

# International **Comparative** Legal Guides



Practical cross-border insights into patent law

## Patents **2022**

**12<sup>th</sup> Edition**

Contributing Editor:

**Katharine Stephens**  
Bird & Bird LLP

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# Litigating AI Patents

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## 1 Introduction

Patent filings relating to artificial intelligence (“AI”) technology have seen significant growth over the past few years. As AI patent portfolios start to take shape, organisations will increasingly turn their minds to ensuring their hard-won rights work to their benefit and prevent third parties from encroaching on their monopoly. This chapter considers the issues that organisations will need to navigate when asserting patents covering AI technology in the UK, and how these considerations can be used to enhance their currently pending applications and future filing strategy.

## 2 What is AI?

There is no universal consensus on a definition of AI, but most definitions define AI by reference to human intelligence. For example, Martin Minsky, a leader in AI and co-founder of MIT, defined AI as “the science of making machines do things that would require intelligence if done by men” and the European Commission’s group of experts advising it on its AI strategy, in 2019, also referred to “systems that display intelligent behaviour”.

However, in the draft Artificial Intelligence Act,<sup>1</sup> the first piece of EU legislation to attempt a definition, AI has been defined as: “software that is developed with one or more of the techniques and approaches listed in Annex 1 and can, for a given set of human-defined objectives, generate outputs such as content, predictions, recommendations, or decisions influencing the environments they interact with.” There is no mention of “human intelligence”; instead AI is defined by reference to the following three programming techniques:

- **machine learning approaches**, including supervised, unsupervised and reinforcement learning, using a wide variety of methods including deep learning;
- **logic- and knowledge-based approaches**, including knowledge representation, inductive (logic) programming, knowledge bases, inference and deductive engines, (symbolic) reasoning and expert systems; and
- **statistical approaches**, Bayesian estimation, search and optimisation methods.

This mirrors the approach of the European Patent Office (“EPO”), which has stated that AI and machine learning are based on computational models and algorithms which are *per se* of an abstract mathematical nature, irrespective of whether they can be “trained” based on training data.

These two technical-centric as opposed to human-centric definitions recognise that AI is, at heart, software that applies data to incrementally improve its functionality and output. What sets it apart from more traditional software is that the

software “learns”, improving its efficiency and accuracy based on its analysis of the data. It is this iterative learning capability that introduces a number of interesting issues relating to patent infringement, such as who to sue, where to sue and how to investigate and plead infringement.

## 3 What AI Patents Are Being Filed?

There have been numerous studies over the last few years mining patent data in order to examine the trends on AI patent filings. One of the most comprehensive was the 2019 report by the World Intellectual Property Organisation (“WIPO”).<sup>2</sup> One of the most striking findings was that 50% of all AI patents have been published in the five years preceding the report; that is around 170,000 patent filings. From the analysis, it was shown that machine learning is the dominant AI technique and that within this category, deep learning used for example in speech recognition and automatic translation systems shows the greatest growth rate. Amongst the functional applications of AI, computer vision, including image recognition, is the most often claimed whilst robotics and control systems are the fastest growing areas. Prominent AI-patenting industries include transport (autonomous vehicles), telecoms, health and medicine and computing and personal devices. Since the WIPO report was published there will have been many more AI patent applications filed touching on all these and more industry sectors.

## 4 What Activities Does Your Patent Cover?

The EPO has responded to the rise in the numbers of applications for AI patents by clarifying its approach to AI inventions in a short section in its Guidelines for Examination, G-II 3.3.1. Published after an extensive review of the EPO’s case law on the exception to patent eligibility for mathematical methods and computer programs in Article 52 of the European Patent Convention (“EPC”), it is intended to and to a large extent does provide a consistent and predictable approach to applications for AI patents.

The starting point for whether an application for an AI-related invention is patentable is, firstly, to ask if, when considered as a whole, a claim only comprises excluded subject-matter. If it does, it will not be patentable. For example, an abstract AI algorithm cannot be patented. However, if the invention has technical character as a whole because it has either: (1) a specific technical application; or (2) it has been adapted to a specific technical implementation, it will not be excluded from patentability. The example given by the EPO of a claim that would fall into the first of these so-called safe-harbours is as follows: “the use of a neural network in a heart-monitoring apparatus for the purpose of identifying irregular heartbeats”. This is not



excluded because the technical purpose is not generic, but is specifically defined. Other examples of technical applications listed by the EPO include digital audio, image or video analysis, speech recognition and encrypting/decrypting or signing electronic communications. Areas such as finance, administration and linguistics, however, are not considered technical and therefore many AI inventions in these areas will not be patentable.

The second safe-harbour is more difficult to define. An example of something that might fall within it is a method of training a model comprising taking certain steps in a computer. Since such a claim considers features of the computer and is not a claim to the algorithm alone, it avoids the exception to patentability. The EPO's Guidelines also mention that steps of generating the training dataset may also contribute to the technical character of the invention if they support achieving a technical purpose. Thus, the following claim sets should be allowed by the EPO, provided, of course, that the claims share common novel and inventive features:

- a method of generating training data for use in a training model;
- a method of training a model for an intended purpose;
- a method of using the trained model for its intended purpose; and
- a system configured to perform any of these methods.

However, a claim to a trained model *per se*, even if it is claimed as a product-by-process (i.e. a model trained in accordance with the claimed method), is another matter. It may well be just a set of numbers and therefore it will be hard to demonstrate that it is new and inventive.

## 5 What Protection is Granted to AI Patents?

AI patents are governed by the same rules on infringement as other patents, but the basic questions can become more complex because of the nature of AI.

The rules on infringement applicable in the UK are as follows:

- Product claims are infringed by making the claimed product, importing it, offering it for disposal, disposing of it, keeping or using it, provided the activities are undertaken in the UK (section 60(1)(a) Patents Act 1977 (the “Act”).
- Method claims are infringed when the process is used or offered for use in the UK. Importantly, however, the patentee also has to show that, in relation to offers for use, the defendant knew, or it was obvious to a reasonable person in the circumstances, that the use without the consent of the patentee would be an infringement (section 60(1)(b)).
- Method claims are also infringed where a product obtained directly by means of that method is disposed of, offered for disposal, used or imported or kept in the UK (section 60(1)(c)).

These are all forms of direct infringement. Indirectly or contributory infringement under section 60(2) occurs when there is a supply or offer to supply in the UK “any of the means relating to an essential element of the invention, for putting the invention into effect”. Knowledge is an important part of the provision as the defendant must know, or it must be obvious to a reasonable person in the circumstances, that those means are suitable for putting, and are intended to put, the invention into effect in the UK.

A recent example demonstrates the difference between direct and indirect infringement. In *Lufthansa Technik v Astronics Advanced Electronics Systems* [2020] EWHC 1968 (Pat), Morgan J held the patent valid and infringed. The patent related to power sockets in airline seats. Astronics manufactured various components in the USA and supplied them to UK customers. At the time of supply, they were not connected together to form the patented

system, however, the components constituted means essential for putting the invention into effect and Astronics admitted that it had the requisite knowledge for contributory infringement. Safran, another of the defendants, used the components of the patented system to manufacture (or in the terms of the Act, “make”) a seat and so committed an act of direct infringement.

## 6 Who is Liable?

AI systems can perform additional steps not contemplated by the original developer as they optimise their performance and become more efficient at their task. For example, AI systems can debug programs and even write their own subroutines to create new methods to solve a problem.<sup>3</sup> Therefore, although an AI system may not start out infringing a patent, it may do so as it evolves over time. However, it is important to address one question up front – the AI system itself cannot infringe a patent. This is because the Act specifies that it is “a person” that infringes a patent by doing the acts referred to above. “A person” is either a natural person or a legal person, such as a company. AI is neither.

### Direct infringement

A defendant will not escape liability by claiming that it had no knowledge or intention that the AI system it was using was infringing; liability is said to be absolute under section 60(1)(a), 60(1)(b) (in relation to the use of a process) and 60(1)(c). As Lord Sumption noted in *Warner-Lambert Company LLC v Generics (UK) Ltd t/a Mylan* [2018] UKSC 56, liability is strict, that is, there is no mental element. He added in relation to section 60(1)(c) that:

“The infringer may be, but need not be, the same as the person who makes the product. The section also applies to anyone in the downstream generic market, including wholesalers and pharmacists. Liability is strict. Provided only that the product has been obtained directly by means of the process, it extends to subsequent dealings with all and every such product irrespective of knowledge.”

In section 4 above, we noted that it would be very difficult to maintain a claim to a trained AI model. However, section 60(1)(c) may provide relief if it could be shown that the model was trained according to the patented method. If it does infringe, then all dealings in it are an act of infringement.

The absolute nature of these infringement provisions covering the maker (developer) and user of an AI system is very useful in a situation where AI technology may morph over time. However, there are two caveats to mention where the case law is still developing.

Firstly, there is the difficult issue of purpose-limited claims. As noted above, AI claims will frequently be stated to be “... for [a technical purpose]”. The issue of infringement relating to a purpose-limited claim (specifically a Swiss-style claim) was considered in the *Warner-Lambert* case, but their Lordships failed to agree on the test to be applied. They were divided as to whether, at least in the context of Swiss-style claims, purpose-limited claims would be infringed where the “outward appearance” of the product or process could be said, objectively, to be for the claimed purpose; or whether a subjective intent was required as objectively assessed from all the circumstances.

The second caveat is that there have recently been suggestions that intention is a factor in assessing infringement by equivalence. In *ViiV v Gilead* [2020] EWHC 615 (Pat), the judge refused to strike out a pleading which alleged that the defendant had knowledge of the patented product and had developed its own drug with the aim of maintaining the characteristics of the patented drug by using similar structural features in its own.

### Indirect infringement

The other two provisions on infringement, section 60(1)(b) (offers of use of a process) and 60(2) (secondary or contributory infringement), specifically require a mental element.

Both sections are potentially relevant to infringement issues relating to AI patents. AI technology is often provided to customers as a software as a service (“SaaS”) model or through a cloud platform service or platform as a service (“PaaS”) model. But, consider the situation where a provider has installed AI software on its cloud platform for customers to execute on demand. If some elements of the process are missing until the software is executed by the customer, it may not be possible to prove infringement under section 60(1)(b). However, there might nevertheless be infringement under section 60(2) because the provider has supplied “means essential” for putting the invention into effect.

Consider next the developer of an AI system performing steps that infringe a claimed method after the initial sale and only following a customer’s use. Even if the developer knew that it was possible that the AI could change in this way, knowledge of such a possibility would almost certainly not be sufficient to satisfy the knowledge requirement under section 60(1)(b). The requirement is of knowledge that the use of the process “would be an infringement”, not that it could be an infringement. However, again, section 60(2) might be infringed since the knowledge requirement demands that the essential means are suitable for and are intended to put the invention into effect.

### Joint liability

In addition, a defendant can be liable if it acts in concert with another to infringe a patent. Turning again to the *Lufthansa* case by way of example, the third defendant, Panasonic, supplied various components of the patented system to customers for assembly into airline seats in the UK. The assembled systems were held to infringe the patent, but Panasonic claimed that it was not a direct infringer under section 60(1)(a) because it did not do the assembly and it did not have the requisite knowledge under section 60(2). The judge concluded that Panasonic was jointly liable under section 60(1)(a) by reason of its common design; the common design being to connect the components to form the infringing system. Panasonic supplied the components, inflight entertainment systems, with assembly instructions and colour coding to assist the installer, the components being connected in the same way regardless of the type of seat.

The test for joint liability was set out by the Supreme Court in *Fish & Fish Ltd v Sea Shepherd UK* [2015] AC 1229. Lord Toulson summarised the position at [21] as follows:

“To establish accessory liability in tort it is not enough to show that D did acts which facilitated P’s commission of the tort. D will be jointly liable with P if they combined to do or secure the doing of acts which constituted a tort. This requires proof of two elements. D must have acted in a way which furthered the commission of the tort by P; and D must have done so in pursuance of a common design to do or secure the doing of the acts which constituted the tort. I do not consider it necessary or desirable to gloss the principle further.”

Applying this, it will be seen that joint liability does not arise in relation to all dealings involving potentially infringing goods. For example, consider the sale of goods, which are not themselves an infringement of a patent, but which can be used for the purposes of infringement. Such a sale will not lead to joint

liability, even if the seller knew that the articles would be used for an infringing purpose because the seller, whilst they may be facilitating the tort, is neither procuring nor involved in it.

There are potentially many players in the life cycle of AI technology. The AI software may be developed by one company, trained by another company, the trained model may be licensed or sold to and used by a third company to develop products for a fourth company. It will be a question of looking at the evidence (as was done in the *Lufthansa* case) to see whether, in any one case of infringement, these players combined to infringe a patent. The ability of AI to incrementally change and improve its functionality will play into this mix and present challenges to the application of all these rules as to who is liable for infringement.

## 7 How Do You Know if Someone is Infringing Your Patent?

Before commencing any patent infringement action, it is important to be certain enough that there is an infringing act taking place to justify issuing proceedings. Practical questions for the patentee include: is there sufficient publicly available material to prove infringement? If not, are there other ways to get hold of the information, including asking the Court to make orders for disclosure? Then, even if the patentee does get access to the underlying solution to undertake testing, it cannot be ascertained how the AI system works?

Underlying the potential issues around proving infringement of AI patents is the “black box problem”. This problem arises from the fact that the way in which some AI systems store their decision-making algorithms is not in a form that is easily understood by a human. Human-implemented logic in the form of source code is generally set out in a logical fashion and annotated with human readable comments explaining the purpose of each element. This can be contrasted with the logic developed by an AI neural network which might be represented as a database containing a huge array of weightings for different artificial neurones.

While a human can easily reverse engineer human source code to work out why a particular decision was taken, an AI neural network is potentially immune to human scrutiny. The fundamental difference between the two is that with human source code it is generally possible to predict how a system will respond to a given input, but the only way to find out what will happen with a given input to a neural network is to apply that input to the network and see how it behaves.

A number of institutions, including the Defence Advanced Research Projects Agency (in a project called Explanable XAI), the University of California, Berkeley and Georgia Institute of Technology, are working to crack open the black box. But if an AI system cannot explain why it created a particular work, used a method or made a specific decision, then it may be impossible to decide whether it or those persons associated with it (as users, programmers or owners) are liable.

## 8 Where is the Infringement Taking Place?

To infringe a patent in the UK, the act of infringement under section 60(1) must take place in the UK. In AI systems which are provided from a cloud service or from a platform, different elements of the claimed invention could either physically be in different jurisdictions or the different steps in a method claim may take place in different jurisdictions. In that case, it may be difficult to establish that there is any infringement, either in the UK or indeed in any other jurisdiction.

However, section 60(2) can, again, plug the gap if what is done in the UK is essential for putting the invention into effect. It

should be noted that in section 60(2) there is a double territoriality requirement; it requires both an offer to supply the “means essential” in the UK and knowledge that the means are suitable for putting, and are intended to put, the invention into effect in the UK.

To demonstrate how this provision works in practice, it is worth considering a couple of cases. In *Menashe Business Mercantile Ltd v William Hill Organization Ltd* [2002] EWCA Civ 1702, an allegation of indirect infringement of a patented system carried out using the internet was made. The patent related to an interactive, computerised gaming system. The parties agreed to try, as a preliminary issue, the question of whether it was a defence that the host computer and part of the communication means, both elements of claim 1 of the patent, were not located in the UK. The agreed facts were that the William Hill system was available to punters in the UK. William Hill would supply them with software which turned their computers into a terminal communicating with the host computer via the internet. The host computer had the properties and carried out the functions of the host computer in the patent claims, but was located outside the UK.

The Court of Appeal held that the question (whether this was a defence) should be answered in the negative. The Court approached the question from the point of view of the punter who obtained a CD in the UK and then used the invention in the UK. The punter neither knew nor cared where the host computer was located, it was the input and output of that computer at the punter’s terminal computer that was of importance. Thus, it was the supply of the CD in the UK which was intended to put the invention into effect in the UK.

More recently, in *Illumina, Inc v Premaitha Health Plc* [2017] EWHC 2930, the Court was asked to consider whether a process for detecting foetal abnormalities was being put into effect in the UK. Here a blood test would be taken in the UK, the sequencing machine would be operated in the UK and the data so obtained would be transmitted to Taiwan for a pre-determined set of automated computer processes to be applied before the output of the computer processing is sent back to the UK for use in the UK. The judge held that in these circumstances the process was being used in the UK notwithstanding the fact that some of the steps were being undertaken in Taiwan.

## 9 Practical Steps if You Suspect Infringement of Your AI Patents

Sending a cease-and-desist letter is a common first step to any patent litigation and, in the UK, a patentee can be sanctioned in costs by the Court in subsequent litigation if it failed to do so. Sometimes parties may not have been aware of the existence of the patent and will be willing to stop using it once they are notified of its existence, but this will very much depend on how much investment they have already made into developing their technology and the availability of alternatives. Often, recipients of a cease-and-desist letter will respond explaining why they do not think they have infringed the patent and then there is a decision to be taken as to how to proceed. If the patentee still considers there to be infringement, it does not necessarily mean commencing an infringement action immediately; the parties could try negotiating or indeed mediating to reach a settlement. However, at some point the patentee will have to decide whether to launch proceedings.

It has to be said that this protracted way of approaching patent infringement will not always be the right solution. Other points that a patentee should consider are:

- Whether a preliminary (or interim) injunction may be a better option if a new product or service is about to be launched.

- A common response to an infringement allegation is to challenge the validity of the patent. This may leave the patentee having to counterclaim for infringement and, as the defendant, being on the back-foot when it comes to the litigation. Further, a point on timing should be considered. If the patent has been granted by the EPO within the last nine months, one option is to file an opposition which, if successful, will invalidate the patent in all EPC states. This is much cheaper than challenging the patent in every EPC state in which it is validated.
- Groundless threats provisions limit the class of persons that cease-and-desist letters can be sent to without risking a claim for an injunction and damages. Again, if the patentee gets it wrong, they may find themselves in Court as a defendant and having to counterclaim for infringement in order to defend the claim.
- A cease-and-desist letter will make the recipient much more cautious about making public statements about how their system functions, which reduces the patentee’s ability to detect what they are doing in the future.

As mentioned in section 7, one of the practical difficulties in actions relating to AI is getting the information to prove the case of infringement. Consideration at the start of the matter should therefore be given to the following:

- Can advantage be taken of those countries offering pre-litigation disclosure and evidence gathering? Some countries, such as France, Italy, Belgium and the Netherlands, have powerful pre-litigation search and seizure rules permitting Court bailiffs to seize evidence (including articles and documents). A patent owner might consider filing a request for the remedy of *saisie contrefaçon* (in France or Belgium), *descrizione* (in Italy) or *bewijsbeslag* (the Netherlands) in order to obtain evidence of suspected infringement, and then, if permissible, use the obtained information in other countries. However, proceedings may have to be commenced within a certain time otherwise the *saisie/descrizione* will become invalid, and it may be necessary to post a bond or guarantee. In contrast, although freezing orders and search and seizure orders are available in the UK, they are granted in more limited circumstances.
- Will disclosure of documents be needed during the course of the litigation? In the UK, disclosure can be obtained on infringement (amongst other issues). Alternatively, a defendant may choose to serve a product or process description which sets out the salient features of the alleged infringing product or process which has to be signed by a statement of truth. Will this be sufficient to prove the issue of infringement?
- Then there is the issue of expert evidence. Each party is permitted to call their own expert and the expert’s evidence is crucially important. Thought should be given early on in the proceedings as to who to instruct, as both the claimant and the defendant may want to instruct the same expert given that AI technology is still a fairly new field and there might not be many suitable candidates.

## 10 Thoughts on Portfolio Enhancement

Portfolios of AI patents can play both an offensive and a defensive role. On the offensive side, a well-developed portfolio of AI patents can be used to keep competitors out of a particular technology area. For defence, a well-stocked arsenal of AI patents can dissuade others from bringing their own patent infringement claims, knowing that a shot in one direction is likely to lead to a substantial volley in response. Filing and publishing applications, even if they do not proceed to grant, can also be an effective



strategy for ensuring that a competitor is not able to obtain patent protection themselves.

During the application phase, an applicant has a substantially greater degree of flexibility to craft the scope of protection than after the patent has been granted. While the application will always be limited to the matter which was disclosed in the original application (and if a priority claim is required to avoid subsequent prior art, any priority application), during the application phase the applicant has the ability to both broaden and narrow the scope of the claims. Narrowing could be required to add additional features or dependant claims which help overcome prior art citations. Broadening could be advantageous if the applicant discovers an infringement during the course of prosecuting the application which falls within the scope of the description but is not currently captured by the pending claims. The ability to broaden claims will be lost once the patent has been granted, potentially leaving the patentee in the frustrating position of missing out on the chance to prevent a third-party using matter which was disclosed in the specification of the application.

Patent portfolios can also be incredibly expensive to obtain and maintain, especially across multiple jurisdictions. Patentees will therefore need to take some important decisions about the geographical scope of protection they want to obtain. Centralised patent filing routes such as the PCT and EPO offer the opportunity to delay decisions about the specific jurisdictions.

Steps which AI patent holders can take to ensure they will get maximum value from their portfolio include:

- Considering detectability as one of the criteria for determining whether to file an application for a particular invention. While it will not be determinative, all other things being equal, an application for an invention where use of the invention can be easily detected will usually be preferred over an invention where it is almost impossible to detect where a third party is using it.
- Continuous monitoring and review of the AI products and services being developed and launched by competitors can be used to inform decisions taken during the prosecution stage. If a particular solution looks like it is being adopted, the scope of pending applications can be examined to determine whether the competitor solution can be covered by any pending application.
- Continuous monitoring and review of the jurisdictions in which an application is pursued and maintained. If a major competitor has announced that they are opening a data centre in a new jurisdiction, that may be a prompt to start filing and validating applications in that jurisdiction. Equally, if the plan is to expand operations to a new jurisdiction, obtaining patent protection there will provide a defensive portfolio to respond to any patent assertions in that jurisdiction.

## 11 Future Issues

There are many consultations currently underway in relation to AI and IP. Since 2019, WIPO has been conducting a wide-ranging “conversation” on AI and IP which encompasses not only IP policy but also AI’s use in the administration of the IP system. In October 2020, the US Patent and Trademark Office reported that, in very general terms, the majority of respondents to its requests for comments expressed a sense that the existing US IP laws are correctly calibrated to address the evolution of AI.<sup>4</sup> Similarly, a report prepared for the European Commission published in September 2020 concluded that there was no immediate need for substantive changes in copyright and patent law to meet the current challenges of AI.<sup>5</sup>

In the UK, the Intellectual Property Office (“UKIPO”) published its response to its “Call for Views” in relation to AI and IP in March 2021.<sup>6</sup> From this it has developed a list of priorities which it will take forward.

Not surprisingly, the issues of protection for inventions were key for the respondents, together with the closely related topic of ownership. Although there was consensus that AI itself should not own IP rights, there were different opinions on whether and how inventions created by AI should be protected. This is a hot topic at present thanks to the efforts of Dr Stephen Thaler and his applications made around the world for a couple of patents invented by an AI system called DABUS (which stands for “Device for the Autonomous Bootstrapping of Unified Sentience”). In the UK, the Patents Court held that an inventor must be a natural person and an AI entity could not be named as an inventor (*Thaler’s Patent* [2020] EWHC 2412 (Pat)). The appeal was heard in July 2021 and the decision is eagerly awaited. In the meantime, and in contrast to the UK decision, the Australian Federal Court has held that the DABUS AI system is capable of being named as an inventor,<sup>7</sup> but that decision will also be appealed.<sup>8</sup>

As a result of the Call for Views, the UK Government has said that it will consult later this year on policy and legislative change for protecting AI generated inventions which would not otherwise meet the inventorship criteria; but the decision to review may, itself, have to be revised following the decision of the Court of Appeal in the DABUS case.

Another big issue for respondents was training data. Many recognised the importance of copyright-protected material in training AI systems, but there were diverging views on whether there was adequate access to such material. Another point for consultation will therefore be on measures to make access easier, which will include reviewing the text and data mining (“TDM”) exception in the Copyright Designs and Patents Act 1988. This is a contentious issue as the negotiations over the TDM exceptions in the Digital Single Market Directive attest to. However, because of Brexit, the UK Government has not implemented this Directive, which means that at present only a very narrow TDM exception applies in the UK. The Government has also said that, in the patent field, it will consider whether a deposit system for training data disclosed within patent applications would be feasible and beneficial.

After inventorship, the main concerns expressed in answer to the patent questions were on patent exclusion (see section 4 above). Many pointed out that the exclusions make it difficult to protect developments in AI systems themselves and that the more permissive approach of the EPO gives a better outcome. Consequently, the UKIPO will publish enhanced guidelines on patent exclusions and will conduct a review of any differences in outcome for AI patent applications as between the EPO and UKIPO.

It will be fascinating to see whether the UK will propose any policy or legislative changes relating to the above issues. However, although the Call for Views asked two questions on the issues of infringement, there will be no legislative changes in this area.

Specifically, the respondents were asked:

- Who is liable when AI infringes a patent, particularly when this action could not have been predicted by a human?
- Could there be problems proving patent infringement by AI? If yes, can you estimate the size and the impacts of the problem?

The Government has stated that the current practice of “legal persons” being liable for infringement appeared to be in keeping with most respondents’ views and that many of the problems proving patent infringement by AI already exist



when trying to prove patent infringement with other technologies. They also added that “[w]e consider that in respect of ‘AI patents’ the Courts have appropriate flexibility to make decisions based on the facts of the case and that claimants are able to use Court processes to support their actions. Therefore, we do not currently intend to intervene in this area”.

Whilst this is a clear endorsement of the Court’s ability to handle the issues raised in AI litigation, it will nevertheless be challenging for all involved. The issues raised in this chapter only really scratch the surface of those that the parties may encounter in such litigation. The technical complexity of AI, the nature of AI to morph as it is used and the highly dynamic behaviour of AI devices will leave considerable challenges in proving infringement and proving liability for infringement.

## Endnotes

1. Article 3(1) Proposal for a Regulation of the European Parliament and of the Council laying down harmonised rules on Artificial Intelligence (Artificial Intelligence Act) and amending certain Union Legislative Acts (Brussels, 21.4.2021 COM(2021) 206 final).
2. WIPO (2019). WIPO Technology Trends 2019: Artificial Intelligence. Geneva: World Intellectual Property Organization.
3. “Automating programming: The software software engineers”, *The Economist*, 10 July 2021.
4. “Public Views on Artificial Intelligence and Intellectual Property Policy”, United States Patent and Trademark Office, October 2020.
5. “Trends and Developments in Artificial Intelligence: Challenges to the Intellectual Property Rights Framework”, European Commission, 2020.
6. “Consultation outcome: Government response to call for views on artificial intelligence and intellectual property”, Intellectual Property Office, updated 23 March 2021.
7. *Thaler v Commissioner of Patents* [2021] FCA 879.
8. Commissioner of Patents’ announcement dated 30 August 2021.



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