

# D YOUNG & CO

## PATENT

### NEWSLETTER *no.102*

August 2024

In this issue:

**Emotional Perception AI** 04

UK High Court of Appeal rejects High Court decision

**Interpreting patent claims** 05

G 1/24 seeks Enlarged Board of Appeal clarification

**Video assistant referee (VAR)** 06

Ballino v UEFA

**First permanent injunction at the UPC** 09

Franz Kaldewei v Bette

**Lack of inventive step from a** 10

“realistic” starting point

Sanofi v Amgen

Also: the year of quantum, UPC updates regarding parallel litigation (Bio-Techne and Molecular Instruments), opt-out validity (Neo Wireless and Toyota). Plus news of our Net Zero 2024 IP update.

## ESA's innovative “space bricks” Paving the way for lunar construction

Full Story Page 02



Short of an interesting holiday read? Our August newsletter can provide some food for thought over the holiday period! In addition to updates on the fast moving development of UPC law, this month we focus on technological developments in lunar technology, AI and quantum technologies. For football fans, the litigation regarding VAR and the adidas connected football may stimulate debate before the new season commences. If you keep an eye on the environment while on vacation, please do download our special edition newsletter from Net Zero Week: [dycip.com/net-zero-week-jul24](https://dycip.com/net-zero-week-jul24). Wishing all our clients and colleagues a peaceful and restful vacation.

**Neil Nachshen, Editor**

## Events



**The UPC one year on: where are we now?**  
**Lexology masterclass, webinar on demand**  
Anthony Albutt, Rachel Bateman and Lawrence King provide an insightful mix of court statistics, case commentary and practical considerations from key decisions of the UPC's first year, as well as anticipated developments for year two.

**European Biotech Patent Case Law**  
**Webinar on demand**  
Simon O'Brien and Nathaniel Wand present our latest webinar update of EPO biotechnology patent case law. Save the date for our next webinar: 10 September 2024.

**IPO 2024 Annual Meeting**  
**Chicago, USA, 22-24 September 2024**  
Andrew Cockerell and Garreth Duncan will be attending the 2024 Intellectual Property Owners Association Annual Meeting.

**AIPLA 2024 Annual Meeting**  
**Maryland, USA, 24-26 October 2024**  
Anton Baker and Catherine Keetch will be attending the American Intellectual Property Law Association Annual Meeting.

[www.dyoung.com/events](https://www.dyoung.com/events)

## Subscriptions



Email subscriptions / mailing preferences:  
[subscriptions@dyoung.com](mailto:subscriptions@dyoung.com)

Read online and view previous issues:  
[www.dyoung.com/newsletters](https://www.dyoung.com/newsletters)

Our privacy policy is published at:  
[www.dyoung.com/privacy](https://www.dyoung.com/privacy)

## Follow us



LinkedIn: [dycip.com/linkedin](https://dycip.com/linkedin)  
Twitter: [@dyoungip](https://@dyoungip)

## 3D printing

# ESA's innovative "space bricks" Paving the way for lunar construction

The European Space Agency (ESA) has embarked on an innovative project to develop 3D-printed "space bricks" from lunar regolith, which could revolutionise construction on the Moon. This initiative, involving 3D printing and LEGO-inspired modularity, not only advances the field of space engineering but also carries significant patent implications.

### The concept: building with lunar resources

At the core of the ESA's space brick project is the concept of in-situ resource utilisation (ISRU). The idea is elegantly simple yet profound in its implications. Instead of transporting building materials from Earth to the Moon, a process that would be enormously expensive and logistically challenging, future lunar bases could be constructed using materials readily available on the Moon's surface.

The lunar surface is covered with a layer of rock and mineral fragments known as regolith. This material, formed over billions of years by meteorite impacts and other geological processes, could potentially serve as a primary building material for lunar structures. However, the scarcity of actual lunar regolith on Earth has posed a significant challenge for ESA scientists looking to test this concept.

### Innovative solution: meteorite-based lunar regolith simulant

To overcome the lack of genuine lunar material ESA scientists devised an ingenious solution. They created a lunar regolith simulant by grinding up a 4.5-billion-year-old meteorite. This approach allowed them to closely mimic the properties of actual lunar regolith, providing a realistic material for their experiments.

The use of meteorite dust as a regolith simulant is innovative in itself. It demonstrates the creative thinking necessary in space research, where scientists must often find inventive ways to replicate extraterrestrial conditions on Earth. Such techniques could potentially themselves be patented.

### 3D printing technology: from dust to bricksmag

With their lunar regolith simulant in hand,

ESA scientists employed another cutting-edge technology: 3D printing. They used the meteorite-based mixture to 3D print LEGO-style bricks, showcasing the potential for additive manufacturing techniques in lunar construction.

The choice of a brick design similar to LEGO is both practical and inspired. Like their plastic counterparts, these space bricks are designed to interlock, allowing for modular construction. This provides flexibility in design and the ability to easily modify structures, a crucial advantage in the uncertain and challenging lunar environment.

The resulting space bricks, while similar in form to LEGO bricks, have their own unique characteristics. They are rougher in texture and come in a single "space grey" colour, reflecting their composition and manufacturing process. These properties are integral to understanding how structures built with these bricks would behave in the lunar environment.

### Testing and experimentation

The modular nature of the space bricks allowed ESA engineers to conduct extensive testing and experimentation. ESA Science Officer Aidan Cowley said, "Nobody has built a structure on the Moon, so it was great to have the flexibility to try out all kinds of designs and building techniques with our space bricks."

This phase involved testing structural designs, assessing the bricks' strength and durability, and exploring different construction techniques. The data gathered from these experiments will be invaluable in designing actual lunar habitats and other structures.

The ability to rapidly prototype and test different designs using these bricks represents a significant advantage. It allows researchers to identify potential issues and optimise designs before committing to full-scale construction, potentially saving considerable time and resources in future lunar missions.

### Intellectual property and patent implications

The development of ESA's space bricks

👉 **Related video**  
*ESA x LEGO space bricks:*  
[dycip.com/esa-lego-video](https://dycip.com/esa-lego-video)

👉 **Related articles**  
*The space IP race: protection and enforcement of your orbiting assets, 02 July 2020:* [dycip.com/ip-space-assets](https://dycip.com/ip-space-assets)  
*How can I patent products made by 3D printing? Challenges posed by latest EPO guidance on additive manufacture, 13 February 2023:* [dycip.com/patent-products-3dprinting-feb23](https://dycip.com/patent-products-3dprinting-feb23)

## Future lunar bases could be constructed using materials available on the Moon's surface



also opens up a new frontier in intellectual property. This novel approach to lunar construction materials and methods presents several potential areas for patent protection:

- 1. Material composition:** The specific mixture used to create the lunar regolith simulant from meteorite dust could be patentable. The exact ratios, processing methods, and any additives used to achieve the desired properties might constitute a novel composition of matter.
- 2. 3D printing process:** The particular 3D printing technique used to create structurally sound bricks from the simulant material could be subject to patent protection. This might include the printing parameters, any special equipment modifications, or post-processing techniques. We have covered this topic in a previous article, see our related articles for a link.
- 3. Brick design:** While the general concept of interlocking bricks isn't new, the specific design optimised for lunar conditions and

3D printing could potentially be patented. This might cover aspects like the exact interlocking mechanism, size ratios, or special features designed for lunar use.

- 4. Construction methods:** Novel techniques developed for assembling structures using these bricks in lunar conditions could be patentable. This might include methods for ensuring stability, sealing joints, or integrating with other lunar base components.
- 5. Testing protocols:** The methods developed to test and validate the performance of these bricks under simulated lunar conditions might also be subject to patent protection.

### Potential challenges

One potential challenge in patenting this technology is the issue of territorial jurisdiction with regard to enforcement. Traditional patent laws of infringement are based on national or regional jurisdictions, but the Moon is not subject to any single nation's sovereignty. The Outer Space Treaty of 1967 declares that the exploration and use of outer space shall

be for the benefit of all humanity. This raises complex legal questions about how patents for lunar technologies should be handled.

### Public engagement and education

In a move that bridges scientific research with public engagement, the ESA has partnered with LEGO to display some of these space bricks in selected LEGO stores around the world, including the UK, Germany, and the USA, between 24 June 2024 and 20 September 2024.

By showcasing these space bricks alongside familiar LEGO products the ESA is making cutting-edge space research accessible to the public, particularly children. This approach could spark interest in STEM fields and space exploration among young people, potentially cultivating the next generation of space scientists and engineers.

### Innovating beyond Earth: outlook

ESA's space bricks project represents a significant advancement in the field of extraterrestrial construction and resource utilisation. By combining innovative materials science, 3D printing technology, and inspired design, ESA scientists have created a tangible prototype for future lunar construction methods.

This project not only demonstrates the potential for using lunar resources in situ but also highlights the importance of creative problem-solving in space exploration. The parallels drawn with LEGO construction serve both practical scientific purposes and provide an engaging way to connect with the public.

As we look towards a future of extended lunar missions and potential colonisation, innovations like the ESA's space bricks will play a crucial role. They represent not just a building material, but a new approach to thinking about how we can live and work beyond Earth. The project serves as a testament to human ingenuity and our ongoing quest to expand the boundaries of our presence in space.

**Author:**  
**Anton Baker**



# Emotional Perception AI UK Court of Appeal rejects High Court decision

Case details at a glance

Jurisdiction: England & Wales

Decision Level: Court of Appeal

Parties: Comptroller General of Patents, Designs and Trade Marks

v Emotional Perception AI Limited

Citation: [2024] EWCA Civ 825

Date: 19 July 2024

Decision: [dycip.com/emotional-perception-jul24](https://dycip.com/emotional-perception-jul24)

Related articles

Computer implemented inventions at the EPO: patent application tips: [dycip.com/cii-tips](https://dycip.com/cii-tips)

UKIPO to appeal High Court decision: are AI inventions patentable?, 13 February 2024: [dycip.com/ai-inventions-patentable-feb24](https://dycip.com/ai-inventions-patentable-feb24)

Last year, in *Emotional Perception AI Ltd v Comptroller-General of Patents, Designs and Trade Marks* [2023] EWHC 2948 (Ch), the UK High Court made the surprising (but welcome) ruling that an artificial neural network (ANN) is not a program for a computer and should, in effect, be treated as a piece of hardware, irrespective of whether it was implemented as such or as an “emulated ANN”. Accordingly, the High Court judge considered that the subject-matter exclusion was not invoked at all.

Separately, that judge also considered the music recommendation system embodied in the ANN and concluded its identification of a media file for recommendation was based on “technical criteria which the system has worked out for itself”, and hence was a technical effect outside the computer for the purposes of escaping the subject-matter exclusion.

Following that judgment, the UK Intellectual Property Office (UKIPO) issued a practice note instructing examiners to treat ANNs differently to other computer programs. However, it also took the unusual step of appealing the decision, and following a hearing in May 2024 the Court of Appeal has now handed down its judgment.

The crux of the argument is found at paragraph 68, which concludes that the weights in an ANN are “a set of instructions for a computer to do something”, even if not in form of “a logical series of ‘if-then’ type statements”, and hence is a computer program. Further, as noted at paragraph 74, “the training is, in effect, part of the creation of the program”.

Consequently the court quite firmly rejects the notion that an artificial neural network is a breed apart from a conventional computer program, asserting at paragraphs 70-71: “However it is implemented, the weights ... of the ANN are a program for a computer and therefore within the purview of the exclusion”, and “...ANN implemented inventions are in no better and no worse position than other computer implemented inventions.”

This appears to unequivocally reverse the High Court’s position.

[www.dyoung.com/newsletters](https://www.dyoung.com/newsletters)

## ANNs are treated to be treated the same as other computer programs at the UKIPO



With regard to whether the ANN’s recommendations in this particular case provided a technical effect beyond being a computer program as such, the Court of Appeal was similarly certain, at paragraph 79: “What makes the recommended file worth recommending are its semantic qualities. This is a matter of aesthetics or ... are subjective and cognitive in nature. They are not technical and do not turn this into a system which produces a technical effect outside the excluded subject matter”.

The court notes that these assessments of technical character are consistent with the European Patent Office (EPO) approach, as outlined in *Yahoo T0306/10* and *Mitsubishi T702/20*. While acknowledging this consistency, the court was also pains to reiterate that the EPO approaches patentability in a different way, and (at paragraph 35) that this judgment would not depart from existing English case law (*Aerotel*, and the five signposts in *AT&T*) in favour of EPO Board of Appeal decision *G 1/19*. As such, it could be considered a missed opportunity for more formal harmonisation of UK and European patent approaches.

In light of the Court of Appeal’s unanimous

decision, the UKIPO immediately reversed its current practice note so that ANNs are again treated the same way as other computer programs.

This this does **not** mean that ANNs (or computer programs) are no longer patentable in the UK, but that, as before, they should demonstrate a technical effect that either exists beyond the computer *per se* or enhances operation of the computer itself.

Meanwhile Emotional Perception AI Ltd has sought leave to appeal to the Supreme Court: we will keep you updated if a further appeal occurs.

If you have any questions about this judgment, the topic of AI or computer programs, please do get in touch with your usual D Young & Co representative.

Author:  
Doug Ealey



# Interpreting patent claims

## G 1/24 seeks Enlarged Board of Appeal clarification

🔗 Useful links

EPO Referral on claim interpretation (G 1/24), 02 July 2024: [dycip.com/referral-claim-g1-24](https://dycip.com/referral-claim-g1-24)

T 0439/22 (gathered sheet), 24 June 2024: [dycip.com/gathered-sheet-t-0439-22](https://dycip.com/gathered-sheet-t-0439-22)

T 0169/20 (pouch with inner container/Reckitt), 23 January 2023: [dycip.com/epo-t-016920](https://dycip.com/epo-t-016920)

T 1473/19, 30 September 2022: [dycip.com/epo-t-1473-19](https://dycip.com/epo-t-1473-19)

UPC\_CFI\_2/2023, 19 September 2023: [dycip.com/upc-nanostring-10x-cfi](https://dycip.com/upc-nanostring-10x-cfi)

**G** 1/24 seeks clarification of the legal basis for interpreting patent claims for the purpose of assessing patentability, particularly whether and to what extent the description and figures may be used. Recent Unified Patent Court (UPC) decisions have suggested that the description and drawings must always be used, highlighting a potential divergence in approach between the EPO and UPC. This referral has arisen from T 0439/22, an appeal from the decision of the EPO's Opposition Division to maintain Philip Morris Products SA's patent EP 3076804 B1 as granted.

The patent relates to a heated aerosol-generating article comprising an aerosol-forming substrate comprising a "gathered sheet" of aerosol-forming material. The Board of Appeal considered that the definition of the term "gathered" provided in the description of the patent was broader than that normally used in the technical field, because it additionally included materials that were "convoluted, folded, or otherwise compressed or constricted".

The prior art cited for novelty discloses subject matter that would anticipate the claims based on the broader definition of "gathered" provided by the description, but not on the narrower definition, which is commonly used in the technical field.

Thus, the determination of this point of novelty depends on whether the definition provided in the description of the patent should prevail.

In its interlocutory decision, the Board of Appeal discussed divergence in the legal basis for construing claims and considered that it could not determine whether the claims were valid. In particular, the Board of Appeal considered there to be divergence on the following points:

- whether a patent claim must be shown to be unclear or ambiguous on its face before the figures and description can be taken into account to construe that claim; and
- the extent to which a patent can serve as its own dictionary.

### Should "gathered" be defined by the claims or as commonly used in the technical field?



The Board of Appeal has referred the following questions to the Enlarged Board of Appeal:

1. Is Article 69(1), second sentence EPC and Article 1 of the Protocol on the Interpretation of Article 69 EPC to be applied to the interpretation of patent claims when assessing the patentability of the invention under Articles 52 to 57 EPC? [see Reasons, points 3.2, 4.2 and 6.1]
2. May the description and figures be consulted when interpreting the claims to assess patentability, and, if so, may this be done generally or only if the person skilled in the art finds a claim to be unclear or ambiguous when read in isolation? [see Reasons, points 3.3, 4.3 and 6.2]
3. May a definition or similar information on a term used in the claims which is explicitly given in the description be disregarded when interpreting the claims to assess patentability and, if so, under what conditions? [see Reasons, points 3.4, 4.4 and 6.3]

Two possible approaches to claim interpretation may be: (a) for the wording of the claims to be considered alone in the first instance, with the description and drawings being consulted only for clarification (see for example decision T 0169/20); or (b) for the invention to be considered in the context provided by the description and drawings in the first instance (see for example T 1473/19).

The Board of Appeal also cited passages from the UPC Court of Appeal's decision

in UPC CFI 2/2023 (see Reasons, point 4.3.4): "The interpretation of a patent claim does not depend solely on the strict, literal meaning of the wording used. Rather, the description and drawings must always be used as explanatory aids for the interpretation of the patent claim and not only to resolve any ambiguities in the patent claim."

The UPC Court of Appeal further stated that: "these principles for the interpretation of a patent claim apply equally to the assessment of the infringement and the validity of a European patent".

The Enlarged Board of Appeal must first decide whether the referral is admissible, specifically whether the Board of Appeal's contention is correct that a decision is required to ensure uniform application of the law, and/or that a point of law of fundamental importance has arisen.

If the referral is deemed admissible, it will be interesting to see how the Enlarged Board of Appeal answers the questions: depending on the outcome of this referral to the Enlarged Board of Appeal, the UPC and EPO could arrive at different conclusions regarding patent validity.

The EPO has also already stated that, despite this referral, examination and opposition proceedings will continue as normal, and will thus not be stayed until the decision is issued.

**Author:**  
Emma Hamilton



# Video assistant referee (VAR) Ballino v UEFA

The eyes of the footballing world were on Germany over the course of the UEFA European Championship (EURO 2024). During such events spectators are guaranteed a festival of football with undoubtedly one or two refereeing decisions that will upset some fans. However, all football fans will be pleased with a recent decision handed down by the Hamburg Local Division of the Unified Patent Court (UPC) rejecting a preliminary injunction that may have stopped EURO 2024 from using the video assistant referee (VAR) in its current form.

## Background

The European Championships use VAR technology. To assist with decisions such as offside and handball, the official match ball of this European Championship features adidas' connected ball technology. This technology was first used at the World Cup in 2022, and provides precise ball data that assists video assistant referees with instantaneous information to assist in making the correct decision. The connected ball technology uses a suspension system within the ball to detect every touch of the ball using an inertial measurement unit (which tracks acceleration and angular velocity of an object).

## What happened?

A Dutch non-practising entity, Ballino BV, filed a request for provisional measures at the Hamburg Local Division on 18 April 2024 (ACT\_16267/2024), alleging that Union des Associations Européennes de Football (UEFA) and its technology partner Kinexon Sports & Media GmbH and Kinexon GmbH (the defendants) infringed its patent EP1944067B.

The patent in suit was filed on 10 January 2007 and relates to a method and system for detecting an offside situation by, according to claim 1 of the patent, "sensing a sound signal produced by the ball". Originally, the patent was owned by a different company but was assigned to the claimant, Ballino BV, on 22 January 2024.

In response to the request for provisional measures, Kinexon Sports & Media



GmbH filed a revocation action at the Paris Central Division on 21 May 2024 (ACT\_27358/2024) and the defendants filed three separate applications on 26 April 2024 specifically relating to the request for provisional measures (APP23209/2024; APP23216/2024 and APP 23217/2024).

As far as can be seen from publically available information, the revocation action is still ongoing, though other details of the revocation action are not publically available.

## Request for provisional measures

The Hamburg Local Division has acted swiftly in this case and has issued its decision in respect of the provisional measures claim.

In a first decision of 14 May 2024 (UPC\_CFI\_151/2024), the Hamburg Local Division dealt with the three separate applications filed by the defendants. In these applications, the defendants asked that:

1. an order be issued before 17 May 2024 requiring Ballino BV to provide security of costs of at least €200,000 prior to the oral hearing;

2. to set the value of the dispute to be at least €2,000,000; and

3. a technically qualified judge in physics be allocated to the panel.

In respect of the security of costs, the court held that security of costs should be provided. The structure of Ballino BV and the circumstances behind its acquisition of the patent in suit was key to this decision.

Ballino BV was a limited liability company with the sole shareholder and only member of the board being one of the inventors of the patent in suit. It was asserted by the defendant inter alia that Ballino BV had no assets and issued capital of only €1, and so would not be in a position to reimburse recoverable costs. While this was denied by Ballino BV the court held that the defendant had not elaborated on this denial and without giving any proof that they could reimburse recoverable costs.

In addition, the previous owner of the patent had posed the question of infringement and issued a first warning letter to Kinexon GmbH and Kinexon Sports & Media GmbH

➤ **Case details at a glance**  
*Decision level: Hamburg Local Division*  
*Case: UPC\_CFL\_151/2024*  
*Order/decision: ORD\_23557/2024*  
*Parties: Ballino BV, Kinexon Sports & Media GmbH, Kinexon GmbH, Union des Associations Européennes de Football (UEFA)*  
*Date: 14 May 2024*  
*Decision: [dycip.com/upc-ballino-kinexon-uefa](https://dycip.com/upc-ballino-kinexon-uefa)*

in October 2023. This raised the concern that the purpose of the transfer was to facilitate the litigation without any financial risk to the applicant. Therefore, the court weighted the interests of the defendant higher than the claimant in this particular case.

Moreover, as the transfer of the patent had occurred after the previous owner had posed the question of infringement but prior to the commencement of proceedings before the UPC, Ballino BV is not in a position to claim protection for small and midsize businesses with regard to R158 of the Rules of Procedure (RoP) of the UPC.

In terms of the amount of the security, the court set this at €56,000 rather than the €200,000 requested by the defendants. This is because the court valued the dispute at €500,000 based on a licence fee arrangement rather than the at least €2,000,000 requested by the defendant, and €56,000 is the ceiling on recoverable costs set by the UPC Administrative Committee for a case this size.

With regard to the request for a technically-qualified judge, the court held that one was not required as the technology in dispute was laid out and thoroughly explained in the submissions by the parties, and was familiar enough to the members of the panel to decide the case. Moreover, the allocation of a technically-qualified judge may delay the proceedings beyond the commencement of the European Championship tournament, which would be in neither party's interests.

In a second and final decision, issued on 03 June 2024, the Hamburg Local Division rejected the request for provisional measures in its entirety. The four-hour hearing concluded that the judges were not persuaded that the patent in suit was infringed. The judges were also not persuaded that Ballino BV had acted with sufficient urgency to benefit from provisional measures. This is investigated below.

### Sufficient urgency

Prior to commencing the suit earlier this year the previous owner of the patent wrote to Kinexon in October 2023 alleging infringement. This was known to Ballino.

Kinexon responded in November 2023, explaining that it did not infringe as no sound sensor was used and this is required by claim 1. A further letter was sent by Ballino in February 2024, and in response Kinexon filed a protective letter with the Unified Patent Court (UPC) in March 2024.

Ballino filed proceedings for preliminary relief preventing direct, indirect and equivalent infringement of the patent in Germany and the Netherlands. There were various other requests from all sides.

The Hamburg Local Division applied the approach to urgency used in *Curio Bioscience Inc v 10x Genomics Inc* and held that the application for preliminary relief lacked urgency. The Local Division held that given Kinexon had responded in November 2023 denying infringement, the claimant would have known that judicial recourse was necessary to determine the matter. As far as the Local Division was aware no further steps had been taken by the claimant to investigate the facts or technology, nor contact UEFA in advance of issuing proceedings. Therefore, the claimant did not diligently initiate and complete the required steps at an early stage and thus lacked the required urgency.

### Infringement

On the point of infringement, the Local Division was not convinced with sufficient certainty that the defendants infringed the patent as, on summary examination, there was no direct/indirect literal infringement and the argument of infringement by equivalent means was not sufficiently demonstrated.

The Local Division construed the claims using the standard set out in *NanoString Technologies Inc v 10x Genomics Inc* at the UPC Court of Appeal. With this construction, the Local Division held that the claims required the sensing of acoustic sound waves in air rather than the broader vibrations.

The Local Division found that the patent's own dictionary differentiated between sound produced by the ball and vibrations in the ball, and

that the claims of the patent relate only to sound signals produced by the ball. Therefore, they held there was no direct infringement.

The Local Division also considered the infringement by equivalent means and found that it is not enough to reduce the question of equivalence to just the effect, but rather how the effect is achieved. Therefore, processing sound as required by the claim is not equivalent to processing acceleration as done by the product and so there was no infringement by equivalents.

It is interesting to note how the Local Division handled the question of infringement by equivalence. While the point in this case was only cursory, it does seem to suggest that the UPC may require a consideration of how an effect is achieved, rather than just that the integer achieves the same effect.

### Final thoughts

One interesting aspect of this case was the structure of the claimant and the issuance of the security of costs decision based upon this structure. The claimant was essentially a non-practising entity (NPE) that had seemingly no assets other than the patent in suit. The court ordered the claimant to provide security based on an insolvency risk due to the claimant failing to provide proof that they were financially capable of reimbursing recoverable costs. Due to this, the court felt security of costs was required, though at a lesser amount than requested by the defendant.

It is clear from the decision that the court was not concerned by any enforcement risk associated with costs as the claimant was domiciled within the EU, but its only concern was an insolvency risk. Therefore, it is important when companies or individuals domiciled in the EU are faced with a security of costs application that they not only assert that the other side would be able to recover reasonable costs, but that they also provide evidence to support this assertion.

**Author:**  
**Jonathan Jackson**



# 2025 The year of quantum

**O**n 07 June 2024 the United Nations (UN) announced that 2025 will be known as the International Year of Quantum Science and Technology. This announcement not only commemorates the 100-year anniversary of quantum mechanics but showcases the growing importance of quantum technologies in the modern world. The UN's announcement is just one of many announcements in recent years recognising the growing value of quantum technologies and how these new technologies will shape the coming decades. For example, in 2023 the UK Government launched its National Quantum Strategy, providing long-term missions aimed at transforming the UK into a quantum technology powerhouse. The UK National Quantum Strategy sets out five missions for the UK quantum technology sector.

### Mission one

By 2035 there will be accessible, UK-based quantum computers capable of running one trillion operations and supporting applications that provide benefits well in excess of classical supercomputers across key sectors of the economy.

### Mission two

By 2035 the UK will have deployed the world's most advanced quantum network at scale, pioneering the future quantum internet.

### Mission three

By 2030 every NHS trust will benefit from quantum sensing-enabled solutions, helping those with chronic illness live healthier, longer lives through early diagnosis and treatment.

### Mission four

By 2030 quantum navigation systems, including clocks, will be deployed on aircraft, providing next-generation accuracy for resilience that is independent of satellite signals.

### Mission five

By 2030 mobile, networked quantum sensors will have unlocked new situational awareness capabilities, exploited across critical infrastructure in the transport,

2025 will be known as the International Year of Quantum Science and Technology



telecoms, energy, and defence sectors. These missions are undoubtedly ambitious, however with appropriate investment and management it is entirely feasible for the UK quantum sector to achieve these missions in the proposed timescales. Similar quantum strategies were recently announced by the Danish Government in 2023 and by NATO in 2024, and the USA has had a government-led quantum strategy for a number of years. With such international focus on this area, the future of quantum technology certainly looks bright.

### Why obtain patent protection for quantum technologies

One key to achieving ambitious quantum technology aims will be to encourage collaboration between researchers from different organisations, without stifling investment and innovation in the sector. Patent protection will therefore be an invaluable tool for the quantum technology sector.

The licensing opportunities that patent protection can allow ensure that not only are researchers fairly compensated for their investment, but that organisations are free to collaborate with one another.

### What quantum technologies can be protected by patents?

Patent protection can be an invaluable tool to help organisations develop international

quantum strategies. A patent can generally be obtained for inventions in all quantum technology areas, including quantum computing, quantum metrology and sensing, quantum communication and cryptography, and quantum-based navigation. However, the scope of any patent protection depends on the invention itself, and potentially upon the particular application.

For example, at the European Patent Office (EPO) inventions for quantum technologies must meet the requirements of patentability in relation to non-technical subject matter. As such, mathematical or software-based inventions for quantum technologies must generally be directed to a technical application, providing a technical effect. However, with the potential uses of quantum technology being seemingly limitless, there are many potential technical applications to which a patent application may be directed. As such, we can expect the number of patents granted for quantum technologies to continue to grow rapidly in the coming years.

### Outlook

The UN's announcement that 2025 will be the International Year of Quantum Science and Technology just confirms what we already knew: large-scale applications of quantum technology are just around the corner.

Author:  
**Ben Hunter**





# First permanent injunction at the UPC Franz Kaldewei v Bette

The Local Division of the Unified Patent Court (UPC) in Düsseldorf has ordered the first permanent injunction at the UPC as a result of a hearing on 16 May 2024. This hearing was a result of an infringement case being filed shortly after the court opened on 01 June 2023. The hearing was held on 16 May 2024 and the judgment issued on 03 July 2024. It is encouraging that the UPC has almost managed to keep to its aim of issuing a final decision within twelve months of the case being brought and within six weeks of the oral hearing.

The contested patent in this case was EP 3375337 in the name of Franz Kaldewei GmbH & Co KG and relating to a “Bathtub Sanitation Device”. Franz Kaldewei, the claimant, accused the defendant, Bette GmbH & Co KG, of infringing claims 1 to 3 of the patent in a number of contracting member states where the patent was in force: Austria, Belgium, Denmark, France, Italy, Luxembourg and the Netherlands. Bette in return challenged the validity of the patent in a counterclaim.

Franz Kaldewei opposed the grounds for invalidity and filed an auxiliary request with claim 1 amended to include the features of granted claims 2 and 3. Bette also opposed the validity of the auxiliary request and furthermore alleged that it was entitled to a right of prior use due to ownership of the invention before the priority date of the patent. It was decided on 01 December 2023 that the infringement claim and the counterclaim should be heard jointly.

## Outcome

Claim 1 of the patent as granted was found to be new but not inventive and therefore invalid. The auxiliary request was found

to be valid. When assessing the validity of the patent and construing the scope of the claims the court repeatedly referred to the description of the patent, and also adopted an approach similar to the European Patent Office’s (EPO) problem-and-solution approach for assessing inventive step.

Bette did not dispute that its products infringed the patent or the claims of the auxiliary request. The court decided that Bette could not invoke a prior user right as it was only able to provide evidence regarding the ownership of the invention and its use within Germany, but not in the contracting member states at issue in the case. The Unified Patent Court Agreement (UPCA) sets out that a prior user right can only be enjoyed in the state in which the prior use occurred.

A permanent injunction was issued to prevent Bette from carrying out any further infringing acts in respect of the patent and to permanently remove the infringing products from the channels of distribution. Bette was ordered to inform Franz Kaldewei of the extent to which it had committed the infringing acts since the grant date of the patent, including further information about the quantities of products and their origins and channels of distribution, the identity of the persons involved, the advertising carried out, and the costs and profits achieved. Bette was required to take these steps within 30 days after service of the communication from the claimant indicating which part of the orders it intended to enforce.

Bette was ordered to pay Franz Kaldewei EUR 10,000 as provisional damages, with more to be ordered should the infringing acts continue. The court then ruled that the costs

## Case details at a glance

Decision level: Düsseldorf Local Division

Case: UPC\_CFI\_7/2023

Parties: Franz Kaldewei GmbH & Co KG v Bette GmbH & Co KG

Date: 03 July 2024

Decision: [dycip.com/franz-kaldewei-bette-jul24](https://dycip.com/franz-kaldewei-bette-jul24)

Decision level: Paris Local Division

Case: UPC\_CFI\_230/2023

Parties: DexCom Inc v Abbott Laboratories et al

Date: 04 July 2024

Decision: [dycip.com/dexcom-abbott-jul24](https://dycip.com/dexcom-abbott-jul24)

## Related article

[UPC v EPO: a comparison of claim construction approaches:](https://dycip.com/upc-epo-claim-construction)

[dycip.com/upc-epo-claim-construction](https://dycip.com/upc-epo-claim-construction)

of the counterclaim should be borne 50% by Franz Kaldewei and 50% by Bette, and that for the costs of the action Franz Kaldewei shall bear 15% and Bette shall bear 85%. The upper limit of the recoverable representation costs was set at EUR 47,600 for Franz Kaldewei and EUR 8,400 for Bette. For the counterclaim, the upper limit was set at EUR 28,000 for each party.

## Three key lessons

1. The UPC appears keen to provide fast relief to parties. It will be interesting to see if this can be maintained as the caseload of the UPC increases.
2. Based on this case, it appears the UPC is taking an EPO-based approach to assessing validity, and is continuing to take the approach of using the description to interpret claims. This is discussed further in our article: “UPC v EPO: a comparison of claim construction approaches” of 06 June 2024 (see “related article” link above).
3. When alleging a prior use it is necessary to provide detailed evidence of prior use in each of the states in which the patent is in force in order to avoid an injunction being granted in each of those states.

It seems likely that the defendant in this case will appeal, which will provide further opportunity to assess how the court is applying the law.

## UPC issues second decision on the merits: DexCom Inc v Abbott Laboratories and nine other Abbott entities

A further decision was handed down by the UPC on 04 July 2024, this time by the Local Division in Paris. This was issued as a result of proceedings brought on 07 July 2023, thus providing further evidence of the UPC wishing to provide a judgment within a year of commencement of proceedings. We will report on this decision in more detail at a later date. However, in brief, the case was brought by DexCom alleging that Abbot was infringing patent EP 3435866. Abbott counterclaimed for revocation. The court found the patent to be invalid and therefore did not rule on infringement.

## Author:

Alice Stuart-Grumbar



A prior user right can only be enjoyed in the state in which the prior use occurred



# Lack of inventive step from a “realistic” starting point

## Sanofi v Amgen

The Unified Patent Court (UPC) has issued three substantive decisions in recent weeks which have kept European patent litigators with a keen interest in the new system on their toes. First we had the Düsseldorf Local Division decision in *Franz Kaldewei v Bette* on 03 July 2024, closely followed by the Paris Local Division decision in *DexCom Inc v Abbott* of 04 July 2024, and twelve days later the Munich Central Division decision in the first-filed case of the UPC between *Sanofi-Aventis v Amgen*.

The Munich Central Division revoked EP 3666797B across the UPC member states in which it was in force for lack of inventive step, and in doing so provided further insight into claim construction and the assessment of inventive step at the UPC. This decision is also the first in the field of antibodies.

The key takeaways are as follows:

1. Commitment to the one-year timeline for a first instance decision.
2. Claim interpretation considers the language of the claims, including technical function of features alone and as a whole, as well as the description and drawings.
3. The description may be considered as the patent’s “lexicon”, especially in the absence of an accepted meaning of a term in the art.
4. The concept of “same invention” within the meaning of Article 87 EPC (priority) is to be assessed narrowly according to G 2/98 from the EPO’s Enlarged Board of Appeal.
5. Inventive step is to be assessed from any “realistic” starting point.
6. An argument that another document is “closer” or “more realistic” is likely to fail.
7. Skilled person may be considered a “team” of relevant technical persons.
8. Arguments as to a lack of a reasonable expectation of success are likely to fail if there are no technical difficulties in taking “next steps” from the starting point and the skilled person would be motivated to do so.

9. Therapeutic antibody inventions in the UPC are likely to be assessed in a similar manner to the EPO; development of new antibodies for a known target is routine.

### Background and technology

Sanofi’s Patent EP 3666797B granted with claim 1 directed to a monoclonal antibody or an antigen-binding fragment thereof for use in:

- treating or preventing hypercholesterolemia or an atherosclerotic disease related to elevated serum cholesterol levels, or
- reducing the risk of a recurrent cardiovascular event related to elevated serum cholesterol levels.

The monoclonal antibody or antigen-binding fragment thereof was defined as binding to the catalytic domain of a PCSK9 protein of the amino acid sequence of SEQ ID NO:1, and preventing or reducing the binding of PCSK9 to LDLR.

In essence, granted claim 1 was a second medical use claim where the antibodies being used to achieve the claimed technical effect were defined functionally.

The patent explains how PCSK9 is a serine protease, an enzyme that cleaves peptide bonds in proteins, involved in regulating the levels of the low density lipoprotein receptor (LDLR) protein. LDLR is a protein receptor expressed on the surface of liver cells that is important for removing low density lipoprotein cholesterol (LDL-C). Typically, LDLRs on the cell surface bind to LDL-C, transport LDL-C into the cell where it is broken down for the use by the body, and are then recycled to the cell where they can continue their role of transporting LDL-C from the bloodstream into the cell.

Hence, the aim of the patent was to provide the above-defined medical use, by targeting PCSK9 to regulate levels of LDLRs (and thereby LDL-C). This aim was explicitly highlighted by the Munich Central Division before construing claim 1.

### Claim interpretation

The legal framework applied by the Munich Central Division for claim construction was that set out by the UPC Court of Appeal in *NanoString v 10x Genomics* (UPC\_CoA\_335/2023). This requires a consideration of how a person skilled in the art would understand the feature in view not only of the literal meaning of the claim wording, but with the description and drawings. The Munich Central Division also referenced the UPC Court of Appeal decision in *VusionGroup v Hanshow* (UPC\_CoA\_1/2024), to emphasise that a feature in a patent claim must be interpreted in light of the claim as a whole.

What this appears to mean in practice is that a feature should not be interpreted in isolation, but with a consideration of any technical relationship with other features in the claim, and the context of the feature in the description and any drawings.

In this case, the main feature interpreted by the Munich Central Division was “binds to the catalytic domain”.

The “catalytic domain” was not explicitly defined in EP 3666797B and there was no “commonly accepted state of the art definition”. After considering the wording of the claim, the explanation in the description, and the drawings, it was held that this meant “the region consisting of amino acid residues 123 to 419 of human PCSK9 (SEQ ID NO:1)”.

It was also noted that the product must be therapeutically effective in view of the “underlying problem”. This meant that the claim was **not** interpreted as covering “all antibodies capable of binding to the catalytic domain”, but those that allowed the claimed result to occur (preventing or reducing the binding of PCSK9 to LDLR). This interpretation relied extensively on the description.

The Munich Central Division also noted that: “Even if terms used in the patent deviate from general usage, it may therefore be that ultimately the meaning of the terms resulting from the patent specification is authoritative”.

🔍 **Case details at a glance**

*Decision level: Düsseldorf Local Division*

*Case: UPC\_CFI\_7/2023*

*Parties: Franz Kaldewei GmbH &*

*Co KG v Bette GmbH & Co KG*

*Date: 03 July 2024*

*Decision: [dycip.com/franz-kaldewei-bette-jul24](https://dycip.com/franz-kaldewei-bette-jul24)*

*Decision level: Paris Local Division*

*Case: UPC\_CFI\_230/2023*

*Parties: DexCom, Inc v Abbott Laboratories et al*

*Date: 04 July 2024*

*Decision: [dycip.com/dexcom-abbott-jul24](https://dycip.com/dexcom-abbott-jul24)*

*Decision level: Munich Central Division*

*Case: UPC\_CFI\_1/2023*

*Parties: Sanofi-Aventis Deutschland*

*GmbH et al v Amgen Inc.*

*Date: 16 July 2024*

*Decision: [dycip.com/sanofi-amgen-jul24](https://dycip.com/sanofi-amgen-jul24)*

**Related article**

*First permanent injunction at the UPC: Franz Kaldewei v Bette, 11 July 2024 (page 09):*

*[dycip.com/kaldewei-bette-upc-jul24](https://dycip.com/kaldewei-bette-upc-jul24)*

The UPC divisions have not yet been presented with a situation where there is a significant difference in meaning between the claim and the description. The above statement and the reliance on the description in the substantive decisions issued so far by the various divisions and UPC Court of Appeal does, however, suggest that the description definition may be adopted in such a situation. In view of the pending referral to the Enlarged Board of Appeal in G 1/24 on claim interpretation, this is an area that European patent attorneys are monitoring closely.

**Inventive step assessment**

On inventive step, the Munich Central Division did not strictly follow the European Patent Office's (EPO) problem-solution approach. Instead of first identifying the "closest prior art" it referred to NanoString v 10x Genomics (UPC\_CoA\_335/2023) and deemed that a "realistic" starting point was all that was needed. It was also noted that there can be several realistic starting points.

In view of this position, Amgen's argument that another document (Graham) was "closer" and "more realistic" were not successful. Graham had been taken as the closest prior art during examination before the EPO.

Lagace described the biological role of PCSK9, including its function to regulate LDLR protein levels. The Munich Central Division summarised that the skilled person "would have realised that Lagace was interested in finding out more about the mechanism by which PCSK9 reduces the number of LDLRs", because it was known that loss of PCSK9 expression resulted in lower plasma cholesterol levels in vivo. Hence, it was a "realistic" starting point.

Lagace also taught that the development of anti PCSK9 antibodies that block the LDLR:PCSK9 interaction "can be explored for the treatment of hypercholesterolemia". From this teaching it was held that the skilled person would have pursued antibodies blocking the interaction as "a next step", and, as there were no serious obstacles and only routine screening methods were



required, it did not involve inventive skill to identify the claimed antibodies.

The Munich Central Division thus rejected Amgen's arguments focused on PCSK9 not being a genetically validated target, and the skilled person not pursuing an antibody approach "at least not with a reasonable expectation of success". The reasonable expectation of success argument appears to have failed because Amgen did not demonstrate that the skilled person would have had "serious doubts" that a therapeutic antibody could be developed. The term "serious" was quantified as "doubts that were of such a nature that these would have dissuaded the skilled person from pursuing an antibody approach to block the interaction...as suggested by Lagace".

The granted claims were found to lack an inventive step. The same conclusion applied to all seventeen auxiliary requests.

**Final comment**

There are pending EPO opposition proceedings in which Sanofi is one of the opponents. Unsurprisingly, the representative for Sanofi filed a copy of the UPC decision the day it was issued and highlighted that the Munich Central Division

had found the patent to lack an inventive step over Lagace. Lagace was presented as closest prior art in its opposition. The parties have not yet been summoned to oral proceedings. When they are, it will be interesting to see how the Opposition Division deals with the UPC decision in its preliminary opinion, and whether it seeks to align itself or take an independent (perhaps even different) approach.

We expect the EPO to align itself with the Munich Central Division, but perhaps with the application of a more conventional problem-solution approach to inventive step. This may be seen as a modified version of the EPO's problem-solution approach, thereby allowing each jurisdiction to come to the same conclusion if by slightly different means.

Amgen have appealed the decision since in an order from the Munich Local Division on 29 July 2024, it is noted that the parties agreed to stay the infringement proceedings (also involving Regeneron) pending the outcome of the appeal against the revocation decision. We will monitor the developments of this ongoing dispute.

**Author:**  
**Rachel Bateman**



# Parallel litigation at the UPC

## Bio-Techne keeps pressure on Molecular Instruments

**O**n the same day as a UK High Court (Patents Court) decision was handed down, finding its asserted patents invalid for obviousness, Bio-Techne announced that it had issued a further patent infringement action against Molecular Instruments Inc at the Unified Patent Court (UPC).

It is a well-established strategy for a claimant to commence parallel litigation in multiple territories, to increase the pressure on a defendant. In this case it appears that Bio-Techne, which is a much larger company than Molecular Instruments, has launched a parallel UPC infringement action in an attempt to force a resolution.

It is not yet clear how the UPC will deal with the complex issues of claim interpretation and joint liability which were considered by the UK High Court. We will watch with interest how the UPC case proceeds and for any significant divergence from the decision handed down by the High Court.

### Background

In September 2022, Bio-Techne, under its Advanced Cell Diagnostics Inc brand, announced that it had filed a patent infringement action against Molecular Instruments at the UK High Court. Bio-Techne alleged that Molecular Instruments' HCR 3.0 technology infringes Advanced Cell Diagnostics's European patents EP 1910572 and EP 2500439.

The patents at issue are directed to methods and kits for detecting nucleic acid targets within an individual cell and underpin Bio-Techne's RNAscope in situ hybridisation (ISH) technology. The patents are from the same family, but differ in that EP 1910572 has method claims and EP 2500439 has product claims.

Parallel litigation at the UPC is a potentially effective strategy to build or maintain pressure



The issues considered by the High Court were technically complex. In a lengthy decision handed down on 23 April 2024, Mr Justice Meade found the patents to be invalid for obviousness. However, had the patents been valid, EP 1910572 (but not EP 2500439) would have been infringed by the acts considered in the trial.

### Infringement: claim interpretation

Molecular Instruments denied infringement on the basis that its products and the methods for using them do not fall within the scope of the claims. In particular, that the capture probes in its products were complementary to "overlapping" regions of the label probe, whilst the claims at issue require the capture probes to be complementary to "non-overlapping" regions.

The judge considered this issue in detail and applied a purposive claim construction, in accordance with established UK case law. The purpose of the feature at issue was identified as increasing specificity by having two probes so that non-specific binding is reduced. A small amount of overlap did not

undercut this purpose and therefore the judge found that "non-overlapping" did not mean "completely non-overlapping".

It will be interesting to see whether the UPC will arrive at the same conclusion to that of the High Court. In the UPC Court of Appeal decision NanoString v 10x Genomics (UPC\_CoA\_335/2023), the court overturned the order of the Munich Local Division at first instance and in doing so, provided its position on claim construction. Unlike the Munich Local Division, the UPC Court of Appeal applied the principles of Article 69 EPC and its Protocol on Interpretation when assessing the claims for validity and infringement. This resulted in a more literal approach to the claim language with reference to the description and drawings as an "interpretation aid".

### Infringement: joint liability

Importation into the UK was the relevant act in relation to EP 2500439, which has product claims. However, the claims at issue require the kit to comprise a permeabilising

### Useful link

Bio-Techne news release, 26 September 2022, "Bio-Techne files patent infringement lawsuit against molecular instruments": [dycip.com/bio-techne-26-sep-2022](https://dycip.com/bio-techne-26-sep-2022)

### Related webinar: biotech patent case law



Our most recent biotech webinar is now available to view at [dycip.com/bio-web-jun24](https://dycip.com/bio-web-jun24)

### Case details at a glance

Jurisdiction: England & Wales  
Decision level: High Court (Patents Court)  
Parties: Advanced Cell Diagnostics Inc v Molecular Instruments Inc  
Citation: [2024] EWHC 898 (Pat)  
Date: 23 April 2024  
Decision: [dycip.com/2024-ewhc-898-pat](https://dycip.com/2024-ewhc-898-pat)

Decision level: UPC First Instance, Local Division (The Hague)  
Case: ACT\_21885/2024  
Parties: Advanced Cell Diagnostics Inc (claimants) and Molecular Instruments Inc (defendants)  
Date: 22 April 2024  
Decision: [dycip.com/act-21885-2024-upc](https://dycip.com/act-21885-2024-upc)

agent, which was not included within the imported product. Therefore, the judge held that even if Molecular Instruments were jointly liable for the importation, it would not amount to an infringement.

Use was the relevant act in relation to EP 1910572, which has method claims. Molecular Instruments provides customers with protocols for the use of its products. Were this all that happened, then the judge indicated that this would amount to mere facilitation. However, in relation to some customers, Molecular Instruments provides "troubleshooting" support.

The judge held that Molecular Instruments would have been liable where it provided troubleshooting support. However, had the patents been valid, the judge considered that this might have led to a difficult decision in relation to relief.

It is not yet clear how the UPC will approach the same issues. Significant differences exist in existing national regimes of joint liability, for example regarding the degree of knowledge or awareness, and it will be interesting to see how the UPC attempts to harmonise these different approaches.

#### Validity: obviousness

Molecular Instruments submitted that the claimed subject matter was obvious in view of a combination of two prior art documents. Collins describes an in vitro branched DNA signal amplification assay for quantification of nucleic acid targets. Kern describes cruciform probes and is referred to in Collins on a number of occasions.

The critical paragraphs for the obviousness attack were the first four paragraphs of the Discussion section in Collins, in which it is disclosed that the assay should also be useful for in situ hybridization assays. Collins further disclosed that the sensitivity of the assay could be improved by the use of cruciform probes (with cross-reference to Kern), which would fall within the scope of the claims at issues.

The judge therefore found that all the features

of the claim would occur to the skilled person, and that the nub of the question was simply whether there was a reasonable expectation of success. However, Bio-Techne did not put forward any specific reasons why the skilled person would think that prospects of success were lacking. In any case, the judge found that any doubts would have been allayed by a prior art document which would have been found by a routine literature search.

The judge did not consider it necessary to apply the Pozzoli test (the general framework used to assess inventive step by UK courts). In the UPC Court of Appeal decision *Nanostring v 10x Genomics* the court did not appear to apply the European Patent Office's (EPO) problem-solution approach, and instead adopted a more "classical" approach to inventive step.

It will be interesting to see whether this approach leads to the same conclusion as reached by the UK High Court on obviousness in the present case.

#### Summary and parallel UPC action

Overall, the UK judgment appears to be largely in favour of Molecular Instruments. The judge held that Collins and Kern point to all the features of the claims of the patents and that Bio-Techne did not assert the existence of any actual problem that would prevent success. Even if the patents were valid, it is not clear what relief Bio-Techne could have sought.

**The UK judgment has not brought an end to the dispute. Instead, Bio-Techne has launched a further patent infringement action at the UPC to maintain the pressure on Molecular Instruments.**

The patents at issue are currently in force in France, Germany, Italy, and the Netherlands, according to the Federated European Patent Register.

According to the UPC Register, the patents were opted out of the jurisdiction of the UPC on 16 May 2023, effectively shielding them from any pre-emptive revocation action by Molecular Instruments. The opt-outs were withdrawn on 18 April 2024, only a few days before Bio-Techne launched the UPC infringement action in the Netherlands Local Division.

#### Take-home messages

The dispute between Bio-Techne and Molecular Instruments involves complex issues of claim interpretation and joint liability. It will be interesting to see how the UPC case proceeds and whether it will make any reference to the decision of the UK High Court on the same patents and involving the same parties.

**This dispute is a reminder that parallel litigation at the UPC is potentially an effective strategy to maintain or build pressure. Bio-Techne has also demonstrated how UPC opt-outs can be used strategically to shield patents from pre-emptive revocation actions, then withdrawn shortly before launching an infringement action.**

Such a strategy may allow a claimant to launch an action in a Local Division which is perceived to be the most favourable to them, provided that no national action has been started in a UPC member state prior to the opt-out withdrawal being filed.

We await further developments and will provide further updates in due course. Please contact your usual D Young & Co representative if you have any questions.

Author:  
**Nathaniel Wand**



# One for all and all for one? UPC opt-out validity in Neo Wireless v Toyota

**T**he Court of Appeal of the Unified Patent Court (UPC) has issued a decision on the validity of an opt-out. This decision was issued in the case of Neo Wireless GmbH & Co KG v Toyota Motor Europe NV/SA.

With this decision, the UPC Court of Appeal has held that a valid opt-out application requires that it is lodged by or on behalf of all proprietors of all national parts of a European patent.

## What is an opt-out?

An opt-out is a mechanism by which a patent owner can remove European patent applications and European patents from the jurisdiction of the Unified Patent Court. The default position is that all European patent applications and European patents are subject to the UPC, unless an opt-out is filed.

If an opt-out is filed, any litigation would take place via the national courts. Notably, the opt-out is related only to European patents and European patent applications. An opt-out cannot be filed for unitary patents which are always subject to the jurisdiction of the UPC.

## Case background

Neo Wireless LLC, Wayne, USA (Neo USA) was the original owner of a European patent EP 3876490. During prosecution of the application, an assignment was made to transfer ownership of the German part of the patent application to Neo Wireless GmbH & Co KG, Ratingen, Germany (Neo).

Before grant, Neo USA filed an opt-out from the jurisdiction of the UPC. However, this opt-out application was not filed on behalf of Neo (the owner of the German part of the application).

The European patent granted on 17 May 2023.

After this time, Toyota Motor Europe NV/SA (Toyota) brought a revocation action before the Central Division Paris of the UPC against the patent. In response, Neo filed a preliminary objection questioning the competence of the court in this case; Neo argued that the patent did not fall under the jurisdiction of the UPC since an opt-out had been filed.

However, the judge at the Court of First Instance held that the opt-out which had been filed was invalid (for the reasons discussed in detail later). The appeal on which the UPC Court of Appeal has issued this decision was an appeal against the decision of the judge at the Court of First Instance.

## The appeal

Article 83(3) of the Agreement on a Unified Patent Court (UPCA) requires that: "Unless an action has already been brought before the Court, a proprietor of or an applicant for a European patent granted or applied for prior to the end of the transitional period... shall have the possibility to opt out from the exclusive competence of the Court".

Furthermore, Rule 5.1(a) of the UPC Rules of Procedure requires that: "Where the patent or application is owned by two or more proprietors or applicants, all proprietors or applicants shall lodge the Application to opt out".

The judge at the Court of First Instance held the opt-out filed by Neo USA to be invalid because not all proprietors of all national parts of the European patent had lodged the application to opt-out as required by Rule 5.1(a) of the UPC Rules of Procedure.

On first reading, it may therefore appear that the question as to who can validly file an opt-out is settled. Rule 5.1(a) of the UPC Rules of Procedure addresses the specific situation where the patent or application is owned by two or more proprietors or applicants. In this situation, Rule 5.1(a) clearly requires that all proprietors or applicants shall lodge the opt-out application.

However, it must be remembered that in

the case of conflict between the UPCA and the Rules of Procedure, the provisions of the UPCA prevail. This is explained in Rule 1 of the UPC Rules of Procedure.

In the appeal, Neo argued that Rule 5.1(a) of the UPC Rules of Procedure must be ignored since it conflicts with Article 83(3) UPCA. According to the arguments put forward by Neo, Article 83(3) UPCA provides that a (in the singular) proprietor or an (in the singular) applicant can opt an application out of the jurisdiction of the UPC.

Neo stated that if the proprietor of only some national parts of a European patent would require the agreement of holders of the other national parts to opt-out, this proprietor would be unduly and disproportionately impaired in exercising his ownership rights, as no patent holder should be forced into the UPC.

Accordingly, at the heart of the appeal is the question as to whether Article 83(3) UPCA allows the proprietor of one or more, but not all, national parts of a patent (application) to validly lodge an application to opt out.

## Decision

In the decision, the UPC Court of Appeal provided a detailed analysis of the arguments put forward in the appeal. Ultimately, the UPC Court of Appeal determined that the appeal was not justified. Therefore, the patent had not been validly opted out by Neo USA and remained under the jurisdiction of the UPC.

The reasoning provided by the UPC Court of Appeal does not rely specifically on the provisions of Rule 5.1(a) of the UPC Rules of Procedure. Rather, the UPC Court of Appeal based its reasoning on an interpretation of the wording of Article 83(3) UPCA itself.

The general rule of interpretation for international treaties is set out in Article 31(1) Vienna Convention on the Law of Treaties (1969) which states that: "A treaty shall be interpreted in good faith in accordance with the ordinary meaning to be given to the terms of the treaty in their context

➤ **Related article**

*The unitary patent and opt-out statistics: one year in, published 06 June 2024: [dycip.com/up-opt-out-stats-jun2024](https://dycip.com/up-opt-out-stats-jun2024)*

➤ **Case details at a glance**

*Decision level: Court of Appeal, Luxembourg  
Case: UPC\_CoA\_79/2024  
Order/decision: ORD\_30505/2024  
Parties: Neo Wireless GmbH Co KG v Toyota Motor Europe  
Date: 04 June 2024  
Decision: [dycip.com/upc-neo-wireless-toyota](https://dycip.com/upc-neo-wireless-toyota)*

**Related webinar: UPC one year on**



*Join us for a review of the UPC one year after its launch, with a look ahead to what future months may bring: [dycip.com/upc-1year-masterclass](https://dycip.com/upc-1year-masterclass)*

**All proprietors of all national parts of a European patent must lodge opt-out applications**



that an interpretation of Article 83(3) UPCA whereby all proprietors of all national parts must file the opt-out is in accordance with this default position. If not all proprietors of all national parts of the European patent file the opt-out, the “default position” stays in place.

The UPC Court of Appeal stated that the consequences of this choice made by the legislator cannot be considered as unfair or unduly impairing a proprietor from exercising its ownership rights. The UPC Court of Appeal noted that the consequences of the interpretation put forward by Neo whereby only one proprietor may opt-out with effect for all national parts (even those parts that they do not own) are not less burdensome.

The appeal was thus held to be unjustified.

**Conclusion**

The phrase “One for all and all for one” is not valid with respect to an opt-out from the UPC. Rather, the opt-out must be lodged by or on behalf of all proprietors of all national parts of a European patent. The decision which has been issued by the UPC Court of Appeal is not surprising in this respect.

**This decision provides a timely reminder for those seeking to remain outside the jurisdiction of the UPC of the importance of accurately ascertaining the proprietor of a European patent (application) when lodging an opt-out.**

An issue with the opt-out application may only become apparent if that opt-out is challenged during proceedings before the UPC. At this time, it will be too late to repair the opt-out if the opt-out is found invalid. Accordingly, particular care must be taken when lodging an opt-out if an assignment has taken place for a part of the European patent (application).

**Author:**  
**Simon Schofield**



and in the light of its object and purpose”.

The UPC Court of Appeal acknowledged that the requirement that the opt-out is lodged by or on behalf of all proprietors of all national parts of a European Patent does not arise based on the “ordinary meaning” of the wording of Article 83(3) UPCA. In this regard, the UPC Court of Appeal noted that the wording “a proprietor of or an applicant for” could indicate the singular (so that only one proprietor or applicant is required to validly declare an opt-out).

The UPC Court of Appeal noted that the wording “a proprietor of or an applicant for” could indicate the capacity of the opt-out applicant (that is, only that a proprietor or an applicant can validly declare an opt-out).

Likewise, the UPC Court of Appeal found that this requirement does not arise from the meaning of Article 83(3) UPCA when read in “context” either.

However, when taking account of the “object and purpose”, the UPC Court of Appeal held that Article 83(3) UPCA must be interpreted such that a valid opt-out application requires that it is lodged by or on behalf of all proprietors of all national parts of a European patent.

This UPC Court of Appeal arrived at this position in view of the fundamental default position chosen by the legislator that a European patent (application) will fall under the jurisdiction of the UPC unless a valid opt-out is filed. The UPC Court of Appeal held

# D YOUNG & CO INTELLECTUAL PROPERTY

And finally...

*Related newsletter*

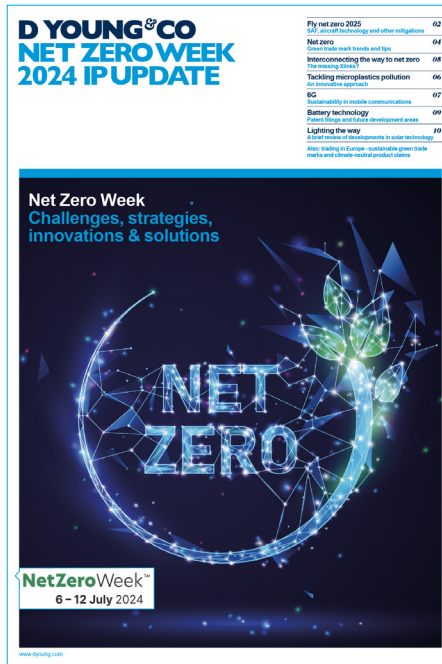
## Net Zero Week 2024 IP update

**N**et Zero Week 2024, the UK's official national awareness week, ran from 06 to 12 July. Backed by the UK Government, Net Zero Week is aimed at individuals, business and industry, and the energy economy. It offers all stakeholders a dedicated platform to highlight solutions, voice opinions, explore strategy, and share evidence in our shared journey towards net zero.

Over Net Zero Week we ran a series of net zero and green technology related articles, with an emphasis on innovation and intellectual property rights.

We have collated these articles in this special edition newsletter, in which we cover a wide range of green topics including green trade mark trends, sustainability-related patents, battery tech, solar tech, mobile communications (6G), aviation, green energy and green chemistry.

We hope that you will find our updates thought provoking and that we are able to share our enthusiasm for helping inventors protect their innovations in the sustainability space.



Download your copy  
from our website:  
[dycip.com/net-zero-week-jul24](http://dycip.com/net-zero-week-jul24)

### Contact details

London  
Munich  
Southampton

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

[mail@dyoung.com](mailto:mail@dyoung.com)  
[www.dyoung.com](http://www.dyoung.com)

Email [subscriptions@dyoung.com](mailto:subscriptions@dyoung.com) to update your mailing preferences or to unsubscribe from this newsletter. Our privacy policy is available at [www.dyoung.com/privacy](http://www.dyoung.com/privacy).

This newsletter is intended as general information only and is not legal or other professional advice. This newsletter does not take into account individual circumstances and may not reflect recent changes in the law. For advice in relation to any specific situation, please contact your usual D Young & Co advisor.

D Young & Co LLP is a limited liability partnership and is registered in England and Wales with registered number OC352154. A list of members of the LLP can be viewed at our registered office. Our registered office is at 3 Noble Street, London, EC2V 7BQ.

Copyright 2024. D Young & Co LLP. All rights reserved. 'D Young & Co', 'D Young & Co Intellectual Property' and the D Young & Co logo are registered trade marks of D Young & Co LLP.

### Contributors

Partner, Patent Attorney  
Editor  
**Neil Nachshen**  
[njn@dyoung.com](mailto:njn@dyoung.com)  
[www.dyoung.com/neilnachshen](http://www.dyoung.com/neilnachshen)



Partner, Patent Attorney  
**Anton Baker**  
[amb@dyoung.com](mailto:amb@dyoung.com)  
[www.dyoung.com/antonbaker](http://www.dyoung.com/antonbaker)



Partner, Patent Attorney  
**Rachel Bateman**  
[reb@dyoung.com](mailto:reb@dyoung.com)  
[www.dyoung.com/rachelbateman](http://www.dyoung.com/rachelbateman)



Partner, Patent Attorney  
**Doug Ealey**  
[dre@dyoung.com](mailto:dre@dyoung.com)  
[www.dyoung.com/dougealey](http://www.dyoung.com/dougealey)



Senior Associate, Patent Attorney  
**Emma Hamilton**  
[ejh@dyoung.com](mailto:ejh@dyoung.com)  
[www.dyoung.com/emmahamilton](http://www.dyoung.com/emmahamilton)



Associate, Patent Attorney  
**Ben Hunter**  
[bmh@dyoung.com](mailto:bmh@dyoung.com)  
[www.dyoung.com/benhunter](http://www.dyoung.com/benhunter)



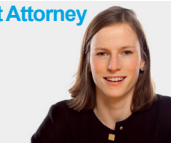
Partner, Patent Attorney  
**Jonathan Jackson**  
[jaj@dyoung.com](mailto:jaj@dyoung.com)  
[www.dyoung.com/jonathanjackson](http://www.dyoung.com/jonathanjackson)



Associate, Patent Attorney  
**Simon Schofield**  
[sxs@dyoung.com](mailto:sxs@dyoung.com)  
[www.dyoung.com/simonschofield](http://www.dyoung.com/simonschofield)



Senior Associate, Patent Attorney  
**Alice Stuart-Grumbar**  
[asg@dyoung.com](mailto:asg@dyoung.com)  
[www.dyoung.com/alicestuart-grumbar](http://www.dyoung.com/alicestuart-grumbar)



Associate, Patent Attorney  
**Nathaniel Wand**  
[now@dyoung.com](mailto:now@dyoung.com)  
[www.dyoung.com/nathanielwand](http://www.dyoung.com/nathanielwand)

