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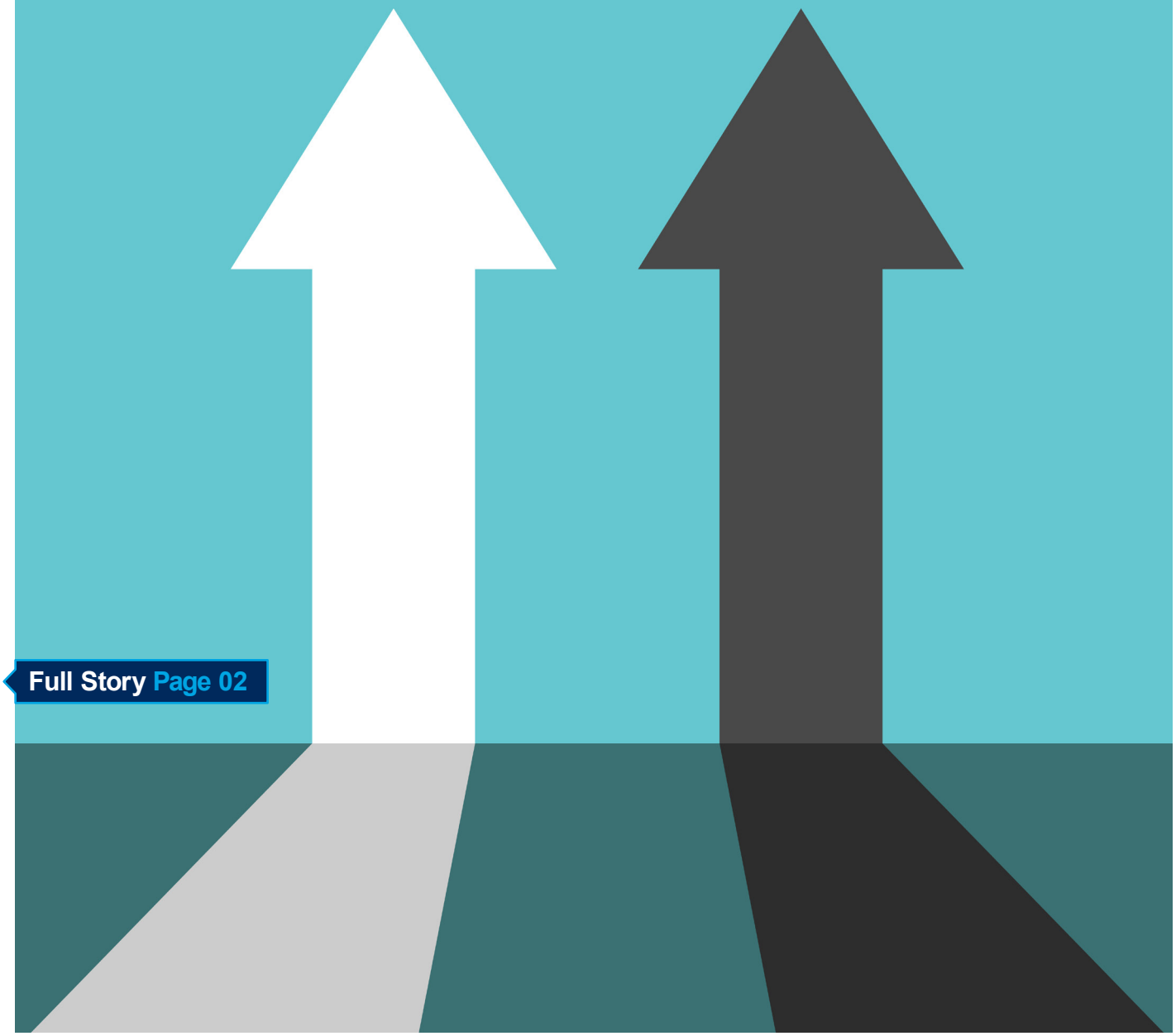
In this issue:

Lessons from Carrier v Bitzer
Parallel proceedings at the EPO and UPC



Full Story Page 02

Editorial

As summer leaves us behind, we can look forward to more exciting developments from the UPC. This edition of the newsletter looks at how the UPC deals with parallel proceedings at the EPO, the UPC's approach to inventive step, further updates on SPC and AI matters, and more.

As ever, please contact your D Young & Co LLP representative should you have any questions on these topics or any other IP queries.

Simon O'Brien, Editor

Events & webinars

TechBio UK 2024
London, UK, 16 October 2024
Robbie Berryman & Jennifer O'Farrell will be attending this UK BioIndustry Association (BIA) conference.

AIPLA 2024 Annual Meeting
Maryland, USA, 24-26 October 2024
This meeting will be attended by Alan Boyd & Catherine Keetch.

European Biotech Patent Case Law Webinar
Webinar, 05 November 2024
Presented by Simon O'Brien & Nathaniel Wand.

Reach 2024
London, UK, 11-12 November 2024
Robbie Berryman and Keith Daly will be attending the Reach Emerging Architectures in Computing Horizons conference.

UPC case law, observations & analysis
Webinar, 13 November 2024
Rachel Bateman, Samuel Keyes & Lawrence King present our latest UPC update.

LSPN Europe 2024
London, UK, 03 December 2024
Rachel Bateman is hosting two roundtable discussions at this Life Sciences Patent Network event.

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Parallel proceedings

Lessons from Carrier v Bitzer
Parallel proceedings at the EPO and UPC

Since the Unified Patent Court (UPC) opened its doors a little over a year ago, the European patent system has been adjusting to the presence of a new pillar alongside the European Patent Office (EPO). Each has its own non-overlapping area of competence: the UPC plays no part in the granting of European patents, and the EPO plays no part in their enforcement.

In these matters the co-existence of the EPO and UPC is relatively uncomplicated. However, both bodies are competent to make binding decisions on the validity of European patents, to the extent such patents have not been opted out of the UPC's jurisdiction. This overlapping competency of the UPC and EPO in assessing validity is a subject of significant interest for users of the European patent system, given the potential for the same European patent to be simultaneously the subject of UPC proceedings and EPO opposition or limitation proceedings, a situation known as parallel proceedings.

A goal of the enhanced European patent system is to seek greater harmonisation, and certain statutory provisions appear to directly support this aim. For the UPC's part, Article 33(10) of the UPC Agreement, and Rule 295(a) of the UPC Rules of Procedure, make specific provision for UPC proceedings to be stayed when a decision in parallel EPO opposition or limitation proceedings can be expected rapidly. While acknowledging that it may be useful to wait for the EPO to issue a decision, allowing this to be followed or at least taken into account at the UPC, these statutory provisions also expressly balance this potential benefit against the UPC's goal of reaching timely decisions.

The question has been how the UPC might assess this balance in practice, and the weight it might place on deference to the EPO in assessment of validity in parallel proceedings. In its recent decision in Carrier Corporation v BITZER Electronics A/S the UPC Court of Appeal has now provided some answers.

The appealed decision relates to a request for a stay of proceedings under Rule 295(a) of the UPC Rules of Procedure, relating to a revocation action brought against Carrier, by Bitzer, in respect of claim 1 of Carrier's European patent EP3414708B1. The revocation action was filed at the Paris Central Division on 29 June 2023, one day after Bitzer had filed an opposition against the patent as a whole at the EPO, citing all available grounds under Article 100 of the European Patent Convention (EPC). On 01 November 2023 Carrier requested acceleration of the opposition proceedings, and on 01 December 2023 requested a stay of proceedings in the UPC revocation action, citing amongst other factors the cost burden and procedural inefficiency of litigating the same patent before the EPO and UPC in parallel. The requested acceleration of the EPO opposition was also cited in support of Carrier's request. The near-simultaneous initiation of the UPC and EPO proceedings provides a useful test case for how the UPC intends to account for parallel proceedings at the EPO.

Balancing of stay factors at the UPC

The UPC Court of Appeal has now maintained the first-instance decision to reject Carrier's request for a stay of the UPC proceedings. The court's decision appears to emphasise the intention of the UPC to exercise its independence from the EPO in determinations on validity. In particular, the court expressly rejected the idea that a decision of either the UPC or the EPO should take precedence in parallel proceedings, pointing out "…that the body that decides last can take the decision of the body that decides first into account in its decision" (ORD_25123/2024).

As far as the court is concerned, the goal of harmonisation does not require either of the UPC or EPO to consistently defer to the other body's decisions on validity. Each body can act independently, and the degree of harmonisation in parallel proceedings will depend on the willingness of the body deciding the case second to follow the decision of the body deciding first. The UPC might have decided to show more deference to validity assessments of the

Case details at a glance

Decision level: UPC Court of Appeal Luxembourg (LU)
Case: APL_3507/2024
Order/decision reference: ORD_25123/2024
Parties: Carrier Corporation v BITZER Electronics A/S
Date: 28 May 2024
Decision: dycip.com/upc-carrier-bitzer-may24

Useful links

Article 33(10), Chapter VI, Part 1, Agreement on a Unified Patent Court, 19 February 2013: dycip.com/UPC-agreement-article33

Rule 295(a), UPC Rules of Procedure, 01 September 2022 (PDF): dycip.com/upc-rulesofprocedure

Decision of the Court of First Instance of the UPC, Central Division (Paris seat), Carrier Corporation v BITZER Electronics A/S, UPC_CFI_263/2023, 29 July 2024 (PDF): dycip.com/upc-carrier-bitzer-jul24

Webinar invitation
UPC case law, observations & analysis
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One European patent can simultaneously be the subject of both UPC and EPO proceedings

EPO, preferring to stay proceedings as a matter of course in parallel proceedings, noting that Article 24(1) of the UPC Agreement might be read as supporting this approach. However, the decision highlights both the UPC's independence, and the emphasis it places on seeking to provide comparatively rapid decisions, making explicit reference to the goal of rendering first-instance decisions within one year. It seems clear from the court's reasoning that this goal takes precedence over deference to validity determinations at the EPO in cases where parallel proceedings bring the two into tension. For the UPC to have legal certainty of the EPO's decision in parallel proceedings, the court noted it would often need to stay its own proceedings until the end of the EPO appeal procedure: a delay of potentially many years.

The decision makes specific reference to the Bitzer's "interest in a decision on its freedom to operate as quick and as far as possible" (ORD_25123/2024) as part of its analysis of the balance of interest of the parties. In the case at issue this interest outweighed Carrier's interests in reducing the alleged burden of litigating both proceedings simultaneously. On the latter point, the court referred to the comparatively late stage of the UPC revocation proceedings, with a substantial proportion of costs already expended. But the court also considered the costs of the revocation action might yet prove advantageous to Bitzer. While revocation by the EPO in the opposition proceedings would obviate the UPC proceedings, the EPO might equally decide to uphold the patent or maintain it in amended form, in which case a decision to revoke by the UPC would be decisive (at least in the UPC member states).

Acceleration of EPO opposition proceedings

A further significant aspect of the decision relates to the acceleration of parallel EPO opposition proceedings. The EPO had, on request of the proprietor, accelerated opposition proceedings by a communication issued 02 February 2024. However, due to issues finding an earlier date which suited all parties, the acceleration did not bring the EPO's oral proceedings earlier than either the scheduled UPC hearing, or within the one year period from initiation of the main action, by which the UPC expressly aims to be able to render a first-instance decision. Accordingly, the court rejected the notion that a request for acceleration of EPO opposition proceedings (whether granted or not) should lead to a stay per se, absent any practical influence on the EPO's expected decision date. As the decision sets out: "…acceleration **as such** is… not sufficient for establishing the expectation of a rapid decision within the meaning of Rule 295(a) RoP" (emphasis added).

However, the court did acknowledge that an acceleration of EPO proceedings could be a more decisive factor in a determination under Rule 295(a) of the UPC Rules of Procedure if it practically changes when the EPO might issue its decision. It appears that acceleration of proceedings at the EPO is only likely to lead to a stay in parallel UPC proceedings if it enables the EPO's decision to be issued prior to that of the UPC. In practice this would seem to require the EPO's decision to issue early enough that the relevant UPC panel can fully account for it in the reasoning for its own decision.

Remaining questions

Finally, the assertion of independence by the UPC in the Carrier v Bitzer decision focuses some as yet unresolved questions for harmonisation of the European patent system. In parallel proceedings, where a first one of the EPO and UPC maintains a patent, the second entity will have to determine whether to follow this decision. At present, it appears entirely possible for both bodies to maintain the same European patent in differing forms (that is, with differing claim scope).

The question of downstream consequences, and those for enforcement in particular, appears to require clarification. At least some light seems soon to be shed on this question by the wider dispute between Bitzer and Carrier. The UPC Central Division has recently issued its decision in the main revocation action, in which it maintains the patent based on AR2. However, in the parallel EPO opposition proceedings, the same request (numbered as AR1) has been preliminarily assessed as lacking novelty.

With oral proceedings in the opposition proceedings imminent (scheduled for 24 October 2024), it will be interesting to see whether or not the Opposition Division modifies this preliminary and non-binding opinion to align with the UPC's decision. If it does not, and it maintains the patent with different scope as opposed to revoking it entirely, it seems further development of case law will be required to clarify how the apparent tension should be resolved.

Author:
Samuel Keyes

Withdrawn marketing authorisations and SPCs
CJEU provides clarification

In a recent decision, the Court of Justice of the European Union (CJEU) determined that Article 3(d) of the SPC (supplementary protection certificate) Regulation is to be interpreted as meaning that the first marketing authorisation (MA) for a medicinal product refers to the MA which was granted on the earliest date for that product in the member state concerned, regardless of whether or not that MA is still in force at the time of filing an SPC application.

Background

This case relates to the interpretation of Articles 3(b) and (d) of Regulation (EC) no 469/2009 (the SPC Regulation) which state: "[An SPC] shall be granted if, in the Member State in which the application referred to in Article 7 is submitted and at the date of that application:
(b) a valid [MA] as a medicinal product has been granted in accordance with Directive [2001/83] or Directive [2001/82], as appropriate;
(d) the authorisation referred to in point (b) is the first [MA] as a medicinal product."

The reference to the CJEU originated from an appeal by Genmab A/S against a decision of the Hungarian Intellectual Property Office refusing to grant it an SPC for a medicinal product marketed under the name Kesimpta®.

Genmab was the holder of European patent EP3284753 (the basic patent), which was in force in Hungary and covered, *inter alia*, the active ingredient ofatumumab. Genmab sought approval to market its first medicinal product, Arzerra, containing ofatumumab, for use in a therapy for untreated chronic lymphocytic leukaemia. On 21 April 2010, Genmab was granted a marketing authorisation for that medicinal product (the prior MA). However, it withdrew the prior on 27 February 2019.

On 29 March 2021 Genmab was granted an MA for the medicinal product Kesimpta®, of which ofatumumab is also the active ingredient (the subsequent MA), for the treatment of relapsing-remitting multiple sclerosis.

On 07 July 2021, on the basis of the basic patent and the subsequent marketing authorisation, Genmab applied for an SPC. The Hungarian IP Office rejected the application on the basis that the subsequent MA was not the first MA for ofatumumab. The Hungarian IP Office noted that Arzerra and Kesimpta shared identical active ingredients, with the only difference lying in their respective therapeutic indications. The Hungarian IP Office referred to the CJEU's decisions in Abraxis (C-443/17) and Santen (C-673/18) and took the view that, as the active ingredients are identical, the prior MA must be regarded as the first MA. Based on this, the Hungarian IP Office concluded that it was irrelevant that the prior MA had been withdrawn and was no longer in force on the date when the application for an SPC was lodged.

Genmab brought an appeal before the Budapest High Court (the referring court) against the decision of the Hungarian IP Office. Genmab submitted that, based on the language of Articles 3(b) and (d), the first MA can only be an MA in force on the date of lodging the application for an SPC, which in this case was the subsequent MA. Genmab argued that the Abraxis and Santen CJEU decisions were irrelevant, since neither addresses the question of the validity of the prior MA and in these cases the MAs in question were in force.

The referring court pointed out that the CJEU had not yet addressed the question of which marketing authorisation must be regarded as the first MA for the product in question, as a medicinal product where that product was already covered by a prior MA, but that MA had been withdrawn. As a result, the court referred the following question to the CJEU for a preliminary ruling: "Must Article 3(b) and (d) of [the medicinal products SPC Regulation] be interpreted as meaning that [an MA] predating the [MA] appearing in the application for [an SPC] and referring to the same product must be regarded as the first [MA] for the purposes of that regulation, even where that prior [MA] was withdrawn prior to the submission of the application for the [SPC]?"

Decision

In its decision, the CJEU concluded that the condition laid down in Article 3(d) should be interpreted as meaning that the first MA for a product is the marketing authorisation which was granted on the earliest date for that product in the member state concerned, **regardless of whether or not that marketing authorisation is still in force**. The CJEU based its decision on the following points.

First, the CJEU decided the wording of Article 3 of the SPC Regulation states that an SPC is to be granted if, in the member state in which the application is submitted, the marketing authorisation granted for the product is the first MA for the product as a medicinal product.

> The CJEU considered it is not apparent from that wording that that first MA must be the first MA only among those in force on the date of lodging the application for an SPC, but rather account must be taken of all the MAs which have been granted.

Second, the CJEU considered it apparent from Article 3 that it sets out four independent and cumulative conditions which cannot be merged. In that respect, Article 3(b) of requires that the product has been granted a "valid" marketing authorisation. Article 3(d) refers to Article 3(b) only in order to identify the marketing authorisation which must satisfy the additional and independent condition which it sets out therein. Accordingly, under Article 3(d), account must be taken of all the MAs granted for that product before the date of lodging the application for an SPC. A contrary interpretation of Article 3(d), to the effect that only MAs in force on that date should be taken into account, would amount to confusing the two conditions by merging the concept of a "MA" with the concept of a

Useful link
Regulation (EC) No 469/2009 of the European Parliament and of the Council of 06 May 2009 concerning the supplementary protection certificate for medicinal products (PDF): dycip.com/regulation-469-2009

The purpose of the SPC Regulation is to encourage pharmaceutical research

"valid MA". The CJEU also noted that this interpretation must be rejected in the light of Article 8 of the SPC Regulation, which outlines the content of the SPC application. Article 8 indicates that the application is to contain the number and date of the marketing authorisation referred to in Article 3(b) of the SPC Regulation and, if it is not the first MA for the product in question, the number and date of that first MA. The CJEU suggested that, if only the marketing authorisations in force were to be taken into account, Article 8 of the SPC Regulation would require that such information be provided.

Moreover, the CJEU noted that the legislative history of Article 3 explains that it is common for the same product to be successfully granted several marketing authorisations, in particular each time a modification is made affecting the pharmaceutical form, dose, composition or indications. Nevertheless, the CJEU ruled that it is the first MA for the product in the member state in which the application is presented that is taken into account for the purposes of compliance with the SPC Regulation, in particular for calculating the period of six months in which the holder of the basic patent has to submit an SPC application. Thus, the CJEU considered that, although the same product may be the subject of several patents and several marketing authorisations in one and the same member state, the EU legislature decided that an SPC will only be granted for that product on the basis of a single patent and a single marketing authorisation, namely the first chronologically granted for that member state.

The purpose of the SPC Regulation is to encourage pharmaceutical research. However, in this regard, the CJEU held that that the legislature intended to protect not all pharmaceutical research giving rise to the grant of a patent and the marketing of a medicinal product, but to protect only research leading to the first marketing authorisation of an active ingredient as a medicinal product. That objective would be undermined if only the MAs in force were taken into account in order to determine the first MA for a given product.

Implications

The CJEU has favoured a strict interpretation of Article 3(d) in line with recent decisions relating to this provision, in particular Abraxis and Santen. As a result, supplementary protection certificate applicants should ensure that their applications are based on the first MA for the medicinal product in question, regardless of whether previous MA's have been withdrawn for that product. It is clear that the CJEU wishes to avoid a situation where an applicant could withdraw a prior MA in order to be granted an SPC for the latest marketed version of the product in question.

Author:
Oliver Cartwright

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A big thank you to all those who participated in the research for these two legal directories.

Meril v Edwards
Inventive step at the UPC

The Paris Central Division of the Unified Patent Court (UPC) found that the claims of Edwards Lifesciences Corporation's patent EP3646825 as amended were inventive, despite the assertions to the contrary by Meril Italy Srl, Meril GmbH and Meril Life Sciences Pvt Ltd. The court dismissed the revocation action brought by Meril Italy, and counterclaims brought Meril GmbH and Meril Life Sciences, and EP3646825 was maintained in amended form. This case provides a further insight into how inventive step is assessed at the UPC.

Key points:

- Interpretation of the claims does not depend solely on the strict, literal meaning of the words, and the description and drawings can be used as explanatory aids when interpreting the claims.
- The skilled person can be a team.
- The claimant must provide evidence for an alleged lack of technical effect.
- The skilled person can only combine art from different technical fields if the documents provide strong motivation to do so.
- Inventive step is to be assessed in terms of the specific problem encountered by the skilled person.
- While the problem-solution approach was not used in the assessment of inventive step, the court stated that the problem-solution approach would not lead to a different conclusion.

Background of the case

On 04 August 2023 Meril Italy filed a revocation action against Edwards Lifesciences concerning Edwards Lifesciences' patent EP3646825. Meril Italy claimed that the patent was not valid for a number of reasons, one of which was a lack of inventive step.

This case involved parallel proceedings, as Meril GmbH and Meril Life Sciences had both filed counterclaims for revocation of EP3646825 on 02 November 2023, in response to a separate infringement action brought by Edwards Lifesciences which was pending before the Munich Local Division. Both counterclaims were identical in their content, and raised some of the same grounds of invalidity that were raised in the revocation action by Meril Italy. The proceedings were therefore consolidated and the counterclaims filed by Meril GmbH and Meril Life Sciences were referred to the Paris Central Division for a decision.

Before the proceedings commenced Edwards Lifesciences filed a number of requests to amend, each containing multiple auxiliary requests. This article focuses on the assessment of inventive step for claim 1 of auxiliary request II submitted by Edwards Lifesciences on 12 April 2024, though we note that other interesting decisions were made by the Central Division in this case, for example, relating to admissibility of amendments and priority.

The oral hearing was held on 07 June 2024.

European patent EP3646825

EP3646825 relates to a prosthetic heart valve which is crimped and mounted on a flexible catheter to prevent or minimize perivalvular leakage. The flexible catheter is then inserted into a patient and travels through the blood vessel of the patient until it reaches the implantation site, where the valve is then expanded to its non-crimped state. Perivalvular leakage (leakage of blood in the opposite direction to the blood flow through the valve) can occur as a result of gaps between the expanded valve and the surrounding tissue. An objective of EP3646825 is to prevent or minimize this kind of leakage with the use of a frame consisting entirely of hexagonal cells (forming a honeycomb shape), which provides a reduced crimping profile, stability during crimping and expansion, and increased radial strength.

Interpretation of the claims

In line with the recent decision in Sanofi-Aventis v Amgen, the Central Division held that the **interpretation of the claims does not depend solely on the strict, literal meaning of the words**, and that the description and drawings can be used as explanatory aids when interpreting the claims. This diverges from the approach taken by the European Patent Office (EPO), which is more restricted to the content of the claims themselves and refers only the description to clarify any ambiguity present in the claims.

Furthermore, it was stated that the assessment of inventive step must be carried out from the point of view of the skilled person. In this case, **the skilled person was considered to be a team** consisting of a medical device engineer with an interest in prosthetic heart valves and an interventional cardiologist. This is in line with the approach adopted by the EPO.

Consideration of a technical effect

Meril argued that the features of claim 1 did not provide a technical effect and were merely an obvious alternative. Specifically, Meril argued that simply implementing a frame made entirely of hexagonal cells was not sufficient to achieve the technical effect described in the description, as other parameters may also affect the crimping profile and radial strength.

The court noted that the claimant **must provide evidence for the alleged lack of technical effect**, in line with the ordinary distribution of the burden of proof. The court concluded that such evidence had not been provided. The court further added that the fact that a feature is not sufficient for achieving a technical effect does not render the feature irrelevant.

Motivation to introduce hexagonal cells

The court stated that the assessment of inventive step must be carried out in accordance with Article 56 of the European Patent Convention (EPC), and was also to be **assessed in terms of the specific problem encountered by the skilled person** (in line with the decision of the Paris Local Division issued in Dexcom v Abbott).

Meril argued that a frame consisting of hexagonal cells is an obvious and alternative

Case details at a glance

Decision level: UPC Court of First Instance (Central Division Paris seat)
Case: UPC_CFI_255/2023
Parties: Meril Italy Srl & Meril GmbH & Meril Life Sciences Pvt Ltd v Edwards Lifesciences Corporation
Date: 19 July 2024
Decision (PDF): dycip.com/meril-edwards-jul24

Related articles

UPC v EPO: a comparison of claim construction approaches, 06 June 2024: dycip.com/upc-epo-claim-construction

Lack of inventive step from a "realistic" starting point: Sanofi v Amgen, 05 August 2024: dycip.com/sanofi-amgen-aug24

UPC departs from EPO selection principle in novelty analysis: Dexcom v Abbott, 08 August 2024: dycip.com/dexcom-abbott-aug24

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solution to the technical problem, as the prior art discloses the use of hexagonal cells in heart valves. Meril therefore argued that it would be a mere design choice to make the frame entirely from hexagonal cells and that the prior art provided motivation for this.

However, hexagonal cells were only used in the prior art in combination with cells of other shapes (intermediate rhombic cells). When attempting to address the problem of reducing the crimping profile of the heart valve, the court decided that the mere use of hexagonal cells in the prior art would not make it obvious to the skilled person to construct a frame **entirely** out of hexagonal cells.

Furthermore, **the prior art disclosed various other solutions** for reducing the crimping profile. One document in particular taught that the use of the intermediate rhombic cells advantageously provided a tapered, collapsed frame. Removing the intermediate cells to produce a frame consisting of entirely hexagonal cells would therefore be **inconsistent with the teaching of this document,** and this modification would therefore not be obvious to the skilled person.

Thus, the court concluded that the prior art provided no motivation to alter the frames of the prior art to create a frame that consisted entirely from hexagonal cells, and this feature was not obvious.

Prior art from other fields

Both parties agreed that the development of the particular type of prosthetic heart valves discussed (those inserted with a catheter) arose from combining the technology of prosthetic heart valves with technology used in vascular stents.

Meril argued that several vascular stents were entirely made of hexagonal cells and provided radial strength and minimal crimping profile. Meril argued that these would be common general knowledge to the skilled person at the priority date of EP3646825. The court agreed that the skilled person would be aware of vascular stent prior art. However, Meril considered that a **reference to prior art in the stent field would require careful consideration and strong motivation for application to heart valve technology**.

Such motivation was not found, particularly because the main cited document from the stent field addressed a **different technical problem** and focused on producing a device that is highly flexible and radially resistant. High flexibility is disadvantageous in heart valves as it may impede a safe anchoring of the valve in the aortic annulus.

Furthermore, radial strength is required in vascular stents to keep the vessel open and prevent restenosis. Therefore, the main document cited from the stent field taught that a honeycomb structure improved the ability of a vascular stent to keep a blood vessel open, but there was no indication that this would also be applicable to heart valves.

Therefore, the court decided that claim 1 was not obvious, even if prior art from the stent field was considered.

Outcome

The claims of auxiliary request II were found to be inventive, and the court rejected the revocation action filed by Meril Italy and the counterclaims for revocation filed by Meril GmbH and Meril Life Sciences. EP3646825 was maintained in amended form.

Final comments

In line with the recent decision in Sanofi-Aventis v Amgen, the court did not follow the problem-solution approach in reaching its conclusions regarding the inventive step of the claims. However, the court still considered the problem encountered by the skilled person and whether the cited documents provided motivation to make the required modifications.

Therefore, although it appears from this case and from the decision in Sanofi-Aventis v Amgen that the UPC intends to diverge slightly from the problem-solution approach adopted by the EPO, the principles for assessing inventive step are largely the same. In fact, the Central Division noted that applying the problem-solution approach would not have led to a different conclusion in this instance.

It should also be noted that the determination of the skilled person was also in line with European practice, as well as the considerations as to whether the cited documents provided motivation for the skilled person to introduce certain features. For example, arguments that the prior art taught other solutions, or that the introduction of features would be inconsistent with the teachings of the prior art, appeared to hold weight in the assessment of inventive step before the UPC.

Meril v Edwards provides further insight into how inventive step is assessed at the UPC

Author:
Molly Guy-Hickson

Abbott v SiBio
UPC Court of Appeal corrects course for provisional measures

Case details at a glance
Decision level: Hague Local Division
Case: UPC_CFI_130/2024
Order: ORD_30434/2024
Parties: Abbott Diabetes Care Inc v Sibio Technology Limited & Umedwings Netherlands BV
Date: 19 June 2024
Decision (PDF): dycip.com/abbott-sibio-jun24

Decision level: Court of Appeal
Case: UPC_CoA_388/2024
Order: ORD_47551/2024
Parties: Sibio Technology Limited & Umedwings Netherlands BV v Abbott Diabetes Care Inc
Date: 19 August 2024
Decision (PDF): dycip.com/sibio-abbott-aug24

A recent wave of lawsuits relating to medtech devices has led to some interesting insights concerning the Unified Patent Court's (UPC) approach to requests for preliminary injunctions. In this article we consider the questions of the UPC's jurisdiction.

Background

Abbott Diabetes Care Inc has been a market leader in the continuous glucose-monitoring devices since 2007, having a EU market share of approximately 80%. SiBio Technology Ltd also manufactures continuous glucose-monitoring devices, selling its products in China since 2021. Towards the end of 2023 SiBio entered the EU market with its GS1 device via an importer: Umedwings Netherlands BV.

First instance decision on jurisdictional competence of the UPC

Abbott pursued a number of remedial actions against SiBio and Umedwings by way of enforcing its rights under EP2713879 (UPC_CFI_130/2024), including a preliminary injunction for direct infringement of the patent. SiBio's defence was predicated on a cease-and-desist declaration, which included undertakings to withdraw its device from Germany, France and the Netherlands. It contested that the application was devoid of purpose and there was no need to adjudicate on it.

In its decision the court noted that Abbott's application stated that the patent was "valid and in force in the contracting member states of Germany, France, The Netherlands and also Ireland", while it was "also in force in the UK". The court took the view that the application statement, when read in combination with the order sought, implied that Abbott intended the order to cover Ireland, which was deemed to be a UPC contracting member state by virtue of it being a signatory state to the UPC Agreement, even though Ireland has not yet ratified the agreement.

SiBio did not challenge the competence of the court with respect to Ireland. Consequently, the Local Division held that the conditions for permitting a preliminary injunction in Germany, France, The Netherlands, and notably Ireland, had been met. In other words, the Local Division held that the jurisdiction of the UPC extends to Ireland in spite of the fact that Ireland has not yet ratified the UPC Agreement.

Only countries that have signed and ratified the UPCA are contracting member states

Interestingly, the court also drew a distinction with the UK, which was deemed to no longer be a contracting member state in spite of the fact that the UK also signed (and in fact ratified) the UPC Agreement, though it subsequently sought to withdraw its ratification. Therefore, the application was not considered to cover the UK.

Court of Appeal clarifies UPC's competence

SiBio lodged an appeal against the Local Division's order (UPC_CoA_388/2024) requesting (in part) that the appeal had suspensive effect to the extent that the provisional measures were granted for Ireland. The UPC Court of Appeal agreed with SiBio's argument, stating that the Local Division's decision was "manifestly erroneous". The court cited issues with the wording of Abbott's preliminary injunction application, which implied that Ireland was a "contracting member state" with respect to the UPC Agreement. In its decision, the court affirmed that only countries that have signed and ratified the UPC Agreement (UPCA) are contracting member states.

Moreover, the court found that SiBio's failure to contest the Court of First Instance's competence, with respect to Ireland, does not alter the fact that Ireland is not a contracting member state: SiBio did not have to expect the court's erroneous interpretation of Abbott's claim. The court granted suspensive effect to the extent that the provisional measures were granted for Ireland. However, it rejected SiBio's request for suspensive effect of the provisional measures in The Netherlands, Germany and France, which are UPC Agreement contracting member states.

Conclusion

The willingness of the Hague Local Division to take a decision that was of a politically sensitive nature certainly raised some eyebrows. Indeed, Ireland had intended to put the question of ratifying the UPC Agreement to a referendum, although this plan has been shelved with no indication of when the delayed referendum may take place.

Had the first instance decision not been challenged it may have been assumed that remedies could be awarded in respect of acts taken in territories that are signatories to the UPC Agreement, but which have not yet ratified the agreement. However, it is encouraging the Court of Appeal has quickly and decisively clarified that the UPC's jurisdiction does not extend to states that have not ratified the UPC Agreement. Reassuringly, it also confirms that there is no obligation on defendants to actively challenge a court's erroneous interpretation of a claimant's application. Nevertheless, interpretation of a claimant's application will always be a point of contention. Therefore, we would suggest challenging all aspects of the UPC proceedings if they are not in line with overall litigation strategy.

Author:
Stephen Solomon

AI in the energy sector Innovation and patenting trends

Useful links

Machine learning can boost the value of wind energy, Google: dycip.com/machine-learning-wind-google

Smartening up with Artificial Intelligence: What's in it for Germany and its Industrial Sector? McKinsey (PDF): dycip.com/ai-germany-industry-mckinsey

Octopus Energy's Kraken consumer-management platform website: dycip.com/octopus-kraken-ai

Measuring the Environmental Impacts of Artificial Intelligence Compute and Applications: The AI Footprint, OECD Digital Economy Papers, November 2022, No. 341: dycip.com/OECD-nov22-341

Environmental Report 2024, Google (PDF): dycip.com/google-environmental-report-24

Top 10 technical fields, Patent Index 2023, EPO: dycip.com/epo-top-technical-fields-23

As we transition to a more sustainable energy system, grid management is becoming increasingly complex. Renewable energy sources such as solar installations are often distributed, creating a need to manage electricity flows to supply electricity to end consumers as well as feed it back into the grid. Renewables also create a fluctuating supply that can be difficult to predict. These factors require careful management, and artificial intelligence (AI) has a key role to play.

Roles of AI in the energy sector

A principal use of AI in the energy sector is to forecast supply and demand more accurately. This improves electricity flow planning, enables more efficient use of the grid, and increases financial return from selling power in advance.

For example, in 2019 Google and its subsidiary DeepMind developed a neural network that predicts wind power output 36 hours in advance. Together with other machine learning innovations, Google reported that this increased the commercial value of its wind energy by 20%. The company has stated that it hopes this approach will strengthen the business case for wind power and facilitate more widespread adoption of renewables worldwide.

Accurate forecasting of supply also enables tasks that require a lot of power to be scheduled to coincide with peaks in supply. Google, for example, can schedule its own computationally intensive tasks to coincide with peaks in supply from its wind farms, avoiding the need to buy extra power from the market.

Another common use of AI in the energy sector is predictive maintenance. Traditionally, grid infrastructure is inspected and repaired at fixed times that are scheduled in advance. The actual state of the infrastructure and its environment is not taken into account in this scheduling, and consequently inspections are sometimes too early and repairs are sometimes too late.

In a new, predictive approach, sensors such as cameras and vibration sensors are distributed around the grid to monitor assets such as transmission lines and collect data from which AI solutions can predict whether maintenance is required. This creates smart scheduling of maintenance and helps to prevent serious failures in infrastructure. AI solutions for predictive maintenance can reduce inspection costs by up to 25% and increase uptime by up to 20%.

Sustainable energy developments are making grid management increasingly complex

Another area that energy companies are exploring is the use of AI for enhanced consumer services. For example, Octopus Energy uses AI solutions in its consumer-management platform "Kraken" to manage end-user solar installations and energy needs, from optimal electric vehicle charging and heat pump management to cost-effective, green procurement of additional energy from the grid.

As with all AI-based innovations, AI solutions in the energy system take a significant amount of energy to implement. In 2022 Google reported that it had spent about 15% of its total energy consumption on AI workloads over the previous three years. In 2024, the company reported that it expected its total greenhouse gas emissions to go up before they come down, and that "reducing emissions may be challenging due to increasing energy demands from the greater intensity of AI compute". In the energy sector AI solutions therefore need to save more energy than they use in order to be viable.

EPO energy sector AI filing trends

The recent surge in AI innovations in all fields of technology is reflected in patent filings. At the European Patent Office (EPO), AI solutions in the energy sector fall into two filing categories:

1. Computer technology

2. Electrical machinery, apparatus and energy

Both of these are experiencing strong, consistent growth and are in the top five technology areas by European patent filings. In the five-year period between 2018 and 2023, computer technology filings grew by 36%, and electrical machinery, apparatus and energy filings grew by 43%.

Patentability of AI in Europe's energy sector

In Europe, patentability requirements for AI-based inventions follow the same rules as software inventions. On their own, software and AI inventions are not considered to be patentable, but they can be if they solve a problem that the EPO considers to be technical.

For example, AI-based solutions for predicting weather events, controlling hardware, and making efficient use of resources in a technical system are likely to be patentable. Our patent attorneys will be happy to advise you further on European patentability requirements.

It will be fascinating to watch AI and other solutions emerge in the energy sector as the decarbonisation effort continues and to see these developments work their way through the global patent system.

Author:
Gemma Sparrow

Approach to AI-assisted inventions in the USA & UK

When is the human inventive contribution considered to be enough?

In August 2022 the US Court of Appeals for the Federal Circuit decided in Thaler v Vidal that "only a natural person can be an inventor, so AI cannot be". This confirmed the position recently taken by courts in other territories in analogous cases: that an application with an AI system listed as the sole inventor is unpatentable. However, the mere involvement of an AI system in the creation of an invention does not necessarily preclude human contributors from obtaining patent protection. With growing use of AI in research, the question of the requisite threshold for human involvement for securing a patent is becoming more relevant.

In February 2024 the United States Patent and Trademark Office (USPTO) issued guidance setting out principles for determining whether or not an AI-assisted invention can be deemed to have a human inventor. In this article we give an overview of the guiding principles set out by the USPTO, and briefly compare them with the current approach taken by the UK Intellectual Property Office (UKIPO) for assessing the patentability of AI-assisted inventions.

Purpose of the guidance

Kathi Vidal, the Under Secretary of Commerce for Intellectual Property and Director of the USPTO, has stated that the US patent system was developed "to incentivise and protect human ingenuity and the investments needed to translate that ingenuity into marketable products and solutions". Therefore, to assess the patentability of an AI-assisted invention, it is necessary to consider the extent of human contribution towards the invention, and determine whether or not that contribution was great enough to warrant the reward of patent protection.

Accordingly, the USPTO has determined that for an AI-assisted invention to be patentable the human contribution must be "significant", so that the human is considered an inventor: similarly to what each of a group of persons would need to contribute to be considered joint inventors. The USPTO has also set out five guiding principles that provide useful context for what the USPTO may in practice consider a 'significant' contribution.

USPTO guiding principle 1: "A natural person's use of an AI system in creating an AI-assisted invention does not negate the person's contributions as an inventor".

This guiding principle reflects the general principle that an invention is not inherently unpatentable if an AI system has been used in its creation.

> The mere use of AI by a natural person in the invention creation process does not preclude that person from being an inventor, provided that they have contributed significantly to the creation of the invention.

This principle is akin to that decided in Hobbs v United States, Atomic Energy Comm (451 F.2d 849, 864 (5th Cir. 1971))), and quoted in Shatterproof Glass Corp v Libbey-Owens Ford Co (758 F.2d 613, 624 (Fed. Cir. 1985)), that "an inventor may use the services, ideas, and aid of others in the process of perfecting his invention without losing his right to a patent".

USPTO guiding principle 2: "Merely recognizing a problem or having a general goal or research plan to pursue does not rise to the level of conception".

A natural person who simply presents a problem to an AI system would likely not be considered an inventor of an invention output by the system as a solution to the presented problem.

However, the natural person can make a "significant" contribution by constructing the prompt provided to the AI system in view of a specific problem to elicit a particular solution. Therefore, prompt-engineering may in some cases be sufficient to meet the significant contribution criterion (see Burroughs Wellcome, 40 F.3d at; see also Hitzeman, 243 F.3d 1345, 1357-58; In re Verhoef, 888 F.3d 1362, 1366 (Fed. Cir. 2018).

USPTO guiding principle 3: "Reducing an invention to practice alone is not a significant contribution that rises to the level of inventorship".

It is not sufficient for a natural person to merely recognise and appreciate that the output of an AI system is an invention for the natural person to be considered an inventor.

This is particularly the case when the use and output of the AI system would be readily apparent to a person skilled in the art. However, if the natural person were to take the output of the AI system and provide a significant contribution in producing an invention, then they may be considered an inventor.

Further, in some circumstances it may be possible to show that a person who conducts a successful experiment using an AI system's output provided a significant contribution, even if the person is unable to establish conception until the invention is reduced to practice.

For example, as was the case in Dana-Farber Cancer Inst Inc v Ono Pharm Co (2019), a researcher, Dr Freeman, was found to be a joint inventor of patents claiming methods of treating cancer by administering antibodies targeting specific receptor-ligand interactions on T-cells.

Dr Freeman had used an automated search tool to identify a ligand amino-acid sequence, and performed subsequent experiments which identified several types of tumours that expressed the sequence identified by the search tool. This was a key discovery in the inventions of the subsequent patents (see Dana-Farber Cancer Inst Inc v Ono Pharm Co (2019),964 F.3d 1365, 1373-74 (Fed. Cir. 2020)).

USPTO guiding principle 4: "A natural person who develops an essential building block from which the claimed invention is derived may

Related article

UK Supreme Court rules only people can be named as inventors, 20 December 2023: dycip.com/uk-supreme-court-ai-dec23

Useful links

Inventorship Guidance for AI-Assisted Inventions, USPTO, 13 February 2024: dycip.com/uspto-ai-inventions-guidance

Stephen Thaler v Katherine K Vidal, 21-2347, US Court of Appeals Federal Circuit, 05 August 2022 (PDF): dycip.com/thaler-vidal

Hobbs v United States, Atomic Energy Comm, 451 F.2d 849, US Court of Appeals, Fifth Circuit, 20 December 1971: dycip.com/hobbs-us-atomic-energy

Shatterproof Glass Corp v Libbey-Owens Ford Co, 758 F.2d 613, US Court of Appeals Federal Circuit, 29 March 1985: dycip.com/shatterproof-glass-libbey-owens-ford

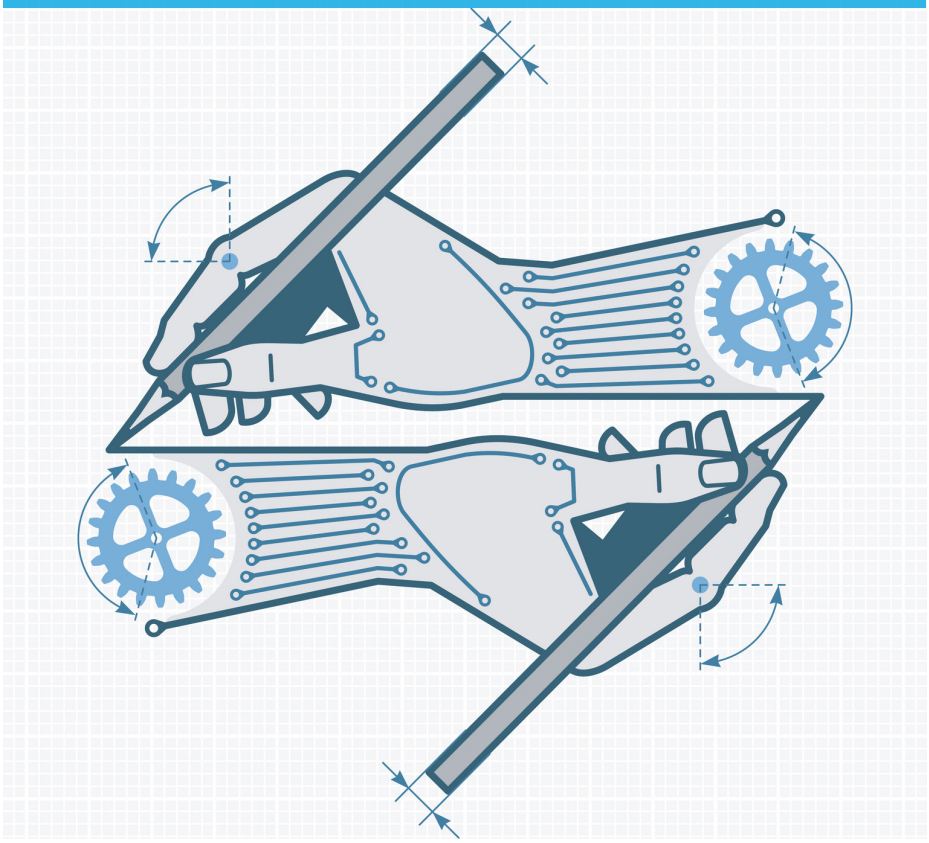
Burroughs Wellcome Co v Barr Labs Inc, 40 F.3d 1223, US Court of Appeals Federal Circuit, 15 December 1994: dycip.com/burroughs-wellcome-barr-labs

Hitzeman v Rutter, 243 F.3d 1345, US Court of Appeals, Federal Circuit, 18 May 2001: dycip.com/hitzeman-rutter

In re Verhoef, 888 F.3d 1362, US Court of Appeals for the Federal Circuit, 03 May 2018: dycip.com/in-re-verhoef

Dana-Farber Cancer Inst Inc v Ono Pharm Co, 964 F.3d 1365, US Court of Appeals for the Federal Circuit, 14 July 2020: dycip.com/dana-farber-cancer-ono-pharm

Can an AI-assisted invention be deemed to have an human inventor?



be considered to have provided a significant contribution to the conception of the claimed invention even though the person was not present for or a participant in each activity that led to the conception of the claimed invention".

It is possible that, in some circumstances, a natural person who designs, builds or trains an AI system specifically to obtain a particular solution to a specific problem may be considered an inventor.

In such circumstances the designing, building and training of the AI system must be a significant contribution to the invention created with the AI system (see Dana-Farber, 964 F.3d at 1372-74).

USPTO guiding principle 5: "Maintaining "intellectual domination" over an AI system does not, on its own, make a person an inventor of any inventions created through the use of the AI system".

It is not enough for a natural person to simply own or oversee an AI system that was used to create an invention. In order to be deemed an inventor, the natural person must be able to show that they provided a significant contribution to the conception of the invention.

This principle is also akin to that of In re Verhoef (888 F.3d 1362 (Fed. Cir. 2018)), in which it was emphasised that the person who conceives of the invention is the inventor.

AI-assisted inventions in the UK

As in the US, the UK Supreme Court has confirmed that under UK law only a natural person can be named as an inventor on a patent application (see related articles).

The UK Supreme Court noted that pure ownership of a machine does not confer to the owner the right to obtain a patent for a product or process generated autonomously by the machine, in line with the USPTO's fifth guiding principle.

The UK Supreme Court also acknowledged that if the owner (Dr Thaler) of the AI machine in question (DABUS) were the inventor and used DABUS as a tool to generate the inventions, the outcome of the proceedings would have been different. The UK Supreme Court's view therefore appears to be aligned with the USPTO's first guiding principle: that mere use of an AI machine does not preclude grant of a patent.

The UK Supreme Court did not provide detailed guidance on patentability of AI-assisted inventions, in contrast to the USPTO, as questions of patentability were not the subject of the appeal. However, the position on inventorship in the UK appears to be similar to that in the US: as long as a human inventor "actually devised" the invention set out in the patent application, they can be named the inventor of an AI-assisted invention and a patent can be obtained.

Authors:
Szymon Pancewicz & Miranda Simmons

In short

For both the US and the UK patent protection remains available for AI-assisted inventions provided that a human has sufficiently contributed to devising the invention. As a final practice point, documentation of the human involvement in AI-assisted inventions should be kept in order to be able to demonstrate the requisite level of the human's contribution to the invention if required (for example, if inventorship is challenged in litigation).

A visit to the UPC Paris Central Division
Courtroom insights and observations

Webinar invitation
UPC case law, observations & analysis
1pm, 13 November 2024
dycip.com/webinar-upc-nov2024

September is typically the time of the year when oral proceedings at the European Patent Office (EPO) start to ramp back up again, and it would seem that things are no different at the Unified Patent Court (UPC).

In the first few weeks of September 2024 we attended two hearings at the UPC Central Division Paris Seat. The hearings related to revocation actions on patents which had already been revoked before the EPO Opposition Division following oppositions. As a result, the outcome of the UPC actions will further develop the understanding as to how the UPC and the EPO judge similar issues (at least at first instance).

The decisions from the UPC are expected in October, but in the meantime this article will share some practical observations that will be useful when attending hearings at the UPC Central Division Paris Seat.

Location and access

The address of the UPC Paris Central Division is 5 Rue Saint-Germain l-Auxerrois, 75001, Paris, France. Being located in the first arrondissement of Paris, the building is very central and occupies a prime location on the River Seine.

However, actual access to the court is tucked away, with little indication that it is one of the highest courts in the European Union dealing with patent litigation. There is not even a face plate identifying that this is the UPC (see photograph below).

Inside, the court itself is somewhat snug, but does have the provision for broadcast to a separate larger viewing room. Parties should be prepared to literally rub elbows with each other, and electronic case files are a must owing to the limited space. The court does have the possibility to use space in the Cour de Cassation (just over the Seine) and so for particular cases parties may want to consider exploring this with the court clerks early in the procedure.

Hearing

The presiding judge ordered that the issues to be discussed be partioned between added matter (where raised), novelty, invenitve step and the auxiliary requests, with the claimant and defendant each being provided with 30 minutes to present on each issue, with a 10 minute allocation each for reply. The parties managed to keep to this for the most part.

The panel did not give a preliminary opinion or view on the issues at the outset, although as pleadings developed the technical judge did ask the parties to explore specific issues in their replies.

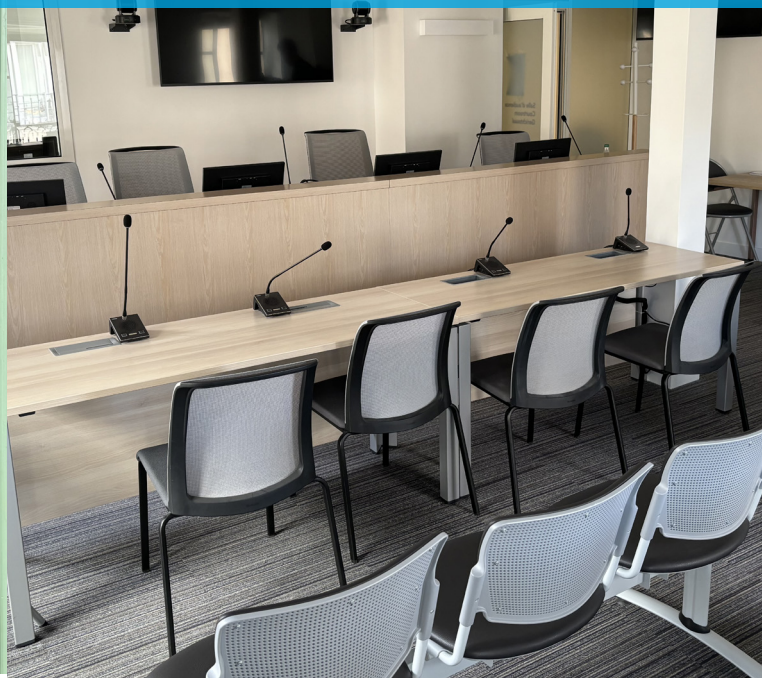
Overall impression

The setting is undoubtedly intimate, and has some similarities to oral proceedings before the EPO Boards of Appeal. However, in these particular cases, the partitioning of time did seem to lead to somewhat broad-brush pleadings, and gave little time to develop more complex arguments (which was an element of the EPO opposition proceedings).

The decision of the UPC Central Division Paris Seat is awaited with interest.

Authors:
Samuel Keyes & Connor McConchie

The court's external door (note the number 5 above and the face-plate with access button) and internal hearing room



Patent support for micro-entities
EPO reduces official fees by 30%

Useful link
Notice from the EPO dated 25 January 2024 concerning fee-related support measures for small entities, OJ EPO 2024, A8: dycip.com/oj-epo-2024-a8

On 01 April 2024 the European Patent Office (EPO) introduced a welcome reduction in many official fees in the European patent grant procedure for applicants which qualify as "micro-entities".

The fee reductions aim to support the development and growth of smaller and less experienced entities by making the European patent grant procedure less expensive. Significantly, the fee reductions apply irrespective of the nationality or domicile of the applicant (OJ EPO 2024, A8).

Micro-entity 30% fee reductions (Rule 7a(3) EPC)

1. filing fee;
2. fee for a European or supplementary European search;
3. examination fee, and in addition the previously paid international search fee where the EPO acted as International Searching Authority;
4. designation fee;
5. fee for grant; and
6. renewal fees for the European patent application.

Over the course of European patent prosecution this can lead to significant cost savings. For example, the examination fee for a European application is currently €1, 915.00. This would be reduced by €574.50 under the fee scheme for micro-entities.

In order to be eligible for the fee reductions, an applicant must satisfy two eligibility criteria:

1. The applicant must be a micro-entity.
2. The applicant must not have exceeded a filing cap defined by the EPO.

In the case of multiple applicants, each applicant must satisfy the eligibility criteria (Rule 7a(5) European Patent Convention (EPC)).

1. Micro-entity status

The EPO considers the following entities to be micro-entities: microenterprises, natural persons, non-profit organisations, universities and public research organisations. A microenterprise is defined as an enterprise which employs fewer than ten full-time persons and an annual turnover and/or annual balance sheet total of up to €2million (European Commission recommendation 2003/361/EC). To be eligible the applicant must be a micro-entity on the date of the payment concerned (Rule 7a(6) EPC).

2. Filing cap

To support less experienced users of the patent system the fee reduction is only available for applicants which have not exceeded a filing cap: the applicant must have filed fewer than five applications with "relevant dates" in the five years before the relevant date of the European application concerned. The relevant date is the filing date for Euro-direct applications, the date of receipt for European divisional applications, or the date of entry into the European phase for Euro-PCT applications (Rule 7a(4) EPC).

EPO fee reductions aim to support development and growth of smaller business entities

How to benefit from the EPO micro-entity fee reduction

To benefit from the reduced fees the applicant must declare they are a micro-entity at the latest when the reduced fee concerned is paid. This may be done by ticking the relevant box on Form 1001 (for European applications) or Form 1200 (for Euro-PCT applications). A subsequent change in status will not affect past reduced fee payments.

EPO checks

Applicants are obligated to inform the EPO of any change of status affecting eligibility for a reduction of fees at the latest when the fee concerned is paid. For example, if the applicant is a micro-enterprise whose number of full time employees increases to ten the EPO must be informed.

The EPO will conduct random checks on the status of applicants throughout the grant procedure. If there is reasonable doubt that a declaration made by the applicant is not accurate, the EPO may request the applicant to provide evidence. The EPO will also conduct systematic checks on whether applicants have exceeded the filing cap.

Incorrectly paying reduced fee

If an applicant incorrectly pays a reduced fee, the consequence depends on which eligibility criterion was not met. If the applicant was not a micro-entity, then the application may be deemed withdrawn. If the applicant exceeded the filing cap, the EPO will invite the applicant to pay the missing amount within a two-month period.

Conclusion

The fee reductions for micro-entities represents a welcome initiative to support smaller businesses and individuals through the European grant procedure. Although not as generous as the corresponding fee reductions for US patents (for which micro-entities can obtain an 80% reduction on most patent-related fees), the fee reductions provide a further incentive for micro-entities to obtain patent protection in Europe.

Authors:
Jonathan DeVile & Sean McCann

Technological innovation meets endangered wildlife

Can AI patent analysis help protect threatened species?

Useful link

"Early warning of trends in commercial wildlife trade through novel machine-learning analysis of patent filing", Nature Communications, 15, 6379 (2024), A Hinsley, DWS Challender, S Masters, DW Macdonald, EJ Milner-Gulland, J Fraser & J Wright: dycip.com/nature-communications-15-6379

Artificial intelligence (AI) is becoming established as a useful tool for the searching of patents and analysis of patent data.

The enormous variety of technologies covered by patents offers access to information about almost any area of innovation one can imagine. A particularly unusual sector has been investigated by a group of researchers, primarily from the University of Oxford, who have explored the patent landscape to reveal intriguing details about the exploitation of threatened wildlife species. The study format, results and conclusions have been published in a Nature Communications paper.

The study shows that patent filings for inventions relating to endangered species are more common than one might think. Businesses utilising such species are as keen to gain a commercial edge over their competitors as those operating in more conventional spheres, and choose to protect the intellectual property arising from their innovations in the traditional manner. Threatened wildlife is, of course, routinely safe-guarded by policy and legislation that manages, regulates or outright bans the exploitation and trade of relevant species, and some of the innovation may be driven by companies desiring to keep ahead of or outside of the law or to achieve a competitive advantage within a new regulation.

In general, policy making in this area has tended to be based on historical data for both legal and illegal trading and has lacked foresight. The analysis of the selected patent data has identified possible links between patenting activity and changes in trading and similar events, which the researchers suggest could be used to better inform future regulatory measures and add some beneficial proactivity to the management of trading in threatened species.

The research looks at patents relating to six exploited species: bears, rhinoceroses, pangolins, sturgeon, horseshoe crabs, and the caterpillar fungus cordyceps. These

Machine learning was applied to detect changes in endangered species patent filing trends

were selected to include a range of trade legalities, threat level and uses to which the species are put. A fifty-year time frame of patent filing dates from 1970 to 2020 was analysed, for which a total of 27,308 patents concerning the six species was identified. These represent 0.23% of all patents filed in that period. Interestingly, these patents show a 130% per-year increase in filing numbers compared to a mere 104% increase for all patents in that time frame. The desire to protect technical developments in this field hence seems more intense than in less controversial areas, and the analysis shows, contrary to what one might expect, that a trade ban on a particular species does not necessarily reduce innovation around that species. Above-average growth in patenting of wildlife-related innovation persists against a background of enhanced efforts (both regulatory and non-regulatory) to reduce unwanted trading of vulnerable species.

Machine learning was applied to detect changes in the patent filing trends, and to explore correlation with external factors relevant to the various species such as the introduction of commercial trade bans. For example, China legalised the patenting of traditional Chinese medicines in 1993, and increases in patents relating to bears, pangolins and caterpillar fungus, all used in medicinal products, occurred in the early-to-mid 1990s. A significant peak in rhinoceros patents coincides with a major increase in rhinoceros poaching in 2008, despite a 1993 ban in China for medicinal rhinoceros products.

The subject matter of the investigated patents is diverse. In addition to medicinal products, there are processes for farming, artificial breeding, harvesting and cultivating, and for synthetic versions of wild products. Many cover new developments in longstanding uses, while others are for entirely new products and methods. The authors suggest that identification of new products via patent filings could be used to target illegal trading more rapidly than current approaches which find such products only after they have been commercialised. For example, patent offices could flag newly filed patents relating to species of interest to governments to enable early intervention, noting that the patenting of illegal products is generally permitted so at present patent information is not used in this way. Further ways to utilise patent data to similar effect, and suggestions for additional AI-based identification of relevant information, are included.

Overall, this is a fascinating insight into the dubious side of wildlife commercialisation, unexpectedly revealed through the lens of patent data scrutinised by AI.

Author:
Cathrine McGowan

And finally...

D Young & Co events

Event invitations
November 2024 webinars

Sign up to secure your webinar seat at www.dyoung.com/events

European Biotech Patent Case Law
9am, noon & 5pm GMT, 05 November 2024

Join European Patent Attorneys Simon O'Brien and Nathaniel Wand to catch up with new and important EPO biotechnology-related patent case law.

The webinar will run at 9am, 12pm and 5pm (UK time) on Tuesday 05 November 2024. Early booking is advised to secure your webinar seat:
dycip.com/webinar-biotech-nov2024

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UPC Case Law, Observations & Analysis
1pm GMT, 13 November 2024

The Unified Patent Court (UPC) has been in existence for almost 18 months and use of the court and case law is starting to build. We are therefore delighted to announce that we will be running a series of regular webinars dedicated to analysing the court's decisions, providing you with the most up to date observations and analysis.

The first webinar will be held on 13 November 2024 at 1pm (UK time), and will be presented by UPC representatives Rachel Bateman, Samuel Keyes & Lawrence King.

Registration is now open:
dycip.com/webinar-upc-nov2024

Contact details

London
Munich
Southampton

T +44 (0)20 7269 8550
F +44 (0)20 7269 8555

mail@dyoung.com
www.dyoung.com

Contributors

Editor, Partner, Patent Attorney
Simon O'Brien
swo@dyoung.com
www.dyoung.com/simonobrien

Patent Attorney
Oliver Cartwright
occ@dyoung.com
www.dyoung.com/olivercartwright

Partner, Patent Attorney
Jonathan DeVile
jdv@dyoung.com
www.dyoung.com/jonathandevile

Technical Assistant
Molly Guy-Hickson
mgh@dyoung.com
www.dyoung.com/mollyguy-hickson

Associate, Patent Attorney
Samuel Keyes
sdk@dyoung.com
www.dyoung.com/samuelkeyes

Patent Attorney
Sean McCann
smm@dyoung.com
www.dyoung.com/seanmccann

Partner, Patent Attorney
Connor McConchie
cfc@dyoung.com
www.dyoung.com/connormcconchie

Partner, Patent Attorney
Cathrine McGowan
cmg@dyoung.com
www.dyoung.com/cathrinemcgowan

Patent Attorney
Szymon Pancewicz
spp@dyoung.com
www.dyoung.com/szymonpancewicz

Technical Assistant
Miranda Simmons
mrs@dyoung.com
www.dyoung.com/mirandasimmons

Technical Assistant
Stephen Solomon
sys@dyoung.com
www.dyoung.com/stephensolomon

Senior Associate, Patent Attorney
Gemma Sparrow
gls@dyoung.com
www.dyoung.com/gemmasparrow