



29th December 2008

PATENTS ACT 1977

BETWEEN

Mr Nelson Nazareth

Claimant

and

The Secretary of State for Defence

Defendant

PROCEEDINGS

Application for revocation under section 72 in respect of patent numbers
GB2333250, EP0942781, and EP1080178

HEARING OFFICER

J Elbro

PRELIMINARY DECISION

Background

- 1 An application for revocation of patent numbers GB2333250 ('250), EP0942781 ('781), and EP1080178 ('178; collectively, "the patents") in the name of The Secretary of State for Defence ("the defendant") was made by Mr. Nelson Nazareth ("the claimant") on 7th March 2007.
- 2 GB2333250 was filed on 14 Jan 1999, claiming priority of 16 Jan 1998, and was granted on 5 June 2002. The claims relate to a reaction vessel using ECP with a container and cap member which projects into the container. EP0942781 was filed on 20 Nov 1997, claiming earliest priority of 6 Dec 1996, and was granted 26 Oct 2005. The claims relate to an apparatus for effecting reactions using electrically conducting polymer ("ECP") to heat reagents through a series of different temperatures. EP1080178 was filed on 17 May 1999, claiming priority of 23 May 1998, and was granted on 7 Dec 2005. The claims relate to a system for culturing biological materials with ECP, power supply and control means.
- 3 The progress of the proceedings up to this point has not been entirely conventional. The proceedings are formally at the stage of being ready for the filing of the claimant's evidence in chief – various versions of the statements and

counterstatements having been filed. However, the claimant has already filed a significant number of documents which primarily appear to be in the nature of evidence to support his allegations. In addition, the correspondence from both parties hints of a broader conflict relating to the technology in these patents, which would appear to have only tangential relevance to the present proceedings but has increased the volume of material.

- 4 The defendant has requested that the cases brought against them in respect of each of the patents be struck out, or alternatively decided summarily in their favour. This came before me at a hearing on 29 October 2008. At the hearing, the claimant represented himself and the defendant was represented by Miss Denise McFarland.

The inventions

- 5 The inventions claimed in the patents are closely related to each other. Each claims a vessel which comprises an electrically conducting polymer (“ECP”). It is apparent from the text of the patents that one of the key uses of these vessels (at least when they were conceived) was as (part of) a thermal cycling device in DNA amplification methods such as polymerase chain reaction (PCR).

- 6 Claim 1 of ‘250 reads as follows:

A reaction vessel according to the present invention comprises a container, a cap member, and an electrically conducting polymer which is arranged so as to heat reagents in the reaction vessel when current is supplied to said polymer, the cap member being formed so as to project into the container to reduce the capacity thereof and to create a space there between of substantially consistent properties.

- 7 Claim 1 of ‘178 reads as follows:

The use of a system comprising an electrically conducting polymer, a power supply and control means therefore, as an incubation means for the culture of biological materials; wherein the polymer is in the form of a film which is either contiguous or integral with an incubation vessel or a coating on an internal or external surface of an incubation vessel, and wherein the control means is set to heat said polymer so that a predetermined culture temperature is reached and held within the incubation vessel.

- 8 Claim 1 of ‘781 reads as follows (reference numerals omitted):

Apparatus for effecting reactions, said apparatus comprising a reaction vessel suitable for holding reagents and comprising an electrically conducting polymer which emits heat when an electric current is passed through it, and control means for controlling supply of current to the polymer, said control means being arranged to supply electric current so as to produce a sequence of different temperatures in reagents held within the reaction vessel, the polymer being connectable to an electrical supply via the control means.

The law

9 The Comptroller's powers to revoke a patent on the application of another person are set out in section 72(1) of the Patents Act 1977. This reads in part as follows:

72(1) Subject to the following provisions of the Act, the court or the comptroller may on the application of any person by order revoke a patent for an invention on (but only on) any of the following grounds, that is to say-

(a) the invention is not a patentable invention;

(b)...

(c) the specification of the patent does not disclose the invention clearly enough and completely enough for it to be performed by a person skilled in the art.

...

10 The Patents Rules 2007 set out the criteria under which the Comptroller may strike out a claim or give summary judgment.

83(1) A party may apply to the comptroller for him to strike out a statement of case or to give summary judgment.

(2) If it appears to the comptroller that-

(a) the statement of case discloses no reasonable grounds for bringing or defending the claim;

(b) the statement of case is an abuse of process or is otherwise likely to obstruct the just disposal of the proceedings; ...

he may strike out the statement of case.

(3) The comptroller may give summary judgment against a claimant or defendant on the whole of a case or on a particular issue if-

(a) he considers that –

(i) that the claimant has no real prospect of succeeding on the case or issue, or

(ii) ...; and

(b) there is no other compelling reason why the case or issue should be disposed of at a hearing.

11 The defendant did not dispute that the power of the Comptroller to strike out or give summary judgment is one which should be used sparingly.

Claimant's case for revocation

12 After a degree of uncertainty in the early correspondence, the claimant's case as set out in his amended statement of claim is based solely on section 72(1)(c) – that the specification of the patent does not disclose the invention clearly enough and completely enough for it to be performed by a person skilled in the art (I refer to this as “insufficiency”).

13 The claimant bases this allegation on five separate points (point (d) is not alleged

in respect of EP 1080178; apart from this the statements of claim are in identical terms except in the references to patent claim numbers). In summary, they are:

- (a) The introduction of electricity in the process renders interferes with PCR and other biological reactions which therefore make the processes of the patents unreliable as to make the process incapable of industrial application.
- (b) There is no material available to the skilled person which can be used to produce electrically conducting polymer (ECP) which is capable of performing the processes of the patents.
- (c) There is inadequate disclosure about the critical electrical requirements of the apparatus, including technical parameters, connections to vessels, and electrical and thermal parameters.
- (d) There is inadequate disclosure of the cooling system which is required to achieve the aims disclosed by the patents i.e. rapid processes.
- (e) There is inadequate disclosure of the thermal reading/control in that it is necessary to for the skilled man invent a system of ultra-rapid multiple channel independent thermal control and associated software.

The Striking out and Summary Judgment applications

- 14 The striking out application was made under rules 83(2)(a) and (b) (set out above). With respect to the application under 83(2)(b) (abuse of process), Miss McFarland explained that this did not really have a life of its own – the alleged abuse of process was that there were no reasonable grounds for launching the revocation action (which is, of course, the allegation under 83(2)(a)).
- 15 Miss McFarland drew my attention to a previous hearing officer’s decision *Eugenie Sergeyeovich Aleshin v Sony United Kingdom Ltd* BL O/056/05 (“Sony”). In that case, the hearing officer found that Mr Aleshin’s case had no reasonable prospect of success and accordingly struck out the claim. She argued that this showed where the bar is set for striking out and that Mr Nazareth plain fell on the wrong side of it.
- 16 The fundamental point of her argument was that Mr Nazareth’s allegations all appeared to relate to whether or not a commercially viable product could be produced at a given cost point. (Although not strictly relevant to the current proceedings, I gather from the correspondence that Mr Nazareth’s company, Biogene, had in the past been engaged on such a project – the outcome appears to have been unhappy). This was not the test for sufficiency – which was, quite simply, “could the skilled person make it work?”.
- 17 She further urged me not, in essence, to err on the side of allowing the case to proceed simply because I saw a “scintilla” of possibility in the claimant’s case. She argued that were I to instead of striking out, require Mr Nazareth to submit an amended statement of claim, that would simply increase cost and drag the proceedings on to ultimately no gain.

- 18 The claimant's response was generally to assert the correctness of his allegations, particularly (a) and (b) above, which were the only two he expanded on at length in the hearing. I will go through these shortly, but will first say a few words on the only background document discussed at the hearing.

The Optisense document

- 19 Although, as I noted above, there are a number of documents already in the proceedings, only one (the "Optisense" document) was relied on by either side. It describes testing the efficacy of an ECP vessel to conduct PCR. It was originally submitted in correspondence by Mr. Nazareth and used by him at the hearing to buttress his case. It was seized on by Miss McFarland as evidence that the inventions claimed in the patents work – and thus, she argued, that there was clearly no merit in any sufficiency objections.
- 20 I do not believe this document takes us as far as she suggests. It certainly appears to disclose use of a system which, on first blush, appears to fall within the scope of the main claims of the patent. This might (although I do not decide the point) show that the inventions claimed have been performed and are thus not physically impossible. But that is not sufficient to show that the disclosure of the patents is sufficient. Firstly, there is no evidence as to the characteristics of the researchers – can they be taken to correspond to the notional skilled person? But even more pertinently, there is no evidence or indeed suggestion that the researchers were acting solely on the basis of instructions in the patents. They may well have had access to information not in the common general knowledge or the patents, and thus what they were able to do does not necessarily correspond to what was enabled by the patents.
- 21 Mr Nazareth used the document to support his contentions that it is not possible to carry out the inventions. He pointed to a number of difficulties identified by the researchers in getting the apparatus to work well. I will return to this point later, but will note at this stage that these difficulties appear to relate to using the apparatus for PCR.
- 22 Before leaving this document I should note that prior to the hearing there had been some confusion over whether this document should be subject to an order to preserve its confidentiality. However, at the hearing, both parties agreed that there were no confidentiality issues relating to it.

Reason (a) – action of electricity on process

- 23 Mr Nazareth's statements of claim (for all three patents) on this point read as follows:

"Electricity interferes with the reliability of PCR – and PCR is the main outlet for the patent, though electricity is likely to suppress many other biological and chemical reactions and no mention is made of the need to electrically insulate the vessel contents;

- The applicant can show both through published literature and independently verified experimentation that the presence of an electrical

current within a reaction vessel is able to electrochemically interfere with a number of biological and chemical processes.

- The applicant can demonstrate both theoretically and practically that an 'ECP' vessel permits ingress of an electrical current."

24 At the hearing Mr Nazareth's arguments essentially mirrored the allegation in the claim, pointing out passages in the Optisense document he believed supported his view. This boils down to an objection that electricity (the "malevolent spirit" as Mr Nazareth colourfully labelled it at the hearing) can reduce the efficiency of the vessel if it is not insulated. This is a long way from showing that the invention does not work – i.e. that it is no use as a reaction vessel (as in claims 1 of '781 and '250) or as an incubation means for the culture of biological materials (as in '178). I agree with the defendant that even if one accepts Mr Nazareth's assertions on this point as true, they do not show that electrical insulation is necessary to put the inventions into effect. Therefore the lack of reference to it in the patent cannot render the patent insufficient.

25 Mr Nazareth's position on this point was further undermined when at the hearing he accepted that an embodiment disclosed in '781 would be sufficiently electrically insulated, in which (column 3, lines 26-29),

'a polymer sheath can be used to adapt apparatus using pre-existing reaction vessels. In particular, a strip of flexible polymer film can be wrapped around a reaction vessel of various different sizes and shapes'.

26 This feature is claimed in claim 6 of '781. Mr Nazareth emphasized that it is not in claim 1. However, anything falling within the scope of claim 6 necessarily falls within the scope of claim 1, on which it is dependent. In terms of disclosure, therefore, Mr Nazareth appears to have acknowledged that, regarding this feature at least, there is sufficient instruction in the patent.

Reason (b) – availability of ECP

27 The statements of claim on this point read:

"There is a totally inadequate characterisation of ECP. No composition is provided and the Caliente materials suggested were found to be inconsistent, meaning that a suitable material can only be achieved by a lengthy iterative process;

- The only material mentioned is a Caliente patent. This material is firstly no longer in production. Secondly, it could only be processed by mechanical means, i.e. it was not suited to mass production, and further it displayed poor thermal conductivity and electrical reproducibility.
- There is no further attempt made in any of the claim to provide an adequate definition of ECP, in that the material that the vessel is to be constructed of, changes entirely the properties of the device.
- The only way to specify such a material is by a lengthy, and hence

prohibitive, process of iteration.”

- 28 The claimant made much of this point at the hearing. In particular, he described the Caliente material as good for heating pizza, but not appropriate for the sorts of reaction vessels in the patents.
- 29 The defendant argues that all that is necessary is that the ECP is suitable to provide heat – if it does this, it will meet claim 1. Further, they assert that the Caliente material was available at the filing date of the patents, and in any case is described in patent applications referenced in the patents.
- 30 It seems to me that the defendant is almost certainly right on the availability of the Caliente material. Further, in arguing the unsuitedness of this material, the claimant appears to be pointing to problems with mass production rather than asserting absolutely that it will not work at all. (Thus, “such a material” in the third bullet means “one which doesn’t suffer the problems noted in the previous bullets”). Similarly to the previous point, this means that even if the claimants’ assertions are proved, they do not show insufficiency.

Reasons (c), (d), and (e) – critical electrical, cooling, and control requirements

- 31 These three reasons are more confusing than the previous two. I find it hard to discern where the claimant is making very general objections – nothing will work because there’s not enough information on how to make electrical connections, cool the vessel, or thermal reading/control – or whether he is concerned with some of the detail developed in some embodiments and later claims.
- 32 The reasons are all listed against the claim 1s, which implies the former (indeed, reason (d) is not cited against any specific claim, implying it goes to some underlying invention). If this is the case, they appear bound to fail, as the inventions of claim 1 would appear to make only very basic (if any) requirements regarding these features, which are clearly met, as pointed out by the defendant’s counterstatement, by statements in the specification.
- 33 The way the reasons are phrased, however, (particularly reference to specific features such as use in a thermal cycler, rapid heating/cooling which are clearly not in the main claims), implies that the claimant is instead arguing against the sufficiency of the specification regarding the invention disclosed in subsequent claims, although he has appeared to have failed to identify claims which clearly relate to his allegations.
- 34 There is also much reference to commercial viability. As noted above, this is not the test for sufficiency.

Other grounds for revocation

- 35 At the hearing Mr Nazareth indicated that the section 72(1)(c) grounds were only what he considered to be his “best” grounds. He also considered that the patents should be revoked under sections (a), (b), (d), and (e), and indicated a willingness to amend his pleadings to cover these grounds also. However, he did

not clearly set out these other grounds.

36 He did suggest, however, that part of his overall belief was that some aspects of the invention are not novel or inventive. In response to a suggestion that his argument at the hearing focused on whether the vessels were suitable for use in PCR (which does not go to the main claims) he said “well, what else is there?”

Conclusion

37 In summary, the claimant's currently pleaded statement of claim appears to be clearly deficient in a number of aspects. The underlying problems appear to be:

- The claimant appears to have constructed his argument around whether or not there is a commercially viable product disclosed. But whether or not the product is commercially viable is not part of the test for sufficiency.
- Perhaps as a result of this, the claimant appears to confuse “may not work as well as it could” with “does not work”. His allegations generally go to the former; he needs to show the latter.
- The claimant is overly focused on the use of vessels in PCR. This is only relevant to a handful of (dependent) claims in the patents. Even if he were to show the vessels unsuitable for PCR, this would not seem to have an impact on the main claims of the patent.

38 As a result, the claimant's allegations (so far as I can understand them), even if proven, would not appear to support a conclusion that the specification of the patent does not disclose the invention of the main claims clearly enough and completely enough for it to be performed by a person skilled in the art, as required by Section 72(1)(c). As this was the only ground for revocation pleaded, it would appear that the statement does not disclose any reasonable grounds for bringing a revocation claim. The option of striking out the claim under Rule 83(2)(a) is therefore open (but not mandatory) to me.

39 However, this case does not seem to me to be on the same level as *Sony*. In that case, it was apparent to the hearing officer that the entire basis of the claimant's case (that the invention had been “stolen”) was unsustainable. That is not so apparent to me here, particularly if the claimant's case is broader than is immediately apparent in his statement of claim. I hasten to add that I am *not* saying that there is any merit in the claimant's position at all – I am simply not able to be certain on the available information.

40 As I noted above, the defendant urged me to consider carefully the costs involved in allowing this application to proceed. At the hearing, Miss McFarland emphasized the point that the claimant could in any event launch a fresh application (presumably with more reasonable grounds) if the present one were struck out.

41 But I am not sure that the possibility of the claimant starting over actually points to striking out being appropriate. The current proceedings, despite being at a relatively early stage, have already taken nearly two years – a situation which

neither party is solely responsible for. As I noted above, numerous documents have already been filed and considered by the parties in the course of those two years. While my conclusions above might result in some winnowing of that material, requiring the claimant to start over from the beginning – which appears a possible result of any striking out given the claimant's professed other grounds for revocation – might result in duplication of effort and dragging out the process still further. I therefore think that the better course is to allow the claimant a period of time to amend his statements of claim.

- 42 The risk is that allowing amendment will only result in further “grounds” based on the same fundamental misconceptions and hence further dragging out of proceedings. I therefore urge Mr Nazareth to consider very carefully the grounds on which he wishes to seek revocation, and seek further professional advice, noting the points I have made above. I re-emphasize that if he wishes to pursue an insufficiency argument against the main claims of the invention, he will need to show that the patents do not allow **those claims** to be carried out. Whether or not the devices and methods are useful for PCR, or a good commercial venture, is not relevant to that question. He will need to set out very clearly which claimed inventions each objection pertains to, and how that specific claim is not inventive, or not enabled, or whatever.

Declining to Deal

- 43 I should note that the defendant originally indicated that if I did not accede to its request for striking out or summary judgment, it would want me to exercise my power under Section 72(7)(b) to send the proceedings to the Court for substantive judgment. However, in the event the claimant withdrew this request at the hearing as it was based in part on an expectation of related court proceedings materialising, which has not been fulfilled. I therefore have not considered this further.

Order

- 44 I order that Mr Nazareth's be required to file amended statements of claim relating to the revocation applications for the patents taking into account the points raised in this decision **within 6 weeks of the date of this decision**. I will consider a request for a short extension of this time if necessary.

Costs

- 45 I agreed at the hearing that I would give the parties an opportunity to make submissions on costs once they knew my decision on the striking out and summary judgment requests. I therefore allow the parties 28 days to do this.

Appeal

- 46 Under the Practice Direction to Part 52 of the Civil Procedure Rules, any appeal must be lodged within 28 days.

J ELBRO

Deputy Director acting for the Comptroller