IP BRIEFS®

Volume 2 / Issue 8 / June 2021

resilience:
"A capacity to persist, adapt or transform in the face of change in a way that maintains the basic identity of a system. And since we're looking at social-ecological resilience, we are interested in really enabling long-term human survival and well-being as part of the biosphere... So, it's quite closely linked to sustainability."

—**Lisen Schultz**, acting deputy science director, Stockholm Resilience Center

IN THIS ISSUE

SAIIPL

FROM THE EDITOR

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When the world locked down in early 2020, no one had any idea of the challenges we would face, the many businesses that would close and the millions of lives that would be lost. To recite the wisdom of my 17 year old daughter: Professor COVID taught us two very valuable things: you have to adapt and accept change at any moment without notice; and you have to take each opportunity you're given, as it might not come around again. We have become resilient in the interest of survival.

As if COVID is not enough, both the draft Regulations to the South African Geoscience Act 100 of 1993 and the draft National Data and Cloud Policy (NDCP) of the Electronic Communications Act No. 36 of 2005, published for commentary during April and May 2021 respectively, raised concerns. Although the two mentioned acts serve a noble cause, the regulations and policy certainly do not. The draft regulations which place the obligation to disclose all geoscience data and information to a government council for the purpose of the council to market geoscientific research data for the benefit of the council, is nothing more than expropriation of intellectual property rights. It has no element of custodianship as envisaged by the Geoscience Act whatsoever. The NDCP, if implemented, would cause disinterest of foreign investment and severely impact ownership of intellectual property rights. The policy set the requirement that all data, regardless of where the technology company is domiciled, shall belong to the government, and "*all data generated from SA natural resources shall be co-owned by government and the private sector participants whose private funds were used to generate the research.*"

It is quite interesting that the drive through policies and regulations for governmental control of data, marks the implementation of the Protection of Personal Information Act 4 of 2013 (POPIA), the comprehensive data protection legislation enacted in South Africa. POPIA aims to give effect to the constitutional right to privacy, whilst balancing this against competing rights and interests, particularly the right of access to information. The compliance deadline was 30 June 2021.

Interesting times!

"The true sign of intelligence is not knowledge but imagination." – **Albert Einstein**

Copyright Blind Spot

By Prof Owen Dean

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INTRODUCTION

Blind people are at a distinct disadvantage and face serious challenges when it comes to reading the written word. They need written text to be rendered in braille or in electronic form to permit a text-to-speech functionality with easy navigation across the text.

The international community, and more particularly the World Intellectual Property Organization (WIPO), has embraced this plight of the blind. WIPO has fathered the Marrakesh Treaty to Facilitate Access to Published Works for Persons Who Are Blind, Visually Impaired, or Otherwise Print Disabled (MVT). It is intended to mitigate the effects of the exclusive rights under copyright of authors of literary works by allowing those works to be reproduced in and adapted for disability utility format (DUF) without their authority in certain circumstances. The Department of Trade and Industries (DTI) has attempted to achieve the objectives of the MVT by introducing appropriate exceptions into our law by means of a Copyright Amendment Bill, but has gone about it in an inept manner that has thus far been unsuccessful.

COPYRIGHT EXCEPTIONS

Generally, copyright legislators balance the exclusive rights of authors against the public interest by making exceptions to those rights in certain defined circumstances. This internationally approved system is recognized in the Berne Convention for the Protection of Literary and Artistic Works (the Berne Convention), a WIPO instrument, and the Agreement on Trade-Related Aspects of Intellectual Property Right (TRIPS), an instrument of the World Trade Organization (WTO). South Africa is a party to both these treaties.

Both the Berne Convention and TRIPS require these exceptions to be subject to the so-called "three-step test", namely (1) they must cover only certain special cases, (2) they must not conflict with the normal exploitation of the work, and (3) they must not unreasonably prejudice the legitimate interests of the rightsholder.

COPYRIGHT AMENDMENT BILL

The Copyright Act, 1978, reflects the Berne Convention and TRIPS. Although good law, it has now become badly outdated, particularly in regard to electronic works and digital communications. With a view to updating the Act the DTI produced a draft amending Bill. Strong (justified) criticism caused it to be redrafted several times. Despite the DTI's efforts, the draft Bill remained an abomination. When the Bill came before the

Parliamentary Committee on Trade and Industry it rightly recognized its poor quality and redrafted it. Its draft Bill, barely an improvement, was passed by Parliament and was sent to President Ramaphosa for signature to become law. He was alerted to the shortcomings of the Bill and sent it back to Parliament for reconsideration. Hopefully, it will go back to the drawing board for redrafting afresh.

Amongst the shortcomings of the Bill is the introduction of the alien American doctrine of "fair use" to the issue of copyright exceptions. "Fair use" entails the court being granted a very wide latitude, subject to certain criteria, to determine just about any form of use (or misuse) of a copyright work, on an ad hoc basis, as being an appropriate exception.

This doctrine is consonant with certain legal measures and procedures peculiar to American copyright law and practice, but that do not find expression in South African copyright law and practice. It is therefore unsuitable and is also considered not to comply with the three-step test.

By contrast with the doctrine of "fair use," our Copyright Act deploys so called "fair dealing" with a work in creating exceptions in certain carefully circumscribed and special cases. These are cases where the legislature (not the court) considers that works should be available for use outside the constraints of copyright restrictions in the public interest.

EXCEPTION FOR PERSONS WITH VISUAL DISABILITY

While being bad law, the Copyright Amendment Bill has a salutary aspect. It introduces section 19D which provides for an exception to the author's exclusive rights in favour of persons with visual disability. The section purports to give effect to the MVT with the clear objective of enabling South Africa to accede to it. Section 19D must be viewed against the background of the tension between "fair use" and "fair dealing". In essence it is in the nature of a "fair dealing" provision and is a welcome innovation.

The exception's realization is being held up and stymied by the poor state of the Amendment Bill. One can understand the chagrin and frustration of Blind SA, the chief proponents of the exception, at their efforts to introduce it being thwarted in this manner and why they instigated litigation in the Pretoria High Court seeking an order compelling the government to read section 19D into the Copyright Act. None of this is called for. There is a simple viable solution that has not been recognized, seemingly due to being a blind spot.

Section 13 of the Copyright Act deals with general exceptions in respect of the reproduction of works. It empowers the Minister of Trade and Industries to make regulations allowing unauthorised reproductions to be made of works in specific cases. They must not conflict with a normal exploitation of works and not to be unreasonably prejudicial to the legitimate interests of the copyright owners, i.e. they must comply with the three-step test. The Minister has used these powers in the past.

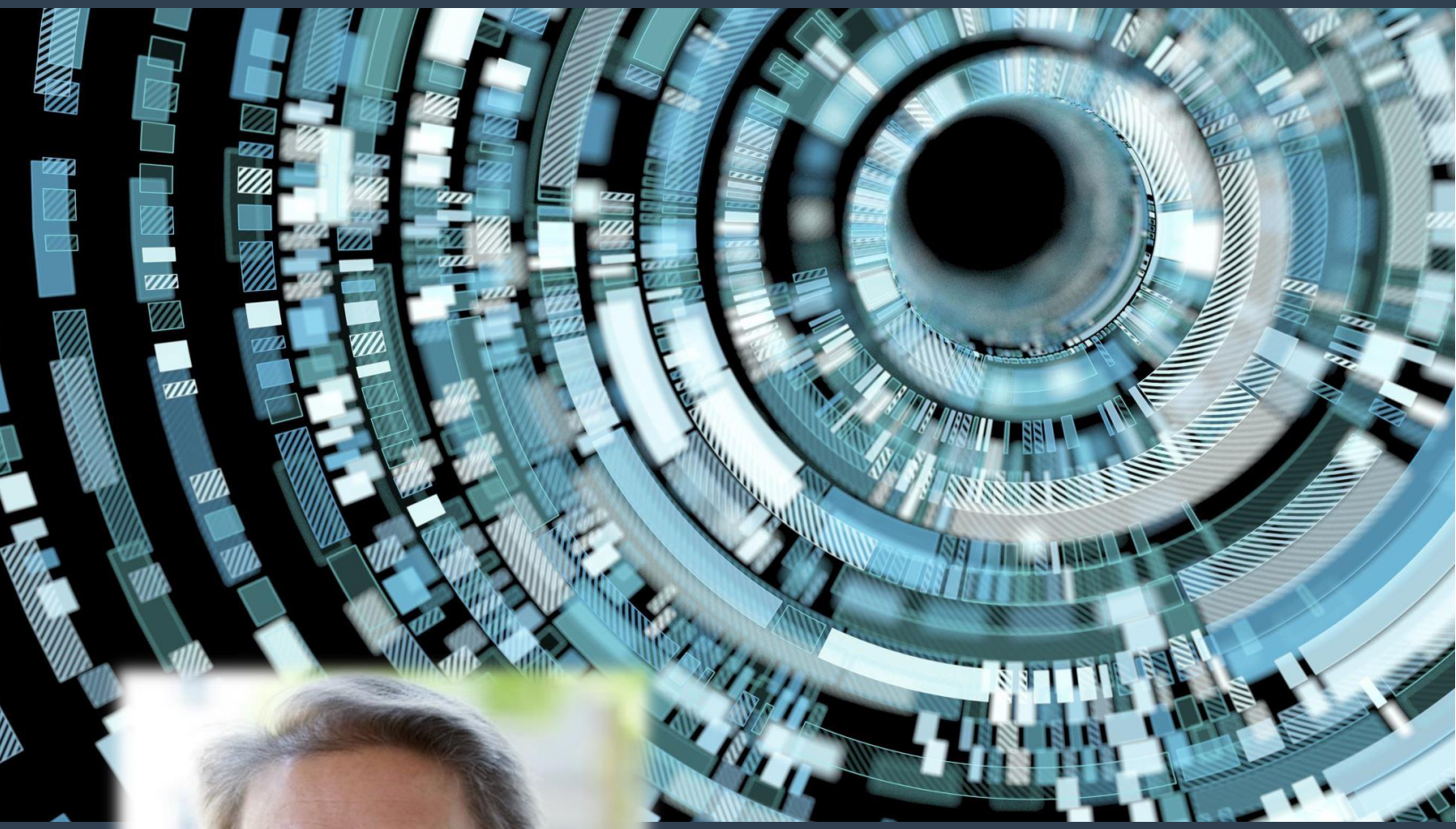
Section 19D in the Amendment Bill (subject to some changes to cure shortcomings) could comfortably be accommodated in regulations made by the Minister in terms of Section 13. Section 19D deals essentially with the *reproduction* of literary works by converting them to DUF. To the extent that Section 19D deals with actions which do not amount to *reproduction* of works, no exceptions are required because those other actions are not currently covered by the copyright in literary works.

Appropriate regulations should be drafted and published expeditiously by the Minister. This will meet the aspirations of Blind SA and make their pending court case unnecessary. The solution is at hand if only one looks for it and can see it.

A more comprehensive article was published on the Anton Mostert Chair of Intellectual Property of Stellenbosch University Blog here: https://blogs.sun.ac.za/iplaw/2021/04/19/copyright-blind-spot/

PATENT LAW CHANGES IN EUROPE

artificial intelligence and simulations inventions patentable?



By Dr. Rolf Claessen

Rolf is a patent attorney at the patent law firm Michalski Hüttermann & Partner in Germany, where is work focuses on the prosecution and litigation of patents and trademarks. He holds a Ph.D. in chemistry from the State University of New York and is the host of the popular podcast IP Fridays. He also hosts his own Intellectual Property Youtube channel .

On March 10, 2021, the Enlarged Board of Appeal (EBoA) of the European Patent Office published the written decision G1/19 almost 9 months after the oral proceedings in July 2020. The proceedings dealt with fundamental issues concerning the patenting of artificial intelligence (AI) and simulations. This essay sheds light on the background and provides advice on what patent applicants can learn for their practice from this decision.

I. Background chronology

In 2002, Bentley Systems (UK) Limited filed a US patent application for simulating the movement of autonomous entities through an environment. Basically, the application is about being able to simulate the movement of people in an airport, for example, without the airport actually having to exist. This helps architects and planners of buildings. But the technology can also be used in computer games to control armies via AI or even in military applications. On September 9, 2003, a PCT application was filed, which ultimately resulted in the European patent application on which the decision was based. The examining division considered the application to be unpatentable and summoned the applicant to oral proceedings on April 30, 2013. The application was rejected at the oral proceedings. In the written reasons for the decision to reject, the examining division essentially held that claim 1 was indeed technical in that it required a computer on which the process was carried out. First, however, the terms "autonomous entities" and "environment" are not necessarily technical.

Second, the reference to physical reality, for example, by referring to a physical property such as energy consumption, was also not apparent. Third, no interaction with the computer hardware is recognizable in the process steps that would reveal a technical effect. Moreover, a simulation is first of all only a numerical method, which is in principle excluded from patent protection in Europe.

The applicant filed an appeal against this decision in November 2013. The Board of Appeal took 5 years to hear the applicant's arguments at oral proceedings in April 2018. It was not until February 2019 that the Board of Appeal issued a decision in which it referred the following questions to the EBoA:

1. In the assessment of inventive step, can the computer-implemented simulation of a technical system or process solve a technical problem by producing a technical effect which goes beyond the simulation's implementation on a computer, if the computer-implemented simulation is claimed as such?

2. [2A] If the answer to the first question is yes, what are the relevant criteria for assessing whether a computer-implemented simulation claimed as such solves a technical problem?

[2B] In particular, is it a sufficient condition that the simulation is based, at least in part, on technical principles underlying the simulated system or process?

3. What are the answers to the first and second questions if the computer-implemented simulation is claimed as part of a design process, in particular for verifying a design?

A Board of Appeal usually refers questions to the EBoA whenever it intends to deviate from the previous case law of the Boards of Appeal. In the present case, it was the case that the Board of Appeal had taken a very restrictive view and had required "a direct link to physical reality" as a patentability requirement. In a simulation of, for example, a planned building that did not even exist yet, this connection did not exist. Moreover, it held that the alleged technical effects were merely virtual or calculated.

The EBoA received 23 amicus curiae briefs in the run-up to the oral proceedings in July 2020. These are letters from interested parties who wish to share their thoughts on the case with the EBoA. The large number of these amicus curiae briefs already showed the great importance of this decision.

II. Decision G1/19 of the EBoA

After the oral proceedings, the EBoA took more than 8 months to issue its written decision in March 2021.
The author had the opportunity to conduct an in-depth interview with expert Bastian Best for the IP Fridays podcast on this decision in June 2021, which is available on the website (https://ipfridays.com).

The EBoA referred the case back to the Board of Appeal and answered the questions raised as follows:
1. A computer-implemented simulation of a technical system or process that is claimed as such can, for the purpose of assessing inventive step, solve a technical problem by producing a technical effect going beyond the simulation's implementation on a computer.

2. For that assessment it is not a sufficient condition that the simulation is based, in whole or in part, on technical principles underlying the simulated system or process.

3. The answers to the first and second questions are no different if the computer-implemented simulation is claimed as part of a design process, in particular for verifying a design.

Thankfully, the EBoA explains in great detail (again) on more than 30 pages of the decision the approach of the European Patent Office in the assessment of computer-implemented inventions. In doing so, the EBoA has not only addressed the aspects raised in the appeal proceedings, but has also dealt with numerous aspects that were first raised by the amicus curiae briefs.

This also includes the so-called COMVIK approach, which has become firmly established at the European Patent Office by now at the latest. According to this approach, only features that are technical or solve a technical problem can be taken into account when assessing inventive step. The EBoA has now formulated general rules or thoughts on how the COMVIK approach should be applied to simulations. It discusses in detail which elements constitute a computer-implemented simulation at all, what the technical features of a simulation as such could be, whether and how the technicality of a simulation is relevant. In doing so, the EBoA discusses in detail the arguments in favor of the technicality of a simulation. Accordingly, in the case of computer-implemented simulations, only technical considerations relating to a

possible contribution to the technical character of the simulation can be relevant for the assessment of inventive step.

The EBoA summarizes its view on the patentability of simulations as follows: when applying the COMVIK approach to simulations, the underlying models form boundaries which may be technical or non-technical. With respect to the simulation itself, these boundaries are non-technical. However, they may contribute to technicality if, for example, they are a reason for adapting the computer or its operation, or if they form the basis for a further technical use of the results of the simulation (e.g., a use with implications for physical reality). To avoid granting patent protection for non-patentable subject matter, such further use must be at least implicitly indicated in the claim. The same applies to any adaptations of the computer or its operation. The EBoA also addresses the following aspects in a very helpful manner:

What is technical? There is still no clear definition formulated as to what the European Patent Office considers technical. This term is to be left open, especially with regard to future developments. Thus, the European Patent Office will continue to decide on a case-by-case basis which features are considered technical and which features are considered non-technical. In a "side blow" towards the originally referring Board of Appeal, the EBoA writes: "the referring Board is apparently willing to accept a broad notion of technicality, since it considers a process defined in part by parameters such as a frustration function to be technical."

The two hurdles: a computer-implemented invention must always clear two hurdles. First, the invention must not be fundamentally excluded from patent protection because it is limited, for example, to software as such or a mathematical algorithm as such. The second hurdle is then described in the COMVIK approach. According to the COMVIK approach, a feature is considered inventive only if and to the extent that it contributes to the technical character of the claimed subject matter. A prerequisite for satisfying the requirement that the claimed invention be inventive over the entire scope of the claim is that it also be technical over the entire scope. Consequently, the requirement is not met if the feature in question contributes to the technical character of the claimed invention only in certain embodiments.

Technical aspects of computer-implemented inventions: The EBoA explains in detail which aspects of computer-implemented inventions can be considered technical. In the Board's view, these include, for example, the computer's interactions with the outside world.

Direct link to physical reality? Following previous case law and taking into account the relevant legal provisions, the EBoA sees no need to require a direct link to (external) physical reality in every case. On the one hand, technical contributions can also be justified by features within the computer system used. On the other hand, there are

many examples where potential technical effects - which can be distinguished from direct technical effects on physical reality - have been considered in the context of the technicality/inventive step analysis. While a direct link with physical reality based on features that are intrinsically technical and/or non-technical is sufficient to establish technicity in most cases, it cannot be a necessary condition in the view of the Board, if only because the concept of technicity must remain open. Thus, the board believes that such a direct link to physical reality is not necessary as long as features of the invention contribute to the technical character of the invention.

Potential Technical Effects: The necessarily technical nature of some effects within the computer does not mean, in the Board's view, that the "downstream" effects caused by the computer's data output are necessarily technical in nature. Therefore, it remains a case-by-case decision. This issue had been raised in some amicus curiae briefs.

Virtual or calculated technical effects: From the point of view of the Board, the calculation of a physical state of an object is generally a measurement which is in principle amenable to patent protection. Just because calculated measurements can be very complex, they do not automatically have to be excluded from patent protection from the point of view of the EBoA, since they can nevertheless be related to physical reality and thus be of a technical nature, regardless of how the results are used.

Criterion of a tangible effect: in this decision, the EBoA definitively abandons the requirement of a tangible effect or the requirement of a "further technical effect" mentioned in some Board of Appeal decisions. The Board is of the opinion that the requirements do not help to distinguish the features in inventions more precisely from non-technical features.

The EBoA also summarizes the relevant previous decisions on the patentability of simulations. Interested parties are therefore also recommended to take a look at this decision.

III. What has happened since then?

First, the submission of the questions probably played a role in the European Patent Office's introduction of a section on AI patentability in the examination guidelines. In May 2021, the original Board of Appeal communicated its preliminary opinion and summoned oral proceedings for November 26, 2021, by video conference. In the preliminary opinion, the Board of Appeal states that it intends to reject the patent application. In doing so, it justifies its opinion by stating that the currently available patent claims would not limit the invention to a specific application and that the calculated or virtual technical effects could also concern cases which, in the view of this Board of Appeal, are classified as non-technical (e.g. in computer games).

IV. What are the main takeaways from the decision for practical purposes?

The decision is not revolutionary, although it is an important one. The previously applicable criteria in assessing the patentability of computer-implemented inventions are presented in detail and interpreted in relation to simulations and AI. In doing so, many criteria that were also raised by amicus curiae briefs are answered in detail. For patent applicants, this decision does not represent a deterioration. On the contrary, the very restrictive approach of the Board of Appeal was criticized and the decision criteria clearly stated.

In particular, the EBoA confirmed that there need not be a direct link to physical reality for a feature to contribute to the technical character of an invention. In order not to hinder future developments in the patenting of computer-implemented inventions, the EBoA has stuck to not defining what the European Patent Office considers technical and what non-technical. Thus, it will always be decided on a case-by-case basis in the future whether certain features can contribute to the technical character of an invention or not. Following this decision, patent applicants now have only a few options for arguing their case when patenting simulations.

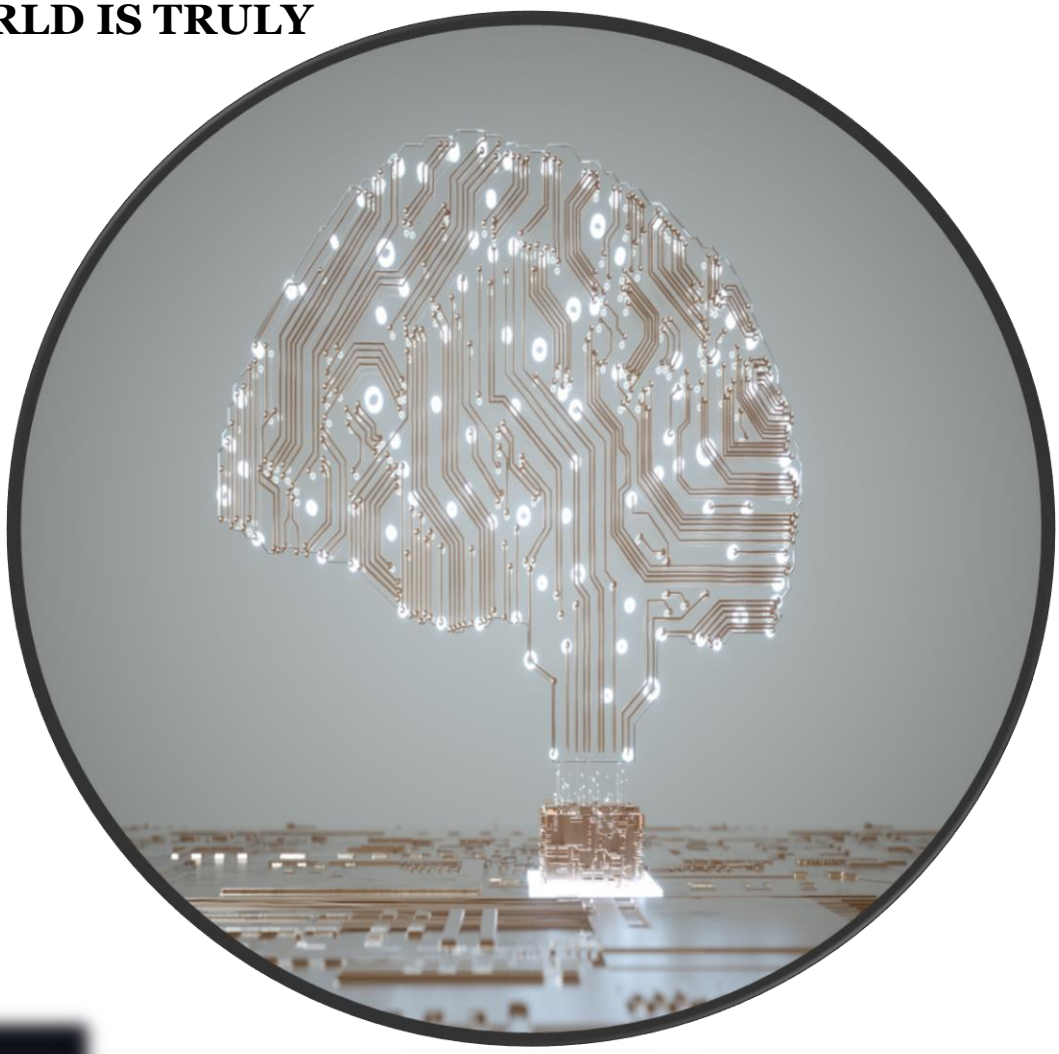
One can argue that the software for the simulation was adapted to a special computer hardware. However, this argumentation is usually out of the question, since software is usually intended to run on a variety of computers.

One could also argue that the result of the computer-implemented simulation has a possible technical effect. As the EBoA has made clear, a direct link to physical reality is not a necessary condition for a finding of technicality. The claim wording should indicate that the result of the simulation is adapted exclusively for the intended technical use. It may be difficult to exclude a possible non-technical use in this context.

Unfortunately, there are no supreme court decisions in Germany, or other EU countries, yet on infringement proceedings of patents involving simulations with the aid of AI. It is therefore not yet possible to assess the extent to which these conclusions from the decision of the EBoA will be helpful in enforcing such patents.

In addition, this case has shown for practice that the applicant himself should carry out a detailed search before filing the application. In the present granting procedure, the European Patent Office - as is often the case in such cases involving software or AI - did not conduct a very relevant prior art search and sweepingly argued with the lack of technical character. Even a subsequent request for a more complete search usually does not lead anywhere. The applicant must therefore assume that in such cases the Office may not carry out a very detailed search, and should therefore carry out a detailed search himself in order to obtain an enforceable patent at a later date.

ARTIFICIAL INTELLIGENCE – THE STUFF OF STAR WARS OR HOW THE WORLD IS TRULY ADVANCING?



ANDRE·VAN·DER·MERWE

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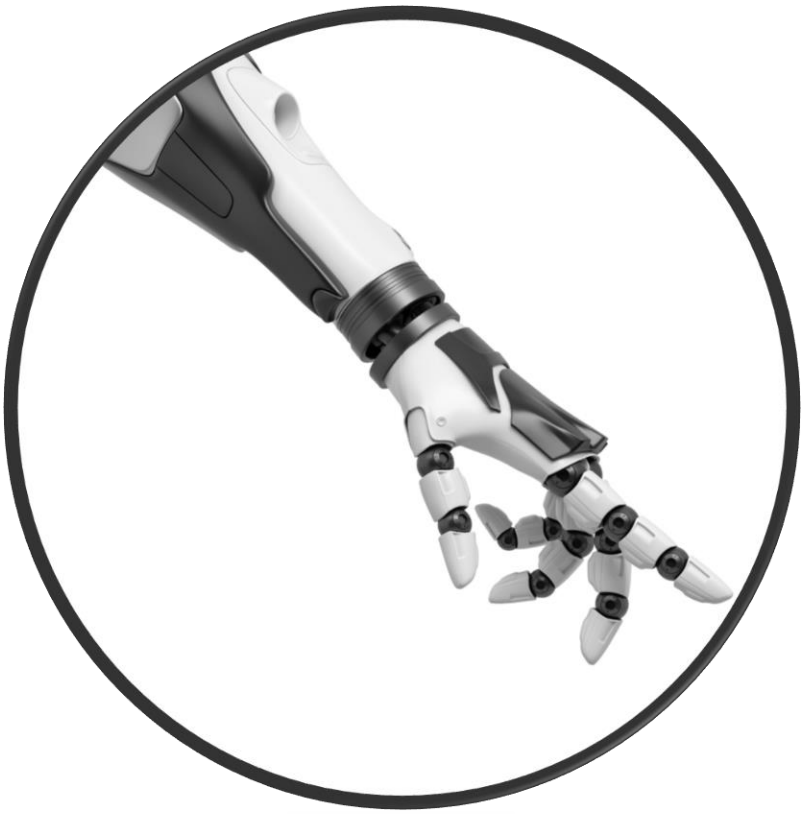

INTRODUCTION

Interestingly, USA President Abraham Lincoln had once said of US patent law that "*it added the fuel of interest to the fire of genius*." In present times, AI and AI-related inventions and creations seem to epitomize "the fire of genius". AI was once dismissed as belonging to the realm of science fiction, but it certainly is very real, although it does not often feature in the daily news. The world appears to be on the doorstep of an AI-era, with AI being one of the most important technologies of our time. In support of this, Google CEO Sundar Pichai has compared the impact of AI on the world to "the discovery of fire and electricity." In similar vein, Microsoft CEO Dave Coplin has said that AI is "the most important technology that anyone on the planet is working on today."

In practical terms and for those not familiar with AI, this can be generated only by an ultra-powerful computer system having a massive computing facility (-the hardware being very costly and highly sophisticated), having access to extensive data-banks, being operated by highly skilled personnel (such as software developers, mathematicians, scientists or engineers), and by using advanced algorithms in the software.

Unfortunately to date the lack of resources and capabilities in this field have largely excluded Africa and third world countries from developing and accessing AI locally. Hence the third world is rapidly falling behind the rest of the world especially in the field of technology and business innovation and development.

In South Africa, in spite of various shortcomings, the Council for Scientific and Industrial Research (CSIR) both on its own and in collaboration with certain local universities have conducted research inter alia in respect of information and communication technologies, with AI showing some development and growth during the last 15 or so years. To date it does not appear that much significant practical innovation has emerged from this work - although the author hereof is aware of an instantaneous translation system used at the North-West University (and developed in collaboration with the CSIR), which provides its under-graduate students with lectures simultaneously in three

official languages namely English, Afrikaans and setsTswana.

Two interesting and thought-provoking short articles on AI were published in the December 2019 edition (Vol 4 Issue 6) of the IP Briefs®. The first article was written by Mr Stephen Middleton and focused on AI-generated inventions, and the requirements and problems (such as inventorship) surrounding these inventions and the patenting of such inventions. For those persons who thought that AI-related innovations were limited to the field of technology, the second article by Mr John Foster would have been a surprise because it focused on AI-created works of a copyright nature such as literary works, musical works, artistic works, and sound recordings. In discussing the issue of authorship, the general question was posed whether or not human involvement in the creation of such works is a requirement for the existence of copyright protection.

Reverting to the field of technology, of course it always advances more rapidly than the law, especially the law that protects such technology, and this disparity will certainly challenge the fundamentals of the world's patent and IP legal systems in respect of AI and AI-related developments.

This article presents a brief overview of AI and its challenges to the patent system of the USA - and by implication to the patent systems of other countries including but certainly not limited to the EU and its countries, the UK, and South Africa – based on a publication by the World Economic Forum issued during 2018 and referenced below.

HOW IS THE WORLD APPROACHING AI?

In 2017 the European Parliament had adopted a resolution and recommendations to the Commission regarding Civil Law Rules on Robotics, and also in 2017 the China State Council had issued the New Generation of Artificial Intelligence Development Plan. These documents discussed the interactivity between AI and the separate IP legal system of each of the EU and China, respectively. To date, although the Obama administration had issued three reports on AI, the USA has not to date, to the knowledge of the present author, issued a comprehensive discussion document that deals with the interaction of AI and AI-derived innovation, on the one hand, and the US patent system, on the other hand.

Against this background, in 2018 the World Economic Forum (hereinafter "the WEF"), from its Centre for the Fourth Industrial Revolution, published a comprehensively researched and interesting White Paper entitled "Artificial Intelligence Collides with Patent Law." (hereinafter "the WEF White Paper").Please see the WEF website for the full text of the White Paper which deals in detail with AI and AI-derived innovation and their interaction with US patent law.

THE WEF WHITE PAPER –

DEVELOPMENTS IN AI

Background and overview of technological advances – Historically, the English mathematician Alan Turing had introduced AI as a theoretical concept in a paper he had published in 1950. Following that, in 1956 the American computer scientist John McCarthy had accepted and coined the term "artificial intelligence" at a scientific conference in the USA.

Since then, no universal definition of AI has been accepted by persons active in this field. It has variously been defined broadly as a computerized system exhibiting behaviour commonly thought of as requiring intelligence – and also as being a system capable of rationally solving complex problems or taking appropriate action to achieve its goals in real-world circumstances.

AI is sometimes described based on its problem space such as logical reasoning, knowledge representation, planning, navigation, natural language processing (NLP) and perception, or sometimes on its overlapping sub-fields, including machine learning (ML), deep learning, artificial neural networks, expert systems and robotics. AI is also sometimes categorized based on its intelligence level eg artificial general intelligence (AGI) - a level of intelligence comparable to that of the human mind – or narrow AI that is the form of AI generally seen today that focusses on solving specific tasks.

AI's technological progress has accelerated in the last twenty years based on advances in ML algorithms, massive growth in the availability of data, and improved and cheaper computing power. This progress, especially in the last ten years, has led to AI being used to "perform activities which used to be typically and exclusively human" and to develop "certain autonomous and cognitive features for example the ability to learn from experience and take quasi-independent decisions." Although we do not see much of this in the public realm in South Africa, AI is now revolutionizing the way people live, work, learn, discover, innovate and communicate – and placing the world on the threshold of a new and exciting era where the outcomes of AI are set to unleash a new industrial revolution.

In the 2nd Obama report (2016), it was stated that the current wave of progress and enthusiasm for AI began around 2010, driven by three factors that built upon each other namely: the availability of *big data* from sources including e-commerce, businesses, social media, science and government; which produced raw material for dramatically *improved machine learning approaches and algorithms*; which in turn relied on the capabilities of *more powerful computers*."

The WEF White Paper reports that global investment in AI has been growing rapidly, with up to $39b being invested in AI development by companies in 2016, including up to $30b by tech giants (and up to $9b by start-ups). This represents a 3 times growth level since 2013.

Global revenue in cognitive systems and AI was expected to grow from almost $8b in 2016 to more than $47b in 2020.

Similarly, AI has led to a race for patents and IP rights among the world's leading technology companies. In fact, the number of AI patents granted globally increased by a factor of three from 2012 to 2016, with the USA alone seeing an increase of 1 628 AI patents issued in the same period.

Advances in AI's "inventiveness" – AI is no longer simply "crunching numbers very quickly" but is generating works of a sort that have historically been regarded as "creative" or as requiring human ingenuity. AI can now independently learn how to perform complicated tasks, prove mathematical theorems, and engage in artistic endeavours such as composing musical works and creating sophisticated artistic works. Using techniques that have developed from our understanding of evolution, molecular biology, neurology, and human cognitive processes, AI is transforming computers into "thinking machines" that are capable of performing creative and inventive tasks at unbelievably high speeds.

Already in 1994 the AI pioneer Stephen Thaler had developed the so-called Creativity Machine which was capable of generating new ideas through artificial neural networks. These networks are collections of on/off switches that automatically connect themselves to form software without human intervention. This system can "brainstorm" new and creative ideas by combining an artificial neural network with another network that assesses the value of the output. The Creativity Machine was apparently involved in generating an invention that was ultimately granted as US patent No. 5,852, 815 in May 1998. This became the first US patent issued on an AI-generated invention. Thaler had cited himself as the sole inventor without any mention of the Creativity Machine.

Another interesting example is the so-called Invention Machine developed by the computer scientist, John Koza. This system is based on genetic programming and is modelled on the process of biological evolution. It is understood that the Invention Machine created an invention that resulted in US patent No. 6,847, 851 granted in January 2005. Likewise, Koza and two other persons were cited as inventors, with no mention of the Inventive Machine.

Further examples of AI inventiveness include computer systems programmed to independently design a new nose cone for a Japanese bullet train; to design new piston geometries for reducing fuel consumption in diesel engines; and to help develop new pharmaceutical compounds.

In a totally different (and surprising!) field of activity - and one that will interest patent attorneys and other patent practitioners - AI technologies have emerged recently to help draft patent applications ie patent specifications and claims. This of course encroaches on territory historically requiring human

ingenuity and input from inventors and more particularly by patent attorneys/practitioners. Is this a challenge or an opportunity, or both, for patent attorneys/practitioners world-wide?

An example of the above has been developed by Cloem, a French company, that uses NLP technologies to assist patent applicants to generate patent claims and variants of patent claims, called "cloems." Another example is AllTheClaims.com and its sister project, AllPriorArt.com (collectively AllPriorArt) which can autonomously generate patent claims and descriptions after parsing and randomly re-assembling patent texts and published applications from the US patent database. A more recent AI-based service called Specifio can prepare software-focussed patent applications, even drafting patent specifications and figures after receiving a set of patent claims from a user of the system. Apparently, this system can generate patent applications that are about 90% complete, requiring a substantial reduction in professional time for a patent attorney/practitioner to complete.

Although such AI platforms still have challenges to overcome at this stage, these appear to forecast a future where AI could reliably and accurately generate parts of, or entire, patent applications, at least in a draft form, without much or extensive input from patent attorneys/practitioners.

Taking the above to its logical conclusion, although it may sound highly speculative at this time, the question arises - would it be possible in future for invention-creating AI to autonomously complete both the inventive and patenting processes ie without human intervention?

AI's entry into fields that have historically required "human ingenuity" raises various critical legal and policy questions that need to be addressed. For example, should AI-generated inventions be protected, and if so, to what extent? And if the patentability of AI-output inventions becomes legally accepted, then should AI also receive inventorship status?

Increased acceptance of AI – The public's view on AI has become friendlier and more acceptable in recent years – possibly coupled with a better understanding of AI and its potential benefits to society. This can impact on legal and policy considerations. In the USA, for example, the approach to AI has been more conservative and guarded than in far-Eastern countries and in Europe. By contrast, a survey conducted in recent years by the European Parliament has shown that 68% of people surveyed expressed positive views on AI while 79% had positive outlooks on robotics.

AI AND HOW IT INTERACTS - AND CONFLICTS - WITH PATENT LAW

In the USA, as far as the author hereof is aware, no official guidance or law amendment has been provided (-other than a decision by the US Patent Office recently – see the Updating note provided below),

and very little discussion has taken place, regarding the repercussions or impact of AI on US patent law (which in certain respects could also in due course apply to the patent law of other countries).

The WEF White Paper concludes, after comprehensive and objective reasoning but without coming to any definite proposals, that the US patent law "governance" and treatment of AI can have significant impacts on innovation, the economy and society. Given how quickly AI is advancing, it is paramount that the relevant stakeholders – patent and non-patent professionals alike – proactively and urgently engage in further research and discussions with one another to find ways for the patent system to promote innovation while minimizing any negative social and ethical implications. More particularly, the WEF White paper explores four main patent issues affected by AI that merit further discussion, as set out briefly hereunder.

The present US standard on patent-eligible subject matter – The present US standard on patent-eligible subject matter needs to be carefully evaluated to determine whether it has any material negative impact on AI or AI-driven technologies *per se* (such as computer software). If so, the relevant actors should search for possible adjustments to the standard that can better achieve the main objectives of patent law such as promoting innovation, disseminating useful information and incentivizing investment in helpful technologies.

The anticipated benefits from the contemplated changes must then be weighed against any possible negative social and ethical implications that may arise from such changes. The relevant actors should also consider other available mechanisms for promoting and protecting AI innovation (eg laws on trade secrets or copyright) to help assess whether any of the identified shortfalls in the present patent law subject-matter eligibility standard can be rectified through other means.

Protection of inventions created entirely by AI? The question of whether inventions that are created entirely by AI should be protected by patent law needs to be answered. To help arrive at an effective solution, the relevant actors must diligently analyze the potential positive and negative effects – from technological, socio-economic and ethical viewpoints – by patenting AI-generated inventions, and then assess these effects in view of one another.

Possible middle grounds between the competing interests must be identified to help the patent system achieve its main objectives in a well-balanced manner. If the relevant actors ultimately decide to allow AI-created inventions to be patentable, then they must also decide whether inventorship should be awarded to AI's that have generated those inventive concepts.

An updating note by the author hereof – In the recent US Patent Office decision of 27 April 2020 on US patent application No 16/524,350 the US Patent and Trade Mark Office

ruled that AI systems cannot be listed or credited as inventors on a US patent. The decision further stated that an "inventor' under current (US) patent law can only be a natural person. This ruling follows similar stances adopted by the EPO and British patent offices. In order to change this approach by the US patent office, an amendment to the patent laws would be required.

Patent infringement by AI and related liability – US liability laws do not account for situations where patent infringement is committed by AI. The relevant actors need to explore "who" (or "what") should be held liable in those situations and how compensation should be assessed.

The different existing liability frameworks must be analyzed to identify their relative strengths, and new approaches should be explored to see if these can function more effectively than existing liability systems.

"POSITA" - Are changes required to the present definition? – Further discussions are required to determine whether changes are necessary to the definition of "a person of ordinary skill in the art" ("POSITA") which is a hypothetical person with which obviousness of an invention is assessed in terms of US patent law. As the use of AI becomes more prevalent, the actual persons "of ordinary skill" who work in various industries will increasingly rely on AI. A categorical exclusion of AI's involvement from the definition of a POSITA can risk having a non-obviousness standard that fails to accurately reflect the real-world level of obviousness.

As AI becomes "smarter," incorporating the use of AI into the definition of a POSITA would likely result in more inventions being deemed obvious, which would likely result in fewer patents being granted. In this scenario, if AI reaches super-intelligence at some future time, would that not mean that everything, or at least most inventions, will be considered obvious? These questions must be studied to help arrive at a non-obviousness standard that is realistic and accurate.

CONCLUSION

Consideration by role players in the United States on these issues needs to be comprehensive and multi-faceted so that an optimal balance can be struck between the various competing factors. This will improve and assist US patent law to continue adding "*the fuel of interest to the fire of genius*", in ways that are socially inclusive, ethically responsible and legally/technically meaningful. This could lead the way to corresponding or similar AI patent law reform in other jurisdictions.

In a time of Covid-19 : To waive or not?

By Dr Rick Longton and Dr Madelein Kleyn

In light of the Covid-19 [1] pandemic that has plagued the world since its December 2019 discovery in China, there has been growing support for the reduction or outright suspension of Intellectual Property (IP) rights related to Covid-19 treatments and therapies. Those who favor this approach refer to it as "patent waiver." The IP rights most frequently mentioned in this regard are patent rights, although other intellectual property rights have not escaped similar scrutiny. The movement to waive patent rights has become more widespread over the last several months with the approval of safe and effective Covid-19 vaccines credited with reducing transmissions of the virus and lowering morbidity and mortality rates. These encouraging results are seen among those who have been fully vaccinated and those who live in places where vaccines are readily available.

The currently approved vaccines are not yet as widely available as one would hope. Death and infection rates in many countries continue at appalling levels. While efforts are underway to make the vaccines available to every person on the planet (approximately 7.9 billion people, according to recent United Nations estimates), these are severely hampered by supply and distribution problems, and are proceeding at a snail's pace. Despite vaccine hesitancy or the "Covid-19 denial" promoted by fringe groups, support for vaccination and hence demand for ready vaccine access are widespread throughout the world. Based on current vaccination rates, vaccine availability, distribution, and supply-chain bottlenecks, it is clear much more must be done if we are to get vaccines from vials into arms to defeat this virus.

It is against this backdrop that the interest group that promotes waiver of intellectual property rights related to Covid-19 treatments and therapies has gained momentum. Loosely summarized, the movement's position seems to be that the limited exclusionary rights granted by intellectual property rights stand in the way of rapid deployment of the Covid-19 vaccines approved to date.

The argument is that intellectual property rights, and specifically patent rights, impede our ability to deal with this global health crisis because they prevent or slow efficient manufacture and subsequent distribution of vaccines to those who need them most. Extraordinary times, it is said, require extraordinary measures, in this case, patent waiver. But, resting as it does on several false premises, the argument fails.

[1] We use the term "Covid-19" herein to include the virus SARS-COV-2 and the disease COVID-19 which is caused by the virus.

The approach advocated by those who would waive intellectual property rights, including copyrights, industrial designs, patents, and trade secrets is, at best, short-sighted and counter-productive, and, at worst, harmful. In our view, a better and already available way balances the need for rapid deployment of every medical tool and related technology at our disposal to combat the virus against legitimate IP rights, including those of patent owners. To toss current procedures aside would amount to nothing less than a reactionary move undermining the very foundations of the patent system, as we explain below.

First, no evidence suggests that patents hinder vaccine availability or that any relevant patent holders are using their intellectual property rights to limit either the production or distribution of vaccines. None. Given this foundational fact, it is unclear how a patent waiver is supposed to be of remedial effect in the worldwide effort to contain and ultimately neutralize Covid-19 and its continuing variations. Far from benefiting this effort, patent waiver instead invites the production of counterfeit and dangerous, low-quality knockoffs and the diversion of scarce raw materials away from established manufacturing facilities. Perhaps just as important, it inhibits what patents are designed to stimulate and effect, that is, research and innovation, and therein it weakens the sanctity of private property not only without providing a compensatory social benefit but encouraging licence and fraud. These are not new objections to the very concept of patent waiver, and it is plain that contentions in favor of that idea are notoriously vague.

Second, arguments in favor of unilateral state-mandated waiver of legitimate patent rights appear to us less persuasive than ones, including ours, which support the view that mechanisms that facilitate vaccine manufacture and distribution are already in place and functioning as they should. These include voluntary licensing (albeit royalty-free by some patent holders in the aid of serving the public), private sector collaborations, public/private partnerships, compulsory licensing (we note that many countries have adopted amended patent legislation to incorporate compulsory licensing), and all these in combination, examples of which come to light nearly every day in press releases and news accounts.

Third, among the real challenges slowing availability of approved vaccines—lack of raw materials, distribution and supply-chain issues, the complexity of the vaccines themselves, and matters of quality control—none have to do with patents, rendering patent waiver nugatory.

The Proposed Waiver

A patent grants a negative right—the right to exclude others from certain conduct such as making, using, offering for sale, selling, and importing a claimed invention. Waiving one or more of the rights conferred by a patent, or any intellectual property right, would mean that the owner of the right will not be able to enforce the right against infringers, and will not be able to charge a royalty or license fee for the use of the right. It is unclear how a patent waiver would be implemented by World Trade Organization (WTO) member states, or what would be included in such a waiver.

South Africa and India have submitted a proposed waiver of IP rights directed to Covid-19 for consideration by the WTO. The proposal is the subject of ongoing negotiations at the WTO.

The most current version of the proposal, dated 25-May-2021, includes an exceedingly broad IP waiver provision which states in part:

> *(1) The obligations of Members to implement or apply Sections 1, 4, 5, and 7 of Part II of the TRIPS Agreement or*

> *to enforce these Sections under Part III of the TRIPS Agreement, shall be waived in relation to health products and technologies including diagnostics, therapeutics, vaccines, medical devices, personal protective equipment, their materials or components, and their methods and means of manufacture for the prevention, treatment or containment of COVID-19. See "Waiver from Certain Provisions of the Trips Agreement for the Prevention, Containment and Treatment of Covid-19" dated 25-May-2021 [emphasis added].*[2]

The scope of the proposed waiver is as stunning as it is vague. With respect to patents, the proposal provides no guidance as to what specific patents would fall within the scope of the waiver, or what to do about patents that might cover Covid-19 vaccines, or the technologies used to make the vaccines, but also cover other potential vaccines unrelated to Covid-19 or the underlying technologies applied in other ways.

The Patents at Issue

The pharmaceutical patents at issue here, in the words of the proposed waiver, are those patents related to "health products and technologies including diagnostics, therapeutics, vaccines, medical devices, personal protective equipment, their materials or components, and their methods and means of manufacture for the prevention, treatment or containment of COVID-19."

Four of the most prominent approved vaccines to date are the Pfizer-BioNTech vaccine; the Moderna vaccine; the Johnson & Johnson vaccine; and the Oxford-AstraZeneca vaccine. Other vaccines exist, or are on the way, e.g., Novavax has recently announced that its vaccine candidate is about 90% effective. But the question remains, what specific patents would be subject to any proposed patent waiver? To answer this question, we must first briefly address a few aspects of patents and how they relate to the technologies at issue.

A patent, or more precisely, the property right granted by a patent, is defined by the claims recited in the patent. Claims can be broad in scope, they can be very narrow, or they can be everything in between. The technologies encompassed by the vaccines mentioned above are extraordinarily complex. The Pfizer-BioNtech and Moderna vaccines rely upon a new platform technology that facilitates the delivery of specific mRNA molecules encoding a desired antigen (a protein or peptide sequence) to elicit an immune response.

In theory, this platform technology can be applied to any disease, as long as a suitable antigen exists that can be encoded by mRNA. This is a new technology that has never been used before to make a safe and effective vaccine, let alone an mRNA vaccine. The Johnson & Johnson and the Oxford-AstraZeneca vaccines work in a different way.

These vaccines use a viral vector (weakened adenovirus) to deliver DNA instead of mRNA to cells. The DNA codes for an antigen specific to the Covid-19 virus which when produced by cells elicits an immune response in an individual.

[2] Note that Sections 1, 4, 5, and 7 of Part II of the TRIPS Agreement are directed to copyrights, industrial designs, patents, and trade secrets, respectively. Consequently, the proposal is not limited to waiver of enforcement of just patent rights, but includes waiver of enforcement of these other IP rights as well.

All of this is to say that the technologies that go into making the approved Covid-19 vaccines are extraordinarily complex and not easily duplicated. As such, many types of patent claims, of varying scope, exist that are directed to different aspects of the relevant technologies. Some of these claims are very narrow and cover specific embodiments of the technology, such as a particular formulation, a particular target, or a particular disease, for example. But other, broader claims exist that would not be limited to Covid-19, or specific Covid-19 vaccine formulations. As alluded to above, the claims in these patents could encompass any of several other unrelated formulations, diseases, or conditions, while at the same time include Covid-19.

The point is, relevant patents which would presumably fall within the scope of the patent waiver proposed by South Africa and India, by virtue of the technologies they cover, are themselves extraordinarily complex and multifaceted. To its detriment, the vague, exceedingly broad patent waiver proposal currently under consideration at the WTO ignores this fact.

Conclusion

Waiving IP rights will open the door for counterfeit pharmaceuticals and sub-standard health devices and equipment which could only have negative impact on companies, governments and consumers. Patent waiver in particular would do little if anything to alleviate the problem of ready global vaccine access. This is because patents have nothing to do with the problem. Governments should instead focus their efforts on strengthening those mechanisms already in place, namely, voluntary licensing, private sector collaborations, public/private partnerships, compulsory licensing, and all these in combination, so as to not lose confidence in medications and the public health system.

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By Gaelyn Scott

A sweet solution to… what exactly?

Gaelyn Scott

Gaelyn is an Executive at ENSafrica. She heads up the Intellectual Property (IP) department. Gaelyn specialises in strategic brand management and the enforcement of IP rights, both locally and internationally, with extensive experience in Africa.

She is experienced in litigation and dispute resolution relating to IP rights.

The well-known Dutch chocolate maker Tony's Chocolonely has certainly managed to create a stir.

Under the name Sweet Solution, the company has launched a range of chocolates that is, to say the least, interesting.

There are four different chocolates. Although each one is branded Tony's and Tony's Chocolonely, one chocolate looks very much like a Kit Kat, one very much like a Toblerone, one very much like a Twix, and one very much like a Ferrero Rocher. These brands are owned by the major competitors of Tony's Chocolonely – Nestle, Mondelez, Mars and Ferrero Rocher.

The shapes of the new products are what Tony's Chocolonely describes as "playful", but we suspect that the other companies might have a different expression for this.

For example, the Kit Kat lookalike comprises a mix of the unequal shaped blocks used by Tony's and the wafer shapes of Kit Kat.

Why is Tony's doing this? Apparently it is intended to draw attention to the problem of slavery and child labour in the chocolate supply chain.

Buyers are asked to sign a petition that supports the need for human rights legislation and seeks an end to the use of slavery and child labour in the supply chain.

Tony's Chocolonely's plan was to launch this new range of chocolates in the UK, Netherlands, Belgium, Germany and the USA.

The company claims its competitors put serious pressure on the UK supermarkets not to stock these limited-edition bars. It is not known to thee author how the product launch has gone in the other countries. One report suggests that these bars are now only available on Tony's Chocolonely's website.

So, what are we to make of this? Seeking to end child labour, slavery and other abuses in the supply chain is, of course, totally laudable, but is it justifiable to use the branding of competitors in the process? Cynics might see this as little more than a ruse to increase revenue.

It is, in our view, highly unlikely that any of Tony's competitors will take the legal route. The simple fact is that any legal action would look bad given the anti-slavery/child labour dimension. But assuming we're wrong, what remedy would the law provide?

If this were to play out in South Africa, Tony's Chocolonely's competitors might well have a case, assuming that they had South African trade mark registrations for their labels, registrations that incorporate the colours.

Trade mark infringement is dealt with in Section 34 of the South African Trade Marks Act. Section 34(1)(*a*) prohibits the "unauthorized use in the course of trade in relation to goods or services in respect of which the trade mark is registered, of an identical mark or of a mark so nearly resembling it as to be likely to deceive or cause confusion."

Image source

Even in cases where consumer confusion is unlikely to happen, there might still be a claim for infringement under section 34(1)(*c*), especially as the various chocolate getups are most certainly well known. This section deals with infringement through the use of a similar mark where the registered mark is well known and the use is likely to "take unfair advantage of, or be detrimental to, the distinctive character or the repute of the registered trade mark, notwithstanding the absence of confusion or deception." It's worth bearing in mind that the trade mark laws in most countries have provisions that are similar to these.

One lesson to learn from this story is the importance of separately registering the product label, including in colour, as a trade mark, in addition to the word mark.

On a closing note, Tony's Chocolonely very recently discovered that taking the moral high ground is one thing, staying on it is another.

The company has been dropped from the Slave-Free Chocolate's list of ethical chocolate companies. Tony's Chocolonely's website says this:

"We have never found an instance of modern slavery in our supply chain; however, we do not guarantee our chocolate is 100% slave free."

It goes on to say that *"we are doing everything we can to prevent slavery and child labour... [but] we cannot be there to monitor the cocoa plantations 24/7."*

But it is thinking big: "Our ambition extends beyond our own bar; we want to change the whole industry which involves being where the problems are so that we can solve them...only then can we say we have achieved our mission to make all chocolate 100% slave free."

Tony's Chocolonely is a Dutch confectionery company founded in 2005 which produces and sells chocolate. In 2018, the company's market share in the Netherlands was 18 percent, making it one of the country's largest chocolate manufacturers.

BREXIT - IMPACT FOR IP, TRADE & COMMERCIALISATION AGREEMENTS

By *Dai Davis*

Dai is a Solicitor and Chartered Engineer and Partner at Percy Crow Davis & Co, UK

Background

Even though English contract law is one of the areas never harmonised by the European Union, changes have occurred because of Brexit. This article explores some of those changes which Brexit has brought about in the field of Intellectual Property Rights and related commercial agreements.

Intellectual Property Rights encompass patents, trademarks, copyright and designs as well as lesser known rights such as data base rights and plant and seed variety protection.

Confidential Information is an area sometimes classified within the ambit of Intellectual Property.

Historically, the European Union has been active in legislating within the field of Intellectual Property.

Since Intellectual Property rights are constrained by international conventions, European Harmonisation has been within the ambit of those convention constraints.

Database Rights

An Introduction

A unique exception to the global nature of intellectual property is the European Union data base rights. Under this legislation, the maker of a database (i.e., a person who creates a database) has the right to prevent the extraction or re-utilisation of the whole or a substantial part of the contents of the database. The legislation applies to databases created on or after 1 January 1998. As indicated, this legislation is specific to the European Union and is not based on an International Treaty.

For these purposes, a database must have an element of selection in it as well as an investment of time and money to create it. For example, a database could consist of the events in a football match, such as the free kicks, corners, penalties and goals, or a database could consist of a list of computer programs together with an overview of what the features of each program are. The rights created by the European Union legislation last for 15 years from the date of creation of the database.

The rights are infringed even by a systematic extraction or re-use of insubstantial parts of the contents of the database. Where there is a substantial change to the contents of a database, so that it can be considered as a "substantial new investment", the database will then qualify for a new term of protection beyond the original 15 year period. In this way, database protection can conceivably last for a long time, provided that "substantial new investments" are regularly made to the database. This will invariably be the case for commercial databases which are continuously being updated.

The key is that there must have been a substantial investment in the obtaining, verification, or presentation of the contents of the database. A further condition is that, in order for the database right to be enforceable in the European Union, the person or organisation who is the creator of the database must be a national of a Member State of the European Union or a company formed under the laws of a Member State and based there from an economic perspective.

Database rights

The first thing to notice is the use of the present tense in the phrase commencing "*be a national of a Member State*".

Where the person or organisation which owns the database, rights, ceases to be a national or company of a Member State, the database right is lost. So, if a company relocates itself and assets to a country which is not a Member state, such as the United States, the database rights are lost.

Unfortunately, it is not absolutely clear that the "light" Brexit deal that has been negotiated ensures that United Kingdom citizens and companies will retain their database rights now that the United Kingdom no longer is a Member State. While the intention of the Brexit deal was clearly that United Kingdom citizens and companies should retain their Database Rights, there is at least one counterargument to that position.

Conversely, within the United Kingdom, European Union citizens and companies, alongside United Kingdom citizens and companies, will continue to have enforceable Database Rights. This continuation is specifically and unambiguously provided for in the initial Withdrawal Agreement which was agreed in January 2020.

However, for United Kingdom companies and citizens, the reverse position is more complex, and the position cannot be stated with absolute certainty. It is the associated doubt itself which has created a disadvantage for United Kingdom companies. In a situation where a United Kingdom citizen or company seeks to enforce its database rights in Europe it may find itself coming up against an argument that, in fact, it no longer has database rights in Europe.

Not only this, but the enforceability may also depend partly upon the country instantiation of the Member State in which that individual or company is seeking to enforce its database right. The European legislation is found in a 1996 Directive. All Directives require a country instantiation in order to be enacted in that country. In some countries, the wording of the Directive states that it is sufficient only that the database owner resided in the European Union at the time the database was created. For example, this appears to be the case in the German instantiation of the Directive.

The position of United Kingdom owned databases is therefore at best unsatisfactorily ambiguous, and at worst, there is no continuing protection for United Kingdom databases in Europe.

Either way, it does not reflect the agreed aim in the political declaration entered into between the European Union and the United Kingdom in October 2019. That declaration included an obligation "to preserve the Parties' current high levels of … rights [in] … database[s]".

Furthermore, database rights are becoming more, not less, important. This is because of the use of artificial intelligence to create those databases. By way of an example, consider a computer generated databases of protein molecules and their likely properties. It is perhaps unfortunate, to say the least, that United Kingdom companies may be at a legislative disadvantage in the future exploitation of databases.

Death Knell of the European Court of Justice

The European Court of Justice will no longer have a role to play in the interpretation of law in the United Kingdom, with the exception that a case currently being referred to it may proceed until judgment and take effect. In the future, the Court of Appeal and Supreme Court are free to interpret European legislation differently. In reality, there are many areas of law where the same European legislation has been interpreted differently by courts in different European member states. Not until the European Court of Justice decides the matter and adopts a uniform approach is that unified approach imposed upon the whole of Europe. Even then, it can take time before the attitude of the European Court of Justice is adopted by lower, national courts.

An example of this, highly relevant to Brexit, is the interaction between copyright and design right. The former is based on international convention, modified in certain areas by European Union Directives. The latter are mainly restated entirely under European Union legislation. One can have both registered designs where the design is registered at the (European or national) intellectual property office, and weaker unregistered design rights where the design is not so registered. Unregistered design rights last for significantly less time than registered design rights. However, a basic question is whether you can have both a design right and a copyright protecting the same product at the same time. Two Italian cases, both of which reached the European Court of Justice, strongly state that the answer to this question is "yes", you can.

The first of those cases Flos SpA v Semeraro Casa e Famiglia SpA (case C-168/09 decided in January 2011) involved the design of a free-standing upright light. The European Court of Justice stated in that case that one cannot automatically exclude copyright protection for [registered] "designs". A subsequent case involving the design of a pair of jeans also reached the European Court of Justice. This was Cofamel v G-Star Raw (case C-683 decided on 17 September 2019).

In the latter case the European Court of Justice held that one "cannot exclude from copyright protection designs which … meet all the requirements to be eligible for copyright protection".

Contrast this with the position of judges in the United Kingdom, where the most recent leading case is that of LucasFilms v Ainsworth (2011 UKSC 39 decided on 27 July 2011).

This case involved replica Stormtrooper helmets, taken from characters in the well know Star Wars series. The Supreme Court, the highest court in the United Kingdom held in that case, when considering the interaction between design rights and copyright that "there are good policy reasons for the differences in the periods of protection [between copyright and design rights], and the Court should not, in our view, encourage the boundaries of full copyright protection to creep outwards".

So, while the European Court of Justice is extending protection for articles most obviously protected as a design and stating that they can also be protected by copyright, the United Kingdom court is doing the opposite.

Post Brexit, it is almost inconceivable that the United Kingdom court would be persuaded to fall into line with the European Court of Justice's attitude on the question of the overlap of copyright and design rights.

Law, Jurisdiction and Enforcement

The only areas of contract law that have been harmonised within Europe are the three separate areas of Law, Jurisdiction and Enforcement. The first deals with which governing law a contract is subject to, the second which courts have jurisdiction over an agreement, and the third whether, having obtained a judicial decision in your favour, the judgment can be enforced in another European country. While a full discussion of this topic is outside the scope of this article, a summary of the position is as follows.

The starting point is that, with the exception of cases that commenced before 1 January 2021, the European Union conventions on Law, Jurisdiction and Enforcement no longer apply. Therefore, in many cases, there is no uniform position on Law, Jurisdiction and Enforcement since local laws, as between the relevant member state and the United Kingdom, now apply.

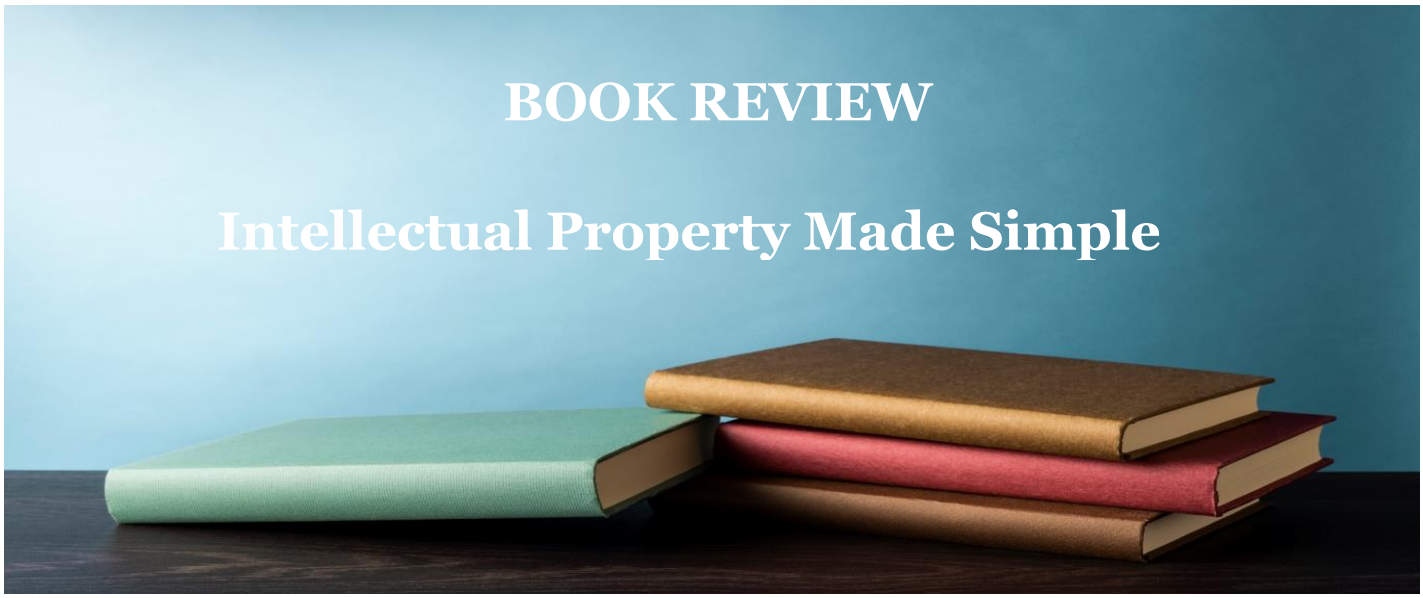
In the European Union, governing law in a contract is dealt with in the Rome I Convention. The starting point for governing law is that the parties may choose which law applies, and this rule applies whether or not both parties are within the European Union. The same position now also exists in the United Kingdom which has, post Brexit, enacted domestic law similar to the Rome I Convention. Overall, therefore, Brexit has little effect on a choice of law clause.

In contrast, Brexit has made a large difference to both choice of jurisdiction and enforcement. Dealing first with jurisdiction, this is dealt with under the Brussels Regulation *(*No. 1215/2012). Article 25 of the Brussels Regulation, dealing with choice of jurisdiction, allows an exclusive or a non-exclusive choice of jurisdiction where the parties agree, unless one of the exceptions apply. An example of such an exception is disputes regarding land where the only court that has jurisdiction is the court of the member state in which the land is situated. However, the Brussels Regulation only applies where all the parties to the agreement are within the European Union.

The Brussels Regulation is extended to the EFTA countries of Iceland, Norway, and Liechtenstein and also Switzerland by the Lugano Convention . The United Kingdom has applied to join the Lugano convention, but at the moment the prospect of this being acceded to quickly looks remote. The application has, in practice, become a political football.

Until the Lugano Convention applies in the United kingdom, the only international convention dealing with jurisdiction of which the United Kingdom is a party is the Hague Convention. The Hague convention covers some 87 countries, including almost all of the world's industrialised countries. The scope of this convention is much more limited, as it only respects the party's choice of jurisdiction where the choice is an exclusive choice of jurisdiction.

A further issue to be considered is the enforcement of any judgment. Within the European Union, this is also dealt with in the Brussels Regulation. Since, after Brexit, this no longer applies to the United Kingdom, enforcing a judgment across as between the United Kingdom and a European Union member state has been made harder. In practice it means that, before a plaintiff commences a case where the defendant does not have assets in the chosen country of jurisdiction, the plaintiff should consider the potential enforceability of a judgment in the local laws of the country where the defendant does have assets. This will therefore sometimes change the choice of jurisdiction which a party may have otherwise opted for.



Owen Salmon is an experienced silk at the Johannesburg bar, who has a Master's degree in IP law and years of experience as a practitioner, lecturer, examiner and writer in the field of intellectual property law .

As a creative writer and musician, he is well aware of the implications of IP law on the broader public.

IP affects virtually everyone in business – whether the large engineering manufacturers or the work-from-home graphic designer. There is barely a sector of economic activity not affected by IP considerations. Yet, for all that, IP as a field of law remains fiendishly complex and the preserve of just a few IP specialists. These IP specialists are not always accessible to the creatives or small business who might suddenly be called upon to negotiate licencing rights, or to challenge perceived plagiarism, or to decide whether or not a bit of code is legitimate to use.

Trade marks, copyright, designs and patents involve different forms of intellectual property rights. In our daily lives, from the music we download, to photographs we post, to goods we buy and products we manufacture, intellectual property is present. However, their laws have terminology and concepts that can be difficult for us to understand.

In this new work *Intellectual Property Made Simple* published earlier this year, Owen addresses the complex IP principles in an easy to understand manner.

This book simplifies the nature, creation, and ownership of these different intellectual property rights. It explains the procedures for registration, and the remedies for enforcement, all in bite-size sections which are easy to read and simple to understand.

Copyright, design, patents and trademarks are separately covered and explained, and the book is highly accessible to the ordinary reader. It is aimed at a wide audience, from lawyers who have not specialised in IP but need some basic knowledge, to tertiary students, advertisers, engineers, IT creatives, and business people.

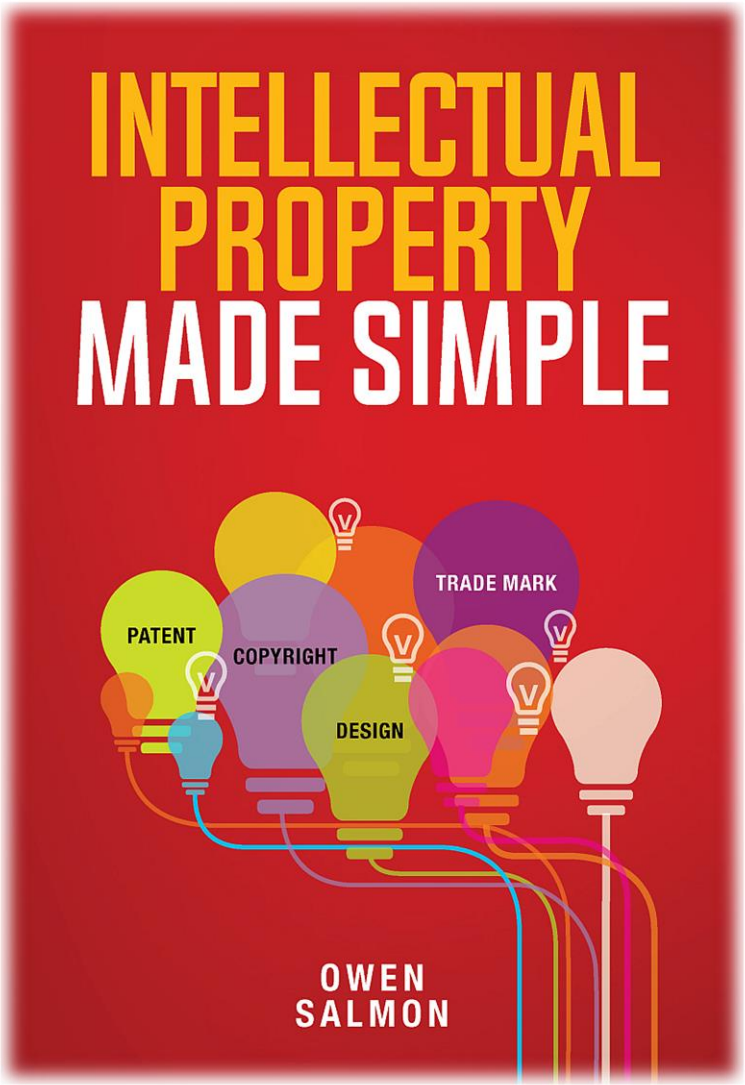
Quoting Judge Louis Harms:

"Intellectual property is like dark matter – intangible, elusive, but present; and since the Statute of Monopolies of 1623, ever-expanding.

We all know of its existence, but we do not grasp its importance or its borders or the extent to which it affects our daily lives.

Each has its own origin, rules, and universe. Each has its own "thing".

To present this mixed bag in simplified form in one slim volume without unnecessary legalese is a major accomplishment. Few have been able to do what Adv Owen Salmon SC succeeded in doing and I fully recommend this book to the general public – and to many learned lawyers – as a beginner's guide to IP. The reader will at least now know that one does not have a patent in one's idea or copyright in a trademark. And how easily and often we infringe copyright."



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From the Juta Law Reports

The following judgments were reported up to June 2021

Competition — Restraint of trade — Enforcement — Application for interdict — First applicant being manufacturer of various security-related products and proprietor of MUTUAL trademark — Second respondent being ex-employee of first applicant, and subject to restraint of trade and secrets/confidentiality contracts, and present CEO and sole director of first respondent company, Simpson Safes — Third respondent being ex-employee of first applicant, and subject to restraint of trade and secrets/confidentiality contracts, and present employee of Simpsons Safes — Simpsons Safes passing off MUTUAL mark as its own without authorisation — Second and third respondents using their customer connections to poach first applicant's existing clients — First applicant having established prima facie right (founded in its right, stemming from restraint agreements, to protect its reputation, its product range, its confidential information, its client connections); that it had suffered irreparable harm; that balance of convenience favoured it; and that there existed no alternative remedy — Court granting interdict in favour of first applicant. *Mutual Safe and Security (Pty) Ltd v Simpson Safes (Pty) Ltd* Gauteng Provincial Division, Pretoria case No 43393/20, Neukircher J, 8 January 2021, 31 pages. JDR Serial No 0143/2021.

Valuation of goods and customs duty relating to IP - Customs and Excise Act 91 of 1964 – section 49(7) – appeal against origin determination – importation of goods from SADC countries – certificates of origin in terms of Annex I to Rules of Origin to the Protocol on Trade in the Southern African Development Community (SADC) Region – validity – goods produced in a member state and sold to purchaser in non-member state – purchaser on-selling goods to an end user in a member state – goods dispatched by producer directly to end user – whether goods consigned directly from one member state to another member state – whether qualifying for favourable rate of duty in terms of Protocol. Valuation of goods for purpose of calculating customs duty – determination of transaction value in terms of ss 65, 66 and 67, read with s 74A(1), of the Act – inclusion of commissions other than buyer's commission under s 67(1)(a)(i) of the Act – what constitutes buyer's commission – international procurement process – manufacturing process under agent's control – scope of purchaser's control of agent – whether commission on purchases through a related company constituted buyer's commission. Transaction value – inclusion of royalties in terms of s 67(1)(c) of the Act – whether royalties due directly or indirectly as a condition of sale of the goods for export to South Africa. Section 67(1)(c) of the Act provides that in determining the transaction value of goods there shall be added to the price actually paid or payable for the goods: "'royalties and licence fees in respect of the imported goods, including payments for patents, trademarks and copyright and for the right to distribute or resell the goods, due by the buyer, directly or indirectly, as a condition of sale of the goods for export to the Republic, to the extent that such royalties and fees are not included in the price actually paid or payable, but excluding charges for the right to reproduce the imported goods in the Republic.
Commissioner: SARS v Levi Strauss SA (Pty) Ltd (509/2019) [2021] ZASCA 32 (7 April 2021).

Patent — Inspection by public — Patents Act 57 of 1978, s 53 — Application under s 43(4)(a) for patentee to supply particulars of search report issued in another country with respect to application for patent relating to same subject-matter lodged in that country — Plaintiff disclosing the details of search reports issued in USA in respect of application for patent filed in that country but not disclosing search reports issued in any other country in respect of invention — Since South Africa not doing own search reports or examining validity of patent before granted, SA patent not guarantee that patent valid and enforceable — Enforceability of patent only determined when contested in court — Commissioner of Patents finding that defendant's allegation it located patent application for same invention in Australia not refuted by plaintiff, plaintiff contravened s 43(4)(a) — Order to compel issued by Commissioner. Microsoft (SA) (Pty) Ltd v You First Mobile (Pty) Ltd, CP case No 2020/59577, Mokose J, 7 June 2021, 8 pages.

Patent — Revocation — Lack of novelty — Inventive step — Whether taken — Australian company mounting radar device used in mining industry on vehicle — Military having mounted radar on vehicles since World War II — Commissioner of Patents revoking patent on ground of obviousness — On appeal, Supreme Court of Appeal holding that presence of inventive step to be found in claims as they stand — SCA finding that no forward step, and particularly no inventive one, disclosed by claims in casu — SCA reiterating that non-inventions should not be allowed to stifle trade — Patents Act 57 of 1978, s 25 and s 65(4). *GroundProbe (Pty) Ltd and Another v Reutech Mining (Pty) Ltd and Others* Supreme Court of Appeal case No 1226/2019, Ponnan JA, Dambuza JA, Molemela JA, Ledwaba AJA and Gorven AJA, 19 March 2021, 15 pages.

Trademark — Registrability — Distinctiveness — SWATCH and iWATCH — Swatch opposing registration of Apple's iWATCH mark on ground of confusing similarity to its own SWATCH mark — No presumption of distinctiveness flowing from fame of Swatch and Apple brands — Two marks visually, aurally and conceptually distinct — Conclusion reinforced by fact that both brands aimed at affluent and discerning consumers — No need for recourse to evidence that iWATCH would form part of Apple's family of i-prefixed marks — Trade Marks Act 194 of 1993, s 10(12), 10(14) and 10(17). *Swatch AG (Swatch SA) v Apple Inc* SCA case No 1320/2018, Unterhalter AJA (Wallis JA, Mocumie JA, Makgoka JA and Gorven AJA concurring), 29 January 2021, 12 pages.

Unlawful competition — Passing-off — Parties competitors in SA market for men's shower gel under brand names NIVEA MEN (respondent) and CONNIE MEN ACTIVE SHOWER GEL (appellant) — Respondent alleging passing-off by appellant — Gauteng, Johannesburg High Court finding in favour of respondent (applicant q quo) — On appeal to SCA< court looking into whether reputation of respondent's get-up of predominant colour combination of blue, white and silver protectable — Whether appellant's product confusingly similar — Respondent's get-up used extensively in SA market — Its products leading brand in its category and holding majority share of shower gel market — Overall appearance and format of appellant's product confusingly similar — Appeal dismissed. *Koni Multinational Brands (Pty) Ltd v Beiersdorf AG* Supreme Court of Appeal case No 553/2019, Schippers JA (Cachalia JA and Sutherland and Unterhalter AJJA concurring), 19 March 2021, 12 pages.