PATENT ISSUES

MAUCHER JENKINS

February 2023

Unitary Patent + UK will be a popular strategy

The Unitary Patent is coming soon. It represents the biggest development in European patent law since the European Patent started in 1978. It will be granted by the EPO in the same way and under the same rules. It will initially be available covering 17 of the 39 states of the EPC, representing a market with a population of 285 million consumers and a GDP of $13 trillion. Cont. page 2

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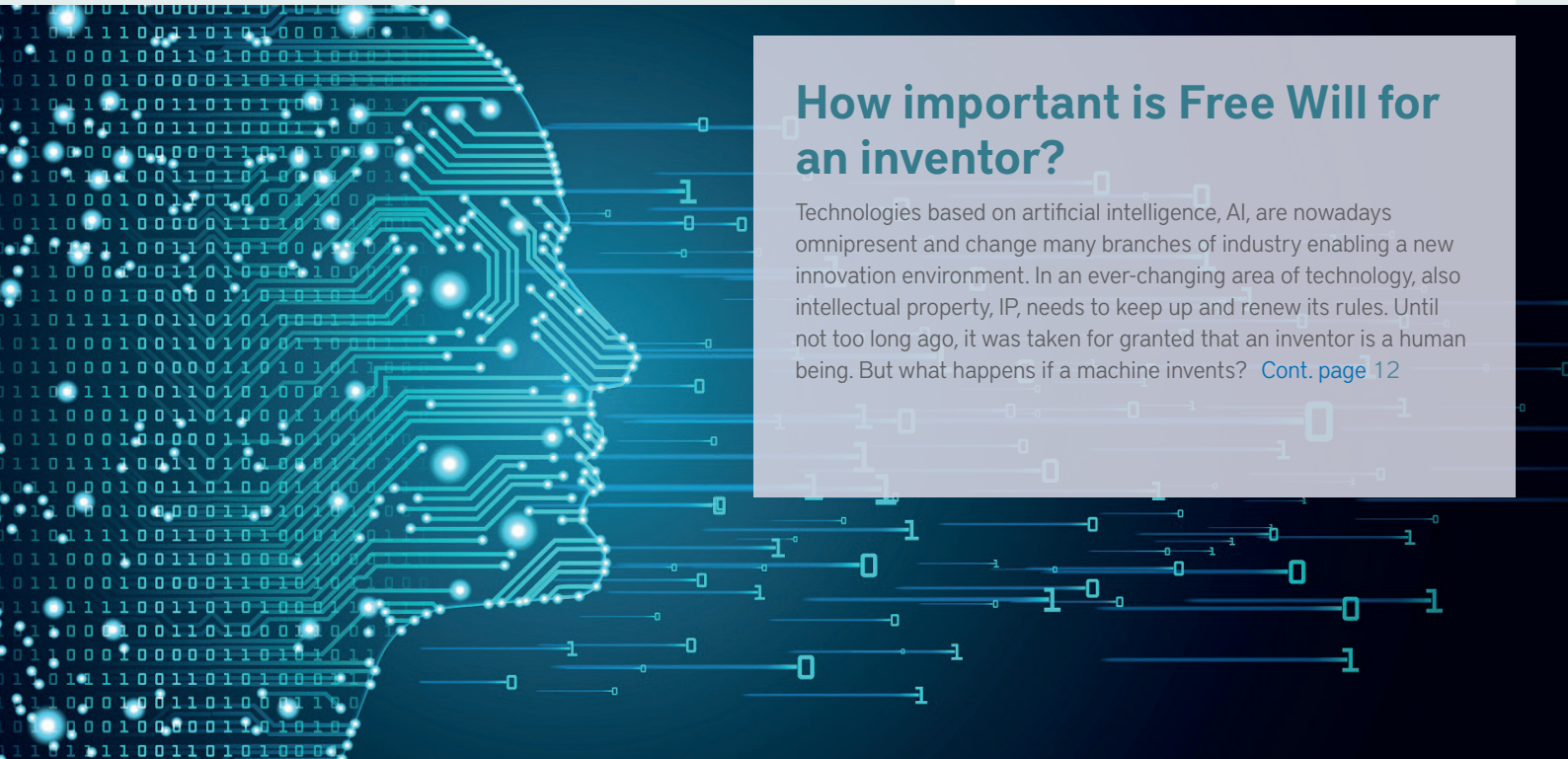


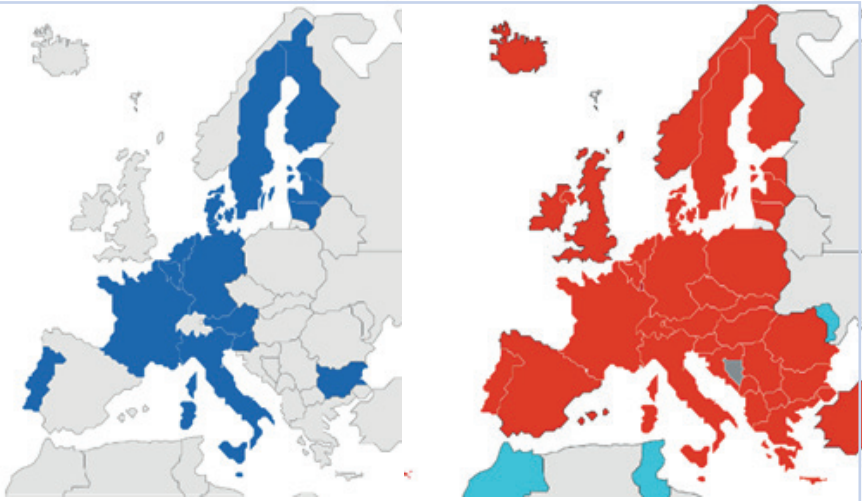
How important is Free Will for an inventor?

Technologies based on artificial intelligence, AI, are nowadays omnipresent and change many branches of industry enabling a new innovation environment. In an ever-changing area of technology, also intellectual property, IP, needs to keep up and renew its rules. Until not too long ago, it was taken for granted that an inventor is a human being. But what happens if a machine invents? Cont. page 12

Unitary Patent + UK will be a popular strategy

The Unitary Patent is coming soon. It represents the biggest development in European patent law since the European Patent started in 1978.

It will be granted by the EPO in the same way and under the same rules. It will initially be available covering 17 of the 39 states of the EPC, representing a market with a population of 285 million consumers and a GDP of $13 trillion. It will not extend to the UK, but the UK can be designated in the usual way, as can other states not party to the new system, including other non-EU states like Switzerland and Turkey.



Initial coverage of a Unitary Patent and total available coverage of a European patent

Unified Patent Court

For the new patent comes a new Court – the Unified Patent Court. It will have divisions in the various states and a Central Division in Paris and Munich. The validity of a Unitary Patent can only be challenged before the Central Division because the patent stands or falls as a whole across all its territory.

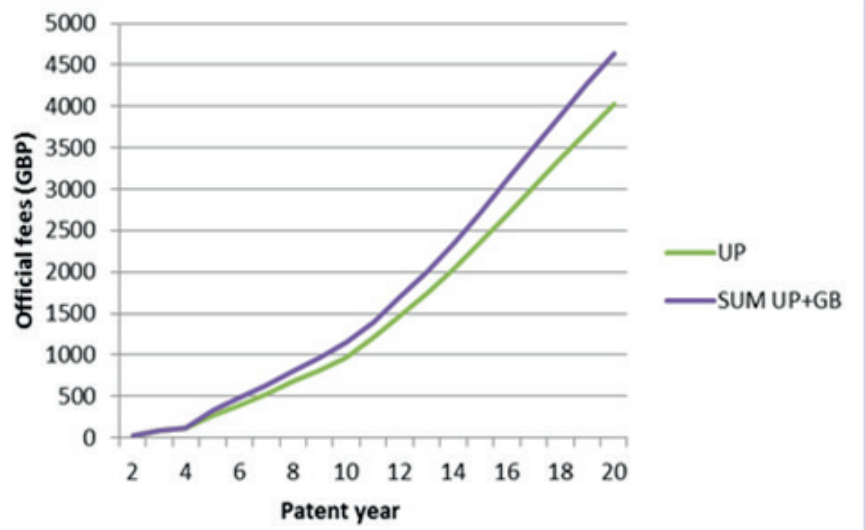
European Patent Attorneys (EPAs), including those in the UK, will be able to bring actions before the new Court, provided they have certain additional qualifications, which all EPAs at Maucher Jenkins have. Our German Attorneys-at-Law also have these rights of audience before the new Court.

Pros of Unitary Patent

- Many more states
- Lower grant costs
  - The patent does not have to be validated separately in different EU states, and multiple translations are not necessary
- Single annual renewal fee
  - Not much more than 3 national patents
- Single registration whenever the patent is assigned
  - Register administered by the EPO
- Benefits of the Unitary Patent Court

Cons of Unitary Patent

- Exclusive jurisdiction of the Unified Patent Court
  - Untried and untested
  - No opt-out
- Validity can be challenged and the patent can be revoked across the whole territory in a single action
  - At any time in its life
  - Not just in the 9-month opposition period.



Designating a Unitary Patent and a UK patent at the time of grant of a European patent will be a popular choice. The UK adds coverage for a further 67 million people and a further $3.5 trillion of GDP. In other words about another 27% market share for a small increase in annual renewal fees (see chart).

By Hugh Dunlop

Opt out of the UPC and opt back in later – a low-risk choice

The Unified Patent Court (UPC) Administrative Committee roadmap envisages that the new Court will begin operation on 1 June 2023. The timing is under the control of the German government, which can start the sunrise period as soon as the UPC Administrative Committee indicates the Court will be ready. (The schedule has been delayed 2 months owing to difficulties in finding eIDAS-compliant smart card providers to comply with the very high UPC case management system (CMS) security requirements.)

In an initial transitional period of at least seven years after the system enters into force, "traditional" European patents (and indeed patent applications) will fall under the joint jurisdiction of the UPC and relevant national courts. This will be the default situation not just for newly granted patents, but to all existing European patents, unless they are actively "opted out" of the Court's jurisdiction.

Accordingly it will be possible, until the end of the transition period, to "opt out" an EP patent or, pre-emptively, a patent application, from the jurisdiction of the UPC. This requires the active step of filing a request through the online case management system of the Court Registry. There is no official charge.

This option will become available in a "sunrise period" of three months before the start of the transitional period – i.e. from about 1 March 2023 if all goes to plan. It is expected that vast numbers of patents will be opted out during this period. If not opted out, there is a risk that a third party could launch a revocation action (or other action), after which the jurisdiction of the UPC will have been invoked and opting out thereafter is not permitted.

Once opted out, the patent will by default remain "out" for the rest of its lifetime, even beyond the end of the transition period. But it is possible to withdraw the request and thus "opt back in", unless an action has begun before a relevant national court. No further change of mind is allowed.

Opt out or stay in?

The major concern about falling under the jurisdiction of the UPC is that of central revocation. Whereas a European patent is subject to central opposition for just nine months after grant, at relatively low cost, a patent subject to UPC jurisdiction is vulnerable to attack throughout its lifetime and the cost is not very much greater. (The Court fee is €20,000, which is much higher than the fee for opposition, and it is a "loser pays" system, so a failed attack can be quite costly, but the procedure is designed to not be much more expensive than an opposition.)

Any third party may apply to revoke a patent - not just a defendant in infringement proceedings.

In choosing to opt out, a patent owner is choosing the status quo i.e. a nine-month period for opposition and familiar options for enforcement before national courts. The UPC is untested and many patent proprietors will prefer to sit back and wait to see how patentee friendly the UPC will be. If an infringement comes to light and the UPC is an attractive forum, the patentee can simply withdraw the opt-out.

Infringement may occur or be imminent in one of the states in which the patent is validated, and the patentee may at that time prefer the national or regional division of the UPC over the local court. Or the UPC may have more accessible powers of discovery, inspection and seizure than the local court. Or infringement may occur across a number of states, such that the broad jurisdiction of the UPC is attractive. These questions can be considered at the time.

The risk is that a competitor pre-empts the withdrawal of the opt-out by some action in a local court to "clear the way" by initiating revocation proceedings or non-infringement proceedings. This is probably a low risk, because such proceedings are rare without there first being some contact from the patentee drawing attention to the alleged infringement.

EPC Applications

Is it necessary to opt pending EPC applications out? On the whole, "no", because proceedings under pending applications (such as applications for declaration of non-infringement - so-called "Arrow" declarations) are extremely rare and generally only necessary in relation to divisional applications where uncertainty hangs on after a parent patent has been granted.

If an EPC application is opted out, it can still be declared as unitary when it is granted, which then cancels the opt-out.

EP(UK) Patents are outside the system

The United Kingdom will be outside the Unitary Patent system and European patents will still need to be validated in the UK, just like Spain, Switzerland, Poland, Turkey and other EPC states that are not participating in the Unitary Patent system. Opting out is of no relevance to UK patents obtained by the EPO route, and neither is it of relevance who sues whom first under a UK patent.

Conclusion

Joint jurisdiction under the UPC and national courts is not for everyone. Some will jump at new options in litigation and negotiation strategy and enhanced forum shopping, and some will shy away from the centralised approach.

Rather than expending effort weighing the relative legal and cost implications, many applicants will simply opt out, with the option to opt back in later.

But don't leave it to the last minute. Patentees (and patent applicants) wishing to opt out should instruct their European Patent Attorneys in good time. There may not be time before the end of the sunrise period to answer all the many questions that will arise, and the online systems will be busy as that time approaches. It may not be critical to file the opt-out before the system starts, but without doubt there will be parties and lawyers keen to file revocation proceedings on the first day for key patents that may not be opted out.

By Hugh Dunlop &
Dr. Gerrit Schultz

European Unitary Patent – EPO Transitional Measures Begin

The long-awaited Unitary Patent system at the European level in patent law is expected to enter into force on June 1, 2023. From that date it is expected that applicants for European patents will be able to obtain unitary effect when their patents are granted (Unitary Patents).

Until now, the only way to delay the grant of a patent and push it far enough into 2023 so as to be confident that it will issue when the system is in force has been to request amendments (e.g. minor formal edits) to the patent application documents intended for grant. Such tactics have been in play throughout 2022 in anticipation of the start of the new system. Throughout 2022, applicants for European patents for which grant is imminent have been second-guessing whether the system might begin in time for their granted patents to be Unitary Patents.

On November 14, 2022, the European Patent Office announced two transitional measures that applicants would be able to use as of January 1, 2023, to obtain Unitary Patent protection for such patent applications. The transitional measures are being introduced to support timely claiming of the Unitary Patent. (See next page for the "sunrise period" for opting existing European Patents out of the jurisdiction of the new Court, which is a different matter and has a different start date.)

From January 1, 2023, applicants seeking a Unitary Patent have been able to make an early request for unitary effect and, if necessary, can request deferral of the decision on grant.

The transitional measures announced for January 1, 2023, will apply until the unitary patent system takes effect.

The early request for unitary effect will allow applicants to request unitary effect for their European patent applications that are due to be granted before the start of the Unitary Patent system. This will allow the European Patent Office to begin registering unitary effect immediately upon launch of the system.

Early requests for unitary effect can only be filed for European patent applications for which a communication under Rule 71(3) EPC concerning the Office's intention to grant a European patent has already been issued.

Early requests for unitary effect filed before a communication under Rule 71(3) EPC has been issued cannot be treated as requests for unitary effect. In this case, the request must be filed as soon as the conditions for doing so are fulfilled.

The request for deferment of the decision on grant of the European patent may be filed after a communication under Rule 71(3) EPC has been issued by the Office and before the applicant has indicated his or her agreement with the version of the application intended for grant.

The request for deferment of the decision on grant results in a deferment of the publication of the mention of the grant of the European patent to a date after the Unitary Patent system comes into force. The (regular) request for unitary effect can be filed within one month after the publication of the grant of the European patent.

Our experts will be happy to answer any questions you may have about the new Unitary Patent system and the strategic options it offers patent applicants.

By Johannes Lange

Onerous EPO Guideline for description amendments remain

In the February edition of the CIPA Journal we reported on decision T 1989/18, published in December 2021, which found there to be no legal basis for refusing an application on the grounds that the description had not been amended in correspondence with the allowed claims.

Now, in recent Board of Appeal decisions (starting from T 1024/18) the decision in T 1989/18 has not been followed and the requirement for amendment of the description in correspondence with the allowed claims is enforced. Unusually, the Board in T 1024/18 was expanded to add two legally qualified members. The conclusions of this five-person expanded Board appear to carry extra weight.

The requirement for description amendments before the EPO is unusual in the context of global patent prosecution. It can place a heavy burden on the applicant and their representative to interpret the scope of the claims and description, a task that has traditionally been reserved for national courts during litigation.

The European Patent Office (EPO) Guidelines for Examination, section F-IV, 4.3, seeks to avoid inconsistencies between the description and the claims of a European patent application. They say any such inconsistency "must be avoided if it may throw doubt on the extent of protection and therefore render the claim unclear or unsupported."

This requirement was made more stringent in the 2021 Guidelines, which has led Examining Divisions to insist upon a range of "tidying-up" amendments such as: adaptation of the specific description to replace "optional" language with positive statements, and excision of subject-matter not within – or combinable with – the scope of the allowed claims. Sometime, Examiners request explicit statements that subject-matter is not within the scope of the claims.

This section of the Guidelines was extensively re-cast in the 2022 Guidelines, but appears to have remained equally as stringent as the 2021 Guidelines.

Recent Board of Appeal decision T 1024/18 (and subsequently T 121/20, T 2293/18, and T 2766/17) support the Guidelines in arguing against the reasoning of T 1989/18. In those cases, patents were refused (in part) on the basis of a lack of adaptation of the specific description to the scope of the allowed claims. In contrast, Board of Appeal decision T 1444/20 supports the position in T 1989/18 that extensive adaptation of the description is not required. It is notable that the former decisions have been issued with distribution to other EPO Boards of Appeal whereas the latter have not.

Facts of T 1024/18

In T 1024/18 certain replacement claims were allowable. They had been amended to specify "a non-woven web atop which a first continuous core was formed and a second non-woven web atop which a second continuous core was formed", whereas the first embodiment of the description related to formation of first and second non-woven webs on a "screen". The expanded Board reasoned that the first embodiment:

> "must therefore be deleted or must be clearly identifiable to the reader, for example by rewording of relevant passages to indicate that such passages are not, or are no longer, part of the invention".

The patentee was invited to file an adapted description, but did not do so, and also did not attend the hearing. Since the description was not amended, the replacement claims were refused.

Reasoning

The Board of Appeal found legal basis for the description amendment requirement in Article 84 EPC. According to the Board, there is long-established case law interpreting Art. 84 EPC as requiring the entirety of the description to be consistent with the allowable claims (e.g., T 977/94, T 0300/04, T 1808/06).

The Board noted the reasoning in T 1989/18, which took a view that Art. 84 EPC requires that the claims themselves are clear and that there exists matter in the description that supports the claims.

For the Board in T 1024/18, however, Art. 84 EPC imparts three requirements on the claims:

i. their clarity,

ii. their conciseness, and

iii. their support by the description.

The Board reasoned that *"the criterion that the claims be "supported by the description"* is not in any way subordinate to the requirement of *"clarity" of the claims, but is a requirement of its own"*. They concluded that merely providing a part of the

description which gives support to the claims is not enough to satisfy the *"supported by the description"* requirement of Art. 84 EPC.

Instead, the Board found that the *"supported by the description"* requirement of Art. 84 EPC requires that *"the description is consistent with the claims not only in some part but throughout"*. They went as far as to reason that *"to provide only support for the claims in one single passage of the description while the rest of the description might give a different or even contradictory meaning to the claims, would in essence negate the general meaning of the words "support by the description""*.

The Board concluded that:

> "when amendments are made to the claims... the description must be made consistent therewith in the sense that a reader is not presented with any information conflicting with the wording of the claims"

Comment

It appears that the EPO and the Boards of Appeal are keen to distance themselves from the decision in T 1989/18, and to follow the requirements of Guidelines for Examination, section F-IV, 4.3 for adaptation of the description.

The expanded Board in T 1024/18 casts the necessary amendments in terms of *"contradictory meaning"* and *"information conflicting"*. It appears to us that subject-matter in the description which is **technically contradictory** to the independent claims should be excised or marked. This is different to a mere inconsistency of language or feature combinations, or a lack of a given claim feature in an example in the description.

Such adaptations are here to stay until such a time as an Enlarged Board of Appeal decides otherwise (if at all).

EPO Guidelines go too far?

EPO Guidelines for Examination section F-IV, 4.3 seeks to encode case law for description adaptation and to communicate when description adaptations are needed. They specify that adaptation of the description is necessary where the description is "inconsistent" with the claims, and go on to attempt to define "inconsistent".

Sometimes, Examining Divisions appear to interpret "inconsistent" as encompassing any wording which is not identical to that used in the claims, in addition to any teaching that might be interpreted as technically inconsistent. Identifying such technical inconsistencies can be an onerous task for Examining Divisions, Applicants, and representatives alike.

Recently, we have noted proposed texts in which it appears Examining Divisions have reviewed the reference signs in the claims, and concluded that only figures (and associated description) whose reference signs appear in the claims are part of the claimed invention. In such cases, other figures have been marked as not being part of the claimed invention. It appears that appropriate and full use of reference numerals in the claims might at least indicate to Examiners the matter which the Applicant considers to fall within the scope of the claims.

We believe a fair interpretation of the case law is that subject-matter in the description which is *technically contradictory* to the claims should be excised or marked as not falling within the scope of the claimed invention. We believe that such an interpretation aides in defining which parts of the description truly do not fall within the claim scope.

Practical steps

The required description adaptations fall into four broad categories:

a) "summary section" amendments – removal of claim counterparts from the "summary" section and replacement with a reference to the claims, or adaptation of the claim counterparts to account for any amendments to the claims.

   These amendments need to be carefully considered to ensure that no subject-matter (and combinations thereof) or associated discussion of technical effect and problem is lost.

b) "alternatives" – it appears that any technically inconsistent alternatives to the subject-matter in the independent claims should be i) marked as not within the scope of the claimed subject-matter or ii) excised.

   This is not a straightforward choice. Given that claim interpretation falls under the Protocol on the Interpretation of Art. 69 EPC and says that equivalents should be taken into account in court proceedings (for example in the UK following Actavis and as long-established in Germany), great care should be taken before excising or disclaiming material that might reduce the scope for equivalents – or indeed where removing material might leave open interpretations to a wider range of equivalents. In consideration of such adaptations, the Applicant must always ask "is this question more appropriate for national courts and/or the unified patent court?"

   Care must also be taken when excising matter that the excision does not result i) in any insufficiency problems or ii) in a different meaning for remaining matter in the description and claims. If a different meaning results, the requirements of Art. 123 EPC might not be met.

c) Embodiments "not covered" – sometimes entire embodiments might not be consistent with the claimed invention.

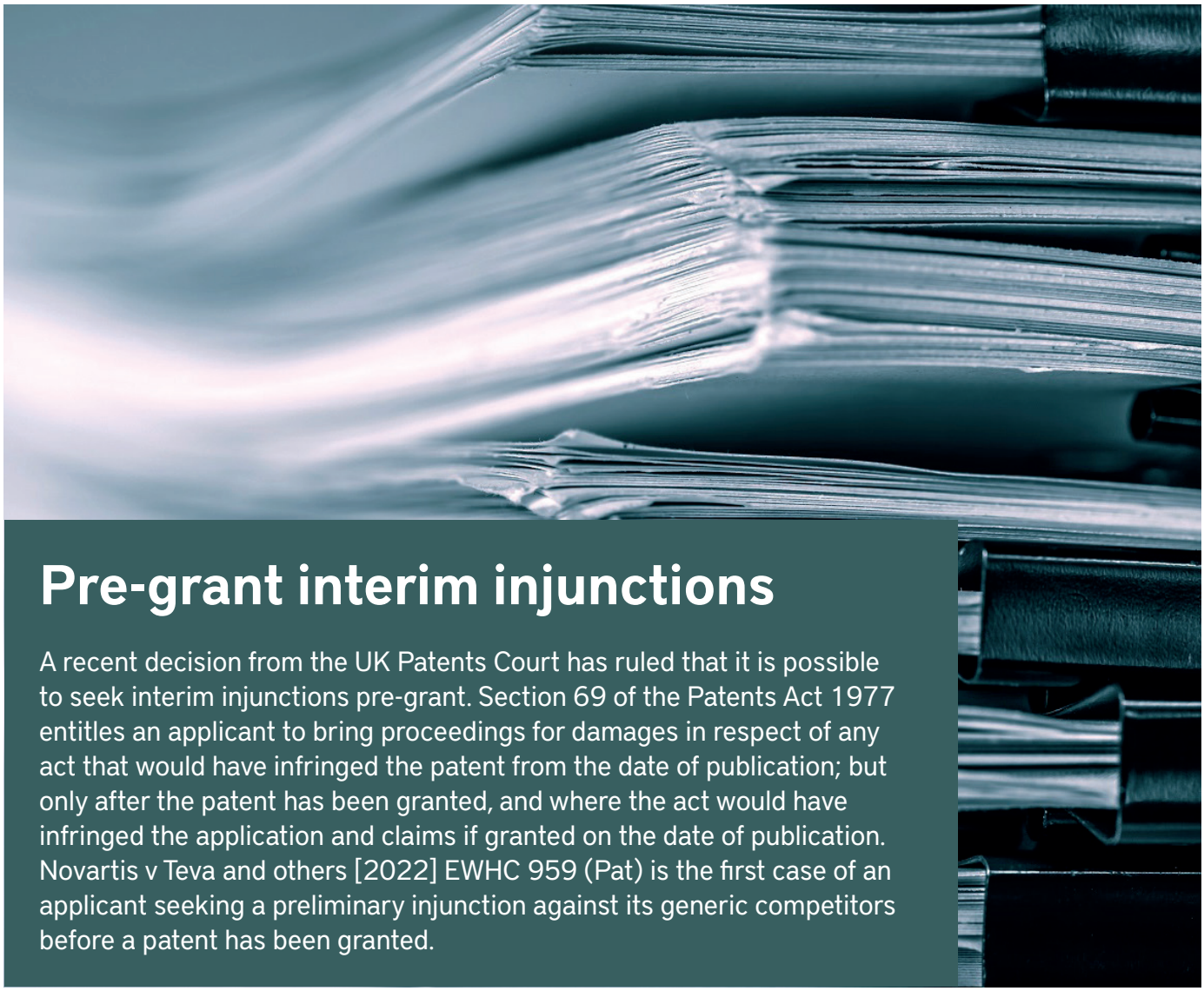
   Such "consistency" must be judged on a technical level, and, we believe, adaptations should only be made to matter which is technically contradictory to the claims. It is noted that Guidelines F-IV, 4.3 states "it is not an inconsistency when an embodiment fails to explicitly mention one or more features of an independent claim as long as they are present by reference to another embodiment or implicit", and that in "borderline cases...benefit of doubt is given to the applicant".
   Similar considerations to those outlined for b), above, are also relevant in this case.

d) "tidying amendments" such as those to remove references to US law or incorporation by reference, citing prior art, and removal of some boilerplate language.
   These are usually uncontroversial.

Amendments a) to c) are only possible with a full technical understanding of the claims and description, and we take the view that amendment is only necessary in case of technically contradictory subject-matter. Even so, a burden has been placed on Applicants and representatives to interpret the claims and description. In the facts of T 1024/18, above, it would have been necessary to ask whether a "screen" is - or could be - an example of a "continuous core"? Such a question might not be easy to answer.

Each and every potential description amendment requires due care and attention, taking considerable time to evaluate and argue for Applicants, representatives, and the EPO. In many cases, they may result in Applicants "nailing their colours to the mast" for claim interpretation purposes.

Dr. John Parkin-Tyrie



Pre-grant interim injunctions

A recent decision from the UK Patents Court has ruled that it is possible to seek interim injunctions pre-grant. Section 69 of the Patents Act 1977 entitles an applicant to bring proceedings for damages in respect of any act that would have infringed the patent from the date of publication; but only after the patent has been granted, and where the act would have infringed the application and claims if granted on the date of publication. Novartis v Teva and others [2022] EWHC 959 (Pat) is the first case of an applicant seeking a preliminary injunction against its generic competitors before a patent has been granted.

Novartis sought an interim injunction in respect of a pending application[1] , to prevent the defendants selling generic versions of a prescription-only drug called fingolimod (supplied in the UK under the brand name 'Gilenya') which is used for treating relapse-remitting multiple sclerosis. The Technical Board of Appeal concluded that Novartis' patent should be granted on 11th February 2022. However, at the date the application for an interim injunction was heard, the patent had not yet been granted. Novartis' regulatory and market exclusivity was due to expire 22nd February 2022, just five days after the application for an interim injunction was heard.

It was concluded that s. 69 of the Patents Act should not prevent the court from granting interim relief under s. 37 of the Senior Courts Act where it may be suitable to do so. It was reasoned that while the temporary and provisional nature of interim injunctions meant they may not be considered to be the same as damages for the reasons of s. 69 of the Patents Act[2], previous judgments mean that the Patents Act should not be interpreted as an exhaustive code as regards to remedies pre-grant[3] , and that s. 69 of the Patents Act may be interpreted as importing the remedies of s. 61 of the Patents Act[4]. It was further reasoned that the provisions of s. 69(2) should be considered to be only a procedural bar to a claim for final relief, and that in the circumstances of present case, where the grant of the patent has not taken place only because of administrative procedures, it would not be an abuse of process to seek interim relief to prevent future damages[5].

While this judgment provides the basis for a new course of remedy, the need to consider the underlying policy of s. 69 to not give a remedy until the scope of the patent has been determined means it is unlikely to lead to a large influx of pre-grant interim injunctions being granted in the UK[6]. Despite coming to the conclusion that the court may grant pre-grant interim injunctions, Novartis' application for a pre-grant interim injunction was denied on the basis that damages would be an adequate remedy. Novartis were refused permission to appeal this judgment on 25th May 2022[7].

[1] EP2959894
[2] At 25
[3] Fujifilm Kyowa Kirin Biologics Co, Ltd v Abbvie Biotechnology Ltd [2017] EWCA Civ 1, cited at 26-27
[4] Spring Form Inc v Toy Brokers Ltd [2002] FSR 17 at 28-29
[5] At 33-37, citing Sevcon Ltd v Lucas CAV Ltd [1986] RPC 609 (originally under the Patents Act 1949)
[6] At 39
[7] [2022] EWCA 775

By Alex Musker

National rights and the Unitary Patent – New EPO Form

It has hitherto been possible to have different granted claims in different EPC states, to reflect prior national rights that may affect validity in some but not all states. The claims can be amended accordingly either before grant or after grant. But if the claims are amended in such a way before grant, in at least one UP participating state, but not all, then it will not be possible to obtain a Unitary Patent. This is because the claims of a Unitary Patent must be the same in all the UP participating states.[1]

The EPO has begun issuing a new form (EPO Form 2906-01) relating to national rights, in view of the Unitary Patent. The form accompanies the Notice of Allowance (Communication under Rule 71(3) EPC) and summarises the results of a search for and prima facie relevance assessment of national prior rights by the Examining Division.

What is a "prior national right"?

The term "prior national right" refers to a patent application filed at a national office of an EPC member state, but not yet published, before the filing date of a European patent under the EPC. Such a prior national right is not considered prior art against the later filed European patent application[2].

What has changed?

If a Unitary Patent is desired in the face of a prior national right, the scope of protection needs to be limited in all UP states. Similarly, if a prior national right relevant to validity is revealed post grant, the UP will need to be amended accordingly, that is, for all UP states. The scope of protection may thereby be reduced in some states as a result of the UP, compared with the "classic" EP option.

There is also a risk in proceeding down the classic route of limiting the claims in the EPC state where the prior national right exists and leaving them broad in the other states. In such a situation, it is important to opt the classic European patent out of the jurisdiction of the Unified Patent Court. This is because the UPC can revoke, upon application, any patent within its jurisdiction (unitary or otherwise) on the basis of a prior national right arising under Art 139(2) EPC[3].

Comment

It has become more important to be aware of prior national rights before grant, to assist in making the best decisions regarding whether or not to proceed with a Unitary Patent. This new EPO service will provide some reassurance.

Typical wording of new form 2906-01

Prior national rights within the meaning of Article 139(2) EPC are not a bar to the grant of a European patent in proceedings before the EPO. Therefore, the EPO is not required to search for and assess such rights (see GL, H-III, 4.4). Applicants may, however, consider the procedural option under Rule 138 EPC in view of the effects of such rights in national proceedings and/or before the Unified Patent Court (Article 3 Regulation (EU) No 1257/2012). As a support service free of charge for the applicant in this context, the applicant is hereby offered non-binding information on a search for and prima facie relevance assessment of prior national rights by the examining division. It is the applicant's responsibility to assess such prior national rights and any use of the procedural option under Rule 138 EPC (see GL, H-III, 4.4).

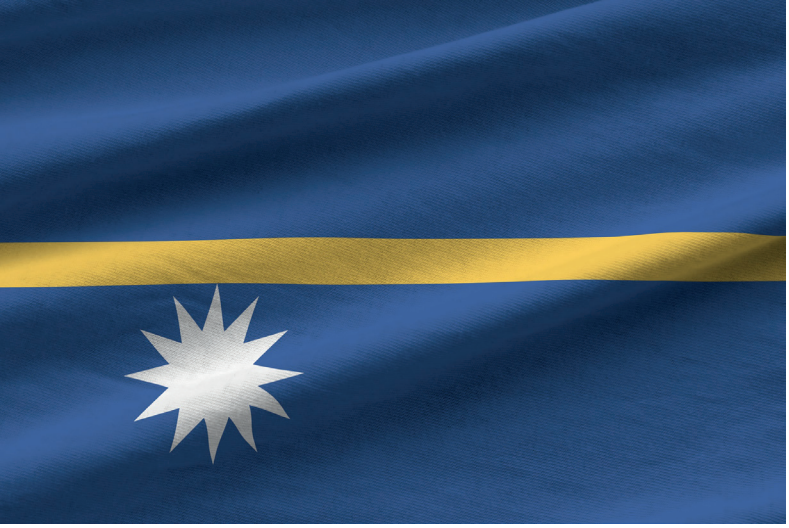
The applicant is informed that no prima facie relevant prior national rights were found.

[1] Regulation (EU) No. 1257/2012, Art. 3(1), and EPO Rules relating to Unitary Patent Protection Rule 5(2) "Unitary effect shall be registered only if the European patent has been granted with the same set of claims in respect of all the participating Member States." In the context of Rule 5(2), participating Member States means states participating in Enhanced Co-operation, regardless of whether they are also signatories to or have yet ratified the UPC Agreement.

[2] Art 139(2) EPC "A national patent application [...] in a Contracting State shall have [only] with regard to a European patent designating that Contracting State the same prior right effect as if the European patent were a national patent.

[3] UPC Agreement Art 65(2)

By Holly Whitlock



Maucher Jenkins Registers Patent in Nauru

Nauru, once known as 'Pleasant Island', is the world's smallest republic and island nation situated in the Central Pacific between Australia and Hawaii. For such a small island, Nauru has a fascinating history, seeing European convicts settle on its shores in the first half of the 19th century, shortly followed by the well-known 'phosphate rush', which saw the island's large natural reserves of phosphate mined extensively..

Local patents are sometimes called a "confirmation patent". These patents provide Applicants with simple protection for their patent rights late in the process, in jurisdictions which they might not initially consider including in their patent portfolios. These can allow jurisdictional protection to be extended as an afterthought when the value of a patent has become clear.

There are a number of small states that allow registration of UK or EP(UK) patents, and a smaller number that allow registration of any patent, as can be seen in the table below.

Registration of a UK national patent worldwide has to be applied for within 3 years from the date of grant of the UK patent, but there are some exceptions and we urge you to enquire with us if this may be important to you.

Area	UK or EP(UK)	Any foreign patent
Caribbean	- Cayman Islands (no deadline) - Grenada - Guyana - Montserrat - British Virgin Islands - St Lucia - Turks and Caicos Islands (5 years)	- Haiti
Asia-Pacific	- Brunei Darussalam (can also register patent of Malaysia or Singapore, depending on basic filing date) - Fiji - Hong Kong - Kiribati - Nauru (can also register Australian or US patent) - Solomon Islands - Tuvalu - Cambodia (can also register patent of China or South Korea, depending on basic filing date)	- Nepal (no deadline)
Africa/ Indian Ocean	- Seychelles - Sierra Leone	- Democratic Republic of the Congo (no deadline) - Ethiopia (no deadline)
Atlantic/ Mediterranean	- Bermuda - Gibraltar - Jersey - Guernsey (no deadline) - Falkland Islands - St Helena - Turkish Republic of Northern Cyprus	-

In addition to registration of a foreign patent, some countries have independent patent systems with a mere "local novelty" requirement for patentability. These are becoming less and less important as the information revolution conveys knowledge around the world. In such countries, a local national patent application may be available if the invention still has local novelty. If this is of interest, it is important to act quickly - without waiting for the UK patent to proceed to grant - or local novelty may be destroyed by others out of your control.

By Edward Belknap

EU Design Law: Has the meaning of "normal use" of a complex product been lost in translation?

Background

On 3 November 2011 Monz Handelsgesellschaft International GmbH & Co. KG ("Monz") registered a design with the German Patent and Trade Mark Office, (DPMA) for an underside of a saddle for bicycles or motorbikes (Design No. 40 2011 004 383-0001) with the following single representation:

On 27 July 2016, Büchel GmbH & Co. Fahrzeugtechnik KG ("Büchel") filed for a declaration of invalidity of the design registration, claiming that the design lacked novelty and individual character under Articles 3(3) and (4) of EU Directive 98/71/EC, which specify the conditions that have to be met to obtain protection of a component part of a complex product.

EU Directive 98/71/EC

Article 1 of the EU Directive 98/71/EC, which was issued on 13 October 1998, defines a "complex product" as a product which is composed of multiple components which can be replaced permitting disassembly and reassembly of the product.

Article 3(3) of the Directive specifies that a component part of a "complex product" is only considered novel, and to have individual character:

- if the component part, once it has been incorporated into the complex product, remains visible during normal use of the latter, and
- to the extent that those visible features of the component part fulfil in themselves the requirements as to novelty and individual character.

Article 4 of the Directive defines "normal use" as meaning use by an end user, excluding maintenance, servicing or repair work.

Lost in translation

At the first instance, the DPMA rejected Büchel's request for a declaration of invalidity, interpreting the term "normal use" broadly. In particular, they stated that "normal use" would include dismantling the saddle by the rider when parking the bicycle outside to prevent the saddle being stolen. Consequently, the underside of the saddle would be visible to the end user during "normal use".

During an appeal by Büchel however, the German Federal Patent Court overturned the DPMA's decision highlighting that the German version of Directive 98/71 uses the phrase "bestimmungsgemäße Verwendung", which translates to "intended use" rather than "normal use". The Court held that while the removal of the saddle to prevent it being stolen may comprise "normal use" of the bicycle, it does not form part of its "intended use". When being used as intended, the saddle will be in place, attached to the bicycle so that an end user can ride the bike. In that scenario the underside is not visible, and thus it is not afforded design protection under the German version of Directive 98/71.

The German version of Directive 98/71 as it stands therefore appears to provide a somewhat narrower scope of protection than both the English and French versions of the Directive, which use the terms "normal use" and "utilization normale" respectively. The result - a lack of harmonisation of the Directive across EU states.

Monz has now appealed the decision with the Federal Court of Justice, who has in turn referred two questions to the CJEU. Firstly, does the component product have to be visible during normal use or can it be visible in *abstracto*? And secondly does "normal use" only include using the product with respect to its principal function?

Decision

We now eagerly await the decision of the CJEU on this matter, however the opinion of the Advocate General (AG) provides an indication of the direction the Court may go. In his Opinion the AG stated that a component part of a complex product must be visible when in "normal use", and not in *abstracto*. They also opined that "normal use" of a complex product should not be limited to the principal function for which it is intended, highlighting that "normal use" could reasonably include cleaning a product, or eliminating minor problems such as removing paper from a jammed printer.

Comment

The AG's opinion that a component part of a complex product must be visible when in "normal use", and not in *abstracto*, is unsurprising and in line with the purpose of Article 3(3), which was introduced by the EU to prevent monopolies in spare parts markets.

The AG's opinion on what defines "normal use" is more interesting, and should the CJEU follow the AG, it will potentially broaden the term "normal use" further than is even intended in the English and French versions of the Directive.

For example, will the appearance of components which are visible when an end user opens up a printer to remove a paper jam now receive protection? What about components in a car engine visible to an end user when they open the bonnet to refill the oil?

In T-10/08, the underside of a combustion engine intended for use in a lawnmower was ignored when assessing its novelty and individual character as it was not visible whilst mowing a lawn. However, in future perhaps the underside won't be ignored if it can be argued that "normal use" includes an end user removing simple blockages in the underside of the lawnmower caused by a build-up of grass when mowing a lawn?

One thing is for sure: if the CJEU follows the AG's opinion, Articles 3(3) and 4 will only apply to a very limited range of scenarios, and an increase in design registrations for component parts of complex products could be expected.

By Dr. Christopher Ashcroft

Take-Downs on Amazon as unjustified threats? – A Comment on the UK High Court decision dated August 4, 2022 (EWHC 2034 (Pat))– Carku vs Noco

Abstract

Take-down measures on online platforms like Amazon are very popular with online retailers to take quick actions against the sale of products that infringe their intellectual property rights. In the best case, the products are blocked by Amazon after just a few days and can thus no longer be sold via the Amazon website. However, when we perform such take-downs for our clients, we always prepare our clients to defend themselves against counterattacks by the affected retailers. Typically, they will dispute the infringement of the property rights or doubt their validity. But what about damages for lost profits due to the blocking of the products? For such a claim, the other side would have to prove that the take-down was an unjustified threat according to Sec. 70 of the Patents Act 1977 (hereafter: the Act). Recently, the UK High Court has handed down a decision on this very relevant issue.

On August 4, 2022 the UK High Court (hereafter: the Court) had to consider, whether conducting take-down measures on Amazon UK based on an alleged patent infringement are held to be unjustified threats of infringement proceedings. This question arose in the context of a revocation action filed by the company Shenzen Carku Technology Co., Ltd. (hereinafter: Carku) against a UK patent concerning battery-powered car jump starters owned by the Noco Company (hereinafter: Noco).

Carku and Noco both have distributed their products on Amazon UK. Amazon UK provides an IPR complaints procedure for intellectual property owners based on that take-down requests can be submitted to Amazon because of an (alleged) infringement of e.g. a patent right by using an "Infringement Form". This procedure has been used by Noco against various products of Carku.

Carku objected to these take-downs by claiming that Noco`s statements to Amazon were actionable threats of patent infringement under Sec. 70 of the Act. This provision especially requires that a reasonable person in the position of a recipient would understand from the communication that a person intends to bring proceedings against another person for infringement of a patent. Noco defended itself by saying that the take-downs conducted on Amazon UK were not threats or at least were justified because the patent in question was infringed and legally valid.

However, since the Court did not confirm the validity of the patent, the main question was, whether the take-downs conducted by Noco were to be considered as threats against Amazon.

According to the Court there had not been any cases in England & Wales relating to this Amazon IPR procedure. Only on eBay´s VeRO (Verified Rights Owner) programme similar issues arose in the context of a summary judgment application. In that former case the Court stated that there was arguably a threat in the notification to eBay. However, for this proceeding regarding the Amazon IPR procedure the Court only concluded from that former decision that whether there is a threat of legal proceedings depends on all the facts.

Here the Court analysed that Noco had conducted take-down requests on Amazon, in which Noco *inter alia* referred to a letter of the Amazon attorneys directed to Carku. In this letter, Amazon had concluded that the allegation made by Noco regarding the infringement of its patent was sufficiently grounded. Furthermore, Noco had announced to "esc[u]late this case to provide that letter". Beside that, Noco had also informed Amazon that patent infringement actions had been filed against various companies in the past.

In light of these facts the Court analysed Amazon´s reasons for choosing to de-list the notified products. The Court held that Amazon made a judgment of its own self-interest, weighing the patent risk to Amazon against its desire to sell all that it can. According to the Court this means that the policy is not just to delist products blindly.

Based on that the Court came to the conclusion that Noco´s communications to Amazon regarding the Carku products were actionable threats. According to the Court from quite an early stage the whole situation was laden with legal positions being taken as Amazon had instructed its lawyers to communicate with Carku. And even if it was not clear whether any lawyer of Noco was directly involved in the take-down requests, the Court stressed that "Noco did provide claim charts to Amazon, which has the strong flavour of lawyers being in the background at least".

It is clear from this decision that clients should be made aware of the possibility that a take-down request on Amazon could be held as a threat, especially if lawyers are involved – even if only as background supporters. Hence, it is very relevant to carefully consider whether such threat would be at least justified because of the infringement of a valid patent right.

Looking at Germany, clients are faced with a quite similar situation. The German law would qualify a take-down request directed against a non-infringing product or based on an invalid patent right as a unjustified warning. Beside a preliminary injunction also an action for declaration of non-infringement could be brought before the German Courts. The latter action however requires a legitimate interest on such declaration. Such legitimate interest could result from an unjustified warning in terms of an unjustified take-down request.

At Maucher Jenkins, we are specialized in patent infringement disputes. We support our clients in all kind of legal actions to defend their patent rights but also to defend against unjustified allegations of infringements of such rights. We especially can provide advice on take-down measures on online-platforms like Amazon or eBay. Please feel free to contact our Team Members in the UK or in Germany.

By Dr. Ulrike Kaufmann

How important is free will for an inventor? On the inventorship of artificial intelligence or thou shalt not switch off an AI

Key findings:

- Many national court decisions judge on whether an AI may be an inventor or not. Not all countries agree in that an AI does not quality as an inventor.
- It could be a compromise to name AI as co-inventor. However, this discussion ends in the same argument that the AI lacks legal capacity.
- Copyright law already discussed about AI, its free will and the creative contribution to artistic works coming to the conclusion that an AI has no free will enabling it to create creatively.
- In copyright law, the amount and quality of the human input to an AI invention such as selection of AI input data or modification of AI generated output decides on the human creative contribution. This approach may be transferable to patent law.
- It remains to be seen how the current patent system will deal with the massive creation of AI generated inventions.

Technologies based on artificial intelligence, AI, are nowadays omnipresent and change many branches of industry enabling a new innovation environment. In an ever-changing area of technology, also intellectual property, IP, needs to keep up and renew its rules. Until not too long ago, it was taken for granted that an inventor is a human being. But what happens if a machine invents?

In more than 100 countries, first patent applications have been filed naming artificial intelligence systems as inventor. Now, courts around the world are struggling to solve this novel challenge. Should rights on such inventions fall to the designer of the AI? Or its user? Or should actually the AI be granted the rights on its invention? Should the new AI technology be forced into the old patent system or is a new patent system necessary?

New technologies challenged the patent system before when novel techniques for genetic sequencing and human-made living organisms emerged. However, the questions arising therewith dealt with whether these were inventions or not.

Now, with AI, the new challenge is not centred around what an invention is and if an invention is patentable, but around who made the invention.

Patent protection for AI-assisted inventions - the DABUS decision

The AI system DABUS (Device for the autonomous bootstrapping of unified sentience), created by Stephen Thaler from the US-based AI firm Imagination Engines, was recently named as inventor on several patent applications: DABUS invented a new type of food container and a flashing light for attracting attention in emergencies. The patent applications have been filed in many countries around the world - trying to find out what national patent laws were capable of and where their gaps were. (Stankova E, Cambridge Law J 80, 338-365, 2021)

Free will and the identity of an AI

The main argument in the above decisions by several regional and national patent offices to deny inventorship to AI systems was based on the fact that an inventor needs to be a legal person.

According to the prevailing opinion, a person with legal capacity is one who has the capacity to be the bearer of rights and obligations. S/he must therefore be able to behave in a way that is legally relevant. The implication of this is that only a legal person may make a declaration of intent according to his/her free will.

The legal capacity of a person, and thereby his/her his ability to declare intent, may be manifestable by the following characteristics: (1) Thinking, (2) Knowledge, (3) Body, (4) Ability, (5) Personality, (6) Name and (7) Ownership. In case of AI, thinking (1) is conceivable. While the access to information of an AI is even more comprehensive than for any human being ("big data"), it is arguable if an AI possesses knowledge (2), which would enable the AI to identify an invention as such. However, it becomes already difficult when thinking about the body (3) of an AI. While the body is assumed to belong to the essence of a person, in what body could an AI manifest? At best, a computer or hard drive may come to mind. However, the computer cannot be it, since it is technically without further ado possible to transfer the trained program on another computer, even on another computer of other construction. Ability (4) includes certain (allowed) actions that may be done as well as the legal possibility granted to a person to affect others/something. In particular, the latter is debatable in the case of AI. While ownership (7) is quickly negated as an AI does not hold any possessions, it becomes particularly difficult to argue for an AI being a person when it comes to personality (5) and therewith the persons own actions and name (6), including e.g. residence, function in society. Both refer to the identity of a person. As indicated for the body (3), the (exchangeable) computer device can certainly not account as part of the identity of an AI. The computer program itself, on the other hand, is arbitrarily duplicated and indistinguishable from its copies. Would, for example, subsequently created copies be the same or another person and would a copy be entitled to a share of the co-inventorship? Or does the identity of the AI inventor manifest itself in the operating state of the computer when the program is executed? Then, what happens when this program is terminated, e.g. by switching off the computer?

Further, it may be stated that "Personhood requires moral agency in the sense of the ability of a subject to choose moral laws for him- or herself." (Wagner, Fordham Law Review 591, 595). It is hard to imagine how an AI should choose his own moral laws.

Autonomous declarations of intent?

Nevertheless, developments in AI make it conceivable for autonomous systems to make and express legal decisions independently, without prior precise parameter input by a human. It is being discussed whether such autonomous declarations of intent can be legitimate as legal representatives for their users. However, only those who have legal capacity themselves can be representatives. Therefore, a limited partial legal capacity of autonomous systems is being discussed. Alternatively, autonomous declarations of intent could in principle be attributed to the respective user or operator as his or her own.

DABUS decision J8/20 by EPO Board of Appeal:

The European Patent Office, EPO, refused two European Patent applications (EP3564144, EP3563896) naming algorithm DABUS as sole Inventor and Stephan Thaler only as patent applicant. The refusal was based on a lack of legal personality of the AI system. The EPO Board of Appeal found that DABUS was not capable of applying for and owning a patent and that the responsibility had to be taken by Thaler. Thaler tried arguing that he was the employer of DABUS deriving the rights of DABUS inventions hereby. However, this argument was overruled by the EPO receiving section, following the same argument that DABUS is not a legal person, and so cannot transfer rights to Thaler (Art. 60(1), 81 EPC). Thus, the BoA finally ruled that the designated inventor has to be a person with legal capacity following the ordinary meaning of the term "inventor".

It was decided that Thaler should designate himself as inventor. This was based on EP law, whereto the user or owner of a device involved in inventive activities can designate themselves as inventor. It was proposed that the inventor - Thaler - may acknowledge DABUS in the description of the patent application.

Concluding, for the EPO there were no legal, moral or practical difficulties in current system to come to said decision. There was no discussion on whether an AI is capable of inventing or not.

The role of AI in inventing - AI as co-inventor?

A co-inventor is someone who makes a creative contribution to an invention. So, what would be the creative contribution of an AI? An AI appears deterministic: the training leads to a reproducible occupancy of the weight functions in the neural network, since this weight distribution is the result of an optimization process. Case law, however, says that the assistant who performs a series of measurements is not a co-inventor. A creative contribution is therefore just the opposite of a deterministic contribution. But the result of an AI is exactly deterministic, because it is comprehensible with a computer. An identical computer with the same training will certainly present exactly the same solution. This should normally not be the case with human twins.

Or a human as co-inventor?

The complete renunciation of a creative contribution of the human being to an AI generated invention is, however, problematic. If the AI completely takes over the search of data and creation of an invention, this is in strong contrast to the use of a merely supporting computer device and the result is not directly attributable to any human act of control. Not even the selection of a specific AI alone is likely to have a direct and concrete effect on the result of the solution. This is especially true in the case of using big data. The question arises if the mere flicking of the on/off switch by the AI user contributes significantly (enough) to the solution. As stated above vice versa, the human would herein probably only act like an assistant with insufficient creative contribution. Finally, even in the case of invention by recognition or selection of AI generated output, the causal connection between the human action and the preceding inventive performance is missing. Recognizing and evaluating a solution can only be inventive if the invention is not yet finished, but otherwise the mere recognition of a solution lacks creative content. Thus, it may be problematic to find the human contribution to fully AI generated inventions.

Regional outcomes:

Similarly to the EPO, a number of national patent offices (UK, US, DE, South Korea, Taiwan, New Zealand) decided to reject the applications due to the fact that an inventor, by law, needs to be human. Other countries, such as Australia, first ruled for allowance, but then adapted their decision to the opinion of other countries afterwards as their decision was overruled by higher court. Only South Africa allowed Thaler to patent one of his products last year, noting that "the invention was autonomously generated by an AI" leading to Thaler owning the patent but the AI system DABUS being listed as inventor. A compromise going into a similar direction was allowed in Germany, where Thaler is named as the "inventor who prompted DABUS to invent".Or a human as co-inventor?

Copyright protection for AI generated works

But what about paintings or pieces of music created by an AI? Recently, a painting created by an AI was auctioned for hundreds of thousands of dollars and AIPPI (Association Internationale pour la protection de la propriété intellectuelle) considers AI to be a potential game changer.

Currently, copyrightable work can only be created by humans and law requires that the work arises from the "author's own intellectual creation" (Infopaq landmark decision C-5/08 by Court of justice of the EU CJEU). In other words, there needs to be a link between the authors personality and the work. Thus, creation by machine is excluded from copyright protection. This is similar to what was discussed above in the context of patent protection.

In copyright protection, AI is currently still found to be similar to a camera used by a photographer to create an image. The author is still the human creator of the work. Consequently, the output of AI systems such as DALL-E, which converts text strings into images is considered to not include any inherent creativity of the AI.

How authorship is currently judged:

This is also mirrored by current law: The US, Australia and Europe ruled that the author of a work must be a human and therefore, no copyright is granted for AI generated inventions. Hong Kong, India, Ireland, New Zealand and the UK refer to their laws which state (in comparable extent) that: "In the case of literary, dramatic, musical or artistic work which is computer-generated, the author shall be taken to be the person by whom the arrangements necessary for the creation of the work are undertaken" (Section 9(3) CDPA).

In this context, it is still under debate if the creative act of a programmer extends to the AI generated work. It is clear that the AI algorithm created by the human programmer can be copyright protection (if the further requirements of protection are met). Thus, to data, the resulting work needs to fulfill requirement itself

and the creative act cannot be extrapolated to come from a programmer. It is therefore currently decided on a case by case basis if the rights fall to the programmer of the AI or its user.

In a recent decision the United States Copyright Office, USCO, decided on a case in which (again) Stephen Thaler was seeking to "register this computer-generated work as a work-for-hire to the owner of the Creativity Machine" (Creativity Machine is the name of the AI). In this case, the AI created the image "A recent entrance to paradise". The USCO found that: "fruits of intellectual labor are founded in the creative powers of the human mind". Thus, courts are "consistent in finding that non-human expression is ineligible for copyright protection".

Authorship is, according to current copyright case law, attributable to the human if the author creates the AI algorithm, selects its input data and chooses the final work from various AI outputs. However, in most cases, the potential human author will not program the AI him-/herself, but use a (trained) AI to generate creative works.

Currently, the selection of training data of an AI alone does not qualify for a human controlling the creative process of the creation of a work. It is considered only as a preparatory act which is not protected by copyright law (similar to the acknowledgement of co-inventorship in patent law as discussed above). While the mere selection of an AI output also lacks creative contribution, a creative selection of the output of an AI may qualify as a creative contribution if it contains a creative selection, such as an arrangement of the components of a work. If the works are, thus, solely AI generated, i.e. the AI makes all decisions while creating an art work, no copyright protection is granted as it is not deserved due to lack of human involvement and creativity.

What about the future

Currently, no changes to the rules on copyright law are announced. However, ideas are discussed (see e.g. UKIPO or H. Sun) according to which a new right with a shorter period of protection (e.g. of 2-10 years) should apply for AI generated works.

In the future, the judgement of authorship may, however, become an increasingly complex issue, because AI will become better at producing artworks and the use of AI by artists becomes more widespread. The boundaries between human and AI input during the creative process become more and more blurred and there will be less chance to distinguish if a work was created by a machine or a human.

Implications

Currently, there is no evidence of AI being able to invent without any human assistance. Thus, it is considered premature to think about changing patent law or copyright law to include regulations for fully AI generated inventions.

While respondents from e.g. the pharmaceutical sector claim that AI has, even today, the capability to discover new innovative drug therapies on its own, there is no indication that any AI system will gain identity and free will, prerequisites to being regarded as a "legal person" with legal rights.

But what are the currently predominant obstacles worried for to become reality when allowing to grant protection (by patents or copyright) to AI generated inventions independent from human control?

One fear is that AI might become so prolific that its inventions could overwhelm the patent system with applications.

Further, it will become more and more difficult to judge on inventive step of an invention, which is currently examined in detail during patent prosecution? How can a human examiner judge if the invention is obvious to a "skilled person"? Must the "skilled person" then be an "AI skilled person"? Is there any difference? Relying on a human "skilled person" could result in all AI generated inventions being inventive. In contrast, introducing an "AI skilled person" could lead to all human generated inventions being obvious.

If, however, courts and governments would decide that all AI generated inventions cannot be patented, this would have huge implications for the innovation landscape in all industries. AI generated invention would then become part of the public domain and businesses would no longer be incentivized to invest into research using AI inventors. Thereby, we could be missing out on potentially game changing developments for finding solutions for the big societal challenges of the present and the future.

We have discussed that the question of whether an AI can be rightfully named as an inventor boils down to the more fundamental question of whether an AI can have a personality in order to have and exercise rights. As long as it not a criminal offense to switch off a computer, we would like to side with the apparent majority of court decisions that denies both questions. Once it is, we are ready to draft your engagement contract with your newly acquired AI concerning IP rights and their appropriate inventor's compensations.

References:

- A. George, T. Walsh, "Artificial intelligence is breaking patent law", Nature 605, 2022
- N. Fox, F. Richardson, "All change (but not just yet) when it comes to AI and IP", The patent layer magazine, 2022
- W. M. Schuster, "Artificial Intelligence and Patent Ownership", Washington Lee Law Rev. 75, 2018
- R. Abbott, "Machine Rights and Reasonable Robots", Washburn Law J 60, 2020
- G. Wagner, "Robot Inc.: Personhood for Autonomous systems?", Fordham L. Rev. 591, 2019
- E. Stankova, "Human Inventorship in European Patent Law", Cambridge Law J 80, 2021
- D. Paulus, "Die Automatisierte Willenserklärung", JuS 960, 2019
- S. Klingbeil, „Rechtsphilosophische Behandlungen", AcP 217, 2019
- H. Sun, „Redesigning copyright protection in the era of artificial intelligence", Iowa Law Rev. 107, 2022
- UKIPO, Consultation outcome: "Government response to call for view of artificial intelligence and intellectual property", 2021"

By Dr. Katharina Brassat and
Dr. Cornelius Mertzlufft-Paufler

Anti-drone patent landscape

New drone technology has allowed drones to be used as a means to transport medical supplies, as flying mobile signals for rescue missions and, of course, for military purposes. Drones have been a defining feature of the war in Ukraine.

The global market for drones for commercial and civilian use is expanding and is estimated to grow by $21.01-billion from 2021 to 2025. The adoption of counter methods is of growing importance.

YouTube has an impressive video of a drone being brought down by the UK "Dragonfire" ship laser gun system, and on 8 November 2022, the Ministry of Defence announced further trials of this laser weapon on its ranges at Porton Down, where testing up to a range of 3km can take place, although the achieved capability remains classified.

The patent records are a rich source of information on every conceivable technology, including technologies that might normally be considered sensitive. We have taken a look in the records to explore the many and varied ways of countering unwanted drones.

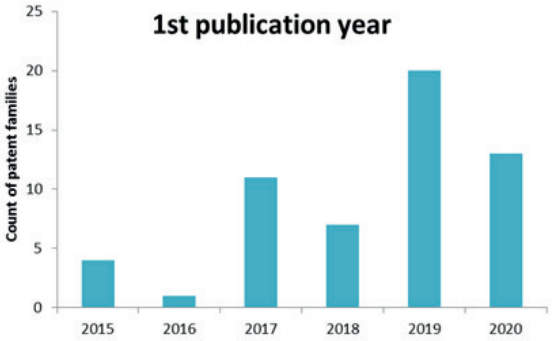
Anti-drone solutions span a wide range of classes of the international patent classification, but there is more than one way to search the patent records and, for this topic, the catch words "anti-drone" and "counter-drone" yield a fairly comprehensive picture of the patent landscape in this field.

According to International patent application WO2019164556A, it is often difficult to effectively engage drones with firearms and conventional kinetic weapons (and unconventional), due to their high speed and manoeuvrability. Hundreds to thousands of rounds are typically fired to remove a single drone threat in a combat theatre. But there are a number of ways of interfering with and destroying a drone without firing a single physical round. These drone countermeasures generally fall into the categories of: antennas, jamming, spoofing, geofencing, kinetic/physical methods and others.

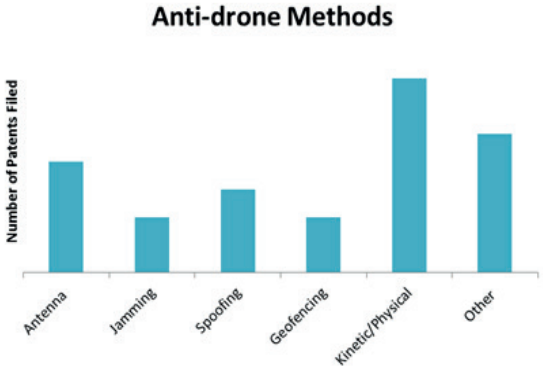
Antennas are used to focus electromagnetic radiation in a direction which will interfere with RF (radio frequency) signals and disrupt/destroy a drone. Jamming methods involve transmitting RF signals towards the drone, overpowering satellite GPS signals received by the drone so it cannot navigate, or blocking RF signal received from a ground operator. Spoofing works by sending fake GPS signals that mimic legitimate ones to alter the drone's GPS coordinates in real-time and cause it to fly off-course. Geofencing is a safety measure imposed on licensed drones, particularly in the USA. As a drone approaches a restricted area such as an airport or military installation, the received GPS signals are tagged as restricted and the drone is prevented from continuing – it simply stops and hovers at the geofence. Physical anti-drone methods include firing nets, guns, lasers, or missiles at a drone to shoot it down and destroy it. "Dragonfire" is just one example in this last category.

As is common across most technologies these days, patent application numbers from China outnumber all patent applications elsewhere across the world.

When looking specifically at the registered patents in Europe, Russia, and the United States of America, there is a general increase in the number of patent applications published since 2015 in the anti-drone field.



The patent records show that, although the technology is available for possible non-physical anti-drone methods, there is a vast array of more likely (and some less likely) physical methods being devised. The main challenge for these physical methods remains that they have a limited range and are not effective against unpredictable drones. Spoofing and jamming methods suffer from problems such as mistaking other objects as drone. The development of anti-drone systems is becoming increasingly important in the civil sector for defence systems applications to protect areas such as airports, important infrastructure, stadiums and the like. There is a growing interest to find the most effective method, whether that be physical or non-physical or even a combination of both.



References:
https://www.robinradar.com/press/blog/10-counter-drone-technologies-to-detect-and-stop-drones-today
https://dronesvue.com/what-is-geo-fencing-for-drones/
https://www.engineeringnews.co.za/article/drones-in-demand-in-defence-industry-2022-03-25#:~:text=By%20all%20accounts%2C%20the%20prospects,the%20forecast%20period%2C%20explains%20Connolly.

By Shivangi Prasad, Patent Intern

UK Patents

What is a FRAND Injunction? Will the Unified Patent Court determine FRAND licences for SEPs?

FRAND stands for "fair, reasonable and non-discriminatory" and describes the nature of licence that a patent owner participating in a standard, such as 3G and 4G wireless, must agree to grant to anyone implementing the standard. A patent that is essential to a standard is a "standards essential patent" (SEP). Anyone party to development of standards of the European Telecoms Standards Institute (ETSI) will have agreed to licence SEPs under FRAND terms.

In recent years, the UK High Curt has been asked to adjudicate over what terms are FRAND where an SEP owner and an implementer have been unable to reach agreement. SEP owners are regularly accused of "hold up" by demanding too much and delaying grant of licences, while implementers are accused of "hold out" by delaying acceptance of licences in the hope of paying less or paying later. In such a framework, the question arises as to at what point should a court intervene and place an injunction on the implementer to force the implementer to pay the licence royalty demanded if the SEP is valid and genuinely essential to the standard. The UK courts have devised a mechanism for moving the negotiation to conclusion by granting the SEP owner a so-called "FRAND injunction", which is an injunction that only comes into effect (only "bites") if the implementer does not accept the terms that the court decides are FRAND.

FRAND does not necessarily mean there is one royalty rate that is fair and reasonable and must apply to all implementers to be non-discriminatory. In Unwired Planet v Huawei Technologies [2020] UKSC 37, the UK Supreme Court held that there may be a range of terms that can be FRAND. Parties may agree between themselves a royalty rate within such a range, or the Court will decide if the parties cannot.

In the long-running battle between Optis and Apple (see box), Optis wanted the Court to bring forward the injunction and grant it immediately, because Apple had refused to be bound, "sight unseen", by whatever worldwide terms the Court might set. Apple took the view that it ought to be able to see the terms and then make an "informed choice" as to whether to accept them or withdraw from the UK market. Optis argued that this meant Apple was not a willing licensee and should be denied the benefit of the undertaking to ETSI. This would have allowed Optis to demand royalties that would be more than might otherwise be FRAND (i.e. "super-FRAND").

Apple v Optis Trial F

Trial F was heard before Mr. Justice Meade in July 2021. His Honour was unimpressed by submissions from Apple that terms it might ultimately impose might be high and not "truly FRAND". Whether Apple had to take a licence "sight unseen" or not, the terms set by the Court would not be "super-FRAND". Under a sight-unseen rule, the highest rate that can result is that which the UK Court considers to be FRAND. Apple's proposed "informed choice" rule could result in a lower rate but not a higher rate. Meade J. saw no reason to give Apple a further opportunity to negotiate lower terms in order to stay in the UK market or withdraw and seek lower terms in other jurisdictions.

The Court found in favour of Optis on the point that Apple must give an unconditional undertaking to accept a licence under FRAND terms determined by the Court, and Apple did so shortly after the trial.

Apple appealed, while Otis appealed on their point that Apple were disentitled to a FRAND licence (and Optis were entitled to an injunction) if Apple were acting as an unwilling licensee.

The Court of Appeal upheld all the findings of the High Court. Apple must accept global FRAND licensing terms set by the UK Court or face an injunction, but Apple does not permanently lose the benefit of the ETSI IPR policy by merely indicating its unwillingness to accept such terms.

Optis v Apple - The story to date

Optis is a patent licensing firm that includes Unwired Planet who have been in dispute with Apple for some years over SEPs for 3G (UMTS) and 4G (LTE) cellular radio technology. The dispute has been fought out through the courts in the UK and US. The UK High Court split the dispute into four technical trials (trials A-D) on the merits of Optis's patents, plus a fifth trial (Trial E) on what should be the terms of a fair, reasonable and non-discriminatory (FRAND) licence that an SEP owner, such as Optis, is obliged to grant to an implementer such as Apple.

In the course of 2020, '21 and '22, Optis faired reasonably well in the technical trials. They won three out of four at first instance but one of those wins was overturned on appeal. That is to say, some of their patents were deemed valid and infringed and others not (see table for details). Optis required only one patent to be valid and infringed to force Apple into the final trial (trial E) on what should be the terms of the licence.

Negotiations on licence terms, in the meanwhile, were not progressing. Apple contended that they had made an offer to pay royalties within such a range. Optis had rejected that offer but were willing to grant a licence under whatever terms the Court might ultimately determine were FRAND.

Before entering the final trial to determine the terms, Optis asked for another trial (triall F) on a narrow point of whether or not Apple must be bound by whatever might be the outcome of the final trial. This is because Apple took the view that, if found to be infringing, Apple could withdraw from the UK market if it did not like the terms of a global FRAND licence set by a UK court. Apple did indeed hint that it would withdraw iPhones from the UK market, causing quite a storm at the time [Macworld, 1 July 2021, Daly Express, 14 July 2021]. Optis, on the other hand, said this made Apple an unwilling licensee and therefore not entitled to a FRAND licence and that the Court should therefore immediately issue an injunction against Apple. (Apple had given gave a contingent undertaking in October 2020 which was almost no undertaking at all.)

Trial F took place before trial E, because the Court saw a possibility of settlement between the parties on the outcome of this point without necessitating Trial E. If the parties could agree a licence there would be no need for the Court to fix its terms.

	Patent Nos.	Winner at First instance	Winner on Appeal
Trial A	EP1230818	Optis	Apple
Trial B	EP2229744	Optis	Optis
Trial C	EP2093953 (plus, EP2464065 & EP2592779)	Apple	
Trial D	EP2187549 & EP2690810	Optis	

Comment

Although neither side overturned any part of the lower court's decision, Optis was the overall winner, in that Apple was forced to give the undertaking to accept, on a global basis, whatever terms the UK court may impose in Trial E or face an injunction for the UK market.

If the parties do not settle first, the outcome of Trial E is eagerly awaited by the industry. One way to make the dysfunctional system function is for the Court to settle licences on sufficiently clear and public terms for parties to know what will be determined to be "truly FRAND". A single decision cannot answer that question for all circumstances. Economists debate ranges of licensing terms in negotiating theory, but "fairness" in the sense of distributive justice requires guidance from courts.

"Dysfunctional system"

Lord Justice Arnold described the state of the current system for determining FRAND licences for SEPs as "dysfunctional". Each side was "gaming the system" and the only way to put a stop to such behaviour is for standards determining organizations such as ETSI to make legally-enforceable arbitration a part of their IPR policies.

But the ETSI IPR Policy was a long time in negotiating. There were many interested parties and it would take a mammoth effort to make binding arbitration a part of the policy. Binding arbitration in a near-vacuum of court precedent could lead to rough justice. Major developers of standards, who invest heavily in development are very wary of signing up to new and untested systems of justice. The UK court is building a track record for fairness in determining FRAND licences and the world watches and waits for its next decision.

Might the Unified Patent Court be a forum for FRAND license negotiations?

The UPC has the power to grant injunctions to stop infringement (UPC Agreement, Art. 63) and to award damages (Art.68). A determination of FRAND licensing terms is therefore within the Court's power, and an award of an injunction that is contingent of such terms is also within the Court's power. A FRAND licence is not the same as a compulsory licence, which is not among the matters for which the UPC has exclusive jurisdiction (Art. 32(1)). On the other hand, accusations of abuse of a dominant position contrary to Article 102 of the Treaty on the Functioning of the European Union ("TFEU") are quite common in FRAND cases - Apple have raised such a defence in Trial E and judgement on that question is still awaited - and where the UPC makes any decision relating to the TFEU, this opens up the possibility of appeal to the CJEU, as happened in Huawei v ZTE (Case C-170/13). So the UPC is unlikely to be much more efficient than the UK High Court in resolving these types of cases.

By Hugh Dunlop

News

Maucher Jenkins opens new office in Kulmbach:

In November 2022, Maucher Jenkins opened our third German office in Kulmbach, Upper Franconia. The region has a fantastic reputation for innovation and hosts a diverse range of companies and educational institutions, making it a choice location for the firm and its attorneys. In addition, its proximity to Eastern Europe will help make the Kulmbach office an excellent addition to our internationally-operating intellectual property firm.

Our on-site team consists of partner Felix Rummler and location manager and counsel Dr. Andreas Geißler, among others, who can advise clients on all intellectual property issues. If you would like to make an appointment, you can find the contact details of our new location below:

Maucher Jenkins Patent Attorneys and Attorneys at Law
Albert-Schweitzer-Strasse 16
95326 Kulmbach
Germany

Telephone number: +49 9221 607887 - 0
Fax number: +49 (0)89 340 77 26-11

E-mail address: kulmbach@maucherjenkins.com

Promotions

We are delighted to congratulate Handong Ran on joining the equity partnership and Richard Parsons, Dr. Silke Petzold, Oliver Poskett, Mark Webster, Dr. Ulrike Kaufmann and Dr. John Parkin-Tyrie on their promotions to Senior Associate. Handong is in charge of our Beijing and Shenzhen offices, while Ulrike is based in Freiburg. John is in our Farnham office and Richard, Silke, Oliver and Mark all work out of the London office.

Exam passes

Congratulations to all of our employees who have passed exams! Congratulations to Christopher Ashcroft and Edward Cheng on passing their Pre-EQE; to Edward Belknap for passing the Queen Mary foundation course; and to Ricky Foo for achieving his European qualifications and fully-qualifying as an associate.

In our German offices, congratulations go to Ralf Haug and Dr. Thomas Gangolf who have both passed their qualifying exams to become German Patent Attorneys.

Newcomers

Our international team has seen the arrival of trainee patent attorney Alexandra Musker in our London office, associates Laura Schrempp and Dr. Cheng Yang in our Munich office, and patent engineer Moritz Gugel to our Freiburg office.

We are also pleased to welcome back Dr. Andreas Geißler who previously worked for our firm from 2013 to 2020. He rejoined us in 2022 and is in charge of the new Kulmbach/Upper Franconia office.

New books:

- European Unitary Patent and Unified Patent Court, Fourth Edition, by Hugh Dunlop (ISBN 978-0-903932-75-2)
- Intellectual Property Enterprise Court: Practice and Procedure, Third Edition, by Angela Fox (ISBN 978-0-414-08093-5)
- Navigating Design Law, by David Musker (ISBN 978-0-903932-74-5)

Contact Us

London
7th Floor, Artillery House, 11-19
Artillery Row, London SW1P 1RT
T: +44 (0)20 7931 7141
F: +44 (0)20 7222 4660
london@maucherjenkins.com

Cambridge
St John's Innovation Centre
Cowley Road, Milton,
Cambridge, CB4 0WS
T: +44 (0)1223 902418
F: +44 (0)20 722 4660
cambridge@maucherjenkins.com

Farnham
Broadmede House
Weydon Lane Business Park
Farnham, GU9 8QT
T: +44 (0)1252 711149
F: +44 (0)20 7222 4660
farnham@maucherjenkins.com

Edinburgh
93 George Street
Edinburgh, EH2 3ES
T: +44 (0)131 610 0256
F: +44 (0)20 7222 4660
Edinburgh@maucherjenkins.com

Munich
Liebigstrasse 39
80538 Munich,
Germany
T: +49 (0)89 340 77 26-0
F: +49 (0)89 340 77 26-11
muc@maucherjenkins.com

Freiburg
Urachstrasse 23
79102 Freiburg,
Germany
T: +49 (0)761 79 174-0
F: +49 (0)761 79 174-30
freiburg@maucherjenkins.com

Kulmbach
Albert-Schweitzer-Straße 16
95326 Kulmbach
Germany
T: +49 9221 607887 - 0
F: +49 (0)89 340 77 26-11
kulmbach@maucherjenkins.com

Basel
Aeschengraben 29,
CH-4051
Basel,
Switzerland
T: +41 61 225 44 90
F: +41 61 225 44 89
basel@maucherjenkins.com

Beijing
A-909, Huibin Building, No 8
Beichendong Street, Chaoyang District,
Beijing 100101, China
T: +86 (0)10 8498 9052
F: +86 (0)10 8498 7962
beijing@maucherjenkins.com

Shenzhen
7F-B09, Building B, Aerospace Science
and Technology Square,
No. 1288 Haide 3rd Avenue,
Nanshan District,
Shenzhen 518053, China
T: +86 (0) 755 2876 5922
F: +44 (0)20 7222 4660
china@maucherjenkins.com

www.maucherjenkins.com | info@maucherjenkins.com