‘Plus ça change, plus c’est la même chose’

This is a special edition of Patent issues at a time of upheaval on the world stage, but our message for 2019 is not merely one of business as usual, but indeed a message of great optimism for protection and enforcement of patent rights, and IP rights in general.

IP protection in China continues in leaps and bounds and we have a strong focus on that region in 2019. See our back page for exciting announcements. A message we have been hearing in China is that, as a trade war with the US looms, so Chinese companies are looking more to Europe for growth in trade.

Many column inches are being filled with speculation on Brexit, and we are writing our share of them, but our message is that this is a non-issue for IP holders.

**Good timber does not grow with ease,**
*The stronger wind, the stronger trees,*
*The further sky, the greater length,*
*The more the storm, the more the strength.*
*By sun and cold, by rain and snow,*
*In trees and men good timbers grow.*

Douglas Malloch
Establishing a national IP appeals court has been a frequent topic of discussion in China since the opening of specialised IP courts in 2014.

Recently, the National People’s Congress, China’s national legislator, issued a decision approving the establishment of an IP Tribunal within the Supreme People’s Court. The new IP Tribunal came into effect on 1 January 2019.

In our 2017 edition of Patent issues, we reported on the increasing number of patent lawsuits in China.

The figures for 2017 continue the trend. The new IP Tribunal will be competent for appeals against first instance civil and administrative judgements or rulings made by the Higher People’s Court, IP court, Intermediate People’s Court, or Beijing IP Court. It will also be competent to hear “major and complicated first-instance civil and administrative cases” brought before these courts.

Zhou Qiang, president of the Supreme People’s Court commented: “A national IP appeal court will also help nurture a favorable legal environment for technological innovation and a better business environment for domestic and international enterprises.”

Zhou also commented that the IP Tribunal of the Supreme People’s Court will uniformly examine appeals such as inventions and utility model patents, which will help optimize the rule of law for scientific and technological innovation.

Comment

China is an increasingly important forum not just for domestic patent disputes, but for major patent disputes between international companies that extend to the territory of China.

For many years, international litigants have perceived, principally through word-of-mouth, that Chinese courts are frequently biased towards domestic litigants. Tactics to address such perceived bias, such as transferring patents to a local Wholly-Foreign-Owned Entity (WFOE) can backfire. What is needed is greater confidence that the courts will apply international standards of fairness.

The new IP Tribunal of the Supreme People’s Court is welcome, as it is expected to play a key role in establishing uniformity, predictability and fairness, including fairness between litigants domiciled in China and outside.
The Munich District Court has granted QUALCOMM permanent injunctions against Apple, banning sales of iPhone models 7, 8 and X series (case No.s 7 O 10495/17 and 7 O 10496/17), for infringing patents related to “envelope tracking”, a feature that helps mobile phones save battery power while sending and receiving wireless signals. The Court ruled that phones that contain a combination of chips from Intel and Qorvo (a supplier to Apple) infringed the patent.

QUALCOMM must post a record security of EUR668m per case if the orders are to be enforced pending appeal. This is to cover potential losses of Apple should the judgments be overturned or amended.

This success for QUALCOMM in Germany followed hot on the heels of wins in the Chinese court in Fujian, in which QUALCOMM was awarded preliminary injunctions against Apple under certain patents that enable iPhone users to adjust and reformat the size and appearance of photographs, and to manage applications using a touch screen when viewing, navigating and dismissing applications on their phones.
In our Autumn 2015 edition of Patent issues, we reported on the preliminary proceedings in a battle between Warner-Lambert, owner of a patent for a second medical use for pregabalin, and Actavis, a generic manufacturer that supplied pregabalin for its off-patent indications. In those proceedings, Warner-Lambert were denied interim relief because, according to the judge, a Swiss form claim requires subjective intent on the part of Actavis that the drug would be used for the treatment of pain.

The matter went to trial and proceeded all the way to the Supreme Court, where Warner-Lambert finally lost because the claim to use of the drug “for pain” was over-broad given that the description taught only that the drug worked for certain types of pain (inflammatory pain).

Pain comes in various forms: there is nociceptive pain produced by noxious external stimuli such as heat, injury or chemicals; there is inflammatory pain; and there is neuropathic pain which is caused by damage to the nervous system itself. There are many medicines for inflammatory pain. It is treatment of neuropathic pain that is of greater interest in sales of pregabalin. Warner Lambert had set out tests on rats demonstrating efficacy of pregabalin for treatment of inflammatory pain, but not for neuropathic pain. Neither was there any unifying principal or theory set out to extrapolate from the results to their application to neuropathic pain.

Applying Conor Medsystems v Angiotech [2008] RPC 28, it was not enough that there was disclosure of a mere possibility that pregabalin might be efficacious for neuropathic pain. That would be no better than a bare assertion. The presence of a cause/effect relationship must be plausible from the patent specification. In this case, it was not.

Comment – Infringement of Swiss-type claims

On the question of whether a Swiss-type claim is infringed only where there is subjective intent on the part of the manufacturer, the five judges were divided, with two preferring the subjective intent test, two preferring an objective test based on product with its labelling and accompanying leaflet and the fifth preferring the objective test but leaving open the possibility that in the facts of a future case, additional extrinsic evidence might be relevant.

The EPO no longer grants Swiss-type claims on patent applications having a filing or earliest priority date of 29 January 2011 or later (see OJ EPO 2010, 514). So the debate over subjective intent, if not fully settled by this decision, is likely to die when the last SPC on the last Swiss-type claim expires. In the meantime (with limited exceptions) infringement is to be determined by what the court referred to as the “outward presentation” test – i.e. the physical characteristics of the product as it emerges from the relevant process (manufacture or repackaging) including its formulation and dosage, packaging and labelling and the accompanying patient information leaflet (so-called “skinny label”).

Comment – sufficiency

The Court did not wish to reward "armchair inventors" - persons who have simply sought to patent abstract possibilities. Something valuable may have been invented, but the contribution must be sufficiently disclosed in the patent. Experimental data is useful but not necessary.

The court went further than the EPO Boards of Appeal by saying the requirement for plausibility is not met by a bare or dubious assertion in combination with common general knowledge or post-published evidence. A priori reasoning may suffice, but it must be set out in the patent application itself.

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1. Generics is the first named defendant, as they first applied to revoke the patent, but Actavis holds the marketing authorization, so Warner-Lambert counterclaimed against Actavis for infringement. Warner-Lambert is owned by Pfizer.
2. EPO decisions T609/02 - SALK INSTITUTE/AP-1 complex and T0578/06 - IPSEN/Pancreatic cells
3. Instead, claims take the form “substance X for use in the treatment of disease Y”.

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SKATING ON THIN ICE: 
THE COURT OF APPEAL EXPANDS ON THE 
CIRCUMSTANCES WHEN AN IMATERIAL 
VARIANT MAY AMOUNT TO PATENT 
INFRINGEMENT 

BY REUBEN JACOB

In its decision in *Icescape Ltd v Ice-World International BV*, the Court of Appeal has considered for the first time the effect of the Supreme Court’s decision in *Actavis UK Ltd v Eli Lilly & Co* on how patent claims should be construed in the context of infringement allegations.

With this judgment, the Court of Appeal recognises expressly that the previous “Protocol Questions” should be abandoned and that from now on the “Actavis Questions” will be applied in order to establish infringement in a case where a variant from the claim achieves substantially the same effect in substantially the same way.

On an appeal from a decision of Mr John Baldwin QC (sitting as a deputy judge in the Patents Court), the Court of Appeal had to decide whether the deputy judge had been correct to revoke a European patent for a cooling system for a mobile ice rink, on the basis that it was not entitled to priority and that, had the patent been valid, it would not have been infringed.

Lord Kitchin, who gave the lead judgment, held that the deputy judge had been correct to revoke the patent for lacking priority over the claimed priority document. However, the case is of particular importance for Lord Kitchin’s application of the three “Actavis” questions in determining that, had the patent been valid, the variant would have infringed because it varied from the invention in ways which were immaterial.

Read our full article in the upcoming (2019) 41 E.I.P.R., Issue 2.
CJEU AND UK HIGH COURT DISMISS SPC FOR PrEP

BY LUCY HOLT

Truvada is a critical drug used for the prevention and treatment of HIV. It is also used for HIV pre-exposure prophylaxis (PrEP), which can reduce, by up to 92%, the risk of HIV infection in people who are at high risk.¹

Truvada is a combination of two active ingredients - tenofovir disoproxil (TD) and emtricitabine. TD alone is sold as Viread and is used to treat chronic hepatitis B and to treat and prevent HIV.

Gilead is a biotech company that researches, develops and commercialises drugs, including TD and Truvada. Gilead’s key patent for TD expired in July 2017 in most jurisdictions.

In an attempt to prolong their market exclusivity, Gilead applied for supplementary protection certificates (SPCs) for the combination product, Truvad. SPCs were granted in the UK, France and Switzerland. (The combination product has been available since expiry of the patent in the Netherlands, Italy and Greece, where the SPC application was rejected.)

The UK High Court has now ruled that Truvad was not “protected by the basic patent [for TD]” and thus Gilead’s Truvad SPC was invalid. Consequently, generic versions of Truvada can now be manufactured and sold in the UK.

The UK High Court earlier referred a question to the Court of Justice of the European Union (CJEU) regarding the interpretation of the wording “protected by a basic patent” of Article 3(a), Regulation (EC) No 469/2009. The CJEU published its decision in C-121/17 on 25 July 2018, in which it indicated (paragraph 56) that Gilead’s Truvad SPC did not fulfi the condition set out in Article 3(a) Regulation (EC) No 469/2009 because “the basic patent at issue contains no information as to the possibility that the invention covered by that patent could relate specifically to a combined effect of TD and emtricitabine … for the purposes of the treatment of HIV.”

In the decision, the CJEU introduced a new test for whether a product consisting of a combination of active ingredients is “protected by a basic patent in force”.

The Court held that in order for the patent claims to “relate necessarily and specifically” to the combination, through the eyes of the skilled person, accounting for the prior art at the filing date or the priority date of the patent, the following criteria must be satisfied:

a) The combination of those active ingredients must necessarily, in the light of the description and drawings of that patent, fall under the invention covered by that patent, and

b) Each of those active ingredients must be specifically identifiable, in light of all the information disclosed by that patent.

The CJEU decided that it did not seem possible for the skilled person to understand how the combination of emtricitabine with TD falls under the invention covered by the patent, because the claims did not relate to emtricitabine.

Following the result of the CJEU referral, Mr Justice Arnold of the UK High Court ruled, on 18 September 2018, that Gilead’s Truvada SPC was invalid for the reasons indicated.

A question may be raised regarding why Gilead did not apply for an SPC for the TD drug alone (Viread). The reason for this is that the regulatory approval and thus the marketing authorisation was obtained so quickly after the filing date of the patent, that the effective term of an SPC would have been zero.

A Supplementary Protection Certificate (SPC) effectively extends the patent term for active ingredients present in pharmaceutical or plant protection products. SPCs are a national right, available in the member states of the EU. The aim of an SPC is to compensate the patentee for the delay in obtaining this necessary regulatory approval required to use and sell such products.

Upon expiry of the patent, the SPC enters into force and usually lasts for up to five years. An extension of six months may be available for a medicinal active ingredient, if it has undergone paediatric testing.

**Legal basis for SPCs**

SPCs are available in the UK under the following European legislation:


The corresponding UK legislation is Section 128B and Schedule 4A of the UK Patents Act 1977.

**Conditions for obtaining an SPC**

There are four conditions set out in Article 3, Regulation (EC) No 469/2009 for obtaining an SPC:

a) The product is protected by a basic patent in force in the particular EU member state.

b) A valid marketing authorisation has been granted to market the product in the particular EU member state.

c) The product has not already been the subject of an SPC (i.e. one SPC per patent per product per patentee).

d) The valid marketing authorisation is the first marketing authorisation to place the product on the market in the particular EU member state.

A number of cases are proceeding through the courts of Europe challenging these criteria, and the European Commission has appointed the Max Planck Institute and Copenhagen Economics to conduct studies on the legal and economic effects of SPCs respectively, and also launched a public consultation between October 2017 and January 2018.

**Duration of an SPC**

Upon expiry of the patent, the SPC enters into force and can last for up to five years. An extension of six months may be available for a medicinal active ingredient, if it has undergone paediatric testing.

The duration of an SPC is equal to the period which has elapsed between the filing date of the patent application and the date of grant of the first marketing authorisation to market the product, less five years (Article 13, Regulation (EC) No 469/2009).
In its recent decision in Unwired Planet Ltd v Huawei Technologies Co Ltd, the Court of Appeal of England and Wales has brought some clarity to the issues associated with licensing standard essential patents (SEPs) under fair, reasonable and non-discriminatory (FRAND) terms.

The court has confirmed that a SEP owner does not need to offer a per-country licence - a worldwide licence can meet obligations under the European Telecommunications Standards Institute (ETSI) Intellectual Property Rights (IPR) policy - and a UK judge has the jurisdiction to set the terms of such a global FRAND license.

In addition, UK courts can (under certain circumstances) grant a FRAND injunction to prevent further patent infringement.

Unwired Planet was a familiar name back in the late 1990’s when, together with Ericsson, Motorola and Nokia, it launched the Wireless Application Protocol (WAP) Forum, an early approach to mobile internet access. The company claims to have developed technology that allowed mobile devices to connect to the Internet, including the Handheld Device Markup Language (HDML) and wireless browsers, and shipped software for over one billion handsets.

In 1999, Unwired Planet changed its name to Phone.com and subsequently merged with Software.com to become “Openwave Systems”. It continued to develop mobile internet technology but the balance of power gradually began to shift away from Openwave’s customers (carriers) and towards device makers like Apple and Google. In November 2011, Openwave decided to sell its product business and concentrate on earning revenue from its IP. After the sale, the business was renamed “Unwired Planet” and became a licensing business, staffed by a small group of IP specialists and accountants.

The prevalence of companies that do not produce their own goods or services but instead exist only to buy up patents and use them as leverage to extract money from businesses by threatening legal action has led to calls for tougher regulation to deter so-called “patent trolls” from filing frivolous lawsuits. In answer to accusations of being a patent troll, Unwired Planet’s General Counsel gave a great answer: “We happen to be at the point in our business cycle where what’s left is a patent portfolio.”

The most interesting part of the judgement is the settlement with Samsung. Unwired Planet was on the verge of insolvency and agreed a rock-bottom royalty for Samsung, but this “did not represent useful evidence of the fair market value of the Unwired Planet patent portfolio.” This is an important and valid point. It is not unreasonable for Huawei to cry “unfair” or “discrimination” if they have to pay more than Samsung, but it confirms that “fair” and “non-discriminatory” do not mean that all licensee rates must drop to the lowest common denominator. This is also confirmed in the judgement by the finding that there can be more than one set of FRAND terms in a given set of circumstances. This last point is the only point of difference vis-à-vis the first instance decision, and it strengthens the negotiating hand of the licensor. If there is more than one set of FRAND terms, the licensor can choose which to offer.

As for the worldwide licence point, all Huawei were trying to do was limit the damage of the case to the UK and continue to “hold out” in every other country. Lord Kitchen said it would be “wholly impractical” to engage in country-by-country licensing. Mr Justice Birss said it would be “madness”.

Our full article discussing the approach adopted by the court in this developing area will be published in Computer and Telecommunications Law Review (CTLR) Issue 2 (2019)
In 2017, the Administrative Council of the EPO changed the EPC Implementing Regulations to provide that products of essentially biological processes should not be patentable.

Now, a Technical Board of Appeal has held that the new rule is void, that the rules of the EPC can only be amended in such a way as to be consistent with the Board of Appeal’s interpretation of the articles of the EPC, and that the earlier rulings of the Enlarged Board of Appeal on the subject are the only binding law.
There is a bit of history to the patenting of plants and processes for creating plants at the EPO.

In our Spring 2013 edition of Patent issues, we reported on the Broccoli and Tomatoes cases G2/07 and G1/08, in which the Enlarged Board of Appeal ruled that a claim to a non-microbiological process for the production of plants which contains or consists of the steps of sexually crossing the whole genomes of plants and of subsequently selecting plants is in principle excluded from patentability as being “essentially biological” within the meaning of Article 53(b) EPC. A technical step to enable or assist in sexually crossing whole genomes does not escape the exclusion.

Then, in 2015, the Board of Appeal questioned if a plant could be patentable and the matter went back to the Enlarged Board of Appeal (G2/12 and G3/12) to consider the plants themselves. As we reported in Spring 2015 Patent issues, the Enlarged Board of Appeal held that a plant is only excluded from patentability as being “essentially biological” within the meaning of Article 53(b) EPC. A technical step to enable or assist in sexually crossing whole genomes does not escape the exclusion.

Thus we had the incongruous situation that a plant could be patentable (so long as it is not a specific plant variety) even though the process of producing it is not.

In November 2016, the European Commission, which is the body responsible for drafting the Biotechnology Directive 98/44/EC, issued a contrary opinion stating that it was never the intention to allow such product claims to be allowable. This prompted the EPO to suspend examination and opposition proceedings for applications relating to plants and animals obtained from essentially biological processes until the matter had been reviewed by the EPO Administrative Council.

At the conclusion of its review, the Administrative Council decided that products of essentially biological processes should not be patentable, and amended Rule 28(2) EPC to specifically exclude from patentability plants and animals exclusively obtained by essentially biological breeding process.

**Rule 28(2) EPC**

Under Article 53(b), European patents shall not be granted in respect of plants or animals exclusively obtained by means of an essentially biological process.

On 5 December 2018, the Technical Board of Appeal gave its decision in case T1063/18. This case was an appeal from the EPO Examination Division against the refusal of patent application EP2753168 relating to a pepper plant. The Examination Division refused this application based on the amended wording of Rule 28(2) EPC as the product of an essentially biological process, i.e. the pepper plant, was no longer patentable. The Technical Board of Appeal took a different view and ruled that the revised wording of Rule 28(2) EPC was void and that the plant could be patented.

Comment

If the Administrative Council were of the opinion that they had effectively nullified the decision of the Enlarged Board of Appeal, then this was dealt a blow by the decision in appeal T1063/18. The Technical Board of Appeal came to the conclusion that Article 164(2) EPC states that the articles of the European Patent Convention take precedence over the rules, and that the Enlarged Board of Appeal’s interpretation of Article 53(b) EPC in G2/12 and G3/12 must be taken to be the primary guidance on what is or is not patentable. Therefore, the board held that Rule 28(2) EPC, as amended, cannot be compliant with the interpretation of Article 53(b) EPC and must be void and unenforceable.

This is unlikely to be the end of matter and we await a response from the EPO Administrative Council on this latest development in the battle for control of which entity makes the decisions on what is and is not patentable at the EPO.
China’s 13th 5-year plan announced that mass innovation and entrepreneurship will be the “twin engines of growth”. In line with that plan, China has risen (in 2017) to second position behind the US as a source of international patent applications filed via WIPO.

Data from: https://www.wipo.int/edocs/en/ipfactsandfigures2018/
IP has been a headline topic in partnering with China, and the US and EU have filed IP-related “requests for consultations” at the WTO, an early stage of the trade-dispute resolution process, raising criticisms that Chinese policy over IP aspects of technology transfer are detrimental to China’s international partners in the long term.

In this article, we look at some of those policies, and have some top-tips for UK and European technology companies considering doing business in China.

China's Regulations on Technology Import and Export Administration (TIER) set some stringent IP ownership and transfer provisions in cases of import of technology to China and export of technology from China. UK and European companies wishing to undertake development with local Chinese partners need to consider the effects of this regulation on their plans.

In particular, Article 27 has the effect that a Chinese licensee of background IP will own any improvements to a licensor's technology. At first sight, this may be a major deterrent to plans to transfer technology into China. IP owners may fear that within a short period the local partner will have developed the technology to an extent that the licensor's involvement is no longer needed.

But there can be various ways to mitigate this concern or work within the Regulation.
Transfer in

Considering first the transfer of technology into China, there are four possibilities:

1. Article 27 applies only to import of technology. So if the technology is first licensed to a wholly-owned foreign entity (WOFE) – i.e. a local Chinese subsidiary – then the local WOFE can receive the import licence and undertake the development, and the ownership of the foreground IP will remain within the licensor group of companies. Alternatively, the WOFE can license the background to the local Chinese partner and the TIER does not apply to a licence between Chinese entities.

2. Another solution is to agree by contract that the foreground will transfer back to the UK/European licensor, with some reasonable compensation in exchange. This may or may not be within the spirit of the TIER regulation, but this is not uncommon practice. It is our understanding that such arrangements have not yet been put to the test as to what is reasonable compensation.

3. A third solution is to assess the risk and, if it is low and containable, then live with it on the basis that the upside value is greater than the risk of losing control of the technology over a longer period (for example because R&D outside China will make the licensed technology and its improvements obsolete is a foreseeable timescale). If this option is chosen, we would ask the question – why not implement option 2 above anyway?

4. A fourth solution is to execute the licence completely outside China. This solution may be suitable for multinational companies that have entities inside and outside China.

Liability for infringement of third party rights

A further regulation to be considered when licensing technology in China is Article 24 of TIER. This places the liability for 3rd party infringement on the technology licensor. The prospect of taking on unlimited 3rd party liability can be a major blockage in negotiations. The regulation was implemented in 2001 when the expectation was that small unwary Chinese companies should be protected from large, knowledgeable multinationals. But much has changed since then, and this provision can be a very heavy burden for a small innovative company wanting to license to a large Chinese company.

Again, there are possibilities for mitigating the risk. One possibility is to agree a cap on the liability (in absolute terms or on some sliding scale). It is our understanding that such an arrangement has never been ruled lawful or unlawful. Indeed, the Chinese government has been known to downplay this provision by saying it has never been put to the test. (The counter position in international trade negotiations is that if this is the case, then why should it be necessary.)

Greater comfort may be found in the December 2017 UK-China Joint Strategy for Science, Technology and Innovation Cooperation, and in particular, the IP Annex to that document.

Transfer out

Articles 33-38 relate to licensing out from China. To address these regulations, it is necessary to know if the technology is: 1) encouraged technology; 2) restricted technology or 3) prohibited technology. In addressing these regulations, parties should consider entering into a mutual obligation to comply with the relevant technology import/export restrictions of their respective governments. This places the onus on the Chinese party to handle the cumbersome export regulations and the UK/European party to handle the rather less burdensome (but not always negligible) regulations in UK and Europe.

Note also that China has additional restrictions on exporting of data. A link to a more comprehensive overview can be found on our website.

We thank Tom Duke, UK IP Attaché to China, for his talk to the China Britain Business Council on 7 November 2018, from which this article draws heavily.
Top Three IP Tips in China

**Number 1** tip for any company considering doing business in China is **register your trademark first.**

Do this before you even think about approaching anyone in China. Do it now!

China, like many countries, is a first-to-file country. 5 million trademark applications were filed in China in 2017 – more than in the entire history of the EUIPO. China is notorious for trademark and domain name “squatters” – people who file registrations for foreign trademarks and domain names in the hope that sooner or later the foreign owner will want to use the mark in China and will have to pay through the nose for their own rights when the time comes. In contrast to other jurisdictions, bad faith alone is not a ground for revocation of a trademark registration in China. There are other grounds for remedying a case of trademark squatting, and at present more such cases are being won by the original foreign trademark owners than are being lost, but the 2012 “Muji” case is a sobering warning that a Chinese company can register and commence use of a mark not previously widely known in China and take ownership of that mark.

Please refer to our website for our handy Fact Card for registering TMs in China.

**Number 2** tip is **execute a non-disclosure agreement**, in Chinese, under Chinese law, under the jurisdiction of the courts of China, with clear penalties for breach, and have it stamped by the local authority.

Chinese courts will enforce Chinese agreements but will not enforce agreements that say they are subject to other jurisdictions. Chinese contracting parties respect enforceable agreements and respect the authority of a government stamp on an agreement.

**Number 3** tip is **register your copyright**. What’s that? Register copyright? Isn’t it inherent under international convention?

Well – yes it is, but it can be registered and stamped in China, and this gives evidence of ownership. So register your software (you don’t have to disclose all the code) and your tables of data and your instruction manuals etc. We can do this for you (and, if you wish, we can also register your copyright in the US to give you the benefit of statutory damages there for added protection).
As in many other jurisdictions, China does not allow computer programs as such to be patented, but does not rule out patentability for inventions related to computer programs. A number of exceptions to patentability are set out by Article 25(2) of the Chinese Patent Law, one of which relates to rules and methods for performing mental activities. This is the exception that is often cited by Chinese Examiners to raise non-patentable subject matter objections against inventions related to computer programs.

Claims essentially relating to one of the following, even if presented in the form of a solution to a problem, are normally regarded by Chinese Examiners as defining rules and methods for performing mental activities:

- methods of calculation or rules of mathematical calculation;
- computer programs per se; and
- rules and methods for playing games.

However, if a claim recites technical features apart from content relating to methods for performing mental activities, patentability cannot be ruled out for the claimed subject matter under Article 25(2) of the Chinese Patent Law.

Software patent applications may also be rejected under Article 2.2 of the Chinese Patent Law for lack of a technical solution. A 3-step test is normally applied to decide whether an Article 2.2 objection should be raised:

1. whether the claimed subject matter involves execution of computer programs in order to solve a technical problem;
2. whether the computer programs are executed by a computer so as to control or process internal or external objects of the computer in accordance with the laws of nature;
3. whether any technical effect is achieved in accordance with the laws of nature by execution of the computer programs.

Failing any one of the three steps, the claimed subject matter will not be regarded as a technical solution in the sense of Article 2.2 of the Chinese Patent Law.

Allowable claim formats
In order to obtain appropriate patent protection for software inventions, certain rules need to be respected when drafting applications for such inventions.

A claim drafted as a process for resolving a technical problem and reciting specific steps performed by way of executing computer programs to perform specific functions can normally meet the requirement of Article 2.2 and does not fall within the exception of Article 25(2).

A product claim normally needs to be drafted in a way that it spells out not only each specific component of an apparatus but also connections between the components and describes how each function of the computer program is performed by a corresponding component or group of components.

If it is not practicable to define the components by their physical structures, it is not necessary to do so. The components can then be defined in means-plus-function language. If means-plus-function language is used for a product claim, it is important to ensure...
strict one-to-one correspondence between recited means and steps recited in the corresponding method claim. Although the Guidelines allow means-plus-function language to be used for product claims, in practice, it is not uncommon for Chinese Examiners to raise objections against means-plus-function claims on grounds of lack of support by the description.

Non-allowable claim formats

The Chinese practice still does not allow certain types of claims. For example, claims to data structures are not patentable, but such claims can be amended to methods for generating the relevant data structures which are potentially allowable. Claims to computer programs as such are normally not allowable either but, following a recent revision to the Guidelines, claims to computer-readable medium storing such computer programs are now allowable provided that a technical effect can be achieved as a result of execution of the computer programs. Therefore, terms such as “data structure”, “signal”, “computer program product” etc. should not be used as definition of inventions in claims if fast grant is desired. However, for Chinese patent applications based on earlier foreign applications (e.g., Chinese national phase entry of PCT applications, or direct Chinese filing and claiming priority from earlier foreign applications), it is advisable to keep such claims at the time of entry/filing in the event that the Chinese practice changes later to allow such types of claims. Often, amendments or new claims (e.g., in divisional applications) based on originally filed claims are more likely to be accepted by Chinese Examiners than those made based on the description.

Description

The description of Chinese patent applications also needs to be carefully crafted to support amendments to the claims. Chinese Examiners are often reluctant to allow claim amendments unless there is almost verbatim support in the specification. This is particularly relevant if the patent applications originate from jurisdictions which adopt less strict policies on added matter issues than China.

Apart from describing the solution as a whole, the description needs to clearly and completely describe the design and technical features involved in the computer programs that are necessary for achieve desired technical effects. It is advisable to include in the description technical problems that the prior art fails to solve and how the invention solves such problems specifically. Where appropriate, it is also advisable to include some description of technical effects achieved by each technical feature or group of technical features. The Chinese Examiners tend to be more prepared to accept that the invention is technical if they see such description.

Arguments for technical effect not based on the description, even if presented with supporting evidence, often are not accepted by the Chinese Examiners.

Normally at least a main flow chart needs to be included in the description of a software invention. Where specific functions or branches of a computer program involve multiple steps, it is advisable to also include flow charts corresponding to the specific functions or branches. The description needs to clearly and completely describe each and every step shown in the flow charts. If particular steps are not essential, it is important that the description explicitly says so. Otherwise, the Applicant may be forced to include corresponding steps and means in the independent claims.

Where execution of computer programs involves changes to the hardware of a computer, a diagram showing the structure of the computer should be included, and the description should describe the relevant hardware components and connections therebetween in a way clear and sufficient for a skilled reader to implement the invention.

The above is only a brief discussion of the particulars that one needs to be aware of if he wishes to patent his software invention in China. For more detailed information, please contact Handong Ran.

1. Computer programs are defined in the Guidelines for Patent Examination of the Chinese Patent Office (Guidelines) as “coded instruction sequences executable by an information processing device, e.g., a computer; to obtain certain results”, or “symbolized instruction sequences or symbolized statement sequences that can be automatically transformed into coded instruction sequences”; a software invention is defined as “a solution to an identified problem, which is wholly or partly based on processes of computer programs, for controlling or processing external or internal objects of a computer via execution of the computer programs by a computer”.
2. There have been recent cases where claims to computer programs are also allowed, but this is yet to be consistently applied.
3. Computer games that involve performance improvements for the computer running the games or technical changes to the structure or function of the computer running the games may potentially be patentable.
4. A “technical solution” is defined in the Guidelines as “aggregation of technical means applying the laws of nature to solve a technical problem”.
5. Effective from 1 April 2017.
Patents & SPCs – no change

There are only a few areas of UK patent law that come from EU legislation and these have, almost without exception, been incorporated in the existing legislation or been incorporated by the EU Withdrawal Act 2018.

• The conditions for patenting biotechnological inventions will remain in place.
• For compulsory licensing, UK, EU or third country businesses as holders of patents or plant variety rights in the UK will continue to be able to apply for a compulsory licence, where there is an overlap between the rights.
• UK, EU and third country businesses will continue to be able to obtain a compulsory licence for manufacturing a patented medicine to meet a specific health need in a developing country.
• For pharmaceutical product testing, UK, EU or third country businesses can continue to rely on the exceptions from patent infringement provided for various studies, trials and tests carried out on a pharmaceutical product.

And do not be confused - the European Patent Office, is an extra-governmental body outside the EU (extending to non-EU states like Turkey and Switzerland) and is unaffected by Brexit. European Patent Attorneys based in the UK will continue to be able to represent applicants before the EPO.

Legal professional privilege is given to patent attorneys registered in the UK and to those intellectual property representatives who are not based in the UK, but are on the ‘list of representatives’ for the EPO, reflecting the geographical area covered by the European Patent Convention (a non-EU international agreement). All Maucher Jenkins European Patent Attorneys are on that list and enjoy that privilege.

Trade Marks and Designs – very little change

The UK government will ensure that the property rights in all existing registered EU trade marks and registered Community designs will continue to be protected and to be enforceable in the UK by providing an equivalent trade mark or design registered in the UK, including those filed through the Madrid and Hague systems which designate the EU.

Those having an existing EU trade mark or registered Community design will have, with minimal administrative burden, a new UK equivalent right granted that will come into force at the point of the UK’s exit from the EU. The trade mark or design will then be treated as if it had been applied for and registered under UK law. These trade marks and designs:

• will be subject to renewal in the UK;
• can form the basis for proceedings before the UK Courts and the Intellectual Property Office’s Tribunal;
• can be assigned and licensed independently from the EU right.

At Maucher Jenkins, we are particularly advantageously positioned to continue to represent clients for UK and EU trade marks and designs though our London and Munich offices. Many of our Trade Marks team, who enjoy rights of audience before the EUIPO in both offices, will continue to do so.

Copyright – very little change

The UK is and will continue to be a member of the main international treaties on copyright. The scope of protection for copyright works in the UK and for UK works abroad will remain largely unchanged. The EU Directives and Regulations on copyright and related rights will be preserved in UK law as set out in the EU Withdrawal Act 2018. The UK government undertakes to ensure the retained law can operate effectively.

EU cross-border copyright mechanisms will cease. On exit, the UK will be treated by the EU and EEA as a third country and the reciprocal element of these mechanisms will cease to apply to the UK.
The guidance note explains what this means for:

- *Sui generis* database rights.
- Portability of online content service.
- Country-of-origin principle for copyright clearance in satellite broadcasting.
- Orphan works.
- Collective management of copyright.
- Cross-border transfer of accessible format copies of copyright works.

**Exhaustion of intellectual property rights – no change for importers, but exporters beware**

The UK Government says it will “continue to recognise the EEA regional exhaustion regime from exit day to provide continuity in the immediate term for businesses and consumers.” There will be no change to the rules affecting imports of goods into the UK, and businesses that undertake this activity may continue unaffected.

There may however be restrictions on the parallel import of goods from the UK to the EEA, and businesses undertaking such activities may need to check with EU rights holders to see if permission is needed. This is the subject of a separate paper being published by our Hugh Dunlop and Mark Webster.

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**Trade Mark Timelines – Deal and No-deal Scenarios**

Assuming a deal is struck and the transition period is agreed, we recommend applicants continue to file EUTM and International (EU) applications as usual until at least 31 December 2019. Most routine EUTM and International (EU) applications filed by that date should have been granted before the transition period expires on 31 December 2020 and will automatically convert into equivalent national UK registrations, so there will be no need to file a separate UK application:

A corresponding UK trade mark application can be filed within 9 months from the end of the transition period – i.e. to September 2021. This new UK application will retain the filing date of the EUTM (and priority date if applicable).

In the event of no Brexit deal, applicants will have a period of nine months from the date of exit to re-file with the UK IPO under the same terms for a UK equivalent right, using the normal application process for registered trade marks and registered designs in the UK but retaining the date of the EU application for priority purposes.

For further details, please request a copy of our award-winning sister publication *Make Your Mark*, or refer to our website.
We are delighted to announce the opening of our new premises in Shenzhen!

Shenzhen, in south-eastern China, is a modern, vibrant city of cutting edge technology and is regarded as China’s Silicon Valley for the world’s hardware start-ups. Our new office will provide us with unmatched access to our Chinese clients, and enable us to further expand into the second largest economy in the world.

The new office is staffed by Partner Handong Ran and Associate Dr. Matthew Yip who are able to advise Chinese companies and businesses in relation to their IP needs in Europe, as well as guiding foreign companies through the complex IP processes and procedures in China. Associate Dr. Edward Rainsford will join the Shenzhen team later this year.

We now also have a presence in Nanjing, the capital of Jiangsu province, the second largest city in the East China region which is remaking itself as a tech hub.

Our Beijing office opened in 2012. These new offices extend our facilities to offer services to clients in China and to our international clients seeking to do business in China.

Please find below our Beijing, Shenzhen, Nanjing and other office addresses and contact details.

Maucher Jenkins China Business Masterclass: Intellectual Property Workshop
23 January 2019
9am—12pm
CBBC, 3rd Floor, Portland House, Bressenden Place, London, SW1E 5BH

For more information visit www.cbcc.org/events