to exclude a class of invention merely based on the inventor being an AI system would run counter to this objective.

The commissioner of IP Australia then appealed this to the Federal Court, which unanimously found in favour of the commissioner. In coming to their finding, the judges relied on the 2015 *D'Arcy v Myriad Genetics* decision from the High Court of Australia which stated that inventions must be products of 'human action'. In their view, this choice of wording was a deliberate one, and that the intent behind the decision is that human agency is a requirement for invention.

This brings Australia, for now, into line with most patent offices in requiring an inventor to be a natural person with legal capacity.

Moving forward

The majority opinion being formed among courts and patent offices is that an AI system cannot be classed as an inventor. Given the reasons given by the various judges to date, it seems unlikely (without explicit input from policy makers) that any other outcome will arise during the various appeal stages.

At present, this definition of inventor to require a natural person isn't likely to cause tremendous issues, because AI systems have not yet reached a level of sophistication where humans are entirely divorced from the process. It is typically possible to identify a person or persons who devised the AI system and initiated its process. This approach is consistent with other areas of intellectual property. In *Nova Productions* (2007), the England and Wales Court of Appeal found that the author of a copyright-protected work is "the person by whom the arrangements necessary for the creation of the work are undertaken".

As AI systems become more sophisticated, however, it may become increasingly difficult to identify a human inventor. Naming an AI system as an inventor would not be problematic so long as it is clear how the applicant is ultimately entitled to the grant of the patent. It may be necessary to provide explicit legislation which specifies that the rights for any invention devised by an AI system thereby automatically flow to its owner.

Tom Furnival

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How UKIPO's education drive will benefit generations to come

To mark World IP Day, UKIPO CEO Tim Moss outlines how the IP Education Framework aims to inspire the innovators of the future

This year's World IP Day – April 26 – focused on intellectual property and youth and has the theme of 'innovating for a better future', recognising how young people around the world are stepping up to the challenge of innovation. Through their energy, ingenuity, curiosity and creativity, they are helping steer a course towards a better future.

Our ambition is for the UK to be the most innovative and creative country in the world – and the government's Innovation Strategy has IP at its core. To realise and sustain this ambition into the future, we need to lay the right foundations now.

Through our new IP Education Framework, the UKIPO is taking a new approach to helping lay these foundations. In keeping with this year's theme, I'd like to explain how empowering young people with IP knowledge – and supporting educators with the practical tools and resources to help them do so – bodes well for us all.

The environment in which young people are growing up, interacting with the world, undertaking research, and developing careers is increasingly complicated and nuanced.

IP is an integral part of this environment. Anyone can create, own, and protect IP. As a society, we need to promote how IP is recognised, understood, and respected. This goal may sound ambitious, but through a long-term approach, I think we can succeed.

"Knowing they will be recognised and remunerated for their work will encourage more young people to innovate and create."

Looking towards our young people is the logical starting point. As the innovators, creators, and entrepreneurs of today and tomorrow, it is essential they have an understanding of IP. The potential for IP to open doors – and magnify the impact of research and innovation on society – is huge.

But if not properly understood, or badly managed, we know that IP can also be a barrier. For example, uncertainty about IP ownership can be an obstacle to effective technology transfer into the marketplace and can discourage collaborative research. Introducing the concepts of IP into the classroom from an early age and building upon that language and knowledge means that the concepts will, over time, become second nature.

IP education

Our new IP Education Framework, developed with help from teachers, industry and professional bodies, is part of the UKIPO's new long-term strategic approach to educating young people about IP. Helping ensure educators can access the appropriate resources is a key pillar of this approach.

To have the greatest impact, understanding of IP needs to be developed over time. By providing teachers and educators with a set of tools that are age-appropriate, the framework helps them integrate IP concepts when they are teaching about creativity, innovation and invention across a range of subjects. In fact, many educators may not realise that they already teach 'IP'-related content, such as copyright.

I want teachers to understand and value the benefits of teaching about IP. They are intelligent problem solvers and innovators. If they understand IP, they can see how it can be included in the classroom. By giving them the tools, resources, and confidence to do so, they can help young people to learn about IP in contexts relevant to them and show them how to identify, protect, use, and respect IP.

While IP is relevant to many different subjects, it is of course not always part of curricula. We recognise that this presents challenges. We know that schools, colleges and universities are busy places with competing priorities and different frameworks, curricula and approaches. Our flexible, free resources will support teaching objectives and different approaches in the classroom. Our material must be accessible, understandable, and contextual, and we will work with teachers and educators to continuously develop and improve it.

While these challenges are considerable, I am sure you will agree the end goal is worthwhile and has tangible benefits for all involved. The learning materials and resources the framework provides will equip us, and educators, to address these challenges and reach that goal in a practical and engaging way.

Inspiring innovators

Readers of Managing IP may be saddened to learn that our aim is not to create a new generation of world-leading IP lawyers. It's not even about getting pupils talking about a new and exciting subject called 'IP' that they learnt in school today. But we do want to help the next generation of musicians, writers, artists, innovators, inventors, and entrepreneurs to have a basic understanding of how to protect and make the most of their work.

IP training and understanding supports curriculum learning objectives and wider student development. Beyond careers and employment, it supports creativity, critical thinking and innovation, and shows how ideas translate into social and economic benefit.

Knowing they will be recognised and remunerated for their work will encourage more young people to innovate and create. Learning about IP will help equip young people for employment and responsible digital citizenship.

If we are to achieve our long-term goal of making IP crime and infringement socially unacceptable to all, I want to ensure that all have a basic understanding of IP – because respect flows from understanding.

I am sure this audience will agree that IP knowledge is a core asset in life. I want this to be widely understood; this refreshed approach – underpinned by the tools and resources in our new framework – is the starting point.

Such understanding will add real value to the skills toolset young people will need to thrive while facing the challenges of the future. This in turn will help create a better future for us all. Happy World Intellectual Property Day to you all.

Tim Moss

Tim Moss is CEO at the UKIPO.

Alibaba: Why we must safeguard the IP of SMEs

Matthew Bassiur, head of global IP enforcement at Alibaba Group, explains how the platform is helping SMEs overcome IP challenges

Almost 30 years ago, a struggling inventor in Bath, England patented a vacuum cleaner that used cyclone technology instead of a bag to suck up dust. It was the first of many patents that he filed before bringing the product to market.

James Dyson's eponymous vacuum cleaner is now a staple of households worldwide, but that early decision to patent his technology also saved the business. In 1999, he successfully sued rival Hoover for infringing his patent, after the US company launched its own triple vortex cleaner. Hoover was ordered to withdraw the product from the market.

But not every would-be inventor or small business owner is as au fait with the value of intellectual property as Dyson, and many are surprised to discover that the product in which they invested blood, sweat and tears – and often their hard-earned savings – has been replicated and is on sale elsewhere.

That was certainly the case for Ashley Gomez, who runs her family's business Et Al Beauty in Henderson, Nevada. Her mother Linda had painstakingly created a non-invasive lip plumper, called Fullips , to boost her thinning lips as she grew older. It quickly became Et Al's flagship product, attracting widespread coverage in the beauty media and, inevitably, the attention of counterfeiters – and knockoffs.

Gomez is a lawyer, but even so, her small business faced big challenges protecting its IP from online infringers. Today, however, Fullips is fully patented. And Et Al Beauty is actively participating in a fight against an illicit industry involved in the trafficking of counterfeit and pirated goods that the OECD estimated in 2016 was worth as much as 3.3% of global trade.

Alibaba has supported Et Al Beauty in the protection of its IP. The company is one of 31 small and medium sized enterprises (SMEs) from the US, Europe, and China, representing 10 different industries, which make up Alibaba's SME Advisory Committee (SAC).

Et Al Beauty's overall approach has become so successful that its own website now offers advice to customers on how to recognize counterfeit Fullips lip enhancers and even keeps an up-to-date tally of fakes spotted on various e-commerce platforms.

SMEs are a vital part of the Alibaba ecosystem, with millions of SMEs selling through our platforms. Just as with our much larger sellers, we make it easy for SMEs to do business anywhere.

Launched in 2020, this unique forum – we believe that Alibaba is the first and only e-commerce platform to provide such support – offers a place for SMEs to share with us, and each other, their strategies challenges protecting IP. This helps Alibaba to better meet SME needs.

"Alibaba offers the forum for SMEs to exchange practical advice, insights, and useful strategies to empower SMEs to enforce their IP rights."

Alibaba offers the forum for SMEs to exchange practical advice, insights, and useful strategies to empower SMEs to enforce their IP rights. We also identify potential issues SMEs face when registering copyrights, trademarks, and patents.

SAC builds on the work of the Alibaba Anti-Counterfeiting Alliance (AACA), which was founded in January 2017 to create a community that brings together brand owners, law enforcement, academics, and uses technology to protect IP rights and fight counterfeiters.

Today, the AACA has a membership of 207 rights holders across 21 countries, representing more than 1000 brands, including Dyson, which is now one of the top ten global brands selling into China via Alibaba's Tmall platform.

In its first year, SAC hosted one-to-one and quarterly meetings so that we could better understand the concerns of SMEs, as well as a speaker series and a workshop on design rights.

We also assured SMEs that the Chinese marketplace is open to them – a fast growing e-commerce retail import market that in 2021 contributed more than half of the world's e-commerce retail sales and they can reach a global audience while protecting their products and IP. SMEs can sell to the world in a healthy shopping ecosystem.

Four pillars of protection

At Alibaba, we create a healthy shopping ecosystem with a robust IP protection programme resting on four pillars.

Notice and Action

The first pillar is our robust notice and takedown program that is facilitated through our IP Protection Platform (IPP Platform), which is a dedicated online portal allowing rights holders to submit takedown requests for IP-infringing listings. This enables Alibaba to process takedown requests very quickly. For example, in 2021, 98% of takedown requests were processed within 24 hours.

Alibaba recognises that most SMEs do not have IP departments so, Alibaba seeks to ensure that a layperson, like the small business owner, is able to successfully enforce their IP.

Launched in 2020, Simp'Ali adapted our highly successful IPP Platform to even better meet the needs of SMEs. For example, Simp'Ali has reduced the number of reason codes from which users choose to describe the type of infringement from twenty-two to eight. This streamlined approach simplifies the takedown process, which we've seen leads to higher success rates for SMEs.

"Alibaba uses technology-enabled capabilities to detect potentially infringing activity and supports brand owners and law enforcement in identifying counterfeit manufacturing and distribution facilities for criminal prosecution."

Simp'Ali's proprietary system also proactively identifies rights owners who may need extra help. If so, our team reaches out. While hundreds of SMEs are already using Simp'Ali, we're not resting on our laurels. We regularly poll Simpl'Ali users to solicit feedback and identify areas for further improvement.

Recently, we also revamped the user area of our IPP Platform to create a dedicated SME Support Center. The SME Support Center makes it simpler for SMEs to find relevant information and resources to help support their IP enforcement efforts. Simp'Ali users now have easier access to support resources, FAQs, and our IPP Platform Handbook, which is available in multiple languages, with step-by-step instructions for registering an IPP Platform account and submitting takedown requests. There is even an online form for SMEs who haven't yet registered an account or who may only occasionally submit takedown requests.

Proactive efforts

The second pillar in our IP protection system is Alibaba's extensive system of proactive measures, which results in the removal of far more listings than those removed in response to all rights owner complaints combined. And it removes them quickly. From July 2020 to June 2021, 93% of Alibaba's proactive removals occurred before a single sale took place.

In addition, AACA has also worked to expand Alibaba's proactive program, so our systems can more readily spot IP-infringing listings. In 2021, the volume of brand knowledge provided by rights owners increased by 319% compared to the previous year, and included incorporation of more than 22,000 images.

Offline investigations

Our third pillar for IP protection is offline enforcement. Given that online counterfeiting sales are a reflection of offline counterfeiting activities, Alibaba complements its online platform governance by collaborating with stakeholders in offline investigations.

Alibaba uses technology-enabled capabilities to detect potentially infringing activity and supports brand owners and law enforcement in identifying counterfeit manufacturing and distribution facilities for criminal prosecution. The company also engages with law enforcement authorities in 31 provinces, regions, and municipalities across China.

In 2021, Alibaba supported police in China on a total of 2,685 cases targeting manufacturers, suppliers and distributors of counterfeit products, resulting in 1,968 arrests and covering a total case value of roughly $600 million.

Stakeholder engagement

As highlighted above, stakeholder engagement is a core pillar of Alibaba's IP protection efforts. In order to strengthen collaboration with companies of all sizes, Alibaba works with dozens of industry associations, representing IP interests of thousands of rights holders as well as policymakers and government officials from around the world. Through sustained engagement with the full spectrum of IP stakeholders, Alibaba works to create an inclusive and comprehensive community for the protection of IP – including industry-leading initiatives and best practices such as the AACA and SAC.

Alibaba has a special connection with SMEs, and we supported the development of emerging, micro-sized, and small and medium-sized businesses long before most big brands used our platforms.

IP is a critical asset for SMEs, who must innovate every day to survive and thrive. Alibaba supports and gives confidence to SMEs that their IP is secure so they can do business anywhere.

Matthew Bassiur

Matthew Bassiur is head of global IP enforcement at Alibaba Group in Washington, DC.

Life sciences IP trends from Japan, Korea and China

Lawyers from Morgan Lewis and Lee & Ko examine the IP changes in the life sciences sectors in Japan, Korea and China as they bounce back from COVID

Asia's dynamic life sciences sector, like many other industries, was significantly affected by the global pandemic and gave rise to unprecedented challenges in addition to a wealth of opportunity. One aspect of that opportunity was the scope for digitalisation and innovation, alongside a strong appetite for, and growth in, international ambition for Asian life sciences companies.

As businesses seek to innovate and adopt new technological solutions, the importance of seeing those creations protected is paramount. We take a closer look at developments across Japan, Korea and China, assessing how government initiatives and legislative updates are paving the way for a wave of innovation and intellectual property protection across Asia's life sciences landscape.

Japan

Japan's IP-related activities over the last couple of years have been hampered by the nationwide COVID-19 lockdowns and restrictions, with many research facilities shutting down for prolonged periods and the corporate world struggling through the challenges of adopting to the new normal. The challenges imposed by the virus, however, accelerated digitalisation and altered the needs of society, giving rise to new business opportunities for which IP is of paramount importance.

Statistics published by the Japan Patent Office (JPO) and WIPO show that while the overall trends in Japan-related filings were adversely affected by the pandemic, signs of growth were also observed in certain sectors.

The number of domestic patent applications in 2020 slipped by 6.3% (from 307,969 to 288,472), a sharper decrease compared to previous years that collectively showed a more moderate downward trend. Some are voicing concerns as the numbers have not dipped below 300,000 for more than a decade.

The decrease is largely attributable to a drop in filings from Japan, as non-resident applicants maintained an overall upward trend in recent years by nearly matching the number from the previous year. Resident applicants, however, have not slowed down their efforts to secure patent rights abroad, maintaining a healthy number of PCT applications with just a slight drop from the previous year.

Moreover, applications filed in Japan by smaller entities continue to grow in numbers, making up approximately 17.5% of total applications filed in 2020 compared to a meagre 0.3% in 2016. Encouraging signs are also observed in the numbers of design patent and utility model applications which, despite the pandemic, have risen.

Digitalisation

Notable innovations due to the pandemic include digitalisation of healthcare. The increased demand for the remote provision of medical services has led the government to rethink its conservative policies restricting telehealth in Japan. With regulatory hurdles easing, tech companies are investing in digital health development such as online health consultation services.

Growth is also expected in biopharmaceuticals and biosimilars. Despite the recent upward trajectory in sales, biopharmaceuticals currently represent about 10% of total pharmaceutical sales in Japan a number that could grow significantly when compared to the rest of the world at 30%.

International investment

Japanese pharmaceutical companies have also demonstrated a robust appetite for overseas business opportunities through acquisitions of startups, strategic alliances, and establishment of subsidiaries. We have seen activity to establish subsidiaries in China and Vietnam, with some looking to capitalise on two of the fastest-growing pharmaceutical markets in Asia.

The health of the Japanese pharmaceutical industry is further supported by statistics from the JPO's annual report which show that Japan ranks either second or third in terms of number of patent application filings pertaining to mid-sized molecule and nucleic acid drugs at major national patent offices around the world.

This momentum in the Japanese life sciences and pharmaceutical industry is further encouraged by the "Pharmaceutical Industry Vision 2021" recently announced by the Ministry of Health, Labour, and Welfare.

In its statement, the ministry emphasises the importance of developing new drugs, and promotes investment in venture companies, mergers and acquisitions, and interactions between academia, venture companies, venture capitals, and pharmaceutical companies to establish an "ecosystem" for efficient collaboration and innovation.

Although there remain some concerns about the decreasing number of patent applications filed in Japan, the Japanese life sciences industry appears as active and healthy as ever and may gain further momentum with the looming end of the pandemic.

Korea

The life sciences industry in Korea has continued to evolve and grow in recent years. Previously dominated by a handful of major players focusing on the manufacture of generic drugs, the industry now has expanded into biosimilars, and numerous startups and ventures creating seeds for future growth have emerged.

The expansion into biosimilars is led by Celltrion and Samsung Bioepis. Celltrion, a pioneer of biosimilars in Korea since 2002, offers six commercialised products and currently dominates Korea's drug exports.

Samsung Bioepis, established more recently in 2012, has gained momentum in recent months with the buy-out of its joint venture. It has a growing global presence with six biosimilars marketed worldwide.

Other large pharmaceutical entities, such as Chong Kun Dang, Dong-A ST, and CJ healthcare, are currently engaged in numerous clinical and preclinical trials and have achieved product approval in certain countries, including Japan.

Rise in biotech

Along with the overall growth of the pharmaceutical industry, Korea is seeing a rise in the number of biotech startups. The rapid growth that Korea has seen in recent years is fuelled by readily accessible funding through governmental initiatives such as Seoul BioHub, as well as increased recognition of and interest in biotech due to the COVID-19 pandemic.

Indeed, there are numerous success stories from collaborations between startups and global pharmaceutical companies funded by the government. Such governmental support is set to continue for years with the intent to propel Korea into a leading spot in the global pharmaceutical and life sciences industry.

Moreover, many successful startups with strong technological foundations are directly reaching out to larger overseas markets to reap the rewards of the larger market size. Increasingly we are seeing sophisticated strategies and investments by these startups to protect their valuable inventions domestically as well as in foreign jurisdictions. Indeed, the statistics from the Korean Intellectual Property Office show that the number of

patent applications filed in relevant fields has substantially increased in recent years.

Korea is also taking advantage of its strength in information technology and artificial intelligence to analyse large volumes of data gathered through the nationally mandated healthcare system. With access to the health-related data of its entire population of 50 million, Korea has set out to build a health-related big data library by 2028 for use in data-based research in areas such as clinical trials and medical device development, and has already confirmed the usefulness of big data in fighting COVID-19.

Finally, with the growth of the life sciences industry, Korea is seeing a growing number of legal disputes involving IP rights. There has been a sharp increase in the number of Hatch-Waxman-type litigation between generic drug makers and marketing approval holders and it seems likely that a wave of court decisions later this year and next year will emerge.

China

China has one of the largest and most active markets for the life sciences and pharmaceutical industry, but the vast majority of the drugs and their manufacturers are generic. As China makes innovation a national strategic objective, a transformation from generic to innovation in the life sciences industry is expected in China along with the new development of laws and regulations.

Patent linkage and early dispute resolutions

Effective on June 1 2021, China's amended Patent Law establishes a patent linkage system. It connects the drug marketing review and approval procedures with a drug patent dispute resolution mechanism for parties to resolve a patent dispute.

Any party of the dispute may file a civil action in the Beijing IP Court to request a judgment, or alternatively request an administrative ruling from the China National Intellectual Property Administration (CNIPA) on the dispute.

The National Medical Products Administration (NMPA) may make a decision on whether to suspend the marketing approval of the drug based on the court's judgment or the administrative ruling (see Article 76 of the Patent Law). The mechanism minimises harms to the parties and public interest.

On July 4 2021, the Supreme People's Court issued the Judicial Interpretation on Provisions on Several Issues Concerning the Application of Law in Civil Cases Involving Patent Disputes Relating to Drugs under Application for Registration. It provides guidance on the juridical procedures for the early resolution of drug patent disputes.

On the same day, NMPA and CNIPA jointly issued the Implementing Measures for the Early Resolution Mechanism for Drug Patent Disputes (for Trial Implementation). The key measures include construction of the drug patent information disclosure platform, patent right registration, generic drug patent declaration, bifurcated judicial and administrative proceedings, approval waiting period, drug review and approval classification treatment, and first generic drug market exclusivity period.

Patent term compensation

Article 42.3 of the amended Patent Law provides patent term compensation due to the time lapse between NMPA marketing review and approval of new drugs. At the request of the patentee, CNIPA may compensate the term of the invention patent related to the new drug which has been approved for marketing in China.

The compensation period shall not exceed five years, and the total effective period of the patent right after the new drug is approved for marketing shall not exceed 14 years. CNIPA's Recommendations for Amendment to the Implementing Rules of the Patent Law (Draft for Comments), published in November 2020, further clarifies the calculation of the patent term compensation and the scope of qualified patents and covered new drugs.

A patentee can only request the compensation for one patent if a drug was covered by multiple otherwise-qualified patents; and a patent covering multiple qualified new drugs can only enjoy the compensation from one new drug. Thus, a strategic arrangement of the patent term compensation is necessary to take full advantage of this new policy.

Innovation in China's life sciences industry will continue benefitting from the legal changes that upgrade and improve the environment of new drug research and development. We expect to witness the transformation of China's life sciences industry and the flourishing of new drug innovation.

The appetite for Asian life sciences and pharmaceuticals companies to access the global market and remain internationally competitive continues to grow. As this continues, we are likely to see an increasingly acute legislative focus on promoting and protecting innovations in the sector.

Moto Araki | Hosang Lee | Janice Logan | Shaobin Zhu | Min Woo Park | Keum Nang Park

Moto Araki (Tokyo), Hosang Lee (Washington DC), Janice Logan (Washington DC), Shaobin Zhu (Silicon Valley) are partners, and Min Woo Park (Washington DC) an associate, at global firm Morgan Lewis. Keum Nang Park is a partner at Lee & Ko in Seoul.

Coordinating patent prosecution in the US and Europe

Moritz Ammelburg and J Peter Fasse of Fish & Richardson examine the patentability requirements and prosecution schemes in the US and Europe and how applicants can prepare applications that will best serve their needs in both jurisdictions

In today's connected global economy, obtaining patent protection in multiple jurisdictions is the best way for companies to protect their intellectual property on a global scale. However, different countries have different patentability requirements and prosecution schemes, and these differences can significantly complicate the coordination of a global patent strategy. For example, companies pursuing patent protection in both the US and the EU should keep in mind a few key differences between these two jurisdictions to avoid losing valuable IP rights.

Inventorship

Inventorship in the US is a critical component of patent ownership. When applying for a patent at the USPTO, the applicant must name all inventors of the invention claimed in the patent application.

Because each inventor owns a complete and undivided interest in the entire patent application and resulting patent, the applicant (such as an employer) should obtain an assignment from each inventor to perfect the applicant's rights in the application, such as the right of priority and the rights to license and enforce the granted patent.

Absent an assignment, each joint inventor may exploit the invention without the permission of, and without accounting to, the other joint inventors. One joint inventor cannot stop another from independently selling,

"Incorrect inventorship or improper assignments in the US can cast doubt on a patent owner's rights and can render a patent unenforceable."

conveying, assigning, or licensing the patent. Incorrect inventorship or improper assignments in the US can cast doubt on a patent owner's rights and can render a patent unenforceable, e.g., if one or more inventors intentionally omit another inventor.

In Europe, on the other hand, inventorship is far less important. While the right to a European patent belongs to the inventor or his or her successor in title, the applicant is deemed to be entitled to exercise the right to a patent before the EPO, and assignments or employment agreements are not examined.

Lack of entitlement is not a ground for revocation before the EPO but is a ground for invalidity in national nullity proceedings in some European countries. However, this ground can only be invoked by the person whose rights have been violated. Among the grounds for revocation, such as lack of enablement or lack of patentability over the prior art, lack of entitlement is by far the least common.

Practice tip

- In the US, be sure to get inventorship correct to avoid problems in the future.

Right of entitlement

Under the Paris Convention and the PCT, whoever files an application is called the applicant. The applicant must have had the right to file the application at the time of the filing based on the law of the nation where the invention occurred. The right to file a subsequent application is presumed to vest in the earlier applicant unless there is a written transfer of ownership.

However, whether ownership actually transferred is also based on the law of the nation governing title to the invention. In the US, transfer of ownership requires a written assignment, and only an actual assignment – rather than merely an obligation to assign – transfers title. In some countries, title to an invention transfers automatically to the inventor's employer, but this is not the case in the US

Practice tip

- In the US, make sure to obtain assignments from all inventors, preferably before filing the foreign application, but certainly before filing the PCT or EPO application.

Right of priority

The right to claim priority to an earlier application filed in another country flows from the Paris Convention. This right belongs to the entity that filed the earlier application (i.e., the applicant), and must be exercised within 12 months of the date of the original application. The PCT authorises an international application to be filed with a priority claim under the Paris Convention and then the PCT application can later be nationalised in different countries for examination and grant while claiming the priority date of the original application.

In Europe, the right of priority is based on the three requirements of Article 87(1) EPC: (a) same applicant, (b) same invention, and (c) first application.

a) **Same applicant**: The US considers the right of priority to vest with each applicant, meaning that any applicant may exercise the right. The EPO considers the right of priority as pertaining to all of the named applicants together, meaning that a priority claim can be made only by all of the applicants in the priority application (or their assignees). While additional applicants may be added, all of the original applicants must be among the applicants listed in the subsequent application that claims priority from the priority application.

b) **Same invention**: According to decision *G 2/98* by the EPO Enlarged Boards of Appeal, the test for the same invention is whether a skilled person can derive the subject matter of the claim directly and unambiguously, using common general knowledge, from the previous, priority application as a whole. The invention claimed in the later application must already be disclosed in the priority application in an enabling manner (i.e., sufficiently clear and complete

that a skilled person can carry it out). The requirements for the same invention to support priority are similar in the US and are determined on a claim-by-claim basis.

c) **First application**: A first application is the application from an applicant that discloses for the first time any or all of the claimed subject matter. However, in some situations, the applicant may determine that the original application is no longer favorable and may wish to start over. Re-starting the clock in this way is permitted by the EPO if, at the date of the subsequent application's filing, the previous application has been withdrawn, abandoned or refused, without being open to public inspection and without leaving any rights outstanding, and has not served as a basis for claiming a right of priority. An applicant may also abandon a US provisional, which is never published, or a US utility application that has not yet been published.

The right of priority in Europe can easily be lost based on minor changes in the subsequent application or the wording of the claims, which can result in a failure to meet one or more of these requirements.

Practice tips

- Absent an intervening assignment you must name the same applicants in the priority application and later application to ensure the right of priority.
- Do not remove an applicant listed on a priority application when filing a later PCT or EPO application absent an assignment from the removed priority applicant to a new applicant listed on the later filed application.
- You can add a new applicant to the later filed application without losing the right of priority and without the need for any assignment, as long as you also list all original applicants.
- In the later application, include the complete disclosure of the priority application; if the invention has evolved, leave the disclosure of the priority application untouched and add new subject matter.
- When intending to restart the clock, ensure that the first application is abandoned with no further rights outstanding.

Claim drafting

Generally, the differences in claim drafting between the US and Europe are a matter of claim coverage. In Europe, claims tend to cover the invention with a high degree of precision and with fewer claims than typically filed in the US (e.g., because of higher excess claim fees). In the US, a variety of claims are typically used to cover the invention with differing scopes of protection. For example, in the US you can include various types of claims (e.g., method claims, composition claims, and device claims) that cover various aspects of the main invention. This strategy ensures that in a typical US application prior art that anticipates or renders obvious specific claims leaves other claims intact.

Other high-level similarities and differences include:

US claiming style

- Multiple independent claims
- One-part format
- Short preambles
- Focus on structure whenever possible
- Avoid functional limitations
- Avoid recitations of intended use (e.g., "for…")
- Avoid using different terms for the same elements
- Avoid multiple dependencies

European claiming style

- Generally one independent claim per category
- Two-part format preferred
- Much longer preamble in the two-part format
- A characterizing portion contains the features distinguishing the claims from the primary reference
- Focus on structure whenever possible

Functional claims

Functional claim elements (also known as means plus function claim elements in the US) are permissible in both jurisdictions. In the US, claim elements that include the language "means for" or "step for", or words such as "mechanism," "module," "device," "unit," "member," and the like, followed by a function rather than structure can be interpreted under Section 112(f). Given this interpretation, the scope of such claim elements is limited to cover only the corresponding elements or examples recited in the specification and equivalents thereof, which can be a narrower scope than absent the 112(f) interpretation. For example, if the specification includes only one example of a given claim element, then the scope of that claim element may be quite narrow. On the other hand, if the specification includes no examples at all, then this could raise a far more significant problem, e.g., lack of enablement, which could render an application unpatentable, or a patent invalid.

Functional claims are more common in Europe, which can pose challenges for applications drafted in the European style and later filed the US. It is therefore important to review both the claims and the specification carefully when preparing a US national application to find and evaluate any possible functional claim elements.

The Boards of Appeal (BoA) of the EPO commonly distinguish between two types of functional features: (a) process steps that are known to the skilled person and may be performed easily by that person, and (b) process steps that recite the result to be achieved. The latter type is permissible only if (i) from an objective

viewpoint, such functional features could not otherwise be defined more precisely without restricting the scope of the invention; and (ii) these features provide instructions that were sufficiently clear for the expert to reduce them to practice without undue burden, including with reasonable experiments if necessary (*T 68/85*).

Practice tips

- Draft applications to cover all important feature combinations to meet both US and European requirements.
- Use multiple independent claims to cover various aspects of an invention for US practice but ensure that the main claims also meet EPO requirements.
- Use consistent terminology in the claims and specification.

Amendments

In Europe, Article 123(2) EPC sets very strict requirements for amendments to patent applications. Generally, European patent applications and patents (in opposition) may not be amended in such a way that they contain subject matter that extends beyond the content of the application as filed or that extends the protection conferred. The legal standard for claim amendments is that the added claim language has direct and unambiguous derivability from the application as filed (ideally, this would be verbatim support).

Lack of support issues are common in European patent prosecution but can be avoided through effective application drafting. For example, taking features from the drawings or a particular embodiment and adding them to the claims may be prohibited if considered to be an unallowable generalisation. However, such intermediate generalisation is not an issue when (a) the feature is not related or inextricably linked to the other features of a specific embodiment, and (b) the overall disclosure justifies the generalising isolation of the feature and its introduction into the claim. Applicants should thus draft applications covering all important feature combinations and include reasonable intermediate features and sub-combinations of features into the description.

Similarly, applicants should not delete an essential feature from an independent claim as originally filed. Deleting such a feature from an independent claim is permissible only if (a) the replaced or removed feature was not explained as essential in the originally filed disclosure, (b) the feature is not, as such, indispensable for the function of the invention in the light of the technical problem solved by the invention, and (c) replacement or removal requires no modification of one or more features to compensate for the change. This is a difficult test to pass, so applicants should include only the most important features into their independent claims.

During EPO prosecution, you should not amend your main claim to add a limiting feature that lacks verbatim support to help avoid the so-called inescapable trap during opposition. In this scenario, you cannot remove that limitation, because that would broaden the claim, which is not permitted in an opposition. In addition, you cannot leave the feature in the claim, as that is also not permitted if you have insufficient written support. Thus, in this scenario, the patent can be revoked in its entirety.

In the US, patent law also prohibits adding new matter when amending a claim or the specification, but the support requirements are quite a bit more relaxed than in the EPO. For example, claims can be amended to add subject matter that is recited in the specification, examples, and figures, and there is no requirement for verbatim support. However, the applicant must still show that there is some factual support in the application to avoid the claims from being rejected for including subject matter that was not originally described in the application.

"The right of priority in Europe can easily be lost based on minor changes in the subsequent application or the wording of the claims."

Practice tips

- Describe intermediate combinations and sub-combinations of features in the specification.
- Specify the technical effects that flow from the invention for best support in European practice, and this may be helpful for US prosecution as well.
- Do not amend a claim in a European patent application to add a limiting feature that lacks verbatim support.
- If elements shown in figures are likely to be important, describe those elements (preferably in claim-like language) in the description in detail.

"Functional claims are more common in Europe, which can pose challenges for applications drafted in the European style and later filed the US."

Declarations and post-filing data

In the US, post-filing data can be submitted in the form of declarations. Submission of declarations is common in US patent prosecution practice. For example, Rule 132 declarations, can be used by patent applicants to:

- Rebut Section 101 rejections
- Rebut Sections 102 and 103 rejections, such as by showing test results, commercial success, inoperability of the referenced combination, long-felt unresolved need, or mischaracterization of a reference by the examiner
- Rebut Section 112 rejections, such as by establishing the level of knowledge in the field
- Rebut a holding of undue experimentation
- Rebut allegations of inherency in prior art disclosures

Rule 130 declarations can also be used by the applicant to avoid prior art published less than one year before the filing date. This can be accomplished by establishing entitlement to the one-year grace period or by disqualifying a prior disclosure as not being a part of the prior art. To disqualify a prior disclosure, the declarant can (a) show that the disclosure was made by or obtained from the inventor(s) (declaration of attribution), or (b) establish that disclosure had, before such disclosure was made or effectively filed, been publicly disclosed by the inventor(s) (prior disclosure declaration). Such prior disclosure declarations are referenced on the face of the patent and are not recommended for applications that will subsequently be filed in Europe, because such admissions can be used to extinguish foreign patent rights.

In the US, the general rule of admissibility for post-filing data is that the patent examiner should accept as true what is submitted in a declaration unless he or she has a reason not to accept the truth of the declaration. In the US, the prohibition against inequitable conduct can be used to challenge declarations later in litigation. However, this is not the case in Europe. Rather, the admissibility of post-filing data in Europe depends upon whether the application as filed provides a plausible disclosure to the problem that has been put forward in the application. As a result, the ability to submit post-filing data is comparatively limited in Europe.

The root of the plausibility doctrine in Europe comes from the 2005 BoA decision *T 1329/04*, which defines an invention as being a contribution to the art, i.e. as solving a technical problem, and requires that: "it is at least made plausible by the disclosure in the application that its teaching solves indeed the problem it purports to solve."

To have an invention, the applicant must therefore show that the application at least makes it plausible to conclude that a problem has been solved rather than merely identified. If an effect is found not to be plausible in view of the application as filed, the plausibility issue cannot be remedied using post-filing evidence under many circumstances.

Practice tips

- Include all available data relevant for the invention in the application to be filed.
- Link the data to the technical teaching.
- Strike a balance between securing an early filing date and trying to clear the plausibility hurdle in later prosecution.

By keeping in mind the differences and similarities between the patentability requirements and prosecution schemes in the US and in Europe, applicants can prepare patent applications that will best serve their needs in both jurisdictions.

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Moritz Ammelburg

J Peter Fasse

Moritz Ammelburg and J Peter Fasse are principals at Fish & Richardson in Munich and Boston, respectively.

IP STARS rankings 2022: Top firms for patent work

Managing IP is delighted to reveal some of the IP STARS 2022 rankings of the leading firms for patent work. This is the third set of firm ranking results from the research for the 2022 edition of IP STARS, which started in September 2021. The rankings in this edition represent only a fraction of the jurisdictions we cover.

Following the publication of the trademark rankings (in our spring edition) and the general intellectual property rankings (on **ipstars.com**), we are delighted to reveal some of our patent rankings in this edition. IP STARS is not a directory of all firms and individuals offering IP services. Participation in the research does not guarantee ranking. Read the research methodology below.

Congratulations to all the firms listed this year.

About IP STARS

Managing IP published its first legal directory in 1994 and rebranded it in 2013 as IP STARS. The IP STARS guide has expanded over the years and now covers over six IP practice areas and more than 70 jurisdictions, making it the most comprehensive, leading specialist rankings publication for the IP profession.

Research methodology

The research for these rankings was conducted rigorously and impartially by our team of research analysts in London, New York, and Hong Kong. Each year, we request information from thousands of firms, IP practitioners and their clients through interviews, email, and online surveys.

Firm rankings

Before compiling the rankings, our analysts also conducted their own independent research, including an analysis of publicly

available information (such as court or IP office data) and existing data we have about firms and their practitioners. The aspects assessed for the firm rankings include expertise, workload, market reputation and record, outcomes achieved for clients, and unique strengths in each practice area. Judgements about which firms to include in the rankings, and which tier and practice area they should be in, take account of all this information.

Firms are ranked alphabetically in tiers, or as highly recommended or recommended. The total number of firms listed varies from jurisdiction to jurisdiction. For most jurisdictions, the rankings are split into prosecution and contentious work. In a few jurisdictions, we evaluated and ranked firms for their overall patent practice.

The prosecution ranking takes account of pre- and post-registration work, including office proceedings and portfolio management advice. The contentious ranking covers patent-related disputes in and outside the courts. Where appropriate, some firms were ranked for both practice areas.

The 2022 firm rankings are based on information available at the time the research was completed (February 2022). Except for firm name changes, any subsequent developments or information that could influence our rankings will be considered during the research for the 2023 edition of IP STARS, which starts in September 2022.

For the avoidance of doubt, the ranking tables do not suggest or indicate that the expertise or services of the listed firms are limited to the practice area in question and Managing IP does not recommend or endorse any firm for IP work.

The IP STARS rankings are not influenced by any commercial relationship, including advertising, with Managing IP or IP STARS. No firm can pay to be included or to influence the results, and there is no fee to pay to participate in our research. The rankings are subject to change each year.

Please visit **ipstars.com** to learn more about our research methodology and read the terms of use concerning our content.

What to expect in the coming months

We will publish all the 2022 patent rankings in June on **ipstars.com**, a searchable website with news and analysis on firms and practitioners. More 2022 rankings, including the firm rankings for IP transactions and copyright work, and firm editorials will be published on **ipstars.com**. Visit the site as well as our LinkedIn and Twitter pages for the latest updates and announcements.

The research for the 2023 edition of IP STARS rankings will start in September 2022. If you have any feedback or questions about IP STARS, please contact our research editor Kingsley Egbuonu or email our research team at **research@managingip.com**.

CANADA

PATENT CONTENTIOUS

TIER 1
Goodmans
Gowling WLG
McCarthy Tétrault
Osler Hoskin & Harcourt
Smart & Biggar
Torys
TIER 2
Aitken Klee
Belmore Neidrauer
Bereskin & Parr
Borden Ladner Gervais
Norton Rose Fulbright
TIER 3
Bennett Jones
Blake Cassels & Graydon
DLA Piper
Fasken
Robic
OTHER NOTABLE FIRMS
Aird & Berlis
Deeth Williams Wall
Gilbert's
Lenczner Slaght

PATENT PROSECUTION

TIER 1
Bereskin & Parr
Borden Ladner Gervais
Gowling WLG
Smart & Biggar
TIER 2
Norton Rose Fulbright
Robic
TIER 3
Bennett Jones
Blake Cassels & Graydon
Marks & Clerk
McCarthy Tétrault
Osler Hoskin & Harcourt
Ridout & Maybee
OTHER NOTABLE FIRMS
Aird & Berlis
Fasken
Lavery
PCK
Torys

CHINA

PATENT CONTENTIOUS (DOMESTIC FIRMS)

TIER 1

Fangda Partners
King & Wood Mallesons
Lifang & Partners

TIER 2

CCPIT Patent and Trademark Law Office
China Patent Agent (HK)
LexField Law Offices
Liu Shen & Associates
Unitalen Attorneys at Law
Wanhuida Intellectual Property

TIER 3

AFD China Intellectual Property Law Office
Han Kun Law Offices
Kangxin Partners
Lung Tin Intellectual Property Agent
NTD Intellectual Property Attorneys
Zhong Lun Law Firm
Zhongzi Law Office

OTHER NOTABLE FIRMS

An Tian Zhang & Partners
AnJie Law Firm
Chang Tsi & Partners
Jincheng Tongda & Neal
JunHe
Watson & Band
ZY Partners

INTELLECTUAL PROPERTY

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Han Kun's intellectual property group provides premium services to clients, covering IP due diligence, patent prosecution, patent litigation, anti-trust litigation, soft IP cases and commercial transactions. The group is particularly specialized in handling IP matters involving complicated information and communications technologies. Clients constantly demand Han Kun's service when it comes to their high-profile litigation need, in particular for their betting-the-company cases.

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Han Kun's intellectual property lawyers and patent attorneys are graduates of top law schools and technology institutions around the globe. They have diverse technical backgrounds and expertise, unique perspectives, and extensive experience in providing value-added intellectual property services. Han Kun's intellectual property practice has won the trust and praise of both domestic and international clients for their professional services and diligent work ethic.

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- Licensing and contract matters in relation to IP rights;
- Consulting on IP assets and strategies;
- Translation of legal documents

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9 Guang'an Road, Fengtai District,
Beijing, 100055, China

CHINA

PATENT PROSECUTION (DOMESTIC FIRMS)

TIER 1

CCPIT Patent and Trademark Law Office
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King & Wood Mallesons
Liu Shen & Associates

TIER 2

China Science Patent & Trademark Agent
NTD Intellectual Property Attorneys
Unitalen Attorneys at Law
Zhongzi Law Office

TIER 3

AFD China Intellectual Property Law Office
Beijing East IP
Beijing Sanyou Intellectual Property Agency
China Sinda Intellectual Property
Jeekai & Partners
Kangxin Partners
Lung Tin Intellectual Property Agent
Shanghai Patent & Trademark Law Office
Wanhuida Intellectual Property

OTHER NOTABLE FIRMS

Advance China IP Law Office
Chang Tsi & Partners
Han Kun Law Offices

CHINA

PATENT (FOREIGN FIRMS)

TIER 1

Bird & Bird

TIER 2

Baker McKenzie FenXun
DLA Piper
Jones Day
Orrick Herrington & Sutcliffe
Rouse

TIER 3

AWA
Deacons
Hogan Lovells
Spruson & Ferguson

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Allen & Overy
Finnegan Henderson Farabow Garrett & Dunner
Gowling WLG
Morgan Lewis & Bockius
Ropes & Gray
Simmons & Simmons

DENMARK

PATENT CONTENTIOUS

TIER 1
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Plesner

TIER 2
Bugge Valentin
Gorrissen Federspiel
Kromann Reumert

TIER 3
Accura
Horten

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Lundgrens

PATENT PROSECUTION

TIER 1
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Inspicos
Plougmann Vingtoft
Zacco

TIER 2
aera
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Guardian IP Consulting
Høiberg

TIER 3
Patentgruppen

OTHER NOTABLE FIRMS
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Patrade
Potter Clarkson

GERMANY

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Hoyng Rokh Monegier

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Kather Augenstein
Krieger Mes & Graf von der Groeben
Preu Bohlig & Partner
Quinn Emanuel Urquhart & Sullivan
Rospatt Osten Pross
Taylor Wessing
Wildanger Kehrwald Graf von Schwerin & Partner

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Jones Day
Klaka

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CBH
DLA Piper
EIP
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Hengeler Mueller
Linklaters
Simmons & Simmons
Taliens

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Eisenführ Speiser
Grünecker
Maikowski & Ninnemann
Maiwald

TIER 3
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Isenbruck Bösl Hörschler
König Szynka Tilmann von Renesse
Meissner Bolte
Samson & Partner
Wuesthoff & Wuesthoff

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Michalski Hüttermann & Partner
Peterreins Schley
Ter Meer Steinmeister & Partner
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Inspicos has been ranked in Tier 1 by Managing Intellectual Property for the 15th consecutive year.

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Hoffmann Eitle
Maiwald
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Eisenführ Speiser
Isenbruck Bösl Hörschler
Meissner Bolte
Samson & Partner
Uexküll & Stolberg
Wuesthoff & Wuesthoff

TIER 3

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Dompatent von Kreisler
König Szynka Tilmann von Renesse
Kuhnen & Wacker
Maikowski & Ninnemann
Manitz Finsterwald
Viering Jentschura & Partner
Weickmann & Weickmann

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Michalski Hüttermann & Partner
Prüfer & Partner
Ter Meer Steinmeister & Partner
Wallinger Ricker Schlotter Tostmann
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Kiortsis & Associates
Malamis & Associates

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Firm profile

Established in 1919 by Dr. E. Patrinos, Patrinos & Kilimiris is the oldest Patent and Trade Mark Agency in Greece. Since then, the firm has expanded to become one of the leading law firms in Greece, with more than 20 collaborators, including 5 attorneys. The firm actively practices in all sectors of commercial law, with a primary focus on Intellectual Property protection under European and Greek Law.

Areas of specialization

The firm provides a full range of legal and technical services provided by experienced patent and trademark attorneys including Patent, Trade Mark and Design counseling, filing and prosecution, Copyright protection, Domain Name registration and disputes, customs actions, franchising, distribution and license agreements as well as technical translations.

Furthermore, the firm undertakes substantial IP litigation up to the Supreme Court, having well established relations with eminent judicial, technical, law scholars and other appropriate experts. Patrinos & Kilimiris has a strong record of successful litigation in IP infringement proceedings acting for large international and domestic companies in all areas of IP and have established an unparallel expertise in patent litigation relating to the pharmaceutical industry.

International memberships

AIPPI, ECTA, EPI, EPLAW, FICPI, INTA, PTMG, MARQUES

INDIA

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- Singh & Singh

TIER 2
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- S Majumdar & Co
- Saikrishna & Associates

TIER 3
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- Krishna & Saurastri Associates
- Lall & Sethi
- Obhan & Associates
- RK Dewan & Co

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- Rahul Chaudhry & Partners

PATENT PROSECUTION

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Bugnion SpA
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TIER 3
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GLP
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- Yuasa and Hara

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- Mori Hamada & Matsumoto
- Ohno & Partners

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- Soei Patent & Law Firm
- Sonderhoff & Einsel Law and Patent Office

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- Ohtsuka Patent Office
- RYUKA IP Law Firm

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TIER 2
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- Orrick Herrington & Sutcliffe

TIER 3
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- Foley & Lardner
- Jones Day
- Paul Hastings
- Quinn Emanuel Urquhart & Sullivan

MALAYSIA

PATENT CONTENTIOUS

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Shearn Delamore & Co
Skrine
Wong & Partners (Baker McKenzie)

TIER 2
Wong Jin Nee & Teo
Zaid Ibrahim & Co

TIER 3
Chooi & Company + Cheang & Ariff
Christopher & Lee Ong
Rahmat Lim & Partners
Shook Lin & Bok
Tay & Partners

OTHER NOTABLE FIRMS
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Raja Darryl & Loh
Ram Caroline Sha & Syah

PATENT PROSECUTION

TIER 1
Henry Goh & Co
Marks & Clerk
Shearn Delamore & Co
Skrine

TIER 2
Advanz Fidelis IP
KASS International
Wong & Partners (Baker McKenzie)
Zaid Ibrahim & Co

TIER 3
Mirandah Asia
Pintas Consulting Group
Rahmat Lim & Partners
Tay & Partners
Wong Jin Nee & Teo

MEXICO

PATENT CONTENTIOUS

TIER 1
Arochi & Lindner
Basham Ringe y Correa
Olivares

TIER 2
Becerril Coca & Becerril
Calderón & De La Sierra
Uhthoff Gómez Vega & Uhthoff

TIER 3
Dumont
Goodrich Riquelme y Asociados

OTHER NOTABLE FIRMS
AVA
Baker McKenzie
Bufete Soní
Müggenburg Gorches y Peñalosa
Santamarina y Steta
TMI Abogados

PATENT PROSECUTION

TIER 1
Arochi & Lindner
Becerril Coca & Becerril
Olivares
Uhthoff Gómez Vega & Uhthoff

TIER 2
Basham Ringe y Correa
Calderón & De La Sierra
Dumont

TIER 3
AVA
ClarkeModet
Goodrich Riquelme y Asociados
Mendez + Cortes
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OTHER NOTABLE FIRMS
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C&L Attorneys
Iberbrand
Santamarina y Steta
TMI Abogados

SINGAPORE

PATENT CONTENTIOUS

TIER 1
Allen & Gledhill
Bird & Bird ATMD
Dentons Rodyk & Davidson
Drew & Napier

TIER 2
Amica Law
Rajah & Tann

TIER 3
Baker McKenzie Wong & Leow
Lee & Lee
Mirandah Law
Ravindran Associates

OTHER NOTABLE FIRMS
Shook Lin & Bok

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TIER 1
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Spruson & Ferguson
Viering Jentschura & Partner

TIER 2
Allen & Gledhill
Amica Law
Donaldson & Burkinshaw
Drew & Napier

TIER 3
Baker McKenzie Wong & Leow
Bird & Bird ATMD
Davies Collison Cave
Dentons Rodyk & Davidson
McLaughlin IP

OTHER NOTABLE FIRMS
Mirandah Asia

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PATENT CONTENTIOUS

TIER 1
Bae Kim & Lee
Kim & Chang
Lee & Ko

TIER 2
Shin & Kim
Yoon & Yang
Yulchon

TIER 3
Darae Law & IP Firm
FirstLaw PC
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- YP Lee Mock & Partners

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- Lee International IP & Law
- NAM & NAM
- You Me Patent & Law Firm

TIER 3
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- Koreana Patent Firm
- Lee & Ko
- Muhann Patent & Law Firm

OTHER NOTABLE FIRMS
- AIP Patent & Law Firm
- Hanol IP & Law
- KBK & Associates
- Yoon & Lee International Patent & Law Firm
- Yoon & Yang

TAIWAN

PATENT CONTENTIOUS

TIER 1
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- Tsar & Tsai Law Firm

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- Saint Island International Patent & Law Offices
- Tai E International Patent & Law Office
- Tsai Lee & Chen

TIER 3
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- Formosan Brothers
- Jones Day
- TIPLO Attorneys-at-Law

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PATENT PROSECUTION

TIER 1
- Lee and Li Attorneys at Law
- Saint Island International Patent & Law Offices
- Tai E International Patent & Law Office
- Top Team International Patent & Trademark Office
- Tsai Lee & Chen

TIER 2
- Deep & Far Attorneys at Law
- TIPLO Attorneys-at-Law
- Tsar & Tsai Law Firm

TIER 3
- Formosa Transnational
- SUNDIAL Intellectual Property Law Firm

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attorneys@leeandli.com
https://www.leeandli.com

UNITED KINGDOM (ENGLAND)

PATENT CONTENTIOUS (LAW FIRMS)

TIER 1
- Allen & Overy
- Bird & Bird
- Bristows
- Hogan Lovells
- Pinsent Masons
- Powell Gilbert
- Taylor Wessing

TIER 2
- Gowling WLG
- Herbert Smith Freehills
- Kirkland & Ellis
- Simmons & Simmons

TIER 3
- Mishcon de Reya
- Osborne Clarke
- WilmerHale

OTHER NOTABLE FIRMS
- CMS
- Fieldfisher
- Freshfields Bruckhaus Deringer
- Linklaters
- Wiggin

PATENT CONTENTIOUS (PATENT & TRADE MARK ATTORNEY FIRMS)

TIER 1
- Carpmaels & Ransford
- EIP

TIER 2
- HGF Law
- Marks & Clerk Law
- Potter Clarkson

TIER 3
- Venner Shipley

OTHER NOTABLE FIRMS
- Haseltine Lake Kempner
- Withers & Rogers

PATENT PROSECUTION

TIER 1
- Boult Wade Tennant
- Carpmaels & Ransford
- D Young & Co
- Dehns
- HGF
- J A Kemp
- Kilburn & Strode
- Mewburn Ellis
- Potter Clarkson

TIER 2
- Gill Jennings & Every
- Haseltine Lake Kempner
- Marks & Clerk
- Mathys & Squire
- Maucher Jenkins
- Reddie & Grose
- Venner Shipley
- Withers & Rogers

TIER 3
- Abel & Imray
- Appleyard Lees
- Barker Brettell
- EIP
- Elkington + Fife
- Forresters
- Keltie

OTHER NOTABLE FIRMS
- AA Thornton
- Beck Greener
- Cleveland Scott York
- Murgitroyd
- Page White Farrer
- Wilson Gunn

UNITED KINGDOM (SCOTLAND)

PATENT CONTENTIOUS

HIGHLY RECOMMENDED
- Burness Paull
- Pinsent Masons

RECOMMENDED
- Brodies
- Dentons

PATENT PROSECUTION

TIER 1
- HGF
- Marks & Clerk
- Murgitroyd

TIER 2
- Creation IP
- Hindles
- Lawrie IP
- Lincoln IP

TIER 3
- Scintilla

UNITED STATES

PATENT CONTENTIOUS

TIER 1

Desmarais
Finnegan Henderson Farabow Garrett & Dunner
Fish & Richardson
Gibson Dunn & Crutcher
Kirkland & Ellis
Latham & Watkins
Quinn Emanuel Urquhart & Sullivan
WilmerHale

TIER 2

Arnold & Porter
Cooley
Covington & Burling
Durie Tangri
Irell & Manella
Jones Day
Keker Van Nest & Peters
McKool Smith
Morrison & Foerster
Orrick Herrington & Sutcliffe
Paul Hastings
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Weil Gotshal & Manges
Williams & Connolly
Winston & Strawn

TIER 3

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DLA Piper
Goodwin Procter
Kilpatrick Townsend & Stockton
King & Spalding
Knobbe Martens
Mayer Brown
McDermott Will & Emery
Perkins Coie
Ropes & Gray
Venable

PATENT PROSECUTION

TIER 1

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Fish & Richardson
Knobbe Martens
Sterne Kessler Goldstein & Fox

TIER 2

Cooley
Fenwick & West
Foley & Lardner
Kilpatrick Townsend & Stockton
Oblon McClelland Maier & Neustadt
Schwegman Lundberg & Woessner
Venable

TIER 3

Banner Witcoff
Bookoff McAndrews
Choate Hall & Stewart
Harness IP
Haynes and Boone
Hunton Andrews Kurth
Leydig Voit & Mayer
Marshall Gerstein & Borun
McDermott Will & Emery
Merchant & Gould
Morrison & Foerster
Perkins Coie
Pillsbury Winthrop Shaw Pittman
Rothwell Figg Ernst & Manbeck
Wolf Greenfield & Sacks
Womble Bond Dickinson

PTAB LITIGATION

TIER 1

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Haynes and Boone
Paul Hastings
Sterne Kessler Goldstein & Fox
WilmerHale

TIER 2

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Cooley
Kirkland & Ellis
Knobbe Martens
Perkins Coie
Quinn Emanuel Urquhart & Sullivan
Ropes & Gray
Weil Gotshal & Manges

TIER 3

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Patent examination practice and application strategy for AI-related inventions in China

Xiaowei Wei and Lili Wu of Han Kun Law Offices review the guidelines for patent examination in China and propose potential strategies going forward

Digital transformation is discussed and practiced in various industries across China and the whole world. Artificial Intelligence (AI) related inventions have become important intangible assets that innovative entities are competing to accumulate.

Accordingly, the patent examination practice and application strategy of AI-related inventions have also become a hot topic in recent years. In addition to AI itself, the 'computer-implemented inventions for new industries' also include the fields that are related to the implementation scenarios of AI, such as 'big data' and 'business methods'.

The innovation points of such inventions may be the technical means itself, or may focus on business rules or management rules, or may be embodied as algorithms. The diversity of innovation points leads to differences in the patent examination in this field, compared to the patent examination in the traditional electricity field.

Since the State Council of China issued Circular 71 in 2015 which pointed out the need to strengthen the IP protection of innovations in new industries and fields, the Guidelines for Patent Examination have been revised several times. These revisions include but are not limited to, enriching the types of patentable subject matter and exploring the substantive examination standard for the patentable subject matter and inventiveness of such technical solutions.

On August 3 2021, the China National Intellectual Property Administration (CNIPA) released the latest Draft Revision of the Guidelines for Patent Examination (Draft for Comments) (Draft Revision of the Guidelines), which further clarifies the examination provisions for the computer-implemented inventions in new industries to meet the growing and changing needs of innovative subjects to protect their inventions, and simultaneously make the patent protection of inventions still conform to the original intention of the patent system without going beyond the protection to technical solutions.

Highlights and analysis of corresponding strategy suggestions

Incorporating the computer readable storage media and the computer program product into the types of patentable subject matter for inventions, and strengthening the patent protection for pure software innovations (see Section 5.2, Chapter 9, Part II of the Draft Revision of the Guidelines).

Patentable subject matter related to software for inventions

The Draft Revision of the Guidelines clearly states that claims with subject matter of 'computer readable storage medium' or 'computer program product' can be protected. It is also the strongest protection given to computer program inventions since the introduction of examination regulations for computer program related inventions in the 'the Guidelines for Patent Examination' of 1993.

Specifically, the current patent examination practice has allowed the computer readable storage media to be one of the types of patentable subject matter that can be protected by invention patents.

The Draft Revision of the Guidelines confirms this examination practice and further specifies the computer programs product claims are also one of the types of patentable subject matter that can be protected by invention patents. It achieves an important step for the protection of computer program related products from tangible products (such as equipment, storage media) to intangible products (such as computer program products released on the internet).

It undoubtedly expands the scope of infringing products and reduces the difficulties of obtaining evidence. For example, previously, if a patent infringing program product was found on the internet for download, it may be necessary to prove the existence of its tangible carrier medium to be consistent with the subject matter of the claims (e.g., device, storage medium, etc.). However, once computer program related products also include intangible products, as long as the computer program of the alleged infringing product can be obtained from the internet, the evidence can be obtained without worrying about the existence of tangible media.

Compared to the examination practices of the US, Europe, Japan, South Korea, and other world IP offices, the revision of the patentable subject matter in the examination guidelines conveys a signal that the CNIPA will perform comprehensive and strong protection on the computer program related inventions, which is undoubtedly a great encouragement for the vast number of software innovation entities to continue their innovation.

Patent application strategies for AI new industry inventions

An additional computer readable storage medium claim and computer program product claim may be added to the patent application file with the form of alternatively referring to prior method claims.

Further improving and clarifying the examination standard for the patentable subject matter of AI new industry inventions, and improve the predictability of determining the patentable subject matter (see Section 6.1.2, Chapter 9, Part II of the Draft Revision of the Guidelines).

Examination standard for the patentable subject matter of AI new industry inventions

The Draft Revision of the Guidelines further improves the examination standard for the patentable subject matter of inventions, and adds examples to illustrate that if at least one of the following conditions is met, the claim of the computer implemented invention in new industries complies with Article 2, Paragraph 2 of the Patent Law:

1. The data processed by the algorithm is the data with definite technical meaning in the technical field. The execution of the algorithm can directly reflect the process of solving a technical problem by using natural laws, and obtaining technical effects; or

2. There is a specific technical correlation between the algorithm and the internal structure of the computer system, which can solve the technical problem of how to improve the hardware operation efficiency or execution effect, thereby obtaining the technical effect of improving the internal performance of the computer system that complies with natural laws; or

3. The solution targets big data in specific application fields, and uses algorithm tools to mine the inherent correlation in the data that complies with natural laws, thereby solving the technical problem of how to improve the reliability or accuracy of big data analysis in specific application fields, and obtain corresponding technical effects.

It can be seen from the above three conditions that although innovations included in the patentable subject matter should be based on 'technique', they can still be protected as a patent as long as the innovation can be associated with 'technique'.

Condition 1 mentioned above is relatively easy to understand and will not be further explained. Conditions 2 and 3 are explained below.

Condition 2: Algorithm and the internal structure of the computer system

The Draft Revision of the Guidelines takes 'internal performance improvement of computer systems that comply with the natural laws' as a typical condition that comply with Article 2, Paragraph 2 of the Patent Law.

Specifically, the algorithm in some solutions may not involve specific technical fields such as image processing or industrial control. However, the implementation or improvement of the algorithm is not only related to an abstract algorithm but also has technical correlations with the internal structure of computer systems.

Therefore, it can solve the technical problems of how to improve the efficiency of hardware operation or execution effect (including reducing the amount of data storage, reducing the amount of data transmission, and improving the hardware processing rate, etc.), and then it can obtain the technical effect of improving the internal performance of the computer system that complies with natural laws. In this case, the solution is also the technical solution described in Article 2, Paragraph 2 of the Patent Law.

The key point of this condition is that the improvement of the internal performance of the computer system is achieved by the specific technical correlations between the algorithm characteristics and the internal structure of the computer system, which also complies with the natural laws.

In other words, the algorithm scheme that complies with Article 2, Paragraph 2 of the Patent Law should not only involve the realisation of abstract concepts but also involve how the algorithm cooperates with the computer system having the internal structure of software and hardware in order to work (hardware structures such as memory, processor, software structures such as databases, threads, processes).

If a solution reduces the time for a computer system to run a program only through the abstract algorithm itself (such as an abstract array sorting method, an array search method, etc.), it does not meet the condition of 'the internal performance improvement of the computer system that complies with natural laws' described here.

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Xiaowei has helped a considerable number of worldwide renowned companies obtain nearly a thousand patents in China, and provided them with valuable advice for patent prosecution strategies in China. She has also helped many Chinese companies obtain patents in Europe, the US, and other jurisdictions.

Condition 3: Algorithm tools to mine the inherent correlation in the data that complies with laws of nature

In recent years, the application scenarios of using algorithm tools to mine internal correlations from big data grows rapidly. Traditionally, the task of mining internal correlations from a large amount of data can be described as a difficult, complex, and cost-intensive task. However, today it can be done by a combination of big data and artificial intelligence algorithms. These algorithms play an important role in many fields, such as smart medical care, financial insurance, and e-commerce, with high application value.

On one hand, relevant innovative entities wish that their innovations related to big data algorithms can be protected as patents. On the other hand, policymakers are also trying to deal with issues such as how to define the techniques of such technical solutions and the boundaries of protection for them.

We are pleased to see that the Draft Revision of the Guidelines provides a way of determining the patentable subject matter for the inventions of big data algorithm solutions. That is, if internal correlations in data mined by the algorithm tools comply with natural

laws with solving technical problems of big data analysis accordingly and obtaining corresponding technical effects, this solution is also the technical solution described in Article 2, Paragraph 2 of the Patent Law.

Then the question arises: what kind of correlations in the data belongs to the so-called 'internal correlations that comply with the natural laws'? For example, the correlation between 'symptoms', 'medical images' and 'diagnosis results' is certainly an internal correlation that 'complies with natural laws'; the correlation between 'machine operation data' and 'machine failure types' also certainly belongs to the internal correlations that 'comply with natural laws'. The correlations between these data with clear technical fields usually do not lead to much controversy.

Therefore, the most concerned question is: if the data is not collected from the technical field with such a clear application and the data itself does not have a clear technical field attribute, then whether it is possible to have the 'internal correlation that complies with nature laws' in the data?

Combining the two examples below (Zhengzhou, September 2021, 'Business Communication and Training Course in the Electrical Field') , the 'internal correlation that complies with the natural laws' is discussed further.

Example 1: A method for analysing the propensity of using e-coupons, which is characterised by comprising:

- Categorising an e-coupon based on information of the e-coupon to obtain e-coupon types;
- Obtaining user sample data based on the application scenarios of the e-coupons;
- Extracting user behaviour characteristics from the user sample data based on user behaviours, the user behaviours comprising: browsing web pages, searching keywords, following, adding to cart, purchasing and using e-coupons;
- Training the recognition model of e-coupon using propensity for different types of e-coupons with the user sample data as training samples and the user behaviour characteristics as attribute labels; and
- Predicting using probability of the e-coupons by the trained recognition model of e-coupon using propensity, obtaining the using propensity of the user for different types of e-coupons.

The solution in Example 1 belongs to the patentable subject matter as the method mines the internal correlation between user behaviour characteristics (long browsing time, large searching times, frequent use of e-coupons, etc.) and the propensity to use e-coupons. This internal correlation is considered as complying with natural laws.

Before further discussing Example 1, we consider Example 2 for comparison.

Example 2: A price prediction method for financial products, which is characterised by that the method comprises:

- Obtaining the price prediction model by training a neural network model using N+1 daily indicator historical price data of financial products, where the first N daily indicator historical price data are used as sample input data and the last 1 daily indicator historical price data are used as sample result data; and
- Using the price prediction model and recent N daily indicator historical price data to predict the price data of the financial products in a future day.

The solution in Example 2 does not belong to the patentable subject matter, as the correlation between the historical financial product price data and the future price data is considered to follow the economic laws rather than natural laws.

Seeing this, there may be a question. The correlation between user behaviour and the propensity to use e-coupons and the correlation between historical price data and future price data both seem to be related to human behaviour. Why is the former one considered to

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Lili has litigated many patent cases over the years, and has represented clients in several court cases which have been recognised as typical cases by the PRC Supreme People's Court and the Beijing High Court. She is also active in international associations, leading and participating in the study of legal issues and drafting of reports and is a frequent speaker in different international conferences.

"AI related inventions have become important intangible assets that innovative entities are competing to accumulate."

comply with natural laws, while the latter one is considered to be the economic laws?

The issue involved here is a complex question about human attributes. In fact, humans have both biological and social attributes. Those behaviours and rules that follow the biological attributes of humans can generally be considered as having technical attributes and belong to natural laws. While those behaviours and rules that follow the social attributes of humans can generally be considered as having economic attributes and belong to the human-made rules.

More specifically, specific behaviour characteristics involving a single individual (such as specific interaction behaviours between a user and applications, like click actions, browsing time, and search times) can be considered as having biological properties and comply with natural laws.

On the other hand, statistical characteristics involving human groups (such as the result of a large population of human actions, like price changes, and buying and selling volumes) are generally considered as having social properties and belong to the range of economics or sociology.

Because the data correlation mined in Example 1 involves the correlation related to the specific behaviour of an individual user (such as browsing the web, searching keywords, following, adding to the shopping cart, purchasing, and using e-coupons), the correlation can be considered as an internal correlation that complies with natural laws. On the contrary, because the data correlation mined in Example 2involves the correlation between historical prices and future prices as statistical data derived from group behaviours, the correlation is considered as not complying with natural laws but economic laws.

Patent application strategies for AI new industry inventions

When drafting an invention patent application related to an algorithm, it is necessary to describe the technical meaning of the data or describe the details of how the algorithm interacts with the internal structure of the software and hardware of the computer system, or reflect the natural laws that the internal correlations of the data to be mined comply with.

Further improving the examination standard for the inventiveness of the invention patents, and further illustrating that the algorithmic features or business rules, method features, and technical features, which are 'functionally support each other and have an interaction correlations', are considered as a whole in the examination of the inventive step, making the standard of inventive step more objective (see Section 6.1.3, Chapter 9, Part II of the Draft Revision of the Guidelines).

Examination basis for the inventiveness of invention patents in AI new industries

In the Draft Revision of the Guidelines, the logic for determining the inventiveness of the inventions in the new industries is a further interpretation of the 'integrated' consideration of technical solutions in the standard for determining inventiveness in China's patent examination practice. According to the Draft Revision of the Guidelines, combining with the characteristics of new industry inventions, the following key points need to be considered in the inventive step.

1. Problems improved by the algorithm in specific technical fields: if the algorithm features are applied to specific technical fields and can solve specific technical problems, the contribution of the algorithm features to the technical solution shall be considered during the inventive step examination;

2. Combining the algorithm with the internal structure of the computer system to jointly improve the internal performance of the computer system: if there is

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a specific technical correlation between the algorithm features and the internal structure of the computer system, which achieves the improvement of the internal performance of the computer system, the contribution of the algorithm features to the technical solution shall be considered during the inventive step examination;

3. Technical features that help improve business rules and methods: if the implementation of business rules and method features requires adjustment or improvement in technical means, the contribution of the business rules and method features to the technical solution shall be considered during the inventive step examination;

4. Taking the improvement of user experience as an auxiliary factor: if there are improvements of user experience brought or produced by technical features, or brought or produced by the technical features, algorithm or business rule and method features jointly, it should be considered during the inventive step examination.

Here, the 'user experience' is explained further as many user-oriented front-end applications of software are related to improving the user experience.

Improvement of user experience as an auxiliary factor

The original intention of many technical solutions may be the innovation of business rules or management rules. Since the innovation of these business rules or management rules requires the improvement of technical means, the overall solution forms a technical solution.

There are also some technical solutions with an ultimate purpose to bring a better experience to users, although the means used are all technical means. For these technical solutions, if their function is explained purely from a technical point of view, it will appear isolated and broken or even difficult to understand.

However, taking these technical features together with the features of the business or application context that are closely associated with them as a whole, and combining the description of the technical effect and the enhancement of user experience, will help to further emphasise the role of the technical means in the overall solution. Further, the ingenuity of scheme improvement as a whole can be fully and intuitively appreciated.

However, it should be emphasised here that, according to the Draft Revision of the Guidelines, the improvement of user experience cannot be independently used as a reason for inventiveness argument mainly due to the following two points:

- In addition to the improvement of user experience, technical effects should also be recited;
- Even for the improvement of user experience, it should also be recited what technical means result into the improvement of user experience.

In fact, the effect of 'improvement of user experience' itself does not necessarily have technical attributes. Therefore, 'improvement of user experience' alone is not sufficient for the arguments of technical effects. For example, the improvement of user experience may be brought by non-technical means. Non-technical means, such as pure business rules, aesthetic features, and artificial rules, can also achieve the improvement of user experience. Therefore, we cannot consider the improvement of user experience without technical effects. A detailed analysis from technical points of view about what effects it can bring is required.

Furthermore, when discussing the 'improvement of user experience', it should be avoided to only discuss the effect of 'improvement of user experience' itself. Instead, the discussion should involve what technical means lead to the improvement of user experience, to link the technical means with beneficial effects.

The discussion should also reflect the functional mutual support and interaction between non-technical features, such as business rules and method features, and technical features, which will contribute to inventiveness step examination and arguments.

Patent application strategies for AI new industry inventions

When drafting a patent application, it should emphasise the interaction between features, especially the interaction between non-technical features (such as algorithm features, business rules, and method features) and technical features, such as how the improvement of the algorithm can help to achieve a certain technical effect in a specific technical field, and which technical means need to be adjusted and improved for business mode innovation.

When using the effect of user experience improvement to reinforce inventiveness arguments, it should be noted to describe what specific technical means or what combination of technical means and non-technical means contribute to the user experience improvement.

Future trends

With the rapid changes in technology, the corresponding patent application and examination practices in China are also developing accordingly. Let our thinking closely follow the trend of technological innovation and the latest examination practices of the CNIPA to draft patent application files with better grant prospects and higher value, thereby maximising the protection of innovations.

The 4th amendment of China's Patent Law: one year on

Guanyang Yao, Yali Shao, Yuan Zhang of Liu Shen & Associates provide a practical insight into the 4th amended Patent Law in China

It has been almost one year since the 4th amendments to the Patent Law come into effect on June 1 2021. Although the detailed implementing regulations of the Patent Law and the examination guidelines are still pending, some Supreme Court judicial interpretations, the draft version of the revised examination guidelines and the new judgments in legal practice have provided certain guidance to topical issues, such as partial design, patent linkage system for drugs, punitive damages in patent infringement lawsuits and patent term adjustment.

Updates on partial design

The involvement of partial design is a significant change in the 4th amended version.

The IP industry is hoping that the examination guidelines will be issued in 2022 for partial design so that the filings of partial design will have some basis to rely on. Until now, only a draft version seeking for public opinions has been issued (on August 3 2021). Although this is not a formal version, it still provides some understanding of the potential plans for partial design filings.

First, the most attractive point is how to show such partial designs. In this draft version, it is regulated that solid line and broken line shall be used together to show a partial design, with the solid line showing the partial design seeking protection and the broken line

showing other parts. Other ways are also allowed, such as a single colour semi-transparent layer which can be used to protect the parts not to be protected. If necessary, dot-and-dash lines can be used as boundary line to separate the partial design from other parts. Therefore, we can see the logic for showing partial design is consistent with usual practice in other major jurisdictions.

Another important area is how to adjudicate infringement and related liability for the partial design. Until the GUI infringement case by the Shanghai IP Court on December 31 2021 there were no judgments for partial designs.

In this case, the patentee Jinshan owns a GUI design with the title of 'GUI for Mobile Communication Terminals'. The defendants are two software developers. In the past, it would be difficult to pursue the claims against such software developers since the GUI design should be connected closely with its product carrying such GUI, in this case mobile communication terminals, while the defendants are not phone manufacturers and the accused infringing GUI is only software but not a phone. In 2016, Beijing IP Court once issued a judgment in a similar case rejecting the establishment of infringement.

Five years later, the Shanghai IP Court overturned this. The Shanghai IP Court held that the characteristics of products using GUI and the specialties of developments in this field should be fully considered. Since a product using GUI has hardware, OS and APP provided by different entities, although defendants do not directly manufacture and sell phones, the infringing GUI design has been placed inherently in the phones via programming.

When the phone user uses the accused infringing software daily, all the dynamic processes of the accused infringing GUI will be inevitably presented, which is subjectively pursued by the defendants. The infringing GUI is playing irreplaceable substantial function when the software is used, therefore, providing the software is the reason to cause infringement. Based on the above reasonings, the court decided that the defendants' behaviour of providing the accused infringing software constitute infringement of the GUI patent.

The Shanghai IP Court is creating a new path to enforce GUI design patent by weakening the 'role' of the 'products'. This may be the logic for determining partial design infringement in the future when the products on which the partial design and accused infringing design are applied could be different.

Further, since the GUI design is rather popular in the market, this case also gives inspirations on how to enforce the GUI design patent right in legal practice. One hint could be that strategically there would be no need to involve phone manufacturers to avoid the case complicated legally and only those software developers would be qualified as defendants to make a strong case.

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Guanyang provides legal opinions on litigation strategy making, freedom-to-operate analysis, patent licensing, anti-unfair competition and trade secret protection. He has represented multiple domestic and international enterprises, covering technical fields including engineering, automobiles, software, telecoms SEPs, home appliances and medical devices. A number of cases handled by him have been selected as annual IP representative cases by local high courts and the Supreme Court, in providing guidance and clarifications on legal issues.

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The recent update is that the Hague system is effective in China since May 5 2022 and on that day 50 design filings have been submitted by 50 Chinese companies via the Hague system.

Punitive damages for patent infringement lawsuits

The incorporation of the punitive damages system is a controversial and influential revision, which has been discussed for a long time and finally decided in this 4th amended version. China has entered into the innovation-driven economy, therefore, strict and strong IP protection are necessary to enhance the confidence of innovators and keep good order of the market.

From a national policy level, other IP laws such as copyright law, trademark law and anti-unfair competition

law, have involved punitive damages at an earlier stage, the Patent Law is the last one to have such a 'punitive' element.

During the new implementing regulations of Patent Law is being formulated, the Supreme Court issued a judicial interpretation on March 3 2021 to regulate some important factors in calculating punitive damages in IP cases, which is believed to be incorporated into the implementing regulations in the future.

Generally, the judicial interpretation regulates that the punitive damages should be based on willful infringement with certain seriousness. 'Willful infringement' considers the elements such as the type of IP right and its status, popularity of the product, and relationship between the defendant and the plaintiff/interest party. 'Seriousness' includes means, frequency, duration, geographical scope, scale and effect of the IP infringement and the infringer's behaviour in the court proceedings. The highest level is five times of the original damage.

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Yali joined the firm in 1997 and mainly specialises in patent prosecution, re-examination, patent invalidation, patent licensing, IP litigation, and client counselling with a focus on electrical engineering, automatic control, telecommunication, electronics, computer science as well as the internet and e-commerce.

Yali handles a number of cases relating to patent examination, reexamination, invalidation, administrative lawsuit, infringement lawsuit, licensing and other IP related matters. In recent years, she has been leading matters including studies of patent law related regulations and suggestions on revision to the regulations, analysis including pre-litigation analysis, pre-invalidation analysis, and searching analysis; patent invalidation, patent infringement litigation relating to SEPs and non-SEP; patent protection studies for specific technical fields such as AI, IoT and 5G.

Although the preliminary approach for punitive damages in patent infringement lawsuits has come into shape, the judgments really applying such punitive damages in patent cases are very few.

According to statistic analysis issued by an IP judgment commercial database 'IP Lead' in 2021, there are 105 IP cases applying such punitive damages, among which only one case is the patent infringement case, while 23 cases are related to trademark infringement and 36 cases are related to copyright infringement. The highest damage is awarded as around $8 million, for a case pursuing trademark infringement and anti-unfair competition. This patent infringement case is related to a utility model and adjudicated by the Guangzhou IP Court to award the damages of approximately $500,000.

The punitive elements include that (i) the plaintiff and the defendant have business cooperation relation for two years, which is decided as subjective intention for manufacturing, selling and offering for sale the accused infringing products by the defendant after the cooperation; and (ii) the defendant did not cease the infringing acts after the filing of the lawsuit by the plaintiff and two administrative checks by the local IP authority, which are decided as seriousness.

Based on the above circumstances, the times/multiplier to calculate damages is decided as three, so that the original damage of around $140,000 increased to $500,000. This case is under judicial review by the Supreme Court IP Tribunal and the second instance judgment may be expected in 2022.

The experiences obtained from this case is that a new era for patent infringement is arriving. Now is the best time for the patentee to be a confident plaintiff, who does not need to hesitate to aggressively claim for punitive high damages since both judicial orientations and the evidence production and sanction system are providing solid supports.

For successful punitive damages, the most important strategy is to collect evidence from multiple perspectives to form an evidence chain so that the instinct 'willful mindset' of the accused defendants can be proved. Another factor is to establish the case in specialised IP courts/tribunals, which have experienced IP judges and technical investigators familiar with claim charting.

Patent invalidity procedure is worth paying much attention since its cycle can be as short as four–six months, with an invalidity rate of around 30% for inventions and around 50% for utility models and designs. In the situation of global parallel patent infringement series lawsuits, China has become an important battlefield since the injunction is automatic and the punitive damages is becoming mature.

Updates on PTA

The 4th amended Patent Law introduced the patent term adjustment (PTA) system, which allows the patent protection term for an invention patent in China to be longer than the statutory protection term of 20 years under certain conditions. More specifically, for an invention patent granted after four years from the date of application and three years from the date of requesting for substantive examination, the CNIPA shall, at the request of the patentee, compensate for patent grant period for the unreasonable delay during the granting process of invention patents, except for unreasonable delay caused by the applicant.

According to the draft revision of the implementing regulations of the Patent Law, the patentee may request a PTA within three months from the date of the announcement of a patent right. The CNIPA will review the above-mentioned request after the Revision of the Implementing Regulations becomes effective.

The unreasonable delay time in the granting process is calculated from the date of four years from the application filing date of the invention patent application and three years from the date of the request for substantive examination, to the date of announcement of the patent right.

According to the draft Revision of the Examination Guidelines, delays caused by the following circumstances are not unreasonable delays in the granting process: suspension procedures, preservation measures, administrative litigation procedures, and reexamination procedures in which amendments are made by the applicant.

According to the draft revision, the date of the request for substantive examination refers to the effective date of the request for substantive examination, and the effective date of the request for substantive examination is the date of issuance of the notification of entry into the substantive examination stage of the invention patent application.

In practice, since the detailed Implementing regulations of the Patent Law and the examination guidelines are still pending, it is advisable that the calculation of PTA should be based on a rough time period counted from the date of four years from the application filing date of the invention patent application and three years from the date of the request for substantive examination, to the date of announcement of the patent right, rather than calculation according to the details of the draft revision of the examination guidelines.

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Patent linkage system for drugs

The patent linkage system was introduced as a principled provision in the 4th amended Patent Law, clarifying that patentees or parties of interest are allowed to file a lawsuit or apply for an administrative ruling on patent disputes related to drugs applied for marketing authorisation.

The National Medical Products Administration (NMPA), the China National Intellectual Property Administration (CNIPA), and the Supreme Court (SPC) consecutively published implementation measures and judicial interpretations in July 2021, detailing operating mechanism of patent linkage system in China.

Briefly, under the patent linkage system, along with generic applications, generic drug companies are required to submit a patent statement disclosing any relevant patents listed on a patent information platform established by NMPA.

If the generic drug company makes a statement that its product does not fall within the scope of the relevant patent, or the relevant patent shall be invalidated, the patentees or the interested person may take action within 45 days after the publication of such

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"The involvement of partial design is a significant change in the 4th amended version."

statement, by filing a claim either with the court (judicial approach) or with the CNIPA (administrative approach).

For chemical drugs, such action will trigger a nine-month stay period, during which the NMPA would not approve the relevant generic drugs. If the patentee or the interested person can secure a favourable court judgment or a decision from the CNIPA within the stay period, the generic drug would not be approved until the relevant patent expires.

For generic companies, the patent linkage system further provides the conditions and procedures for the certification of non-infringement and a 12-month marketing exclusivity period that would be granted to the first generic company succeeding the patent challenge and receiving marketing authorization approval.

In July 2021, the NMPA established a patent information platform listing the patents relevant to brand-name drugs approved in China, as the basis for the patentees to assert their rights. Since then, patents involving over 1,000 drugs have been listed thereon.

In November 2021, the first patent linkage litigation was filed with Beijing IP court, involving a drug named eldecalcitol from Chugai Pharmaceutical Co., Ltd, with the asserted patent claiming the eldecalcitol formulation. The defendant is Wenzhou Haihe Pharmaceutical Co., Ltd, who filed a generic drug application in August 2021, claiming that their product would not fall within the scope of the asserted patent. Five months later after Chugai initiated the lawsuit, in April 2022, the Beijing IP court made a decision favouring the generic drug company, opining the generic drug is different from the technical solution claimed by the asserted patent.

From the administrative side, by the end of October 2021, 12 administrative cases under the patent linkage system were filed with the CNIPA. In April 2022, CNIPA announced it has made rulings on the first batch of cases involving the drug oxycontin. The rulings support the generic company's statements, determining that the generic drug does not fall within the scope of the asserted patents.

China amends its law on the supervision and administration of medical devices

Xiaojuan Yu of Purplevine IP Group discusses the medical device industry in China and considers why changes to the law are welcomed

The medical device industry in China is now embracing its 'golden age'. As of December 31 2021, it has recorded 28,954 medical device manufacturers nationwide, an increase of 13.8% compared with 25,440 in 2020.

The pharmaceutical market is developing rapidly in China where the benefits from policies have made industrial competitors focus more on their patent strategies. Mainland China has become the world's largest region for technical innovation after the US, Japan and Europe.

In order to further protect human health and safety by supervising and administrating medical devices and ensure the safety and effectiveness of those medical devices, in 2000, the State Council of the People's Republic of China issued and implemented the 'Regulation on the Supervision and Administration of Medical Devices' (the regulation). The regulation was amended in 2014, 2017 and 2021.

The latest amendment to the regulation was officially implemented on June 1 2021. The highlights of the revision are discussed below.

First, the regulation continues to strengthen the administration of the life cycle of medical devices from registration/recording to production, operation and use. Through implementing the system for medical device registrants and recordation entities, the regulation strengthens the responsibilities of enterprises.

The regulation specifies that registrants and recordation entities shall establish the quality management systems commensurate with products and maintain the effective operation thereof, strengthen the administration after the marketing of medical devices, establish and implement the product traceability and recall rules, and assume responsibilities according to the law for the safety and effectiveness of medical devices in the process of research and development, production, operation and use thereof.

Medical device registrants and recordation entities may produce medical devices by themselves, or commission other parties that comply with certain rules. The regulation also specifies the responsibilities and obligations of entities engaged in the online distribution and the responsibilities of operators of e-commerce platforms.

The relevant provisions involved are:

- Responsibility of registrants and recordation entities (paragraph 2, Article 13);
- Registration and recordation process of overseas entities as registrants and recordation entities (Articles 15 and 16);
- Establishing the quality management systems commensurate with products and maintaining the effective operation thereof (paragraph 1, Article 20);
- Developing the plans for research after the marketing of medical devices and risk management and control and ensuring the effective implementation thereof (paragraph 1, Article 20);
- Conducting adverse event monitoring and re-evaluation according to the law (paragraph 1, Articles 62 and 66);
- Establishing and implementing the product traceability and recall rules (Article 67);
- Commission agreements for commissioned production and responsibilities and obligations of both parties (paragraph 2, Article 34);
- Prohibition of production of the implantable medical devices with high risks on a commission basis (paragraph 3, Article 34);
- Relevant provisions regarding online distribution of medical devices (Article 46).

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Second, the regulation requires an implementation of certain reform of the medical device review and approval system of medical devices, and includes medical device innovation in the scope of development priorities to promote high-quality development of medical device industry.

The regulation specifies that the state shall give priority to the evaluation and approval of innovative medical devices to support the clinical promotion and use of innovative medical devices, support the basic research and application research of medical devices to facilitate the promotion and application of new medical device technologies.

In the meantime, enterprises shall be supported in establishing or jointly forming research and development institutions, and be encouraged to cooperate with institutions of higher education, scientific research institutes, and medical institutions, among others, in conducting research and facilitating innovations on medical devices, strengthen the IP protection for medical devices, and improve independent innovation capabilities in terms of medical devices.

The relevant provisions involved are:

- Giving priority to medical innovation review and approval to promote medical device innovation (Article 8);
- Supporting the basic research and application research of medical devices (Article 9);
- Commendation and reward of research and innovation of medical devices. (Article 12);
- Loosing requirements on registration and recordation of overseas innovative medical devices (paragraph 2, Article 15, and paragraph 2, Article 16);
- Encouraging medical institutions to conduct clinical trials of innovative medical devices (paragraph 3, Article 26).

Third, the regulation specifies that the state shall strengthen the information technology construction for the supervision and administration of medical devices, enhance the level of online government services, and facilitate the handling of administrative licensing and recordation of medical devices.

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"The pharmaceutical market is developing rapidly in China where the benefits from policies have made industrial competitors focus more on their patent strategies."

The relevant provisions involved are:

- Announcement of relevant recordation information by the State Council through the online government service platform (paragraph 3, Article 15);
- Announcement of relevant registration information by the State Council through the online government service platform (Paragraph 2, Article 18).

Fourth, the regulation strengthens supervisions and punishments for illegal acts.

The regulation stipulates that the state shall establish professional and specialised inspector teams and unique identification systems for medical devices, conduct extended inspection and impose punishments for dishonesty.

In the meantime, the state shall impose harsher punishments for violation of laws, severely increase the cost for violation as a means to intimidate the enterprises and individuals and punish the violators for their illegal acts. In addition, those who are suspected in criminal cases should be held criminally liable.

The relevant provisions involved are:

- Establishing a professional and specialised inspector system (Article 68);
- Implementing the unique identification system for medical devices (Article 38);
- Prohibition of the import of used medical devices that have been expired, invalid or eliminated (paragraph 3, Article 57);
- Reporting on the surveillance of adverse events of medical devices (paragraph 3, Article 64);
- Extended inspection of other relevant entities and individuals by medical products administrations (paragraph 2, Article 69);
- Regulatory measures against potential quality and safety hazards that are not eliminated in a timely manner in the process of production and operation (paragraph 1, Articles 72 and 74);
- Increase of cost for violation and clarification of responsibilities of each individual (Articles 81, 82, 83, 85, 86, 88, 89 and 90);
- Addition of four punishable situations regarding recordation (Article 84);
- Guidance of punishment for purchase of medical devices and failure to implement the responsibilities related to the whole life cycle administration of medical devices according to regulations (Article 89);
- Punishment for violating the relevant regulations of online distribution of medical devices and failure to comply with the quality management norms for clinical trials of medical devices (Articles 92 and 94);
- Punishment for failure of domestic enterprise legal person designated by a medical device registrant or recordation entity to fulfill relevant obligations in accordance with regulations (Article 98);

Generally, the 2021 edition of the regulation optimises the review and approval procedures and further strengthens the supervision of the whole life cycle of medical devices, accelerating the development of China's medical device industry while alleviating the problem of clinical application.

It is expected that the issuance of relevant supporting measures will boost industrial development and drive the innovation of medical device enterprises, so as to force enterprises into completing or reviewing their compliance management (including IP) and better control relevant risks in the life cycle of new products.

Currently, the US remains a primary medical device manufacturing country with the biggest export of patented technologies in the world. As one of the world's important medical device manufacturing bases, China represents nearly 20% of the global medical device market and is grabbing greater market share. Therefore, impressed by the sheer size of the Chinese market, foreign enterprises are casting eyes on China and making a foray into patented technology development.

In a broad sense, the enterprises are advised to prioritise patent mapping, track and monitor the trends for keeping abreast of the latest market developments. Besides, the enterprises can target some key areas or technical fields for patent classification and management, in a bid to grip trends of technical development. Technically speaking, medical devices are a fast-evolving sector, where greater efforts may be spared on patent portfolio planning.

Like all the other national markets, China's medical device market has its own unique regulation and competition environment. In fact, Chinese authorities have unveiled a stream of preferential policies for domestic products in various ways in recent years.

Nonetheless, it's unrealistic to completely localise medical devices in China, especially with importation playing a crucial part in innovation and technology transfer in the industry.

A reverse payment settlement agreement under antitrust scrutiny of China's SPC

Jianhui Li and Honghui Hu of Wanhuida Intellectual Property discuss the antitrust scrutiny of China's Supreme People's Court in a patent infringement appeal concerning reverse payment settlement agreement

On December 17 2021, the Intellectual Property Court of the Supreme People's Court (SPC) rendered a decision (2021) Zui Gao Fa Zhi Min Zhong #388 in a patent infringement appeal *AstraZeneca AB v Jiangsu Aosaikang Pharmaceutical Co., Ltd.* (ASK Pharm). It is China's first court decision concerning reverse payment pharmaceutical patent settlement, which is subject to the SPC antitrust scrutiny of its own accord. The case is included and published in the "Précis of the Adjudicating Gist of the Intellectual Property Court of the Supreme People's Court in 2021" (Case #47).

On April 23 2019, AstraZeneca lodged a patent infringement lawsuit against ASK Pharm before the Nanjing Intermediate Court, asserting its invention patent ZL01806315.2, which relates to Saxagliptin, a drug for treatment of type II diabetes. The patent at issue was assigned to AstraZeneca on May 23 2014, by Bristol-Myers Squibb Company (BMS).

On August 10 2011, a generic drug manufacturer Jiangsu Vcare Pharmatech Co. Ltd. (Vcare) filed an invalidation petition, challenging the Saxagliptin patent. On December 6 2011, BMS and Vcare signed a Settlement Agreement (the first agreement) and as agreed Vcare withdrew the invalidation petition within 5 days upon the entry-into-force of the agreement.

On January 4 2012, BMS and Vcare entered into a second Settlement Agreement, which superseded the first.

To reciprocate Vcare's withdrawal of invalidation petition, BMS would waive all legal liabilities for possible infringement and infringement of designated intellectual property rights as executed by Vcare and the associated parties thereof within the "prescribed period" (from January 1 2016 to the expiry date of the patent at issue).

In June and August 2012, ASK Pharm and Vcare successively reached a few cooperation agreements. As agreed, Vcare would be remunerated for completing the technical development of Saxagliptin tablets, while ASK Pharm would legitimately manufacture and sell Saxagliptin tablets in China before the expiry of the patent.

On October 30, 2020, the Nanjing Intermediate Court ruled in favour of ASK Pharm, finding that ASK Pharm, in the capacity of Vcare's associated party as prescribed in the Settlement Agreement, manufactured, sold and offered for sale Saxagliptin tablets within the agreed period, which did not constitute an infringement of the patent at issue. AstraZeneca later filed an appeal before the SPC, which accepted the case on March 10 2021.

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However, AstraZeneca filed on April 16 2021, an application for withdrawal of the appeal. In deciding whether to allow the withdrawal, the SPC examined the legitimacy of both parties' actions and specifically initiated a preliminary antitrust scrutiny of the Settlement Agreement, which the court found appeared in the form of reverse payment pharmaceutical patent settlement.

The SPC expatiates on the definition of reverse payment pharmaceutical patent settlement as an agreement where the pharmaceutical patentee undertakes to directly or indirectly compensate the interests of generic drug manufacturers (including providing disguised compensation like mitigating the loss or the non-profitable state of the generic drug manufacturers) in exchange for the undertaking of not challenging the

"The SPC opines that in principle, insofar as pharmaceutical patent disputes involving pharmaceutical patentees and generic drug manufacturers, the settlement agreement or contract, which appears in the form of reverse payment pharmaceutical patent settlement, shall be a subject of preliminary antitrust scrutiny of the court."

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validity of the pharmaceutical patent or for postponing the entry of generic drugs into the market of the patented drug. Such agreement may constitute monopolistic agreement, provided that the arrangements prescribed are likely to eliminate or restrict competition.

The SPC opines that in principle, insofar as pharmaceutical patent disputes involving pharmaceutical patentees and generic drug manufacturers, the settlement agreement or contract, which appears in the form of reverse payment pharmaceutical patent settlement, shall be a subject of preliminary antitrust scrutiny of the court.

The SPC elaborates on the methodology to be employed in the preliminary antitrust scrutiny of the reverse payment pharmaceutical patent settlement.

- Whether the reverse payment pharmaceutical patent settlement, which is designed for not challenging the validity of patent right, allegedly constitutes a monopolistic agreement as prescribed by the Anti-Monopoly Law, hinges on whether the said agreement eliminates or restricts competition in the relevant market.
- By comparing the actual circumstance where a reverse payment settlement was reached and executed and the hypothetical scenario of the other way around (no settlement & no execution), court should prioritise the assessment on the likelihood of invalidation of the pharmaceutical patent in the context where the generic drug manufacturer has not withdrawn the invalidation petition, ensued by analysis of whether such agreement has undermined competition in the relevant market.
- In principle, the fact that the patentee offers, without just cause, generic drug manufacturers handsome compensation in exchange for withdrawal of the invalidation petition, may be perceived as a key parameter in finding that the patent right stands a good chance of being invalidated. In general, courts are also advised to assess and predict the outcome of the invalidation proceeding assuming that the generic drug manufacturer had not withdrawn the invalidation petition.
- Parameters to be factored in ascertaining the harm inflicted by the agreement over competition usually include whether such agreement has substantially prolonged the period of market exclusivity of the patentee and has substantially delayed or eliminated the market entry of actual and potential generic drug manufacturers.

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Honghui is one of the lead counsels that helped defend the validity of Bayer's compound patent of blockbuster anticoagulant drug rivaroxaban, a case selected as one of CNIPA's Top Ten Patent Reexamination and Invalidation Cases in 2020.

Turning to the case, the SPC holds: Although the BMS – Vcare Settlement Agreement features the characteristics of reverse payment pharmaceutical patent settlement, due to the expiration of the patent at issue, ascertaining the merit of monopoly will become moot as the obstacle impeding the entry of the generic drug into the relevant market has ceased to exist. Thus, it would be neither necessary nor urgent to assess whether the Settlement Agreement breached the Anti-Monopoly Law.

Moreover, neither BMS nor Vcare participated in the proceeding and the scarcity of evidence in the invalidation proceeding made it difficult for the court to further ascertain the likelihood of invalidation of the patent at issue and to identify whether there was any just cause to justify BMS's grant of early entry of the generic drugs manufactured, sold and offered for sale by Vcare and the associated parties thereof. The SPC therefore terminated the antitrust scrutiny and granted the withdrawal request of AstraZeneca. The case is selected as one of the SPC's Annual 50 Exemplary IP Cases in 2021.

Reverse payment patent settlement (also known as pay-for-delay) is a tactic employed by pharmaceutical patentees to delay the market entry of generic drugs so as to maintain the exclusivity of the patented drugs. The fact that the SPC subjects the case to antitrust scrutiny of its own accord is unprecedented. It remains to be seen if this case will herald the judicial antitrust scrutiny of reverse payment pharmaceutical patent settlement in China in the long run.

AUSTRALIA

Expansion of the patent box scheme

FB Rice

Lee Miles

Originally designed to encourage home-grown innovation in the biotech and medical technology sectors, the Australian government announced in its 2022–23 Federal Budget the intention to expand the patent box scheme to include the agricultural and low emissions technology sectors.

Once operational (noting that the scheme is yet to pass through Parliament a year after it was initially unveiled), the patent box will enable companies operating in the agricultural and low emissions technology sectors to access a concessional tax rate of 17% (down from 30% for large businesses and 25% for small and medium-sized enterprises (SMEs) for profits generated from eligible patents and plant breeders rights (PBRs) within Australia.

For the agricultural space, eligible patents will be those covering "practical, technology-focused innovations", examples of which may include agricultural and veterinary products listed on the Public Chemicals Registration Information System (PubCRIS) register administered by the Australian Pesticides and Veterinary Medicines Authority (APVMA). Pleasingly, the government has also expanded the patent box to include PBR for new plant varieties.

For the low emissions technology sector, patents covering technologies which reduce emissions will be eligible. This arguably covers multiple industry sectors.

In another development, the budget announced that patents issued by the USPTO and EPO will also qualify for the scheme going forward, whereas previously only Australian patents were eligible.

In this regard, the budget paper noted that this expansion "will remove regulatory barriers to accessing the patent box regime for Australian developed innovations patented in the major overseas jurisdictions with equivalent patent regimes". Given the importance of the US and European markets to most patenting strategies, this is another welcome development.

For biotech and medical technologies, the patent box scheme is set to commence on July 1 2022 and will apply to eligible patents granted after May 11 2021. For the agricultural and low emission technology sectors, the scheme is set to commence on July 1 2023 and will cover patents or PBRs granted after March 29 2022.

CHINA

Trademark pre-emptive registration may constitute unfair competition

Lifang & Partners

Yan Zhang

The Fujian High People's Court issued a final judgment in an important lawsuit to do with unfair competition.

The case was brought by Emerson Electric Co. (Plaintiff) against Xiamen Hemeiquan Drinking Water Equipment Limited (Defendant 1) and Xiamen Haina Baichuan Network Technology Limited (Defendant 2), as well as the legal representative of the above two defendants (Defendant 3), and the trademark agency of the above two defendants (Defendant 4).

The court held that the Defendants' acts of registration of trademarks constituted unfair competition, and ordered the Defendants to stop applying and registering identical or similar trademarks in the case. The court awarded the plaintiff damages totalling RMB 1,600,000 ($250,000).

Background to the case

Beginning in 1994, the Plaintiff had registered the trademarks "In-Sink-Erator" and "爱适易" [the Chinese version of In-Sink-Erator] on various goods classes. These trademarks are famous in food waste disposers and instant hot water purification systems in China.

Between 2010 and 2019, Defendants 1 and 2 applied and registered trademarks identical or similar to the above trademarks of the Plaintiff on multiple classes. The Plaintiff filed oppositions and invalidations against these trademarks.

During proceedings, Defendants 1 and 2 were recognised by the China National Intellectual Property Administration (CNIPA) and the court as engaging in trademark hoarding. The Plaintiff then filed a complaint to the court, claiming that the Defendants' acts of trademark registrations were malicious and constituted unfair competition.

The court affirmed that Defendants 1 and 2 had registered multiple identical or similar trademarks to those of the Plaintiff's "In-Sink-Erator" trademarks, in multiple classes, which obviously exceeded the needs of normal business operations, therefore constituting hoarding trademarks. The Plaintiff had to take actions such as trademark opposition and invalidation, and filed administrative litigations against these trademarks to stop the trademark registrations.

The Defendants' mass trademark registrations resulted in the Plaintiff's significant expenses to defend its rights, which also interfered with the Plaintiff's normal business operations. The two Defendants' acts of hoarding trademarks were clearly malicious, and caused prejudice of the Plaintiff, thus constituting an act of unfair competition.

The local insights section in Managing IP comprises updates contributed by firms on a jurisdictional basis. These updates are sponsored by each correspondent, and all the contact details are listed on the last page. Please contact the firms directly with any queries arising from these articles.

"This case is the first in China to find that trademark hoarding constitutes unfair competition, and that the defendants are liable for permanent injunction and damages."

Liabilities of other defendants

Regarding the liabilities of the other defendants, the court held that the legal representative (Defendant 3) was also the holding shareholder and general manager of the two Defendants. The court ruled that, as the legal representative was controlling the two Defendants, was fully aware of the acts of unfair competition by them, and was collaborating with them, this constituted joint infringement.

The trademark agency (Defendant 4) was also aware that the acts by Defendants 1 and 2 of hoarding trademarks were in violation of the Trademark Law. However, the agency continued to represent the Defendants for the registration of almost all the hoarded trademarks. This constituted an act of assisting infringement, meaning that the agency undertook joint liability.

The court assessed that, although the hoarded trademarks are all void, it is not necessary for the court to order the Defendants to stop infringement. Considering that the cost of a trademark application is quite low, and that the Plaintiff would bear substantial costs to defend against the Defendants, the court held that it is necessary to order the Defendants to stop any trademark applications that are identical or similar to "In-Sink-Erator".

The court further confirmed that, after a consideration of the costs and losses of the Plaintiff due to the infringement, as well as the gains of the Defendants from the infringement, it would apply judicial damages, totalling RMB 1,600,000 ($250,000).

Importance of the judgment

Previously, malicious trademarks could be rejected or invalidated, but the trademark owners suffered no more than losing the trademarks. This was not enough to deter the trademark squatters from trademark hoarding.

This case is the first in China to find that trademark hoarding constitutes unfair competition, and that the defendants are liable for permanent injunction and damages. This judgment therefore substantially increases the legal risks and costs of trademark squatters.

The case also affirms the liabilities of the actual controller of the infringers (the legal representative, Defendant 3) and the trademark agency (Defendant 4) in acts of trademark hoarding. This should further deter legal representatives and the trademark agency from collaborating in the hoarding of trademarks.

This judgment is a milestone in the efforts to stop trademark squatting in China, and the deterring effect of the ruling is encouraging for authentic trademark owners who want to defend their rights.

EPO

Preparing for the unitary patent

Inspicos

Jakob Pade Frederiksen

The unitary patent (UP) and Unified Patent Court (UPC) regime is expected to enter into force in late 2022 or early 2023. Under the future system, patentees may request unitary effect for their patents in the 17 EU States currently participating to the system. Patents with unitary effect will not have to undergo country-by-country validation.

The exact date of entry into force of the new system will be triggered by Germany's depositing of its instrument of ratification of the Unified Patent Court Agreement.

In preparation for the coming into existence of the new system, the EPO has implemented transitional measures applicable to European patent applications having reached the final stage of the grant proceedings.

The measures will be available for European patent applications, in respect of which the EPO has issued its communication under Rule 71(3) EPC informing the applicant of the intention to grant a patent.

The first transitional measure provides the possibility for applicants to file a request for unitary effect before the entry into force of the new system. Once the UP system has started, the EPO will register unitary effect. Requests for unitary effect cannot, however, be validly filed before Germany deposits its instrument of ratification, or before the communication under Rule 71(3) EPC has been issued.

The second transitional measure enables applicants to request a delay in the EPO's issuing of the decision to grant a European patent until immediately after the entry into force of the UP system. Patentees may thus benefit from unitary protection and hence avoid country-by-country validation in the 17 participating countries. However, only requests filed after the date of Germany's depositing of its instrument of ratification will be allowed.

In respect of cases, where time limits for replying to 'office actions', i.e., communications under Article 94(3) EPC, or time limits under Rule 71(3) EPC, are already

running, applicants who wish to benefit from unitary protection may consider not lodging early replies with the EPO. Rather, applicants may wish to benefit from the full reply periods available in order to increase their chances of being able to benefit from the transitional measures.

GERMANY

A quiet but important step for software patents

Maiwald

Simon Lud

A decision by the German Federal Court of Justice from October 2021 can be seen as a positive litmus test for the patenting of computer-implemented inventions in Germany. The decision is also crucial for the most important key technologies, such as artificial intelligence and quantum computing.

In the decision X ZR 98/19 of October 7 2021, the German Federal Court of Justice (*Bundesgerichtshof* – BGH) once again had to decide on the issue of patenting software.

Although the BGH did not give the decision a title or a guiding principle in terms of a headnote, there is more to learn from this decision than from many other more frequently cited decisions that receive more media attention. Studying the decision offers the opportunity to learn to what limits the BGH currently considers software to be patentable.

The patent in suit

With the present decision, the BGH confirmed a decision by the German Federal Patent Court to uphold patent DE 600 31 088.4. The patent in suit relates to a method for presenting data stored in a data storage device of a server, where a unidirectional or one-way data path is used, and no backtracking is possible.

Claim 1 of the patent in suit reads as follows:

"Method for presenting data stored in a data storage device (2) on a data server (3) for a user, wherein the user accesses the data server via a network, wherein in the process between the access to the server and the presentation of the data at least one data path is used, over the control data associated with the selection of data are to be sent, wherein the at least one data path is unidirectional."

Analysis of the claim

First, it is remarkable that the BGH considers the question of the technical character of the features of the above patent claim to be so clear and positive. The BGH therefore considers a deeper discussion, or any further reference to the corresponding case law and the principles established therein, to be dispensable.

Second, it is important that the BGH interprets the criterion for the technical character – that a data processing program takes into account the technical circumstances of the data processing system – very broadly.

Claim 1 of the patent in suit basically exhausts itself in the connection and consideration of a unidirectional data path, and it seems that this very limited connection to the data processing system was sufficient to render the subject matter of this claim technical.

Particularly for future technologies such as artificial intelligence and quantum computing (although for the latter the question of hardware – superconductors versus ion traps – is by no means decided yet), it seems to be advantageous if the interaction of hardware and software does not have to be described in too much detail in the claim.

Therefore, the approach of the BGH of not imposing a high requirement on the linkage of software and hardware seems to be very advantageous for patent applications in the fields of artificial intelligence and quantum computing.

GREECE

Transfer of trademarks to the Greek Industrial Property Organisation

Patrinos & Kilimiris

Youli Angelou

Law No. 4796/2021 (Articles 33-48, Government Gazette 63/April 17 2021) provides the transfer of the responsibilities regarding trademarks from the Directorate of the General Secretariat for Trademarks of the Ministry of Development and Investments to the Greek Industrial Property Organisation (OBI), which is supervised by the Ministry of Development and Investments.

The responsibilities for the Greek trademark of products and services, as provided in Law No. 4072/2012 on trademarks remain in the Directorate of Trademarks of the General Secretariat for Trademarks of the Ministry of Development and Investments. Therefore, based on the new law:

- The OBI Is responsible for the physical (paper) and electronic register of trademarks, the trademarks archive, the information systems, the software and the corresponding systems that support the operation of the registry and the archive of the Administrative Commission for Trademarks (Article 35);
- The OBI is designated as the competent national authority for verifying the authenticity of the final decisions of the EUIPO (Article 33§5); and
- The OBI participates and represents Greece on trademark issues in the EUIPO, WIPO and any corresponding European or international organisation or body and is responsible for all communication and cooperation with these organisations (Article 33§7).

A Joint Ministerial Decision (JMD) of the Ministry of Development and

Investments as well as of the Ministry of Finance is expected to regulate all the necessary details of the transfer of organisational, technical and practical nature to complete the transfer of the physical (paper) and electronic register of trademarks, the information and other corresponding systems that support it, the trademarks archive as well as the adequate staffing of OBI.

The main objective of this transfer is the assumption of full responsibility by one body as well as the administrative concentration/integration of all branches of industrial property in one entity, thus aiming at a more efficient strengthening of trade. Moreover, this transfer aims at a uniform and unified national policy with regard to all industrial property rights, thus bringing Greece in line with the practice of other countries.

In view of the above, the consolidation of all branches of industrial property in one body can only bring positive results.

INDIA

Advertising watchdog steps in to protect the advertising ecosystem

RNA Technology and IP Attorneys

Ranjan Narula, Abhishek Nangia and Daleep Kumar

In the changing business landscape, many businesses use the digital medium to promote their services, and many new companies have emerged that are digital-only.

The last two years of COVID-related disruption has caused many businesses to work on their digital strategy to connect with consumers and grow their market share. The Advertising Standards Council of India (ASCI) has been actively working to fulfil its mandate to bring transparency to protect consumers, brands, and the advertising ecosystem at large.

This article provides a brief roundup of steps taken by ASCI during the last two years to address the changes in the business environment to balance the consumer and business needs.

Advertising of virtual digital assets

Crypto and non-fungible tokens (NFTs) are gaining traction in India in recent months, even though it has still not been granted legal status in India. ASCI issued guidelines on advertising and promoting virtual digital assets (VDA) and related services to safeguard the interests of consumers so that they are not coaxed to invest into these riskier assets. These guidelines, issued on February 23 2022, apply to all VDA-related ads published on or after April 1 2022 and have been covered in detail in our previous article.

Guidelines for influencer advertising on digital media

Considering more consumers buying goods online, brand owners frequently use influencers for marketing their products. ASCI unveiled guidelines making it mandatory for the influencers to label the promotional content posted on digital media with the disclosure labels viz., advertisement, ad, sponsored, collaboration, partnership, employee or free gift.

The guidelines were rolled out on May 27 2021, making them applicable to commercial advertisements published on or after June 14 2021. The detailed note on these guidelines can be accessed in our previous article.

Brand extension for liquor and tobacco

To evaluate the genuineness of an unrestricted product or service brand extension (e.g. liquor and Tobacco) whose advertising is prohibited by law, ASCI has clarified that the objective criteria to be used to qualify a correct brand extension product or service. It says that brand extension product or service should be registered with appropriate government authority, e.g. GST/ FDA/ FSSAI /TM, etc.

The detailed guidelines issued on March 18 2021 can be accessed here.

Online gaming

The proliferation of new gaming apps and rising consumer interest during the COVID-19 lockdown led to ASCI stepping in to issue guidelines to regulate advertising surrounding gaming apps. This was necessitated as gaming advertisements often target people by suggesting that gaming could be a legitimate source of income and a potential livelihood for them. These guidelines, issued on November 24 2020 came into effect on December 15 2020. Our detailed update can be accessed here.

COVID-19 advertising advisory

As COVID-19 virus created havoc, several advertisements with misleading claims around COVID-19 emerged, e.g. referring to cure and prevention stemming from 'anti-corona' mattress or through the application of tulsi (Indian basil) drops to apparel.

To curb these practices, ASCI issued guidelines to promoters for the advertisement of various medicinal products/services. Our detailed update issued on October 20 2020, can be accessed here.

Awards and rankings in advertisements

Advertisers use awards and rankings to make superiority claims for their products and services in advertising. Due to the lack of knowledge, consumers may be led into believing that an award or ranking given to a product, institute or service makes it superior or more authentic.

These guidelines issued by ASCI guide the advertisers for

appropriate reference to award/s or ranking/s and claim/s in advertising and will assist the advertiser in understanding why ASCI's Consumer Complaints Council (CCC) may accept or reject the mention of a specific award or ranking. The detailed guidelines can be accessed here.

Endorser due diligence service

With a view to avoiding legal liability that could be imposed on the endorsers towards the claims made by them in the advertisement, ASCI has rolled out Endorser Due Diligence service. It is a paid service, and endorsers can seek the help of ASCI's multi-disciplinary panel to assess the statements claims in the advertisement and examine the evidence. The notification issued by ASCI on March 10 2022 can be accessed here.

ASCI, FSSAI join hands to curb misleading claims in F&B advertisements

There has been a sharp spurt in the number of complaints filed at ASCI against food and beverage (F&B) ads. To scrutinise F&B advertisements against misleading claims made, ASCI signed an agreement with the Food Safety and Standards Authority of India (FSSAI) on July 1 2021.

As per the agreement, ASCI agreed to identify advertisements that *prima facie* violate Food Safety and Standards (Advertising and Claims) Regulations, 2018, and set up a three-member expert panel to evaluate F&B advertising identified by the ASCI monitoring team. The notification issued by ASCI on July 5 2021 can be accessed here.

As advertisement plays a vital role in attracting consumers' attention that leads to purchase decision, the guidelines issued by ASCI are steps to balance the companies and consumer interest and create a level playing field for stakeholders.

INDONESIA

Indonesia's ongoing struggle against IP infringement offline and online

Tilleke & Gibbins

Rochmali Zultan and
Alif Muhammad Gultom

The Indonesian government has launched a number of strategic initiatives aimed at getting the country removed from the Priority Watch List in the US Trade Representative's annual Special 301 Report on Intellectual Property Protection.

In trying to leave behind this ignominious status – which has been stubbornly persistent for over 30 years – Indonesia's Directorate General of Intellectual Property (DGIP) is leading an IP Operations Task Force consisting of five ministries and agencies, including the National Agency of Drug and Food Control (BPOM), customs, the state police, and the Ministry of Communications and Information (MOCI).

According to statistics from the task force, 554 infringement cases were handled by the police and the IP Office in 2019–21, with trademark infringement and copyright infringement being most prevalent. Year on year, the number of trademark infringement cases increased from 90 in 2020 to 137 in 2021, while copyright infringement cases over the same period decreased slightly, from 42 to 38.

While the cases occurring in physical markets remain high, the battleground has now expanded to online platforms and social media. Indonesia has embraced digital technology with enthusiasm, and the country's citizens are among the world's most avid users of e-commerce, social media, and other mobile apps. Research from Google, Temasek, and Bain & Company indicates sizable growth in Indonesia's digital economy, from $47 billion in 2020 to $70 billion in 2021– a digital marketplace that now includes more than 158 million e-commerce customers.

Separately, the MOCI reported suspension of 1,745 websites and other infringing online content from 2017 to 2019. Meanwhile, the DGIP banned hundreds of problematic e-commerce portals related to trademark infringement during 2019. There is no official report on recent online infringement cases; however, the numbers are predicted to rise in tandem with the increasing use of online platforms.

Aside from these enforcement actions, authorities in Indonesia have been taking other steps to strengthen IP protection. For example, the Indonesian National Police joined various online platforms in signing a memorandum of understanding that enables greater cooperation in fighting online IP infringement. The government has also prepared a forthcoming technical regulation addressing online copyright infringement, and has instituted a programme to issue IP-based certifications to both physical and online shops.

Several laws and other measures that manage the growth of electronic platforms also include provisions on online IP infringement, such as Law No. 11 of 2008 on Electronic Information and Transactions, Government Regulation No. 71 of 2019 concerning the Implementation of Electronic Systems and Transactions, and MOCI Regulation No. 5 of 2020 concerning Electronic System Operators in the Private Sector.

Safe harbour policy v 'landlord liability doctrine'

In 2016, the MOCI issued a circular letter on the limitations and responsibilities of e-commerce platform providers and merchants in relation to user-generated content. This became known as the 'safe harbour policy'.

In summary, the policy states that platforms are not liable for failure to comply with the country's safe harbour policy in the event of force majeure, error, or negligence on the part of a user. Under the policy, a platform is only held responsible for prohibited content if they are unable to prove that a user was responsible for uploading the content. The policy also obliges platforms to include a mechanism that allows users to report illegal goods and services, after which the platform must take down the offending pages or content as soon as possible.

The takedown request system, however, has been found lacking against repeated or large-scale infringement, as IP owners need to proactively check each platform for infringing content and file takedown requests with detailed URLs when instances are found.

Moreover, there is no significant action to ensure that infringers who have been previously punished are permanently banned from creating new accounts once their user access is blocked. In addition, a takedown will only be completed if the IP owner holds an Indonesian IP registration certificate.

Frustrated by continuous infringement, IP owners and related parties have increasingly demanded that platforms be more proactive in tackling infringement instead of passively waiting for complaints.

In line with these concerns, the IP Operations Task Force has proposed the 'landlord liability doctrine', a system whereby e-commerce and other platforms would be certified as marketplaces containing genuine and authorised goods.

Under the landlord liability doctrine, the task force asserts that online platforms, as 'landlords', have equal responsibilities to their users and are thus accountable for any infringement conducted by their users. This would also require individual sellers to own IP registration certificates before they are allowed to sell anything. The goal of this scheme would be to ensure that hosted products and content are authentic and do not infringe the IP of any authorised entity; however, this certification process would seemingly render third-party sellers unable to sell genuine products, meaning that only the official accounts would remain.

The task force, which has so far held several meetings on the proposed program, expressed that the platforms, as the landlords, bear responsibilities equal to those of their users. Thus, platforms are also accountable for any infringement conducted by their users. The plan has not yet been implemented as there is no formal regulation issued to accommodate this idea.

At the moment, it appears that the safe harbour policy and the proposed landlord liability doctrine contradict each other, and that the task force may not take the existing safe harbour policy into account in its development of the landlord liability doctrine.

While there have not yet been any court rulings on this apparent discrepancy, there are two ongoing cases in which local IP holders filed lawsuits against platforms, which are alleged to bear more responsibility than the users for copyright infringement on their platforms.

The results of these cases could indicate whether the so-called landlord liability approach will overturn the existing safe harbour policy.

Conclusion

While Indonesia's fight against infringement is making progress, the government's desire to be removed from the Priority Watch List seems to be a long way off. The challenges facing the IP Operations Task Force are still considerable – especially when it comes to online infringement.

Nevertheless, there are some practical approaches that could make a real contribution to IP enforcement in Indonesia – as suggested by the US Trade Representative during a meeting with the IP Operations Task Force in November 2021.

The Indonesian government would do well to first focus their efforts in these areas, which include increasing raids of counterfeiters' premises, stepping up their confiscation of goods, and disposal of evidence (e.g. confiscated goods) in enforcement proceedings.

On the online front, it would be helpful to follow the shutting down of websites or online accounts with indictments to enable further prosecution and combat repeat infringement.

JAPAN

FRAND declared SEPs and a warning letter

Abe & Partners

Takanori Abe

Summary of the case

One-Blue LLC (One-Blue) is a US company managing and operating a patent pool for standard-essential patents (SEPs) related to Blu-ray disc products (BD). Upon commission by 15 patentees such as Dell, HP, Phillis holding BD related SEPs, it licences those SEPs in bulk. The 15 patentees have made fair, reasonable, and non-discriminatory (FRAND) declaration for those SEPs.

Imation Corporation Japan (Imation) is a Japanese corporation that belongs to a corporation group led by US Imation Corporation (US Imation) selling BD.

Upon commission by 11 patentees (the patent-pool patentees) holding 350 BD-product-related SEPs in Japan, One-Blue sent a notification dated June 4 2013 (the notification) to three retailers conducting business with Imation stating that selling BD without licence from the patent pool managed by One-Blue

would constitute patent infringement and that the patentees have the right to seek an injunction and damages.

Imation sent a warning letter dated June 21 2013 to One-Blue alleging that (i) the notification constitutes an act of making a false allegation specified in Article 2(1)(xiv) of the Unfair Competition Prevention Act; (ii) the notification constitutes unfair trade practices under the Antimonopoly Act; (iii) Imation requests that One-Blue withdraws the notification and responds in good faith to recover the actual damages caused to Imation; and (iv) Imation is willing to obtain a licence under the fair, reasonable, and non-discriminatory terms; to be more specific, to obtain a licence with a royalty rate of 3.5% of the purchase price of BD and to continue negotiating a licence in good faith.

Imation sought an injunction against the One-Blue's act of making or circulating a false allegation and damages.

Judgment of February 18 2015, Tokyo District Court

The Tokyo District Court (Presiding Judge Shimasue) affirmed an act of unfair competition (an act of making a false allegation) and granted injunction, but dismissed damages by denying negligence, holding as follows.

It is not appropriate to allow a patentee who has made a FRAND declaration to exercise its right to seek an injunction against a person who is willing to obtain a licence under the FRAND condition.

On the other hand, if a person who manufactures and sells a product conforming to a standard is not willing to obtain a licence under the FRAND condition, a claim for an injunction against such a person shall be permissible. However, as there are adverse effects in permitting an injunction, the finding of unwillingness to obtain a licence under FRAND condition shall be made strictly.

The following was found:

1) One-Blue notified US Imation Corporation by the letter dated June 25 2012 of the licencing programme on One-Blue's website and offered the royalties One-Blue proposed as a condition of the One-Blue's patent pool;

2) US Imation, by the letter dated September 4 2012, made a specific proposal for royalties (3.5% of the sales costs) clearly stating that the royalties One-Blue proposed is not "fair and reasonable" but "Imation expects to pay, and is willing to pay a fair and reasonable royalty for the technology that is essential to Blu-ray Disc and related devices. US Imation also requested One-Blue to provide (i) the grounds that the royalties One-Blue proposed is non-discriminatory and (ii) the basis for the royalties One-Blue proposed;

3) One-Blue responded by the letter dated September 11 2012 that it would not and could not negotiate with licensees individually regarding royalties and that several companies co-signed the brand owner subscription agreement. However, One-Blue did not provide any documentation that the brand owners had actually contracted with One-Blue at royalties One-Blue proposed nor did they provide any basis for royalties One-Blue proposed;

4) US Imation requested by the letter dated September 26 2012 to provide the basis for the 'fair' rate;

5) One-Blue Japan, by the letter dated April 11 2013, proposed Imation a licence agreement based on the royalties One-Blue proposed;

6) Imation responded to One-Blue Japan by the letter dated May 9 2013 stating that it is ready to discuss about 'fair and reasonable' royalty rate; and

"Imation sought an injunction against the One-Blue's act of making or circulating a false allegation and damages."

7) One-Blue did not provide any basis for royalties One-Blue proposed nor negotiate a royalty rate. It filed a patent lawsuit against US Imation jointly with the other patent-pool patentees and sent the notification to retailers conducting business with Imation in Japan.

In light of the above, it is recognised that Imation and US Imation were negotiating for licence showing their willingness to obtain a licence under FRAND condition. It is reasonable to find that Imation is a willing licensee under FRAND condition given that (a) Imation is a Japanese corporation that belongs to a corporation group led by US Imation and (b) the finding of unwillingness to obtain a licence under FRAND condition shall be made strictly.

Since it is recognised that Imation was willing to obtain a licence under the FRAND condition as of the time of the notification, *regardless of whether or not the royalties One-Blue proposed violated FRAND condition*, it is recognised that seeking an injunction against Imation and the retailers conducting business with Imation by the patent-pool patentees constitutes an abuse of rights and thus impermissible. Further, in case seeking an injunction is impermissible as an abuse of rights, notifying as if it has the right to seek an injunction is deemed as making a false allegation and is considered to be an act of unfair competition.

Correspondence of Japan Fair Trade Commission (JFTC)

On November 18 2016, the JFTC made the following announcement:

"The JFTC has investigated One-Blue in accordance with the provisions of the Antimonopoly Act. The JFTC has found that the relevant conduct committed by One-Blue falls under Paragraph 14 (Interference with a Competitor's Transactions) of the 'Designation of Unfair Trade Practices,' consequently being in violation of Article 19 of the Antimonopoly Act. However, because the relevant violation has already ceased to exist, there being no necessity to issue a cease-and-desist order. Therefore, the JFTC has decided to close the investigation on the case."

Practical tips

The Notification was issued before the decision of May 16 2014, the Grand Panel of the IP High Court (*Apple v Samsung*) (Grand Panel decision). According to Professor Shiraishi, this judgment granted an injunction and denied damages for the acts committed before the legal criteria had been clearly defined. After the Grand Panel decision, it is high likely that not only injunctions but also damages are granted against the notification of false allegation in cases where the implementor is deemed as willing licensee.

According to the JFTC's determination, One-Blue issued the notification to the retailers conducting business with Imation in order to encourage licence negotiations between One-Blue and US Imation. After the Grand Panel decision, SEP holders will be less likely to take measures to issue notifications to the implementers' clients in order to encourage licence negotiations.

The judgment is a specific judgment on the willingness to license under FRAND condition after the Grand Panel decision, and will be of great reference in future SEP litigations. In accordance with the Grand Panel decision, the judgment held that "unwillingness to license under FRAND condition should be strictly determined" and found that it is reasonable to find that the One-Blue is a willing licensee under FRAND condition.

Professor Karatsu criticised that the determination of a willing licensee under FRAND condition is questionable, as Imation only presented their willingness to receive a licence for a royalty amount of 3.5% of the purchase price of a single BD and that it should have been judged whether the FRAND conditions were satisfied with the 3.5%. However, as far as the framework of the Grand Panel decision is concerned, whether injunction shall be granted is determined by whether the implementor is a 'willing licensee' under FRAND condition. The court is not required to find the royalty under FRAND condition nor to judge whether the royalty offered by the patentee/implementor was in conformity with the FRAND condition. SEP holders will therefore have to be aware that, subject to the Grand Panel decision, the implementor is likely to be determined as a 'willing licensee'.

Professor Kawahama pointed as follows: The JFTC's correspondence is regarded as a unique case in that, while determining there had been a breach of the Antimonopoly Act, it concluded there was no particular need for a cease-and-desist order, and thus completed the investigation; it is noted that just because damages under the Unfair Competition Prevention Act are denied, as in the handling of the case, it does not mean the assessment of the Antimonopoly Act has to follow it; there is room for assessing damages under Article 25 of the Antimonopoly Act as reasonable, considering that the notification of seeking injunction to third parties may worsen the hold-up situation. Thus, in the upcoming similar cases, the JFTC may not complete the investigation as it did in this case.

NEW ZEALAND

The role of the Māori Trade Mark Advisory Committee and expected updates

AJ Park

Harvey Henderson and Kate Giddens

We now live, work, and play in a digital and global era. Due diligence is even more important when prosecuting trademarks with creators and businesses operating in a fast-paced world. One important consideration that is often lost amidst commercial evaluations is cultural sensitivity. In New Zealand, the Māori Trade Mark Advisory Committee (MTAC) plays an important role in this regard.

Following the assent of the New Zealand Trademarks Act 2003, MTAC was established to "address Māori concerns relating to the registration of trademarks that contain a Māori sign, including imagery and text". As an authority, they aim to minimise the risk that people and organisations may inadvertently register intellectual property likely to offend Māori.

The function most relevant to this article is stated in 3.2.1 of the IPONZ terms of reference, "considering trademark applications and providing written advice as to the likelihood of offensiveness to Māori". It is worth noting that the Māori language (Te Reo Maori) is a taonga – a versatile word that refers to something treasured, as it is used commonly with cultural or spiritual concepts and objects.

When might something be referred to MTAC?

As stated above, the general ambit of MTAC is to address Māori concerns about potentially offensive trademarks by reviewing applications that are flagged by IPONZ

examiners. Under the current regime, a MTAC review of a trademark application will be triggered where an Examiner notes that a trademark contains Māori words or imagery.

The trigger threshold is relatively low for words. Trademarks that are/or contain words in Te Reo will be forwarded to MTAC for review. This applies to all languages, regardless if a word has a meaning in a different language. If it has a meaning in Te Reo or in part comprises a word, it will be referred to MTAC.

One common source of referrals to MTAC is trademarks consisting of Japanese words. The Japanese language is linguistically similar to Te Reo, and there are a number of words that have different meanings in both languages. For example, Tokotoko in Te Reo can mean "to walk with a stick". Conversely, 'Tokotoko' is a Japanese onomatopoeia for the sound of something walking fast in short steps.

Regarding Māori imagery, this is generally broken down into three distinct features by IPONZ:

1) Curvilinear designs (contained by or consisting of a curved line or lines) as depicted in moko (tattooing), kowhaiwhai (rafter patterns), and whakairo (carving);
2) Rectilinear designs (contained by, consisting of, or moving in a straight line or lines) as depicted in tukutuku (ornamental paneling) or taniko (embroidery); and
3) Designs incorporating Māori objects.

Before applying in New Zealand, any prospective applicant or agent needs to consider these points. It is prudent to verify whether or not a potential trademark contains Māori words or imagery prior to applying early in the trademark process. Potential applicants should consider whether it is appropriate to adopt Māori words or imagery. Education and consultation are important processes in this regard.

There are resources to assist with this process, such as online Māori dictionaries. However, it is harder to do so regarding Māori imagery, particularly in the case of international agents or Applicants, as they are likely to be unaware of what constitutes a Māori design and contextual uses of those designs. In such a case, it is best to discuss their mark with a New Zealand based trademark professional.

What is MTAC's role in the trademark registration process?

When an application is referred to MTAC, the review typically takes a few weeks but can extend to a few months. If MTAC considers the trademark non-offensive, the Applicant will be notified, and the application can proceed as normal (other objections may need to be addressed).

If the trademark is considered offensive, MTAC may issue a s 17(1)(c) objection under the Trademarks Act 2003. Under this section, the Commissioner must refuse registration if the mark is likely to offend a significant section of the community, including Māori. Examples of this include granting an Applicant exclusive use of a word where that word is considered offensive or inappropriately related to the goods and services applied for. A fairly common example is a trademark containing Māori imagery that is intended to be used for alcohol.

This is an absolute ground for not registering a trademark and can be hard to overcome. An applicant can make submissions arguing against this finding, but it is unlikely they will be accepted.

When an objection is raised, MTAC may also issue a post-finding recommendation that an Applicant approach Taura Whiri i Te Reo Māori, the Māori language commission, to find a more appropriate term for their trademark. Naturally, you cannot amend the mark itself, and should a more appropriate word be found, a new application would have to be made.

Expected developments for MTAC

Revised IPONZ practice guidelines are expected to be issued later this year. The details are yet to be released, however we expect to see a general trend towards a more comprehensive framework.

The predicted approach is a move away from looking strictly at paper applications to a broader approach. The idea is to protect Te Reo as a taonga within the frame works of trademark protection. This would include educating applicants and providing consultation. While reviewing trademarks on paper applications works as an extension of the law, a more comprehensive approach will address both cultural concerns and better educate applicants.

It is expected that the IPONZ guidelines will be updated this year, to include more guidance to those seeking to protect marks that comprise or contain elements of Māori culture. But what would a comprehensive approach look like? We can look to recent changes and note developments there.

Two notable changes where a pattern seems to emerge. First, there have been increased instances of applicants being asked to provide more information on the source and adoption of their trademark prior to MTAC issuing its determination. For example, did the applicant carry out consultation prior to brand adoption, including the use of Taura Whiri i Te Reo Māori, the Māori language commission, to understand the meaning of the trademark? Was a cultural integrity scorecard and framework used when developing the brand? Is the impact of the use (not just registration) of the trademark considered?

Secondly, when MTAC determines that there is an issue with the use of a Te Reo word there has been more

transparency on timeframes and the process the applicant is going through.

This shows a trend towards a more comprehensive and holistic system where applicants are better informed prior and during the process. It is likely that this is also a move away from MTAC examining strictly on the paper application towards a view of the trademark as a whole in consideration of the Applicant's use.

As it stands, MTAC fulfils its role in the system excellently. But reviewing trademarks solely based on one section of legislation can only do so much. In the future, the consideration is likely to be based on whether it is culturally appropriate to use the trademark, and whether the applicant has undertaken the proper process – such as consulting with Iwi. This would echo a trend seen in other New Zealand government agencies where Māori ideas and concepts are being embraced.

Ultimately, this gives MTAC more factors to consider away from the sometimes-rigid structure of legislation. Greater flexibility means that it will be easier for Te Reo, Māori designs and other taonga to be protected.

It is important for applicants to understand and respect Te Reo and Māori culture as this is the best way to avoid any misuse.

Conclusion

There is a clear and ever-present danger of commercial exploitation of culture in the world of trademarks. The Māori Advisory Committee has an important role now and into the future to protect mātauranga Māori and tikanga Māori (Māori worldview, culture and protocols).

Should you wish to file a trademark in New Zealand, it is prudent to be aware of all factors that may affect the registration of your mark. If you would like guidance on navigating this, please reach out to a member of the AJ Park trademark team.

SOUTH KOREA

South Korea introduces changes to the Patent Act

Hanol IP & Law

Min Son

As of April 20 2022, the revisions to the South Korean Patent Act (KPA) became effective. The major changes include:

1) A longer period for responding to a final rejection;
2) An expanded window for requesting re-examination even after allowance;
3) A new separate application system; and
4) Relaxed requirements for reviving lapsed rights.

Response period for final rejection lengthened from 30 days to three months

Under the previous KPA, a period of 30 days was provided for responding to a final rejection by filing an appeal, a request for re-examination, or a divisional or converted application. This 30-day period has long been thought too short to prepare the documents required for an appeal, and many applicants filed for extensions before actually submitting any documents.

The amended KPA now provides a longer period, which is set as three months from the date of receipt of a notice of final rejection. This three-month period may be extended by up to an additional 60 days. Under the new law, applicants can save costs by avoiding time extensions.

Requesting re-examination of an application is now possible even after allowance

Under the previous KPA, an applicant could file a request for re-examination in response to the first final rejection, but not after receiving a notice allowance. Therefore, if an applicant wanted to correct some errors in the claims or specification after having received a notice of allowance, it would have been necessary to file a correction trial after the patent had been registered.

A correction trial is a post-grant proceeding before the Intellectual Property Trial and Appeal Board (IPTAB). It is a separate administrative proceeding that may take a year or so, and the scope of amendment to the claims or specification permitted through this proceeding is quite limited.

Applicants were permitted only to:
1) Narrow the scope of a claim(s);
2) Correct a clerical error(s); or
3) Clarify an unclear description(s).

Any correction could not substantially expand or change the scope of the claims. Because of this reduced flexibility in correction trials, applicants often chose to file a divisional application to amend the application more easily.

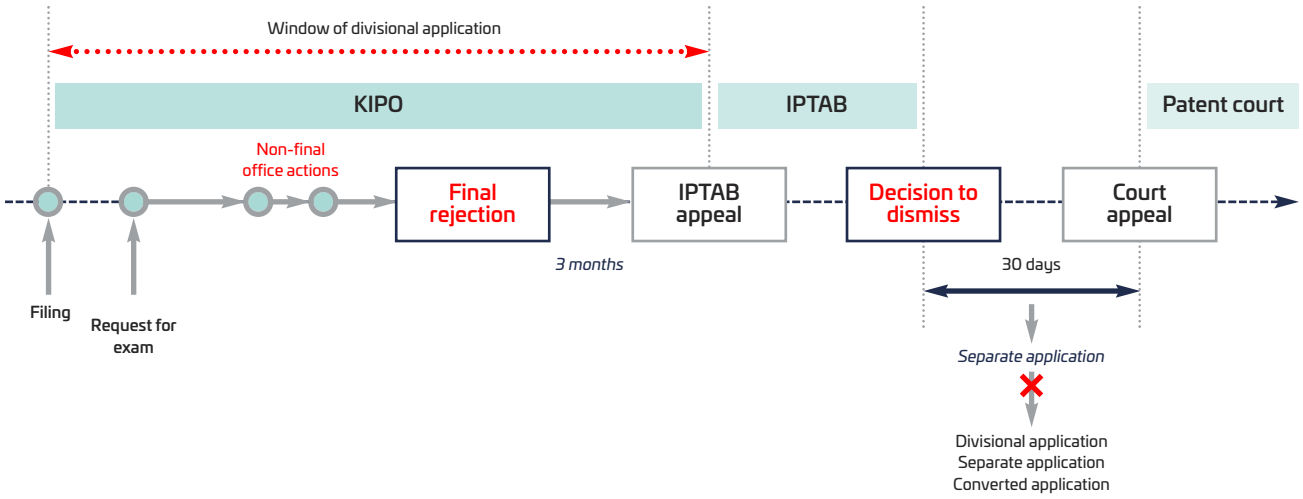
Under the amended KPA, requesting re-examination is now available even after a notice of allowance, but before the application is registered as a patent. This can be an easier way to resolve any obvious errors or clarity issues that were found late, or to amend the claims after allowance to meet any needs that may have occurred in the market.

If a request for re-examination is filed, the notice of allowance is deemed to have been cancelled, and the examination procedure is re-opened.

The allowable scope of amendment remains limited to:
1) Narrowing the scope of a claim(s);
2) Correcting a clerical error(s);
3) Clarifying an unclear description(s); or
4) Deleting new matter added by a previous amendment in the same manner as when responding to a final rejection.

These limitations are less restrictive than those in a correction trial. However, if the allowance was issued after re-examination following

Relaxed requirements for restoring lapsed rights under the 'justifiable reason' standard



a first final rejection, requesting another re-examination is not allowed.

A separate application can be filed when an appeal to a final rejection is dismissed.

In South Korea, a patent application is either allowed or rejected in its entirety, although substantive examination is performed on a claim-by-claim basis. Therefore, entire applications, including potentially allowable claims and rejected claims, have been rejected even when the rejection was directed only to some of the claims.

Under the South Korean patent system, claim amendments or divisional applications are not possible after an appeal against a final rejection has been filed. Say an applicant appealed in response to a final rejection that had indicated both rejected and not-rejected claims. Under the old law, if the case was later dismissed, it was not possible to save those claims that were potentially allowable at the final rejection stage.

The only way to get around this situation was to file a precautionary divisional application at the same time as the appeal in response to the final rejection.

As of April 20 2022, applicants can now file a separate application for claims not rejected in a final rejection when a subsequent appeal has been dismissed. It applies to cases in which the appeal was filed on or after April 20 2022.

Although they appear to be similar, the separate application has more limitations than a divisional application. Further, a separate application is not allowed if all claims were rejected, and another divisional or separate application cannot be filed based on a separate application.

Because of these limitations, a divisional application remains the most flexible prosecution tool. However, a separate application will prove its usefulness when the applicant has missed the window to file a divisional application.

South Korea has relaxed the procedural requirements for restoring lapsed rights due to the failure to meet deadlines. The government has amended the relevant provisions in the KPA, the Utility Model Act, the Trademark Act, and the Design Protection Act.

In the past, it was necessary to submit an explanation that the failure was due to 'reasons not attributable' to the applicant. This standard has been construed very narrowly to mean extreme circumstances such as natural disaster. Accordingly, there has been a relatively low likelihood of success in remedies for missed deadlines.

In the amended law, the requirements for restoring, reinstating, or re-establishing lapsed rights have been relaxed to 'justifiable reasons'. The South Korean Intellectual Property Office (KIPO) explained that 'justifiable reasons' includes situations such as the sudden hospitalisation of the applicant due to infection by COVID-19.

This 'justifiable reason' standard is thought to be similar to the 'due care' standard of other jurisdictions.

The following deadlines can benefit from the revised rules:

1) Responding to a notice of informalities;
2) Request for examination;
3) Request for re-examination; and
4) Paying registration and annuity fees (with surcharges).

However, there is no remedy or restoration of rights when an applicant has failed to observe the deadline for PCT nationalisation, or for claiming priority based on the Paris Convention.

The request for the remedy or completion of the missed procedures must be completed within two months of the date on which the justifiable reason ceased to exist. In addition, it must be made within one year after the expiry of the deadline that was not observed.

TAIWAN

Third-party observations in patent applications: Taiwan v mainland China

Saint Island International Patent & Law Offices

Chiu-ling Lin

In today's keen business competition environment, could a business entity take countermeasures against those patent applications which, if approved, would adversely affect its interest? The answer is yes.

Of the various available countermeasures, filing of a third-party observation is an option that can be considered. To be specific, any party may, during the prosecution of a patent application, file a third-party observation to assist the examiner to examine, by reviewing the brief of the third-party observation and evidence, the novelty or inventive step of the claimed invention, so that the applicant could possibly be forced to narrow down the scope of the claims or to even forestall the application from maturing into a patent.

Coupled with the fact that the cost of filing a third-party observation is usually much cheaper than filing an invalidation action after a patent application matures into a patent, it is particularly worthy of understanding the procedure of a third-party observation.

Given that Taiwan and mainland China are competitive in cutting-edge technologies and that mainland China is a huge consumer market, many applicants would choose to file patent applications on both sides of the strait at the same time. Therefore, a comparison between the two cross-strait sides regarding the procedure of a third-party observation is shown below.

One other matter worth mentioning is that while filing of a third-

	Taiwan	Mainland China
Legitimate basis; operation guidelines	Article 39 of the Enforcement Rules; revised operation guidelines are implemented on September 1 2020	Article 48 of the Enforcement Rule; no operation guidelines are available.
Application	A third-party observation can be filed against an invention patent application only. In case an invention patent application and a utility model application were filed on the same date, and in case the invention patent application has not yet been laid-open for public inspection, it is necessary to enter into the relevant form the application number of the approved utility model application.	A third-party observation can be filed against an invention patent application only.
Time limit to file a third-party observation	Prior to approval of an invention patent application.	From the laying-open date to the publication date of the grant of the patent right. (According to the examination guideline, a third-party observation filed after the notification of grant/approval issued by SIPO will not be accepted or examined).
Who may file a third-party observation? Can it be filed anonymously? If not, will the identity of the third party be disclosed?	Any person; it can be filed anonymously. The identity of the third party would basically be placed in confidence, unless the third party chooses to make its identity public.	Any person; it can be filed unanimously. The identity of the third party will be placed in confidence.
Can the third party submit evidence?	Yes	Yes
Which information will be published in the Patent Application Publication Search System / Patent Examination Data Search System?	Cited references	Only the date of filing of a third-party observation is recorded for public inspection.
Will the official opinion on a third-party observation be open to the public?	No, except for the cited references.	No
Will the applicant be informed of the filing of a third-party observation?	Yes	No
Will the applicant be able to review the entire file of a third-party observation?	Yes	No
Will the official opinion on a third-party observation be served on the third party.	No; however, the third party can judge from the official examination results whether or not the content of a third-party observation has been considered.	No; however, the third party can judge from the official examination results whether or not the content of a third-party observation has been considered.
Is there any suggested format in which a third-party observation and evidence may take?	Yes	No
Is it necessary to pay any official fee?	No	No

party observation in an anonymous manner exists in practice in either Taiwan or mainland China, any third party can determine whether to reveal his identity on the basis of actual circumstances. For example, if the purpose of filing of a third-party observation is to prevent a competitor's invention patent application from approval or to induce the applicant to narrow down the scope of the claims, disclosing his identify or not would be of no consequence.

However, in other circumstances, such as when one's invention is maliciously copied by others and an invention patent application has been filed for such invention, filing an anonymous third-party observation against an invention patent application suspected of plagiarism may not be an ideal option.

TURKEY

IP rights can also protect public health and safety

Gün + Partners

Barış Kalaycı and Direnç Bada

Gün and Partners recently acted in a case that started as an ordinary anti-counterfeiting case, but which was quickly identified as something much bigger. When it turned out that some fake 'fire-resistant' glass was not fire-resistant at all, public health and safety became a major concern as well as trademark infringement.

The case began after we received a picture of some fire-resistant glass from a global manufacturer of these products. The logo trademark was simply printed on the glass and, due to several inconsistencies, it was clearly a fake product.

An investigation into the suspected company showed that the counterfeiter was installing fake products on the fire escapes of a public hospital. Following further in-depth investigation, it was determined that the fake glass had been installed in many hospitals. Some pieces of fake products were found at the counterfeiter company's premises.

Action taken

Gün and Partners filed a criminal complaint and requested a search warrant from the court to seize the products kept at the company's premises. The Court rejected our request due to lack of evidence, and the prosecutor issued a non-prosecution decision.

We then proceeded with conducting a civil discovery of evidence with the local Civil IP Court and managed to identify and seize the fake products through a civil preliminary injunction decision.

Following the submission of a favourable expert report to the civil discovery of the evidence file, we filed a fresh criminal complaint and concurrently informed the Ministry of Health (MoH), as well as the management of the relevant hospitals and some administrative bodies, of the threat on public health and safety.

The MoH initiated an investigation covering all hospitals throughout Turkey and it turned out that there were several other hospitals in which fake products were being used. This piece of information led to official fire-resistance tests being conducted by Turkish Standards Institute Laboratories.

The tests made it clear that the products were made of ordinary glass and were resistant to fire for only three minutes, although it was supposed to be resistant for 120 minutes to give enough time to rescue patients in a critical condition. The MoH has taken some official steps and all relevant hospitals took actions to have the fake products replaced with fire-resistant ones.

Consequences and next steps

At the end of the preparatory investigation, the prosecutor indicted the infringer based on trademark infringement. As we managed to bring concrete pieces of evidence, the accused also confessed that he was guilty and added that he is ready to replace all fake products with fire-resistant products.

> *"This is an important example of how additional grounds can be leveraged in matters that appear to be straightforward IP infringement or counterfeiting issues."*

The Criminal IP Court found the infringer guilty and, considering the public health and safety risks he created, sentenced the infringer to imprisonment without suspending the verdict, unlike the majority of anti-counterfeiting cases tried in the country.

The accused filed an appeal before the Regional Court of Appeals. However, the Court of Appeals not only upheld the local IP Court's decision but also decided to inform the Public Prosecutors' Office to instigate a separate investigation based on aggravated fraud, because the fake products were sold to the state through public tenders.

In this matter, not only protected the client's IP rights but also helped to put an end to a serious public health and safety threat. Our work enabled the government to collect losses from, and to punish, an infringer who also committed aggravated fraud against the state.

This is an important example of how additional grounds – such as public health and safety-related provisions – can be leveraged in matters

that appear to be straightforward IP infringement or counterfeiting issues.

The case also shows that brand owners should take everything into consideration when taking action against counterfeiters, and seek tailored action plans for the best success in their brand protection efforts.

UK

Brand protection in the metaverse: NFTs and how to handle them

Bird & Bird

Emma Green

Whether you are deep into the realms of the metaverse, or still trying to distinguish your Web2 from your Web3, there is no escaping the growing conversion around NFTs.

The infiltration of digital assets into the consumer brands ecosystem presents a number of trademark challenges but may also yield opportunity. Four important considerations for brand owners are outlined below:

1) Take the time to review your portfolio: digital assets can be protected in Class 9 and are well worth integrating into new trademark applications to ensure your business is best placed to tackle infringing content. Consider protecting not only word marks but also important figurative marks which may be of interest to digital artists. It is a perfect opportunity to audit your existing portfolio to identify vulnerabilities and to ensure your protection also matches your real-world expansion plans for the next three to five years.
2) Have a robust infringement strategy. Creators of digital wearables are not bound by the traditional manufacturing and supply chain barriers which means the creation, minting and distribution of NFTs is very quick. New 'stock' can hit the digital shelves of platforms within hours, not weeks. Brands must therefore be able to react quickly to tackle the issues which arise before they escalate. Understanding the infrastructure of NFT marketplaces and the interface with social media is essential to identify the source of infringements. Be sure to look for aliases, linked profiles and associated accounts, and remember that sales may happen on private platforms as well as on the open market. Thorough due diligence will help to maximise the potential success of an action. Be clear on the issues you want to tackle – what is your position on cryptoart v digital wearables? Will you approach at B2B level first, file a take down notice or instruct external counsel?
3) Curate bespoke undertakings: handling NFTs is not the same as handling a consignment of infringing goods, so standard settlement terms need to be updated to reflect the new terminology. For example, a minted NFT can only be 'deleted' by sending it to a NFT blackhole (an inaccessible digital wallet address) in a process known as burning. It will be impossible to recover minted NFTs which have been sold, so focus on what can be achieved – seek undertakings that minted NFTs in possession of the infringer will be burned, and that the underlying image or digital files are deleted, transferred or amended to remove infringing content.
4) Consider collaboration: Digital wearables, collectibles and cryptoart are all unique, making them highly covetable. NFT collectors are also fiercely loyal and quick to help brands establish cult status and grow their following. Getting involved may help your brand stay ahead, enabling you to reach new audiences and provide a platform to tease product launches or drive engagement around initiatives and immersive experiences. If you do not intend to create your own digital works, consider a strategic collaboration with a carefully chosen artist or creator to add brand value and access the potential of the NFT community.

VIETNAM

Are game show formats in Vietnam protected by copyright?

Tilleke & Gibbins

Trung Nguyen and Phuong Thuy Nguyen

TV game shows play an important role in the Vietnamese entertainment industry, as in the global market. Many well-known game shows from other countries have been franchised or licensed for broadcast in Vietnam, including 'Who Wants to Be a Millionaire?', 'Vietnam's Got Talent', and 'The Voice', drawing large audiences and generating billions of VND from commercialised activities.

Other popular shows have been developed domestically – some wholly original, but many bearing a heavy resemblance to existing shows from other markets, with similar gameplay, similar sets, and even similar names.

This raises an interesting question from the intellectual property perspective as to whether owners or creators of game shows can charge these copycat shows with infringement. In other words, are format rights recognised as a copyright and can a game show be protected under intellectual property law?

Globally, this is a question without a clear and explicit answer. The Format Recognition and Protection Association (FRAPA), a trade association formed in 2000 to advocate recognition of television formats as intellectual property, strongly believes that format rights are

protectable and has been working to convince courts and lawmakers around the world to define these rights under law. However, recognition of format rights is still very limited, and is often determined on a case-by-case basis.

A common argument from legal experts is that because the format of a game show is only composed of ideas, which are not protected by law, it cannot be the subject of copyright (for reference, *Green v Broadcasting Corporation of New Zealand* in 1989). However, others argue that if the format of a game show is an intellectual creation and contains key elements which have unique originality, and it is not just a combination of general and commonplace elements, it can be protected under copyright law (for reference, *Meakin v BBC [2010] EWHC 2065*).

Format rights in Vietnam

Vietnam's IP Law does not stipulate any protection of formats and there are no provisions on infringement and enforcement of format rights. In other words, format rights have not yet been recognised in Vietnam. However, it is believed that a game show can still be separately protected under the IP Law via copyright for (i) literary works for the scripts; and (ii) dramatic works for the 'expression' of the game show on stage (including the concept, structure, studio and lighting design, rules, etc.).

The IP Law does not require copyright owners/authors to register their works (in this context, the literary work or the dramatic work) but it is a recommended and easy way to prove the ownership of a copyrighted work in order to prevent potential infringement.

Assessment of copyright infringement between game shows

Although there is a way to partially protect the copyright of a game show, when it comes to a claim of copyright infringement, it is far more complicated, especially when the global entertainment industry has created and televised hundreds of game shows with many features and elements in common.

To establish copyright infringement, including for literary works and dramatic works, there are at least three criteria to consider: originality, the similarity of the disputed works, and the willfulness of the alleged infringer.

Originality can be difficult to prove. Many game shows fall into recognisable categories with similar ideas and structures, like quiz shows or talent contests. For example, most singing competitions, like the 'Idol' and 'The Voice' franchises, have contestants demonstrate their talents on stage, after which the panelists/judges give comments and scores, and contestants are eliminated from round to round until a championship or grand finale finds a winner of the show. When a game show's format has these very common elements, it is hard to claim they give the show originality. And even though each game show is an interactive event where the participants have the freedom to act and comment beyond any prewritten script, it is doubtful that such acting and reacting can make the whole game show original.

Discerning the similarities between disputed game shows is also important when considering whether an allegedly infringing show is a copy or a derivative work of the earlier show. To this extent, it is necessary to identify whether the similar elements are essential to the whole show or just coincidental. For example, both 'Who Wants to Be a Millionaire?' and *'Rồng Vàng'* (a popular game show in Vietnam from 2003 to 2007, licensed from a Thai show) have similar elements and structures wherein a single contestant tackles a series of multiple-choice, general-knowledge questions to win a large cash prize, and can confer with family and friends to find the answer.

A viewer of both shows would certainly recognise a resemblance and might confuse one for the other.

"Vietnam's IP Law does not stipulate any protection of formats and there are no provisions on infringement and enforcement of format rights."

However, to our knowledge, no infringement suit was ever pursued, likely due to the originality issue. The elements that were most similar were common or even inherent to the quiz show genre, while the elements that were arguably the most distinctive – such as the amount of the cash prize, a key element of the 'Millionaire' brand – were different.

Finally, the claimant must prove that the infringer *willfully* copied the copyrighted work in question. It is possible to prove this indirectly by showing that the original work was created, published, or registered before the copycat, and that the infringer should have known that its work could damage the claimant's rights.

Conclusion

While Vietnam's IP Law does not expressively provide copyright protection for game shows, it is clear that a game show can indirectly be protected through its literary works and/or dramatic works. However, it is not easy to enforce the copyright of a game show in practice because in the entertainment industry, there is a blurred line between copyright infringement and the similarity of ideas among game shows. Thus, one must carefully evaluate and assess the show's originality and the similarity between the disputed game shows, and the willfulness of the infringer. Only when all the criteria are satisfied can we say that there is a copyright infringement of the game show.