

A CASE-STUDY IN LITERALISM? DISSECTING THE ENGLISH APPROACH TO PATENT CLAIM CONSTRUCTION IN LIGHT OF *OCCLUTECH v AGA MEDICAL*.

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Forthcoming [2011] IPQ XXX

ABSTRACT

The decisions of the Court of Appeal and the judge at first instance in *Occlutech v AGA Medical Corporation* shed important light on the English courts' approach to patent claim construction. More palpably than any other case in recent years they illustrate why the prevailing attitude of the courts, following behind the House of Lord's judgment in *Kirin-Amgen*,¹ may demonstrate an unarticulated bias towards adopting a literal interpretation of the claims. The decisions are also noteworthy for their explicit reference to, and reliance upon, dictionary definitions of the words in issue when determining the patent's scope. Additionally the judgments provide proof, if proof were needed, that equivalency as a tool in patent construction is a concept that is as dead as Mr Praline's infamous parrot.

I OF INTERPRETATIVE FREEDOMS AND A LEGACY

The fundamental reference point for issues of claim construction within UK law is, of course, Article 69 of the European Patent Convention (the EPC). This dictates that the extent of protection conferred by a European patent shall be determined by the claims, which are to be interpreted in light of the description and drawings. The same principle is enshrined within UK statute law by s125(1) of the Patents Act 1977 in similar, but not identical, words. The claims are therefore critical to the determination of a patent's scope, and consequently the approach taken to their interpretation is of deep importance.

The EPC was enacted, in part, to harmonise certain aspects of patent law and practice in those Member States that subscribed to it. It also created the European Patent Office; a central point of application, examination, and grant for European patents. Upon reaching this final stage of this process, the single application (where successful) is released into the wild as a bundle of national patents, to be enforced in the domestic courts of the Member States. Fearing that disparate traditions of claiming practices and approaches to the determination of a patent's scope in the different Member States of the EPC would lead to inconsistent outcomes in the national courts, the Convention's drafters included a further harmonisation mechanism within its text. Accordingly, the Protocol on the Interpretation of Article 69 EPC (the Protocol) was designed to shepherd the Member States along a common path, eschewing extreme interpretations of the patents claims, either over-literal or over-liberal, for a middle ground in which fairness to the patentee is combined with a reasonable degree of certainty for third parties.

¹ *Kirin-Amgen v Hoechst Marion Roussel Ltd* [2005] 1 All ER 667.

2010 marks the 30th anniversary of the House of Lords' decision in *Catnic Components v Hill & Smith*,² a decision that has been heralded as ushering in a new epoch in patent claim construction in the UK.³ The case itself was decided in the context of a 1949 Act patent, a patent to which the (then) new law dictated by the UK's implementation of the EPC did not apply. Yet, in a series of decisions spanning from the latter years of the 1980s through to current times, the English courts have, almost universally,⁴ endorsed Lord Diplock's exegesis of the manner of approaching the construction of a patent, 'purposive construction', laid down in the case as being the correct approach under the new law. The *Catnic* decision is described in favourable terms in the most recent House of Lords authority on patent claim construction, *Kirin-Amgen v Hoescht Marion Roussel Ltd*.⁵ Here Lord Hoffmann explains that the approach adopted by Lord Diplock not only toes the line demanded of the UK as one of the signatories of the EPC, but is also provides an answer to the literalistic errors of the past:

“If literalism stands in the way of construing patent claims so as to give fair protection to the patentee, there are two things that you can do. One is to adhere to literalism in construing the claims and evolve a doctrine which supplements the claims by extending protection to equivalents. That is what the Americans have done. The other is to abandon literalism. That is what the House of Lords did in the *Catnic* case”.⁶

So *Catnic*, viewed through the lens of *Kirin-Amgen*, provides an approach consistent with the Protocol, and moreover is presented as tearing the English courts away from their literalistic interpretative past. Everything is rosy.

However, it has been questioned whether Lord Hoffmann's categorisation of purposive construction as having abandoned the shackles of literalism was an accurate analysis of the English courts' approach to the interpretation of a patent's claims.⁷ The concern is that perceived adherence to the notoriously broad wording of the Protocol (“more of a five-lane motorway than a cable-car to interpretative bliss”⁸) masks an underlying rot at the core of patent protection in which unarticulated presumptions operate to constrict the scope accorded to the patentee.

The decision in *Occlutech v AGA Medical* provides a platform from which to investigate these unarticulated presumptions and to examine the defects and deficiencies in the *Kirin-Amgen* approach to construction of a patent's claims.

II. THE DISPUTE IN OCCLUTECH

The action in *Occlutech* began life as an attack on the validity of AGA Medical Corporation's patent (EP(UK) 808 138) on a medical device for the occlusion of blood vessels and other body

² [1982] RPC 183. The decision was handed down on 27 November 1980.

³ See, for example, Lord Hoffmann's comments to this end in *Kirin-Amgen v Hoescht Marion Roussel Ltd* [2005] 1 All ER 667, at [42].

⁴ There being but one, ill-fated, attempt at rebellion in *PLG Research v Ardon International* [1995] RPC 287.

⁵ [2005] 1 All ER 667.

⁶ *Kirin-Amgen v Hoescht Marion Roussel Ltd* [2005] 1 All ER 667 at [42].

⁷ See, for example, Laddie, 'Kirin-Amgen – The End of Equivalents in England?' (2009) 40 IIC 3, who brands the *Kirin-Amgen* variety of purposive construction as “contextual literalism”, at [18].

⁸ Fisher, 'New Protocol, Same Old Story – Patent Claim Construction in 2007; Looking Back with a View to the Future', [2008] IPQ 133 at 145.

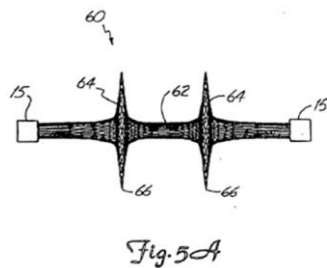
lumens. Occlutech additionally sought a declaration of non-infringement in respect of two of its products – referred to as the “old” and the “new” devices – for use in the surgical remedy of conditions commonly referred to as holes in the heart.

A. The Patent

The patent that Occlutech sought to revoke (and in respect of which it sought its declaration) concerned “intravascular devices for treating certain medical conditions”⁹. Its specification noted that: “in certain circumstances it may be necessary to occlude a patient’s vessel, such as to stop flow through an artery to a tumour or other lesion.”¹⁰ Accordingly, the patent presented, and claimed:

“A collapsible medical device comprising a metal fabric formed of braided metal strands, the device having a collapsed configuration for delivery through a channel in a patient’s [body], and has a generally dumbbell-shaped expanded configuration with two expanded diameter portions separated by a reduced diameter portion formed between opposed ends of the device, characterized in that clamps are adapted to clamp the strands at the opposed ends of the device.”¹¹

A device said to be in accordance with the invention was presented within the specification in figure 5A, reproduced below:



The device was stated to typically be constructed from a braided fabric of monofilament nitinol, a “memory” metal consisting of an alloy of nickel and titanium that, when appropriately treated, will “remember” its pre-defined shape such that it will automatically revert to it if subsequently deformed. This characteristic of nitinol makes it particularly useful for the manufacture of devices that are required to be “introduced through spaces in a squashed-up way”,¹² for example for delivery to a site within the body via a catheter. Such a device can be deformed to fit inside a catheter tube and guided to its destination whereupon it can be released from its prison, allowing it to revert to its original, expanded, form.

B. Occlutech’s Technology

The devices in respect of which Occlutech sought a declaration of non-infringement were also made of braided nitinol. Occlutech’s products were designed to act as occluders to remedy and repair holes in the heart. The devices fell into two general classes: PFO (patent forament ovale) and ASD (atrial septum defect) occluders, each of which was designed to treat a different type of

⁹ [001] of the description.

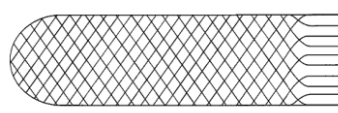
¹⁰ [003] of the description.

¹¹ Claim 1 of the specification.

¹² [2009] EWHC 2013, at [2] per Mann J.

heart defect. Both products were essentially “dumbbell-”, or perhaps “yo-yo-”, shaped¹³ in that they consisted of two larger disks connected by a thinner mid-section, but they differed in the width of their mid-section – that of the PFO being narrower than that of the ASD. Both devices were intended to be collapsed by axial elongation enabling them to be threaded through the hole in the heart before being allowed to revert to their pre-formed shape. Each end of the dumbbell, or yo-yo, would then protrude from a different side of the heart wall, which would be clasped between the disks. The two were thus both held in place by the same “natural inward “pinching” forces which the disks exert along the axis of the device”.¹⁴ Nothing of significance turned on the slightly different designs of the PFO and the ASD; indeed, the judge at first instance, Mann J, declared their “fate (in terms of infringement and non-infringement) ... [to be] exactly the same.”¹⁵

Each design also had a “new” and “old” incarnation: these differed from each other in the details of their creation. In both cases, the braided fabric created from the nitinol wire was formed into a sock with a closed distal end (the ‘toe’) and an open proximal end (the ‘mouth’), which terminated in some loose wires that were not braided (or not braided to the extent that they formed a fabric). Thus:



The wire sock was then placed into a mould that reflected the final desired shape of the product and was heated to a temperature sufficient to set the memory properties of nitinol and make it retain the desired shape following a deformation. As far as their methods of production go, the old and new products then part company, as the methods of fixing the strands at the mouth end of the device differ between the two. In the former, the mouth of the sock had a copper wire wound around it to draw the strands together. The strands were then fed into another nitinol sleeve, in the form of a short cylinder with open ends of slightly larger diameter than the bundle of wires, and the sock/sleeve combination was inverted, so the toe pointed down, to stop the sleeve falling off. The copper wire was then removed and the protruding wires cut flush with the end of the sleeve by a laser beam. The, now short, bundle of ends within the sleeve was then welded, fusing ends and sleeve together to form a welded clot of nitinol, before connecting the device to a delivery adaptor affixed at the weld-site.

The new process differed from the old in that, once moulded, the sock was placed into a template through which the loose ends were left to protrude. The ends were then laser-cut leaving short ‘stubble’ jutting from the level of the template. This stubble was then welded, fusing the wires to each other and forming a nitinol clot to which a steel sleeve delivery adaptor could be fitted. Therefore, whilst the welding operations in both processes occurred at one end

¹³ The reader will note that this was actually one of the questions of construction that the court at first instance was tasked with deciding: whether the Occlutech devices could be said to be dumbbell shaped. The use of “dumbbell-shaped” and “yo-yo-shaped” reflects counsel’s arguments on either side of the dispute to describe a shape in which two wider end-sections are connected via a thinner central portion. See further, below.

¹⁴ [2009] EWHC 2013 at [6].

¹⁵ [2009] EWHC 2013 at [7].

of the sock only, the new process involved fewer steps than the old. The toe, in each case, was woven closed from the outset with the fibres passing from the sock's mouth over the toe and back to the mouth in one continuous weave.

III. THE CASE AT FIRST INSTANCE

At first instance the case came before Mann J. who explained that there were essentially two main questions under consideration: first, was the patent valid?; and second, if it was valid, did Occlutech's two devices (the old and the new) infringe?

A. Validity

By the end of the oral argument, Occlutech's attack on the validity of the AGA patent had been reduced to just one piece of prior art, an international patent application filed by a company in the US:¹⁶ "Boston Scientific". According to its abstract, this application concerned stents for "reinforcement of the lumen of a peristaltic organ, and methods for forming, shaping and heat-treating of such a stent."¹⁷

Boston Scientific essentially disclosed a stent formed by knitting a filament of a suitable material, such as nitinol, into interknit loops so that each row of loops was able to shift axially relative to and independent of the rows on either side. This configuration was stated to be beneficial as it prevented slippage and thereby migration of the stent within the organ. The specification explained that the shape of the stent could be selected to have a variable diameter; in particular noting that it might have a flare at one, or both, ends in order to better anchor it within the organ in question.

Applying the, now well-known, *Pozzoli* restatement¹⁸ of the classic *Windsurfing* test,¹⁹ Mann J. adopted the mantle, noting that the skilled addressee would be a team consisting of a medical devices engineer and a clinician, and looked at the differences between AGA's claimed invention and that of the prior disclosure. He identified three main points of difference: the use of a braided structure, as opposed to Boston Scientific's knitted fabric; whether Boston Scientific disclosed a dumbbell shape, or whether it would be obvious to move to one; and the fact that the prior art was essentially open-ended and intended to facilitate flow, whereas AGA's device was closed at both ends and intended to occlude.

Mr Justice Mann addressed each of these in turn, noting that there were significant problems that lay in the path of concluding that any one of the differences on their own could be bridged by obviousness, let alone when considered as a combination of elements. Therefore the question of whether the invention was obvious could not be answered in the affirmative, and Occlutech's attack on the validity of the patent failed.

B. Infringement

Moving, then, to the issue of infringement, Mann J. stated that significant questions of construction arose in this particular case: notably over the meaning of the words "clamps" and "to clamp" in claim 1 of the patent. Eager, perhaps to avoid admonishment for failing to adhere

¹⁶ WO 94/12136.

¹⁷ See also [2009] EWHC 2013 at [34].

¹⁸ From the Court of Appeal's decision in *Pozzoli SpA v BDMO SA* [2007] EWCA Civ 588.

¹⁹ *Windsurfing International v Tabur Marine* [1985] RPC 59.

to Lord Hoffmann's cautionary words in *Kirin-Amgen Inc v Hoescht Marion Roussel Ltd*²⁰ ("*Kirin-Amgen*") concerning the perils of acontextual interpretation, the judge explained that he was focussing his attention on the factual context in which the terms were used. Reading the claim integers on to Occlutech's device, this translated into asking whether the nitinol braiding in Occlutech's wire sock could be said to be clamped within the meaning of that word in the patent given that it was secured at the mouth end by a weld. If "clamp" was to be interpreted as incorporating affixation by welding then subsidiary questions arose as to whether Occlutech's device could be said to be clamped at "opposite ends" and whether it could be said to be "generally dumbbell-shaped"; it being suggested in relation to this latter point that Occlutech's device more resembled a yo-yo than a dumbbell.²¹

C. "Clamps"

Mann J. began by setting out "the most authoritative correct approach to construction", i.e. that laid down by the House of Lords in *Kirin-Amgen*. In that case, he noted, Lord Hoffmann had stated that the essential question when approaching the language of the claim was to ask "what the person skilled in the art would have understood the patentee to be using the language of the claim to mean."²²

Mann J. went on to extract, from both *Kirin-Amgen* and Hoffmann LJ's (as he then was) judgment in *STEP v Emson Europe Ltd*,²³ a number of principles, which he proceeded to apply to the case. He distilled three main points:

- i) The language of the patent is the starting point and is critical though not finally determinative.
- ii) If there is a conventional meaning of a word or expression, either in the eyes of the skilled team, or in everyday language if the words have no special meaning to the team, then a conclusion that it has some unconventional meaning requires a rational basis.
- iii) Even if a given limitation looks odd, in the sense that one cannot see why the patentee would have included it, there may nevertheless be an undisclosed reason for that oddity and one cannot assume that the oddity is unintended and betokens an unconventional meaning for words, or that the limitation should be disregarded.²⁴

Applying these to the facts, Mann J. noted that, as "clamps" was not a term of art in the field of medical devices, the skilled addressee would take the word to be displaying its common meaning, so that in a general sense "a clamp is some object that exerts force upon two or more other objects in order to keep the latter objects together". This, he noted, "coincides with dictionary definitions".²⁵

Therefore, having begun his judgment by stating he was focusing on the factual context, Mann J now acontextualised the debate and reverted to the definition of "clamp" that appeared in Webster's Third New International Dictionary. Taking this definition as definitive, the judge

²⁰ [2005] 1 All ER 667.

²¹ See [2009] EWHC 2013 at [6] and [80].

²² [2005] 1 All ER 667 at [34].

²³ [1993] RPC 513.

²⁴ [2009] EWHC 2013 at [49].

²⁵ [2009] EWHC 2013 at [50].

continued, noting that: “Something held together by soldering, welding, gluing or similar mechanisms would not naturally, or at least not immediately, fall within that meaning.”²⁶ This said, he explained that one still has to consider “whether the patent has an extended meaning going beyond physical compression by a particular object.”²⁷ In other words, whether there was a rational basis to stretch its definition away from that commonly understood as being signified by the term to cover something unconventional; or to make it mean what, at first glance, it did not.

i) The Pull of Literalism

Put in this way, it is perhaps unsurprising that the court refused to make this jump. The task of taking a word outside of conventional usage and making it signify something else by stretching a starting definition impulsively feels like an intellectually dishonest process. The acontextual meaning shines through any attempt to do such violence to the term simply because the mind identifies it as the “true reflection” of what the word actually means. Therefore any explanation for removing a common definition and replacing it with an unconventional meaning will logically be derided, and labelled irrational, for the same reason.

The result of this exercise is that it will be difficult, if not impossible, to move beyond the literal definition of a word or phrase. Viewing the term in context does little to assist the adoption of a broader meaning; a literal interpretation of a word in context is still a literal interpretation after all. Without the ability to rewrite a claim, or to ignore a claim integer, all that context provides is an indication as to which of the conventional meanings of a word may have been intended by the patent’s creator. But needless to say, offering a choice between literal meanings does not remove the fact that each is, in and of itself, literal.

Furthermore, the method by which the courts approach the construction of claims, dividing them up into fragments for forensic analysis, does nothing to assist the rejection of a path to a literalistic interpretation. When atomising phrases the natural tendency is to treat the individual particles as elements of precision. One assumes that the message conveyed by the whole is simply the sum of its parts, whereas often the true story is much more complicated. Ask anyone that has translated a text from one language to another and they will tell you that a mechanistic, robotic, dictionary-based approach is not a translation at all. And yet within patent law there are many examples of courts (and, by extension, parties) atomising the claims and proceeding in this manner.

ii) A Weld is not a Clamp

It is therefore perfectly understandable that once “clamps” had been singled out for attention, the court would feel bound to look for a conventional clamp in Occlutech’s devices. Aside from the gut reaction that a weld is not a clamp, Mann J. also pointed to five other indicia which reinforced his conclusion.

First, the repetition of the word “clamp” in the phrase “clamps are adapted to clamp the strands” in claim 1 of the patent suggested to the court that the patentee had adopted the conventional meaning of the word. However, this was, as the judge conceded, “not strong” evidence by itself. Second, the case was more firmly supported by the cross reference in the claim to figure 5A (reproduced above), in which something “fairly clearly representative of a

²⁶ [2009] EWHC 2013 at [51].

²⁷ [2009] EWHC 2013 at [51].

clamp” is shown. Third, “[t]he more one reads the description and embodiments the clearer this view becomes”. Therefore, references in [0025] and [0026] of the description refer to “clamps ... [which] will hold the ends of the cut braid together ...”²⁸

The nail was said to be put firmly in the coffin of a broader interpretation of the word “clamp”, however, by the fourth indication: [0026] of the specification “which in terms distinguishes other techniques.” Therefore the fact that it stated that: “one can solder, braze, weld or otherwise affix the ends ...” as alternative methods of preventing fraying, was held to mean that “clamping is said not to indicate these alternative methods of fixing.” The final point against a broader interpretation of the term within the claims was found within [0041] of the specification which detailed how a clamp could be seized. It was hard, according to the court, “to see how this can refer to anything other than a clamp in the ordinary sense of the word, which excludes such things as soldering or welding.”²⁹

iii) A Two-Stage Approach to Construction?

The manner of approaching the question of construction that Mann J adopts in this case is itself interesting as it provides clear illustration of a two-stage approach. First, consideration of the acontextual meaning of the phrase (or as Mann J put it, “the common meaning”); and second, asking whether there is anything in the patent that would lead the skilled person to presume that the patentee had adopted an “unconventional” meaning.

Although it may be argued that this is an inevitable pathway for the mind to adopt, it also has the effect of narrowing the onlooker’s focus as one seeks reasons to legitimise departure from a standard. Separating the analysis out into two stages serves only to accentuate the gulf between that which is considered ‘normal’ usage and that which is unconventional. Here, the effect of adopting such a stage-wise approach was to restrict the patentee to the dictionary meaning of the word used in the claims. Thus:

“clamps means clamps – that is to say that it connotes fixing the strands together by means of an object which exerts a physical fixing and binding force on the strands of the fabric so that they do not unravel. It does not include the other methods of fixing referred to in paragraph 0026 (and perhaps other things as well, but that does not matter for the purposes of this case).”³⁰

Whilst it is easy to see why this approach was adopted – ‘clamps’ is not a particularly highfaluting or complex word; everyone *knows* what it means – consideration of the acontextual definition of the claim term before viewing it in context necessarily narrows the interpretation that is accorded to that element. Familiarity, as they say, breeds contempt. Thus, despite Lord Hoffmann’s statement in *Kirin-Amgen* that there is no presumption about the width of the claims,³¹ the more common the meaning of the words used, the less likely the court will be to consider that convention has been eschewed in favour of a novel definition. The burden of convincing the tribunal that an unconventional (and therefore non-literal) meaning has been adopted is evidently weighty. As noted, by assuming such an approach, and looking for reasons to legitimise

²⁸ [2009] EWHC 2013 at [51].

²⁹ [2009] EWHC 2013 at [51].

³⁰ [2009] EWHC 2013 at [52].

³¹ *Kirin-Amgen* [2005] 1 All ER 667 at [33].

departures from a “common meaning”, we almost necessarily return to a literal construction; beguiled, as we are, by familiarity.

iv) Application to the Facts

Applying, therefore, the common definition of a clamp to Occlutech’s two devices, the old and the new, the judge concluded that neither contained clamps within the meaning demanded by the patent. In respect of the old device, and the constriction of the loose ends of the braided material by the copper wire prior to placing them within the nitinol collar, Mann J considered that this could not fairly be described as clamping. This was for two reasons: first, because the force was not applied with a view to fixing permanently; and second, the force was simply not sufficient to amount to a clamp. Put simply, the wire gathered: it did not clamp. The issue of permanence aside (why a clamp should need to have been intended to be a permanent fixture is not adequately explained by the judge),³² this would appear to be a linguistically straightforward conclusion. Moreover, the nitinol cylinder that was applied after the strands had been gathered was also not considered to be a clamp as it was simply too loose.

The welding of the end of the old device, despite falling within the teaching of the patent and operating in a manner equivalent to that of the dictionary’s definition of the clamp – i.e. designed to prevent the gathered wires from fraying and the braiding consequently unravelling – was also not considered to be a clamp within the meaning ascribed by the court. In support of this conclusion, the judge pointed to [0026] of the specification, which detailed “alternative methods of achieving [the objective of preventing unravelling] to clamping”, including welding. Mann J considered that, far from the patentee having made a dictionary of the specification by including this paragraph, she had “referred to clamps, and then referred to alternatives to clamps.”³³ Thus, in effect, by including a list of elements that could be considered to be equivalent to the ordinary meaning of the claimed integer, the patentee had actually provided a basis for the court to distinguish those methods of affixation. Arguably, therefore, the patentee would have been in a better position if they had chosen not to include their list at all.

In respect of Occlutech’s new device, the court’s reply to the claim of infringement was even swifter: “there is no clamp. Here there is no wire, and no nitinol ring. Welding cannot be clamping”.³⁴ The new device did not infringe either. Given this conclusion, the other points of construction were technically irrelevant; however, as other reasons were advanced for there being no infringement, Mann J. considered that he should also deal with these.

C. Clamps at “opposite ends of the device”

Thus, it had been argued that the reference in the patent to clamps “at the opposite ends of the device” could not be satisfied in any case where one end of the object was formed as a closed weave, as was the case in both Occlutech’s old and new devices. AGA had accepted that Occlutech’s devices did not have a clamp at the distal (toe) end of the sock, but claimed that the single weld spot at the proximal end served the purpose of the clamps referred to in the literal wording of the claim.³⁵ They argued that the use of a single weld in combination with a sock construction in which the toe end was naturally closed satisfied the patent’s requirements as the combination operated in the same way as a pair of clamps would do. This contention was

³² Surgical clamps applied during an operation, for example, would not, under any definition of the word, be considered to be permanently affixed.

³³ [2009] EWHC 2013 at [52].

³⁴ [2009] EWHC 2013 at [65].

³⁵ [2009] EWHC 2013 at [68] referring to AGA’s final written submissions.

rejected by the judge, who noted that the wording of the patent was “specific ... so far as clamps and ends are concerned. There are to be clamps, and they are to be at opposite ends of the device.”³⁶ As far as the court was concerned this was a straightforward issue. The question was simply: does the patent “mean what it says?” Mann J considered that it did.

The submission that the ‘closed end and a weld’ formulation of Occlutech’s devices provided the same functionality as the claimed invention was deftly sidestepped: the court simply noted the argument was “irrelevant” in light of the wording of the patent. “The patent claims one thing; the device is another thing.”³⁷

Thus, the selection of a braided starting material that required clamping at both ends was considered to have been a deliberate choice by the patentee, even if the reasons for so choosing were not readily apparent. Following Hoffmann LJ’s guidance in *STEP v Emson*,³⁸ therefore, the judge noted that where the language was clear then that was the end of the matter. The court did not have to attempt to peer behind the plain meaning of the claim to discover whether the patentee had any reasons for choosing such a narrow interpretation. Instead it was entitled to assume that the patentee must have had some unarticulated motive to use such restrictive language. Again, therefore, Lord Hoffmann’s comment in *Kirin-Amgen* concerning there being no presumption about the width of the claims, is brought into focus and we see that this only operates in one direction: we are not entitled to presume that a patentee will want to claim to the extent of the patent’s teaching, but we are entitled (indeed encouraged) to assume that there may be unarticulated reasons for a patentee to want to restrict their claim.

Evidently, based on the interpretation adopted by the judge, the fact that Occlutech’s devices were only secured at one end meant that they could not be said to be clamped at ‘opposite ends of the device’, and therefore for this reason also they fell outside of the patent’s claims.

D. “Dumbbell-shaped”

Finally, Mann J turned to the “dumbbell-shaped” point. Occlutech had argued that its devices did not conform to this descriptor as their central portion was too short. It also contended that, as the function of the central bar in both the PFO and ASD devices was to pinch or exert inward forces, they could be distinguished from AGA’s claimed invention in which the central bar operated predominantly to separate the end bells.

Mr Justice Mann began his investigation in much the same manner as he had done for the other questions of construction, noting that: “the expression has no specialised meaning to the skilled man, so the words bear their ordinary meaning.”³⁹ However, in contrast to the earlier issues, the judge was careful to stress that the wording of the claim was, in this respect, “generalised”, adding that the term was also treated in a broad fashion in the specification. Thus, Mann J. observed that a figurative interpretation appeared to have been intended for the shape being described. Whether Occlutech’s device was a dumbbell or not was certainly not a question that could be answered by “some rigorously logical process.”⁴⁰ Dictionaries were out, and a broader, more touchy feely, interpretative regime was in. The argument that “yo-yo” would be a better

³⁶ [2009] EWHC 2013 at [72]. Emphasis in original.

³⁷ [2009] EWHC 2013 at [73].

³⁸ [1993] RPC 513.

³⁹ [2009] EWHC 2013 at [79].

⁴⁰ [2009] EWHC 2013 at [80].

descriptor for Occlutech's devices was bluntly rejected: "The fact that another metaphor might be more appropriate for a given device does not determine whether or not the patent's metaphor is itself, and on its true construction, inappropriate for that device."⁴¹ Put simply, they were sufficiently dumbbell-shaped for these purposes.

E. The German and Dutch Decisions

Mr Justice Mann completed his discussion of the issues by turning to the parallel proceedings that had been brought in the German and Dutch courts. The former, he noted, had found in favour of AGA, whereas the latter had delivered a decision that more closely matched his own. Given this split of interpretation on substantially identical facts, the judge considered that he should "at least explain why" he had reached a different conclusion from that of the German court.⁴²

In respect of the clamps versus weld issue, Mann J. noted that the *Oberlandesgericht* (the Düsseldorf Regional Court) was of the opinion that the Defendants (including Occlutech) had conceded at first instance that the old device had a clamp, so the point "was not fully in issue". Further, the German appellate court had noted that the:

"defendants cannot seriously deny that the Nitinol ring receives the ends of the wires and holds them together, even if it is initially only loosely slipped on to the bundle. With that, the spatial arrangement and physical configuration of this ring, corresponds to what claim 1 and 16 of the patent in suit disclose with respect to the clamp."⁴³

If it had to consider the issue, therefore, the Düsseldorf court would have concluded that the 'sleeve plus weld' formulation provided a clamp in the form of the nitinol sleeve, because of its proximity to the strands, and further that the weld also was a clamp as the patent did not rule this possibility out.⁴⁴ In respect of the new device, a clamp was considered to be "physically and spatially present in the form of the steel sleeve [the delivery adaptor subsequently affixed to the weld site] which receives the wire ends and holds them together simply by receiving them".⁴⁵ Mann J respectfully disagreed with this conclusion, noting that he had "real difficulty in understanding how a patent which in terms draws a distinction between clamping on the one hand and welding (and other techniques) on the other can be treated as if it were treating them as the same."⁴⁶

Whether Occlutech's devices had "clamps at opposite ends" was also a question that was addressed by the German court. However, in contrast to the conclusion drawn by Mann J, the *Oberlandesgericht* considered that the teaching of the specification, in particular the presence of the open pocket device therein, made it clear that the patent was primarily concerned with clamping opposite ends of the strands and not opposite ends of the device *per se*. Therefore, a plurality of clamps was not required by the patent, it only demanded "as many clamps as are necessary and meaningful for any given design".⁴⁷ Mann J. did not agree. He explained that this conclusion

⁴¹ [2009] EWHC 2013 at [80].

⁴² [2009] EWHC 2013 at [82].

⁴³ [2009] EWHC 2013 at [84].

⁴⁴ See [2009] EWHC 2013 at [89].

⁴⁵ [2009] EWHC 2013 at [88].

⁴⁶ [2009] EWHC 2013 at [90].

⁴⁷ Quoted in [2009] EWHC 2013 at [91].

seemed to “overlook the fact that the “pocket” alternative is presented as another aspect of a problem, and not as a clear embodiment of the invention, and is distinguished from tubular braids.”⁴⁸ Therefore, in this respect also, Mann’s reading of the patent differed from that of the German court: Occlutech’s devices did not infringe.

IV THE COURT OF APPEAL

By the time that the case came before the Court of Appeal, only one issue was still live; that of infringement. Occlutech did not cross-appeal on validity. In a somewhat unusual turn of events, Lord Justice Jacob was notably absent from the line-up hearing the case. Lord Justice Patten, with whom Pill LJ and Sir Paul Kennedy concurred, gave the only judgment.

A The Arguments of the Parties

Summarising Occlutech’s argument before the court, Patten LJ stated that it was essentially contending that the patent informs “the skilled addressee that protection is being claimed ... only in respect of a device similar in appearance to Figure 5A [above] which uses clamps at both ends in order to secure the strands of metal so as to prevent them from unravelling.”⁴⁹ Occlutech’s own products were described as being made in a “different (and more expensive) way”⁵⁰ than those claimed by AGA. Thus, once again, the weld that secured the strands at the mouth end of Occlutech’s sock structure was first argued not to be a clamp and second, even if it was a clamp, to operate at one end only and not “opposite ends” as required by the claims. These differences, Patten LJ said, were alleged to be sufficient to render Occlutech’s devices non-infringing.

AGA, however, argued along the same lines that had been successful in the German proceedings. It alleged that the teaching of the patent included the use of a pocket method to form a suitable shape for moulding. This method, it argued, would inevitably only have cut strands at one end, and would therefore only necessitate a single clamp. If the resulting device was intended to fall within the patent’s claims then reference to clamps being used in order to “clamp the strands at the opposed ends of the device” must be read to include this part of the teaching. Furthermore, AGA suggested that the lower court had been wrong to conclude that the weld securing the ends of the strands at the mouth of Occlutech’s sock structure was not a clamp.

B The Specification

Turning, then, to the patent specification, the Court appraised the manner in which it introduced the invention; noting in particular that Figure 5A, therein, illustrated the “clamps” referred to in claim 1. Lord Justice Patten, like Mann J before him, also settled upon paragraph [0026], observing that its references to “soldering, brazing and welding” as being alternative means of affixing the end of the braid should be compared to those describing the claimed clamping means in paragraph [0025]. The implication from this comparison is clear: “clamps” are described in [0025]; “not clamps” (but equivalents thereto) are described in [0026]. Paragraph [0027] of the specification also attracted attention on the basis that it was alleged by AGA to support its argument that the teaching of the patent included the use of the sock method of creation that was employed by Occlutech in their devices. Patten LJ also noted that references to “clamps” or “clamping” could be found within paragraphs [0041] and [0060].

⁴⁸ [2009] EWHC 2013 at [91].

⁴⁹ [2010] EWCA Civ 702 at [5].

⁵⁰ [2010] EWCA Civ 702 at [5].

C Construction of the Claims

As an introduction to the issues of construction, Patten LJ stated that the Court had been taken on a journey through some familiar territory. He noted that the governing principles were to be found in Article 69 EPC 2000, which “requires the extent of protection conferred by a European patent to be determined by the claims.” This, he noted, then raises the question of how they should be interpreted, and on this point “some guidance is contained in the Protocol.”⁵¹

As a small comment at this point, Lord Justice Patten’s statement that the Protocol provides guidance on the interpretation of claims is a subtle misrepresentation of both its wording and its function. As Laddie noted, the Protocol is not concerned with how to interpret claims, but rather “how to determine the scope of protection conferred by a European patent.”⁵² The two issues are therefore conceptually distinct. In systems where the determination of the scope of protection is based solely on the interpretation accorded to the wording of the claims then there may be no difference between the two issues, but it is far from clear that the loose wording of Art 69 EPC and the Protocol in fact mandate such an approach. Lord Hoffmann also clearly believes that there is a difference between what Art 69 and the Protocol are setting out to do, as he states, in *Kirin-Amgen*, that “[i]t is a protocol on the interpretation of article 69, not a protocol on the interpretation of claims.”⁵³

Notwithstanding this point, Patten LJ noted that: “These issues and, in particular, their application to cases where the alleged infringer has arguably achieved the same effect as the patent by equivalent means were considered in detail by the House of Lords in *Kirin-Amgen*...”⁵⁴ However, rather than delving in to that judgment directly, he instead adopted the summary of the relevant principles that were first laid down by Jacob LJ in *Technip France SA’s Patent*,⁵⁵ and which were approved, subject to minor modification, by Lord Hoffmann in *Kirin-Amgen* itself. Their lineage can then be traced, through the refinement of Pumfrey J in *Halliburton v Smith International*,⁵⁶ to their most recent outing in the Court of Appeal’s judgment in *Virgin Atlantic Airways v Premium Aircraft Interiors UK Ltd.*⁵⁷ There are 11 points in total that are assumed to be the definitive statement of the principles of claim construction (“the 11-point list”). Patten LJ explained that the focus of this guidance “provides a useful compromise between the perhaps over-literal approach of an earlier generation of UK patent lawyers and the reliance in some countries on what Lord Hoffmann refers to as the essence of the invention in order to displace the consequences of that kind of interpretation.”⁵⁸ Therefore, whilst the specification provides a contextual aid to construction, the language of the claims must be interpreted to decide if it can encompass all of the ideas expressed in the teaching.

i). Equivalents: A Brief Aside

Before addressing the Court’s application of these principles, it is perhaps apposite to pause and examine the 11-point list in a little more detail. Most of the points are relatively uncontentious – Article 69 EPC contains the overarching principle; it states that the claims must be interpreted in

⁵¹ [2010] EWCA Civ 702 at [23].

⁵² Laddie, ‘*Kirin-Amgen – The End of Equivalents in England?*’ (2009) 40 IIC 3, at [12].

⁵³ *Kirin-Amgen* [2005] 1 All ER 667 at [25].

⁵⁴ [2010] EWCA Civ 702 at [23].

⁵⁵ [2004] RPC 919. The dispute is also known as *Rockwater Ltd. v Technip France S.A.*

⁵⁶ [2005] EWHC 1623 (Pat).

⁵⁷ [2009] EWCA Civ 1062.

⁵⁸ [2010] EWCA Civ 702, at [24].

context; acontextual interpretation is banned, as is treating the claims merely as guidelines; etc. However, one point in particular deserves further consideration; not least because the language Patten LJ utilises to introduce the list suggests an eagerness to establish further legitimacy for it.

The list contains, at (ix),⁵⁹ a statement that “there is no general ‘doctrine of equivalents’”. This is evidently the orthodox English view on the matter of claim construction, but it is important to note that Jacob LJ first made this comment at a time before the new Protocol on the Interpretation of Article 69 EPC had entered into force.⁶⁰ The original Protocol was intended to be game changing; a fact made clear by examination of the disparate traditions of interpretation in the prospective member states of the EPC before its entry into force.⁶¹ Yet by the turn of the century when the Member States were meeting once more, this time with reform of the Convention in mind, it was clear that the game had not been changed as much as was hoped. The Basic Proposal for amendment of the EPC put before the Munich Diplomatic Conference charged with this task in November 2000, branded the old language of the Protocol somewhat “unclear”, having regrettably not achieved, “to the extent desired, the goal of ensuring as uniform an application and interpretation as possible”⁶² amongst the EPC’s contracting states, particularly in respect of their treatment of equivalents. As part, therefore, of the process of amendment, a second Article was proposed to be appended to the Protocol, which, on the face of it, appeared to remedy the main deficiency and mandate the adoption of a doctrine of equivalents by the EPC Member States. In the form finally accepted by the Munich Conference, the new Article provides:

“For the purpose of determining the extent of protection conferred by a European patent, due account shall be taken of any element which is equivalent to an element specified in the claims.”

Whilst the precise impact of this amendment has been the subject of some debate,⁶³ it is nevertheless important to note that Jacob LJ’s observations concerning the absence of a general doctrine of equivalents were made in the context of the old, unamended, Protocol. Furthermore, the acceptance of these principles by Lord Hoffmann in *Kirin-Amgen*, and his statement that Article 69 “firmly shuts the door on any doctrine which extends protection outside the claims”,⁶⁴ occurred in similar circumstances. Neither court was directly concerned with the interpretation of the new provision, and neither seriously considered whether the new Protocol was intended to bring about a fundamental change in the prevailing interpretative

⁵⁹ The Bailii version of the judgment refers to it as point (vii), but due to a formatting error there are 3 points with the same numbering. Starting from the beginning of the list, it is point (ix).

⁶⁰ The new Protocol, along with the rest of the EPC 2000, entered into force 13 December 2007, two years after Greece became the 15th contracting state to deposit its instruments of ratification or accession.

⁶¹ See further the discussion in Fisher, ‘New Protocol, Same Old Story? – Patent Claim Construction in 2007; Looking Back with a View to the Future’, [2008] IPQ 133, at 135-41.

⁶² See Basic Proposal for the Revision of the European Patent Convention. Doc MR/2/00, at 59. Available online at:

[http://documents.epo.org/projects/babylon/eponet.nsf/0/43F40380331CE97CC125727A0039243C/\\$File/00002a_en.pdf](http://documents.epo.org/projects/babylon/eponet.nsf/0/43F40380331CE97CC125727A0039243C/$File/00002a_en.pdf). The same comments are made in ‘Revision of the European Patent Convention (EPC 2000). Synoptic presentation EPC 1973/2000 – Part I: The Articles’, [2007] *Special Edition No. 4 OJ EPO* at 68-70.

⁶³ Compare, for example, Lord Hoffmann’s reaction to the provision in *Kirin-Amgen* [2005] 1 All ER 667 at [36] to [44] and [49], and Fisher, ‘New Protocol, Same Old Story – Patent Claim Construction in 2007; Looking Back with a View to the Future’, [2008] IPQ 133.

⁶⁴ *Kirin-Amgen*, [2005] 1 All ER 667 at [44] to [49].

regime. However, as was warned at the time,⁶⁵ the likely result of the courts even hypothesising about whether there was room within Article 69 for a doctrine of equivalents would be an extension of the established view and entrenchment of the belief that this orthodoxy complied with the European standard. In other words, there was fear that debate over the new provision would be headed off at the pass.

It would appear that in *Occlutech* this fear has now crystallised into reality. Thus, without any reasoned debate or in-depth consideration of the matter, the Court of Appeal has effectively adopted Lord Hoffmann's obiter comments concerning the application (or not) of an equivalents analysis as an accurate, and binding, exegesis of the position under the new Protocol. Lord Justice Patten's statement that "[t]hese issues and, in particular, their application to cases where the alleged infringer has arguably achieved the same effect as the patent by equivalent means were considered in detail by the House of Lords in *Kirin-Amgen*..."⁶⁶ appears to be an attempt to bring the case within the ratio of *Kirin-Amgen* and to deftly sidestep any difficult questions of policy on this point. This conclusion is reinforced when the Court comes to apply the law to the facts and to construe the term "clamps" within the claims. It is to this issue that we now turn.

ii) "Clamps"

Just as at first instance, the Court of Appeal turned to the dictionary to assist in the construction of the claim. However, in contrast to the lower court, which made mention of only one external source of wisdom for the meaning of the word, the appellate bench bore witness to a clear case of 'dictionaries at dawn' as Webster's was pitted against the OED on the definition of "clamps". The former, it will be recalled, had been used by Mann J. as the basis for his understanding of the word, whereas the latter was noted to offer a slightly broader definition which the Court considered could, in an appropriate circumstance, be applied to the claims. This was, however, not such a circumstance: the preference was clearly for Webster's definition, which was described as providing the primary meaning of the term. No justification was given for this preference; however, the court did have the following to say in respect of the broader definition:

"whilst the primary or a-contextual meaning of the word denotes an external device applied to the wire ends in order to hold them together, the same word could, in a suitable context, be understood to carry an extended meaning which might include the use of a device which physically bound the strands together even if that was not the only means used to secure them. The OED definition would suggest that this is a possible use of the word."⁶⁷

The argument therefore seems to be that Webster's dictionary contained the literal meaning of the term whilst the OED contained a non-literal, extended, definition of the same. This is clearly nonsense. Both dictionaries evidently provided acontextual definitions as they were both outside of the context of the patent. Whilst one might have been broader than the other, it does nothing to change the fact that the words as defined in the pages of Webster's or the OED were not contextual vis-à-vis the patent. Nevertheless, the Court considered that the latter could, in the right circumstances, be adopted if the addressee considered it appropriate to do so. However, in order for the broader meaning to apply, there must be good reason to depart from Webster's 'ordinary' meaning. Accordingly, the Court addressed the remainder of the specification to

⁶⁵ See Fisher, 'New Protocol, Same Old Story – Patent Claim Construction in 2007; Looking Back with a View to the Future', [2008] IPQ 133.

⁶⁶ [2010] EWCA Civ 702 at [23].

⁶⁷ [2010] EWCA Civ 702 at [39].

determine which of the broad or the narrow the skilled addressee would understand had been adopted.

Therefore the specification was said to teach that the braided ends of the fabric must be secured to prevent unravelling and that this could be done either by clamping the ends [0025] or by other means such as soldering or welding [0026]. Clamping was thus once more considered to have been distinguished from other methods of fastening the loose ends. Furthermore, the Court considered a clamp to be something that binds together other objects by applying to them some degree of external pressure or force, consequently a 'weld' could not be a 'clamp'. AGA's subsidiary argument, that the patent envisaged that the ends could be secured by welding and then a clamp could be added later, was rejected. The Court was of the opinion that the clamp must be the primary and effective means of securing the loose ends.⁶⁸

iii) Analysis

At first glance, all appears ship-shape and Bristol fashion. The context is considered, and the common meaning is identified. Thereafter the specification is addressed in order to divine what the skilled person would understand it to mean. However, the Court seems, somewhat conveniently, to overlook the fact that both definitions are actually acontextual constructions of the word used: each dictionary is self-evidently outside of the context of the patent. Therefore the real question was which of two acontextual definitions the Court considered the skilled person would understand had been adopted: a broad or a narrow one.

The problem, however, with phrasing the question as a choice between a broad and a narrow definition, both of them acontextual, is that this approach is explicitly disavowed by the Protocol on the Interpretation of Article 69 EPC. The statement within the Protocol is clear: the extent of protection of a patent is not "to be understood as that defined by the strict, literal meaning of the wording used in the claims, the description and drawings being employed only for the purpose of resolving an ambiguity found in the claims". Neither it is to be understood at the polar extreme of treating the claims as mere guidelines, and extending protection to that which, "from a consideration of the description and drawings by a person skilled in the art, the patent proprietor has contemplated". Rather, Article 69 is to be interpreted so as to balance these extremes, and combine "a fair protection for the patent proprietor with a reasonable degree of legal certainty for third parties."⁶⁹ Furthermore, in *Kirin-Amgen*, Lord Hoffmann interpreted the first element of the Protocol as a rejection of rules that required the "words and grammar of a sentence to be given their 'natural and ordinary meaning', that is to say, the meanings assigned to the words by a dictionary and to the syntax by a grammar."⁷⁰ Whilst it could be argued that the *Oculitech* Court's approach to the claims did not *require* the words to be given a dictionary meaning, this was just an aid to construction, when combined with the underlying presumption that words bear their ordinary meaning, the practical difference is nil.

iv) Equivalent means?

Having construed the claim in these terms, it is not surprising that the Court also adopted Mr Justice Mann's approach to the question of equivalence. Therefore, the fact that the patentee discussed clamping in para [0025] of the specification and then, in the subsequent paragraph, stated that the securing of the loose ends of the strands could also be achieved by welding and soldering, led the court to conclude that the patentee had chosen to differentiate the two fixing

⁶⁸ [2010] EWCA Civ 702 at [43] to [47].

⁶⁹ Protocol on the Interpretation of Article 69 of the European Patent Convention (as amended).

⁷⁰ *Kirin-Amgen* [2005] 1 All ER 667 at [27].

methods. Welding was not clamping. Furthermore, the specification was not considered to leave room for any argument that the delivery adaptor, which could be affixed to the nitinol clot at some point after welding, could be the clamp referred to in the claims. The adaptor simply “does not clamp [the ends] in the sense of keeping them together. That is done by the earlier weld.”⁷¹

In support of this conclusion, the Court pointed to the distinction made in the patent between clamping and welding at the pre-moulding stage, stating that this was not considered to have been “displaced by any contra-indications in the subsequent paragraphs of the specification or in the claims.”⁷² This, according to Patten LJ, prevented the Court’s rejection of the ‘weld first: clamp later’ argument being criticised as an “over-literal approach”.

Once again, therefore, the fact that the patentee had advanced a list of things that she considered to be equivalent to clamps was used by the Court to restrict the construction of the claims to the ordinary (dare we say literal) sense of the word. This is, in many respects, the most troubling aspect of both the first instance and Court of Appeal’s judgments. It is clear from *Kirin-Amgen* that the House of Lords considered (albeit in obiter statements) that the new Art. 2 of the revised Protocol on the Interpretation of Article 69 EPC 2000, which requires due account to be taken of equivalents to claimed integers, would be satisfied in the UK by considering such equivalents as part of the background common general knowledge of the skilled addressee.⁷³ The approach of both Mann J. and the Court of Appeal in *Oculutech*, however, suggests that any attempt by the patentee to specify what should be considered equivalent to a claimed integer may in fact be used by the court to narrow the claim, as it forms a basis for distinguishing what is claimed from what is not.

Furthermore, the pathway used in both courts to approach the question of construction – two stages: first an acontextual divination of meaning; and thereafter seeking reasons to deviate – is, in and of itself, intellectually corrupt, as familiarity with language means that we automatically question the very existence of the second stage. Thus, it is difficult to see how one can depart from a conventional meaning of a claim term, whilst staying within Lord Hoffmann’s guidance in *Kirin-Amgen*, without providing just the sort of detail that AGA did in this case. If the patentee is silent on the matter of equivalents then there is nothing to suggest that they have intended to stretch the claim term to cover an unconventional meaning. Whereas if they mention “alternative methods of achieving” the claimed objective, then this can now also be used to restrict the claim to the common definition of the words used. Stuck between a rock and a hard place, the entire notion of equivalency is effectively sidelined: this can hardly have been the intention of the drafters of the revised Protocol.

Thus, not only have Lord Hoffmann’s obiter comments, concerning the manner of approaching equivalents, been adopted by the Court of Appeal without question, but “equivalents”, whatever they may be, have also now been cut out of the picture altogether, trapped between two presumptions which are said not to exist. The pincer movement is complete: equivalency is dead.

⁷¹ [2010] EWCA Civ 702 at [45].

⁷² [2010] EWCA Civ 702 at [45].

⁷³ *Kirin-Amgen* [2005] 1 All ER 667 at [49].

v) The Parallel Proceedings

In the context of construing the term “clamps”, the Court of Appeal also made reference to the parallel proceedings in the Netherlands and Germany, just as Mann J had done at first instance. Lord Justice Patten took his lead from an article co-authored by the late Pumfrey LJ and Peter Meier-Beck, justice of the *Bundesgerichtshof* (German Federal Supreme Court), which he took to include a comprehensive summary of the German position on equivalents. This, he said, made it “immediately apparent” that the German approach “does not contain anything similar to the third of the questions posed by Hoffmann J ... in *Improver Corp v Remington Consumer Products Ltd*”⁷⁴ – i.e. whether the reader skilled in the art would nevertheless understand from the claim language that the patentee intended strict compliance with the primary meaning of a word or phrase found within the claim to be an essential requirement of the invention?

From this, Patten LJ concluded that the absence of this element of the test would be “likely to deprive the skilled addressee of one possible explanation of the words used: i.e. that they have been deliberately chosen so as to narrow the scope of the claims over the teaching in order to accommodate the considerations described by Lord Hoffmann [in *Kirin-Amgen*].”⁷⁵ However, he then deftly sidestepped further consideration of the differences by concluding that it was not feasible to conduct an exhaustive comparison of the relevant principles of the German law so as to be able to express a confident view whether the underlying principles at play in the decisions were the same.

vi) Clamping the Strands at “Opposite Ends of the Device”

As at first instance, having concluded that Occlutech’s weld was not a clamp within the meaning of the claim, there was no real need for the Court to consider the second issue of construction – clamping at “opposite ends of the device”. However, just as in the lower court, Patten LJ addressed the arguments that had been advanced by counsel on this matter: presumably because they cemented his opinion that there was no infringement. Accordingly, he noted that the only real obstacle to a straightforward conclusion that two clamps were required, one at each end, was the reference in paragraph [0027] of the specification to the “use of a flat sheet of woven fabric which, once inverted as suggested in the teaching, will result in all of the loose strands being gathered at one end of the device.”⁷⁶ This open pocket formulation had, as noted, convinced the German court to construe the references within the claim to “clamps” to be interpreted so as to accommodate this teaching. Thus, the *Oberlandesgericht* had concluded that the strands were the critical items to be clamped and not the opposed ends of the device.

The Court of Appeal therefore considered that the fundamental question was whether “the addressee will or should assume that the entirety of the [patent’s] teaching ... was intended to be included within the claims.”⁷⁷ This is an issue of critical importance, as it formed one of the main points of distinction between the decision of the *Oberlandesgericht* and that of Mann J at first instance. Patten LJ considered that the words of the patent must be the necessary starting point: “Unless he has access to material from the file which gives him a particular insight into the thinking and motives of the patentee, the addressee has only the[se] words ... to go on.”⁷⁸ Although not explicitly stated as such, the words Patten LJ refers to in this quote must logically

⁷⁴ Citation omitted. [2010] EWCA Civ 702 at [28].

⁷⁵ [2010] EWCA Civ at [29].

⁷⁶ [2010] EWCA Civ 702 at [48].

⁷⁷ [2010] EWCA Civ 702 at [49].

⁷⁸ [2010] EWCA Civ 702 at [50].

be the terms of the claims, as there is little point in trying to gain insight into the patentee's intention to include or exclude the teaching in the specification from that teaching itself.

Despite, once again, there being no presumption about the width of claims:⁷⁹

“The circumstances in which the patentee is to be assumed to have departed from their conventional meaning are therefore likely to be rare and the skilled addressee will, in practice, give them an extended meaning only where the idea encompassed in the invention is difficult to define or where the language of the patent as a whole compels that conclusion.”⁸⁰

Quite what a presumption looks like if this is not one is anyone's guess.

The Court accordingly considered that the skilled person would not take a different view of the scope of claim 1 “from that which the natural meaning of the words ... would have given him.”⁸¹ Addressing the construction that the German court had placed upon the claims, Patten LJ stated that the *Oberlandesgericht* proceeded on the basis that “all aspects of the teaching ... were intended to be encompassed in the claims.” The third *Improver* question, he noted, had not been asked and the possibility that the patentee had deliberately limited the scope of their claims was not even considered. “The resulting analysis is therefore open to the very criticism ventured by Lord Hoffmann in paragraph 33 of *Kirin-Amgen*: i.e. that it presumes that the patent claims as much as it teaches.”⁸²

The irony of this statement is profound. The German court may apparently be criticised for operating under an overt presumption that requires the addressee to assume that the patentee intended to include all that falls within the patent's teaching within the scope of the claims unless this cannot have been their intention. However, when the English courts effectively operate under a polar opposite presumption that is never articulated as such, indeed whose existence is denied, this is OK?

Returning to the issue of construction, Patten LJ explained that the skilled addressee “would therefore have read the reference to clamps (plural) as a distinctive and necessary feature of the invention.”⁸³ As such, Occlutech's device, which had only one site at which the loose ends of the nitinol braid would have to be secured, could not be said to have clamps (plural) at opposite ends. Accordingly, for this reason also, it did not infringe.

V THE PROBLEM BROUGHT BY FAMILIARITY

Patten LJ's approach to the main issue of construction is disarmingly straightforward: The purpose of AGA's “clamps” was evidently to control the loose ends of the nitinol braiding and to prevent them from unravelling. That a clamp also presented an attractive site for affixing a delivery adaptor was merely an adjunct to this primary purpose. Whilst other devices in which

⁷⁹ As per Lord Hoffmann's comments in *Kirin-Amgen* [2005] 1 All ER 667 at [33].

⁸⁰ [2010] EWCA Civ 702 at [50].

⁸¹ [2010] EWCA Civ 702, at [58].

⁸² [2010] EWCA Civ 702, at [57].

⁸³ [2010] EWCA Civ 702, at [58].

the loose ends of the braided nitinol were controlled by welding, brazing, soldering, or otherwise affixing the strands together could easily be envisaged as evidently obvious departures from the claimed language, the straightjacket that *Kirin-Amgen* places upon the interpretation accorded to the claims means that it is practically impossible to escape the conclusion that ‘clamps is clamps’; no more and no less.

We have seen this type of approach before: for example, in *Wheatley (Davina) v Drillsafe*, the majority of the Court of Appeal considered that the interpretation of the phrase “centre-less hole-cutter” was simply a “matter of first impression”.⁸⁴ This is a worrying, but admittedly honest, demonstration of the core problem that confronts us when answering questions of claim construction. The familiarity that one personally has with the “common meaning” of a word or phrase lulls us into a false sense of security when attempting to determine what other parties may have been trying to communicate. In addition, as *Occlutech* and other cases⁸⁵ have shown, familiarity can also cause those presiding over cases of construction to forget that it is not strictly the court’s eyes that are supposed to interpret the claims, it is those of the skilled addressee. The point is aptly summarised by (then) Chief Judge Mayer in the US case of *Fromson v Anitec Printing Plates Inc*, when discussing the meaning of the word “anodization” in the claims of a patent:

I “know” what anodization means from my own undergraduate studies and experiments; the concept is not difficult and I need no further education to grasp it. I happen to have a dictionary in my chambers from the era pertinent here, which would confirm my “knowledge” about anodization.... But, I am neither an expert in the field nor one of ordinary skill in the art despite how much I think I “know” about a process I once studied.⁸⁶

The *Occlutech* courts were evidently less aware of the pitfalls that this kind of familiarity breeds.

A. Further Problems

A further portentous turn of phrase that may be seen to represent a subtle shift in the approach to claim construction can be discerned from the language that Patten LJ uses to summarise the guidance found in the 11-point list.⁸⁷ In *Kirin-Amgen*, Lord Hoffmann followed closely in Lord Diplock’s footsteps when he stated that the quintessential question of construction required investigation of what the skilled addressee would understand the patentee to be using the language of the claim to mean.⁸⁸ In *Occlutech*, by contrast, Patten LJ states that the focus of the prior guidance, the 11-point list, concentrates on “what the skilled addressee would have understood the language of the claims to mean.”⁸⁹ The patentee and her intentions are removed from the equation. The difference between the formulations is subtle, but is nevertheless significant as the latter more clearly allows emphasis to be placed on the ordinary and customary meaning of the claim terms. Whilst this may be dismissed as Patten LJ simply ‘getting it wrong’, it does call into question just how clear the *Kirin-Amgen* formulation really is if an appellate tribunal can make such a mistake.

⁸⁴ Per Sedley LJ, in *Wheatley (Davina) v Drillsafe* [2001] RPC 133, at [68].

⁸⁵ Such as, for example, *Daily v Berbet* [1993] RPC 357, in which Balcombe LJ threw off the mantle of the skilled addressee entirely when he stated (at 361) that: “A ‘braking arrangement associated with the rear wheels’ to me connotes a braking arrangement which acts either directly or indirectly on the rear wheels, causing them to lock.” (emphasis supplied).

⁸⁶ 132 F3d 1437, at 1448.

⁸⁷ i.e. that first laid down by Jacob LJ in *Technip France SA’s Patent* [2004] RPC 919.

⁸⁸ *Kirin-Amgen* [2005] 1 All ER 667 at [34].

⁸⁹ [2010] EWCA Civ 702 at [24].

It also mirrors very closely the first stage of the U.S. test for infringement of a patent in which the court asks, as part of its assessment of the literal meaning of a claim term, what the language means to the person having ordinary skill in the art (the U.S. equivalent of the skilled addressee). This has been described as allowing the “adopt[ion of] a strict constructionist approach to literal infringement”⁹⁰, which in many respects embodies a “meticulous verbal analysis” of the type cautioned against by Lord Diplock in *Catnic*.⁹¹

Thus, the U.S. Court of Appeals for the Federal Circuit⁹² (CAFC) has held, when working within the first, literal, stage of construction, that whilst the words utilised to demarcate the invention “are generally given their ordinary and customary meaning,”⁹³ the court should also look to see if the patentee has in fact used this term in a manner consistent with this meaning. Furthermore, it has noted that it is a “well-established axiom in patent law that a patentee is free to be his or her own lexicographer, ...and thus may use terms in a manner contrary to or inconsistent with one or more of their ordinary meanings.”⁹⁴ Put another way: the claims may be understood in a manner that deviates from the conventional definition of the words used only where there is good reason for doing so. The similarity to the Court of Appeal’s formulation in *Occlutech* is striking.

In contrast to the UK, however, the U.S. augments this narrow, literalistic, interpretation with recourse to the doctrine of equivalents. In elementary terms, this allows protection to be extended to equivalent means having the same function, operating in the same way and achieving the same result as the claimed integer.⁹⁵ The operation of the doctrine has been described by the U.S. Supreme Court as necessary to “temper unsparing logic and prevent an infringer from stealing the benefit of an invention.”⁹⁶ The reader will note that Lord Hoffmann described it in less favourable terms in *Kirin-Amgen* when he stated that it had been declared as “arbitrary and unworkable” by the CAFC in *Festo Corporation v Shoketsu Kinzoku Kogyo Kabushiki Co Ltd*. 234 F3d 558 (2000).⁹⁷ Accordingly, his Lordship proclaimed that “[i]f literalism stands in the way of construing patent claims so as to give fair protection to the patentee, there are two things that you can do. One is to adhere to literalism in construing the claims and evolve a doctrine which supplements the claims by extending protection to equivalents. The other is to abandon literalism.”⁹⁸ He concluded that the U.S. had done the former and the UK the latter. However, following *Occlutech* we must now question just how accurate a summary this statement really is.

⁹⁰ Cole, *Fundamentals of Patent Drafting*, (London, The Chartered Institute of Patent Attorneys, 2006), at 114.

⁹¹ i.e. “the kind of meticulous verbal analysis in which lawyers are too often tempted by their training to indulge.” Per Lord Diplock in *Catnic Components v Hill & Smith* [1982] RPC 183.

⁹² The U.S. equivalent of the Court of Appeal with exclusive jurisdiction for all patent appeals.

⁹³ *Vitronics Corp v Conception Inc* 90 F.3d 1576 (1996, CAFC), at 1582.

⁹⁴ *Hormone Research Foundation v Genentech* 904 F.2d 1558 (1990, CAFC), at 1563 (citations omitted). Similar comments can be found in *Johnson Worldwide Associates, Inc v Zebco Corp*, 175 F.3d 985 (1999, CAFC), at 990.

⁹⁵ The famous “function, way, result” test having been laid down by Justice Sanford in *Sanitary Refrigerator Co v Winters* 280 US 30 (1929, Supreme Ct), was then adopted by Justice Jackson when he delivered the leading judgment in the seminal case of *Graver Tank v Linde Air Products*, 339 US 605 (1949, Supreme Ct).

⁹⁶ Per Justice Jackson in *Graver Tank v Linde Air Products*, 339 US 605 (1949, Supreme Ct) at 608, quoting Judge Learned Hand in *Royal Typewriter Co. v Remington Rand*, 168 F.2d 691 (1948, Circuit Court of Appeals: 2nd Circuit).

⁹⁷ 234 F3d 558 (2000). Lord Hoffmann’s comments can be found in *Kirin-Amgen* [2005] 1 All ER 667 at [39].

⁹⁸ See *Kirin-Amgen* [2005] 1 All ER 667 at [42].

VI SO WHAT DOES THE DECISION IN OCCLUTECH MEAN FOR CLAIM CONSTRUCTION?

Occlutech is, in some respects, an unremarkable decision of the Court of Appeal. The end result, that the alleged infringement did not fall within the claim, seems correct. However, it does appear to be a case of ‘right result, wrong approach’. This said, *Occlutech* is one of many that have ‘applied’ the *Kirin-Amgen* guidelines and have centred their analysis on the 11-point list of key principles endorsed by Lord Hoffmann in that case. It does not express an intention to change any aspect of construction, and yet provides evidence of a subtle shift in the language and techniques used to determine the scope of a patent’s claims in the UK. It presents a glimpse of the presumptions that in fact underlie the process of claim construction in the UK, and gives us a clear indication of the some of the reasons why ‘purposive construction’ is ‘contextual literalism’ under another name. Moreover, it provides a snapshot of the problems with *Kirin-Amgen* itself, and the fact that without expressly disavowing the Protocol on the Interpretation of Article 69 EPC the case has effectively excised Article 2’s instructions to take equivalents into account.

The introduction of the dictionary as an aid to construction is also concerning, leading as it does to fights between the parties as to which of a series of dictionaries provides the most accurate (read: their most preferred) definition of the claim term. The practice in the U.S. is enlightening in this respect. Even under the hard-line “dictionary first” approach to claim construction,⁹⁹ in which it was held that “[c]onsulting the written description and prosecution history as a threshold step in the claim construction process, before any effort is made to discern the ordinary and customary meanings attributed to the words themselves, invites a violation of our precedent counseling [*sic*] against importing limitations into the claims,”¹⁰⁰ an almost complete lack of consistent judicial guidance on the choice of dictionary left both patentee and defendant free to choose the source that best supported their argument.¹⁰¹ Dictionary squabbles reigned. As will be imagined, this did nothing to aid either the predictability or fairness of the proceedings. Similarly, the bald conclusion that Webster’s offered a better definition of “clamp” than the OED in the *Occlutech* dispute does nothing to enhance either of the Protocol’s goals. The use of a dictionary also entrenches the view that the literal construction of a word or phrase is the only logical outcome of the interpretative process. When considering that the specification and claims of a European Patent may well have been translated from the original filing language before coming before the court, the fallacy of this approach is immediately apparent.

None of this would matter if the UK were going it alone on the issue of claim construction. However, the simple fact of the matter is that it is not. It is now, and has been for over 30 years, part of the EPC, which brings with it certain obligations and responsibilities. That it is possible for one EPC State to operate under a presumption that the patentee has intended to capture all of the teaching of the patent within the scope of their claims, and yet it is also possible for another to (effectively) presume the exact opposite, is in itself worrying. However, the fact that the latter State does not even acknowledge that this presumption is applied, and instead insists

⁹⁹ See Cook, ‘Constructive Criticism: Phillips v AWH Corp and the Ambiguity of Patent Claim Construction Principles’, (2006) 55 *University of Kansas Law Review* 225, at 237.

¹⁰⁰ *Texas Digital Systems Inc v Telegenix* 308 F3d 1193 (2002, CAFC), at 1204.

¹⁰¹ See comments to this end in Miller & Hilsenteger, ‘The Proven Key: Roles and Rules for Dictionaries at the Patent Office and the Courts’, (2005) 54 *American University Law Review* 829, at 864-70.

that there is “no presumption about the width of the claims”, says little for the intellectual honesty of this approach to construction.

So this is the core of the problem. Purposive construction, with its unarticulated predilection towards literalism, potentially belies an intellectually unsatisfactory approach to interpreting a patent’s claims. The doctrine of equivalents is much derided in English patent circles, but at least such a doctrine does not invite violence to be done to the words of the claims in order to stretch them to fit an infringement. Instead it appreciates that the claim’s drafter is not perfect and that sometimes one word is chosen where another would more effectively convey the underlying meaning. It also acknowledges that the inventive concept at the core of a patentee’s creation forms the benefit that society gains from their endeavours, and that the patent’s scope of protection should therefore be influenced by this contribution. Under the *Kirin-Amgen* approach as applied in *Oculutech*, by contrast, the courts look for the “conventional meaning” of a claim term before seeking “reasons to justify departure from convention”; in other words, reasons to justify giving a claim a meaning that it does not, as a matter of first impression, possess. Unless, therefore, one adopts Humpty Dumpty’s approach to language,¹⁰² one feels constrained by a self-evident meaning, or set of meanings, and will naturally tend towards literalism. The fact that this remains unacknowledged by the English courts is not simply unfortunate; it is the worm at the rotten core of construction.

¹⁰² “‘When I use a word’, Humpty Dumpty said in rather a scornful tone, ‘it means just what I choose it to mean – neither more nor less.’ ‘The question is’, said Alice, ‘whether you can make words mean so many different things.’ ‘The question is’, said Humpty Dumpty, ‘which is to be master – that’s all.’” Lewis Carroll, *Through the Looking-Glass* (New York, Cosimo Classics, 2010), ch 6 at 57. Text originally published 1872.