



PATENTS ACT 1977

BETWEEN

PROCEEDINGS

Linstol UK Limited Claimant

and

David Huang Defendant

Application for revocation under section 72 in respect of patent number GB2417385

HEARING OFFICER A C Howard

INTERIM DECISION

Introduction

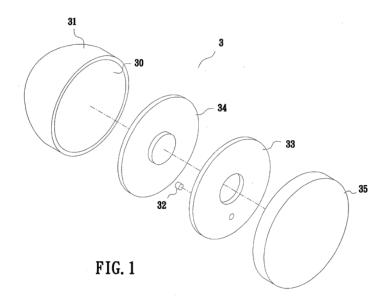
- GB2417385 (hereafter "the patent") was filed on 16 August 2005 in the name of David Huang (hereafter "Mr Huang"), claiming a priority date of 17 August 2004. The patent was granted on 21 November 2007. The invention relates to an acoustic device comprising a noise reduction unit for combating noise in a resonance chamber of the device and finds particular use in the context of noise-reducing headphones.
- An application for revocation of the patent on the grounds of lack of novelty, inventive step and sufficiency was made by Linstol UK Limited ("Linstol") on 30 September 2010 (received in the Office 1 October 2010). A number of prior published patent documents were cited by Linstol in support of the application.
- 3 Mr Huang filed a counterstatement on 3 December 2010 denying Linstol's grounds and requesting an award of costs in his favour.

- Proceedings were delayed by the need to consider a preliminary matter. The next significant event was on 15 July 2011 when Linstol filed an amended statement. This included an additional document (US 5182774) in relation to the novelty and inventive step arguments.
- It was agreed that Linstol's case could proceed as amended, and Mr Huang consequently filed an amended counterstatement on 4 August 2011. This included an admission that the features of claim 1 of the patent were disclosed in US 5182774, and a request that the claims of the patent be amended by the incorporation of an additional feature which, it was asserted, was neither disclosed nor suggested in the prior art. A draft set of claims was offered, presumably on an unconditional basis in view of the admission in respect of the granted claim 1, although this was not made explicit.
- A hearing was appointed for 20 September 2011 and, as is customary, skeleton arguments were provided by both parties. This was done on 16 September 2011. Mr Huang's skeleton arguments included a further amended claim set, while Linstol introduced further inventive step arguments based in part on new documents US 4694499 and US 5343523.
- This was the state of play when the matter came before me at the hearing, at which Linstol was represented by Mr James Robey of Wilson Gunn, and Mr Huang was represented by Mr Robert Games and Ms Cloe Loo of Albright Patents LLP.
- At the beginning of the hearing, Mr Games informed me that there was an error in the counterstatement and that Mr Huang wished to withdraw the admission that US 5182774 disclosed all the features of claim 1 as granted as well as the corresponding offer to amend.
- Although Mr Robey had come expecting to argue on the basis of the claims offered in the amended counterstatement, he was prepared to go along with Mr Games's request to go back to the granted claims, which I accordingly agreed to allow. I shall therefore deal in the first part of this decision with the question of the validity of the claims as granted.
- I should also say here that in the course of the hearing, Mr Games offered two sets of alternative amendments on a conditional basis subject to my findings on patentability of the granted claims. These new amendments differed in a material way from those which had previously been offered, and Mr Robey was not in a position to respond to them on the spot. More on this below.

The invention

The patent relates to an acoustic device comprising a resonance chamber which includes a noise reduction unit. The figure below is an exploded view of a preferred embodiment comprising a pair of headphones. The acoustic device 3 includes a resonance chamber 31, first and second electro-acoustic transducers 32 and 34 (preferably a microphone and a speaker respectively),

a controller circuit (not shown), a sound absorbing member including a porous body 33, and a protective cover 35.



The patent as granted has a single main claim and one subordinate claim. These read as follows:

Claim 1

An acoustic device, comprising:

a resonance chamber; and

a noise reduction unit for combating noise in said resonance chamber, said noise reduction unit including

a first electro-acoustic transducer mounted in said resonance chamber, and operable so as to generate a first electrical signal that corresponds to the noise in said resonance chamber,

a controller coupled to said first electro-acoustic transducer, and operable so as to receive the first electrical signal generated by said first electro-acoustic transducer, and so as to generate a second electrical signal,

a second electro-acoustic transducer mounted in said resonance chamber, coupled to said controller, and operable so as to generate a sound wave that corresponds to the second electrical signal and that counteracts a portion of the noise in said resonance chamber, and

a sound-absorbing member including a porous body that is mounted in said resonance chamber and that absorbs another portion of the noise in said resonance chamber.

Claim 2

The acoustic device as claimed in claim 1, wherein said porous body is made from a polyurethane foam material.

The matters at issue in respect of the granted patent

Linstol argues that claim 1 lacks novelty and claim 2 lacks an inventive step by virtue of the disclosures of the following documents:

D1 - US 2003/0026438 A1

D2 - US 6597792 B1

D3 - US 5182774

D5 - US 5343523

In addition the following document has been referred to in support of the allegation of lack of inventive step:

D4 - US 4694499

- All of the above documents were published earlier than the priority date of the patent.
- In addition, Linstol also seeks revocation on the grounds 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.

The law

17 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 ("the Act"), the relevant provisions of which read as follows:

72.-(1) Subject to the following provisions of the Act, the court or the comptroller may by order revoke a patent for an invention on the application of any person ... 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 be performed by a person skilled in the art;

. . .

Also relevant is constitutes a patentable invention is set out in section 1 with the relevant portion stating:

- 1.-(1) A patent may be granted only for an invention in respect of which the following conditions are satisfied, that is to say –
- (a) The invention is new;
- (b) It involves an inventive step;

..

- Sections 2 and 3 define what is meant above by "new" and "inventive step" respectively:
 - 2.-(1) An invention shall be taken to be new if it does not form part of the state of the art.
 - (2) The state of the art in the case of an invention shall be taken to comprise all matter (whether a product, a process, information about either, or anything else) which has at any time before the priority date of that invention been made available to the public (whether in the United Kingdom or elsewhere) by written or oral description, by use or in any other way.
 - (3) The state of the art in the case of an invention to which an application for a patent or a patent published on or after the priority date of that invention, if the following conditions are satisfied, that is to say -
 - (a) that matter was contained in the application for that other patent both as filed and as published; and
 - (b) the priority date of that matter is earlier than that of the invention.
 - (4) ...
 - 3. An invention shall be taken to involve an inventive step if it is not obvious to a person skilled in the art, having regard to any matter which forms part of the state of the art by virtue only of section 2(2) above (and disregarding section 2(3) above).
- The claims of a patent are to be interpreted in the light of Section 125 subsections (1) and (3) of the Act, which read as follows:
 - 125.-(1) For the purposes of this Act an invention for a patent for which an application has been made or for which a patent has been granted shall, unless the context otherwise requires, be taken to be that specified in a claim of the specification of the application or patent, as the case may be, as interpreted by the description and any drawings contained in that specification, and the extent of the protection conferred by a patent or application for a patent shall be determined accordingly.
 - (2) It is hereby declared for the avoidance of doubt that where more than one invention is specified in any such claim, each invention may have a different priority date under section 5 above.
 - (3) The Protocol on the Interpretation of Article 69 of the European Patent Convention (which Article contains a provision corresponding to subsection (1) above) shall, as for the time being in force, apply for the purposes of subsection (1) above as it applies for the purposes of that Article.
- Section 125 (3) of the Act refers to the Protocol on the Interpretation of Article 69 of the European Patent Convention which reads as follows:

Article 69 should not be interpreted as meaning that the extent of the protection conferred by a European patent is 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. Nor should it be taken to mean that the claims serve only as a guideline and that the actual protection conferred may extend to what, from a consideration of the description and drawings by a person skilled in the art, the patent proprietor has contemplated. On the contrary, it is to be interpreted as defining a position between

these extremes which combines a fair protection for the patent proprietor with a reasonable degree of legal certainty for third parties.

These are accordingly the principles to be applied in construing the claims before me.

The arguments in relation to novelty

22 As I have already remarked, Linstol's arguments are based on the following documents:

D1 - US 2003/0026438 A1

This discloses a communication headset comprising two earcups, at least one of the earcups comprising active noise reduction utilising an internal error sensing microphone (14) and a cancellation speaker controlled by a noise cancellation algorithm (10). The document also discloses that "[t]he external acoustic noise signal is naturally attenuated passively 16, as it passes through damping material, for example, a headset shell structure, and is absorbed by foam liners within the ear cup of the headset" (see paragraph 0023).

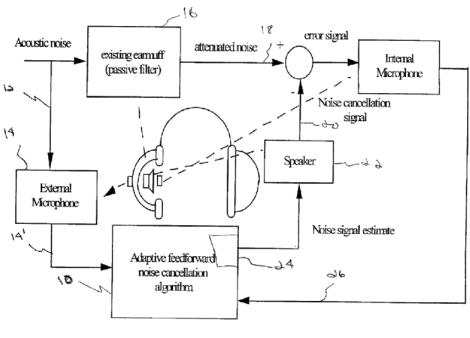


Fig. 1

D2 - US 6597792 B1

This discloses a noise reducing headset comprising: earcups 11; a microphone 17 mounted in the earcup; "electronic circuitry" intercoupling "the

microphone and driver 12 to provide active noise reduction"; and "highly absorptive foam around the walls of the earcup".

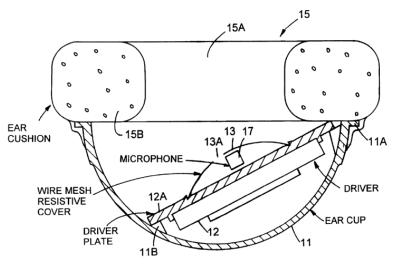


FIG. 2

D3 - US 5182774 A

This discloses a headset providing for the cancellation of noise during operation comprising: earcup 14; microphone 18 mounted in the earcup which provides an input to "electronic circuit" (24); the modified signal from the electronic circuit (24) being provided to driver 16; and foam overlay 42 which "damps acoustic resonant frequencies above 1 kHz".

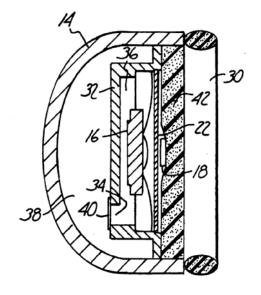


Fig. 2

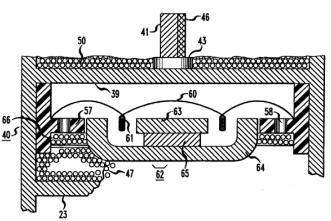
D5 - US 5343523 A

This discloses a telephone or radio receiver headset apparatus which reduces the energy of unwanted local or ambient noise comprising: housing (10); error microphone 41; "noise cancelling circuitry"; speaker (55) (formed of

parts 56-68); and acoustic foam pads 47 and 50. Column 4 lines 12-22 states:

"The acoustic response of the speaker 55 is improved by the combination of a rear enclosure consisting of the housing wall 12 and baffle 23, together with two acoustical foam paths [sic] 47, 50. The foam pad 47 behind speaker 55 and foam pad 50 in front of the speaker 55 provide damping of undesirable acoustic resonant modes and reflections emanating from the enclosure 16 and the user's ear. The pads 47, 50 advantageously are installed slightly compressed, which helps stabilize the position of speaker support 40 while at the same time providing useful frequency response shaping. Use of the front foam pad 50 provides the added benefit of reducing a high frequency response peak into a higher frequency range wherein the noise cancellation will not be adversely affected."

FIG. 7



The key point at issue

- It was Mr Robey's position that each of these documents anticipates claim 1 because each discloses the use of foam to achieve passive noise attenuation in addition to an active noise reduction system comprising transducers and control circuitry. He referred to the passage in the description of the patent at page 1 lines 12-21, from which he concluded that the invention aimed to compensate for the deficiency in the active noise cancellation of prior art devices by the use of a porous sound-absorbing member. This deficiency, and its solution, were, in his submission, evident in the prior art.
- Mr Games for his part accepted that the citations disclose acoustic devices having resonance chambers and which comprise noise reduction units of the general type required by claim 1 of the patent, as well as sound absorbing foam material. However he put it to me that an essential feature of the invention was the deliberate attenuation of a low frequency portion of the noise in the chamber using the anti-noise signal and the deliberate absorption of a high frequency portion of the noise using the porous body. He argued that in D1-3 and D5 the anti-noise signal is used to attempt to attenuate all of

the noise, rather than a portion of it. In this regard he highlighted the following passages in D1-D3:

D1 paragraph 0024:

"The attenuated noise signal 18 is then cancelled by an equal and opposite acoustic noise cancellation signal 20, y_k , generated using a speaker 22 inside the ear cup of the communication headset."

D2 column 1 line 67-column 2 line 5:

"Electronic circuitry intercouples the microphone and driver 12 to provide active noise reduction and exchange audio signals through cable 14 for transduction by driver 12 into desired sound signal for the wearing user and by the microphone into a noise-reducing audio signal."

D3 column 2 line 67-column 3 line 2 and column 4 lines 11-19:

"The above described problems are overcome by a headset for acoustic production of an electronic signal which electronic signal is representative of either an anti-noise signal or the summation of a desired audio signal and an anti-noise signal."

"The modified signal is generated by summing of the original audio signal (if any) and an anti-noise signal that is generated based on the signal obtained from microphone 18. The modified signal is thereafter provided to driver 16. Since the anti-noise signal is added to the original audio signal, a portion of the modified signal reproduced by driver 16 will have the effect or tendency to cancel or null background noise in the earcup cavity".

- He also drew my attention to D3 at column 7 where it is stated that "Conventional passive noise reduction built into the headset, however, provides fairly effective noise reduction at higher frequencies". In this regard he noted that, in the context of claim 1 of the granted patent, fairly effective (passive) noise reduction is clearly not good enough as the thrust of the patent is that the attenuation at high frequency has to be extremely good, and thus something merely fairly effective would not be sufficient. He referred to figure 6 of the patent (showing a comparison of noise levels in both the prior art device and one embodiment of the invention) in order to support this argument. He also made reference to the content of Linstol UK Ltd's website, although I do not propose to consider this further as he did not appear to hold it out as being a key plank of his argument and it is moreover not clear what relationship the device discussed has to the patent.
- In response to these arguments, Mr Robey suggested to me that you could not have a patent that depends on what you are trying to do rather than what you actually do; thus "if the prior art describes an arrangement which has all

the features in the claim, whether by accident or design, then the claim lacks novelty".

- 27 Having considered the arguments put to me, I am satisfied that D1-D3 and D4 all disclose those features accepted as standard in the prior art (page 1 lines 12-21 of the patent), wherein the noise-reduction circuit comprises first and second transducers arranged as required by claim 1 and in addition a sound-absorbing member including a porous body. I also agree with Mr Games that none of the prior documents makes any explicit disclosure of a deliberate apportionment of attenuation between active and passive modes. The key question therefore comes down to whether this is a requirement of claim 1.
- In applying the principles of s.125 of the Act, the correct approach is to give the words the meanings and scope they have in the relevant art, and with due regard to the descriptions and drawings (if present) in accordance with those statutory provisions noted above.
- 29 The critical phrases in claim 1 are

"operable so as to generate a sound wave that [...] counteracts a portion of the noise" at lines 17-19; and

"that absorbs another portion of the noise" at lines 20-21.

- In my view, the plain language interpretation of these phrases indicates no more than that the components in question will each, in operation, counteract only a portion of the noise. The description, with reference to Figure 6, suggests that the improvement in noise-reduction performance in comparison to a "conventional" device takes place mainly at high frequencies and is due to the presence of the foam material. This does not support Mr Games's contention that the deliberate apportionment of sound absorption characteristics between the active and passive components is an essential feature of the invention. Nor do I believe that a skilled reader would draw any different conclusion from an appreciation of the prior art which teaches that active noise reduction on its own is not completely effective and a combination of active and passive means provides good performance across a wide range of frequencies.
- I therefore reject Mr Games's view of the interpretation of claim 1, and it follows, for the reasons explained above, that I find claim 1 to lack novelty.

Arguments as to the inventiveness of claim 2

- Having concluded that claim 1 lacks novelty it is necessary to consider the inventiveness of claim 2.
- 33 Mr Robey took me through the *Windsurfing* approach as reformulated in *Pozzoli SPA v BDMO SA* [2007] EWCA Civ 588, the steps of which are as follows:

- (1)(a) Identify the notional "person skilled in the art"
- Both parties broadly agreed that the person skilled in the art would be a sound engineer and thus someone involved with apparatus for recording and reproducing sound who has an interest in headphones and noise cancelling headphones.
 - (1)(b) Identify the relevant common general knowledge of that person;
- Similarly both parties agreed that the skilled person would have knowledge of materials. Mr Robey suggested that the relevant common general knowledge would include knowledge: of audio electronics; of acoustic design of acoustic equipment including knowledge of properties of materials; of passive noise cancellation in headphones (e.g. as shown in D3 column 7 line 13, D1 figure 1 part 16); that isolation of sound inside a headset from that outside may be achieved; that foam (including compressed foam) may be used to absorb sound (see e.g. D4 column 2 line 17 onwards); and that active noise cancellation is possible, but not perfect as acknowledged as a problem in the patent.
- I am content from consideration of the prior art before me that passive noise cancellation in headphones was sufficiently well known to be regarded as common general knowledge (e.g. as shown in D3 column 7 line 13, D1 figure 1 part 16); and also that foam may be used to absorb sound to at least a limited extent in acoustic devices. However, despite the fact that D4 refers to the use of compressed polyurethane foam in an acoustic device, I cannot confidently conclude from this that it forms part of the common general knowledge.
 - (2) Identify the inventive concept of the claim in question or if that cannot readily be done, construe it;
- Mr Robey asserted that the inventive concept is, in the context of acoustic devices, the application of both passive and active noise cancellation in order to improve the functioning of the device (in acceptance that active attenuation is not perfect). He offered this construction in relation to claim 1 and did not revise this when considering claim 2. Mr Games offered no alternative inventive concept.
- Given that I have found claim 1 to be anticipated, the inventive concept of claim 2 may simply be expressed as the use of polyurethane foam for a porous body for the purpose of passive noise reduction in an acoustic device comprising both active and passive noise reduction.
 - (3) Identify what, if any, differences exist between the matter cited as forming part of the "state of the art" and the inventive concept of the claim or the claim as construed;

- Taking D3 as the most relevant example, my view is that the prior art and the inventive concept differ only by the use of polyurethane foam as opposed to the choice of foam in general for passive noise reduction.
 - (4) Viewed without any knowledge of the alleged invention as claimed, do those differences constitute steps which would have been obvious to the person skilled in the art or do they require any degree of invention?
- Mr Robey put it to me that the choice of polyurethane foam was a selection invention. He referred to the Manual of Patent Practice at paragraph 3.89, and in line with *Dr Reddy's Laboratories (UK) Ltd v Eli Lilly & Co Ltd* [2010] RPC 9 posed the question whether the selection of polyurethane foam was supported by a "hitherto unknown technical effect". He then listed the criteria which must be satisfied in order for there to be a technical contribution, and thus for the selection to be inventive. These are derived from the EPO Board of Appeal decision in T 939/92 AGREVO/*Triazoles* 6 OJEPO 309:
 - i) the selection must not be arbitrary but must be justified by a hitherto unknown technical effect;
 - ii) a technical effect which justifies the selection of the claimed group must be one which can be fairly assumed to be produced by substantially all the selected members;
 - iii) this technical effect can only be taken into account if it can be accepted as having been demonstrated in the specification as filed.

He argued that there was no hitherto unknown technical effect as, for example, figure 6 of the patent which purports to compare the invention with the prior art did not specify the materials used in the devices tested. Thus having asserted that no evidence for the selection is suggested or demonstrated, he argued that the use of polyurethane foam is merely an arbitrary selection over the use of any other type of foam and thus lacks an inventive step in view of the disclosures of for example D3 (column 4 line 54) and D5 (column 4 line 61 (as recited earlier)) using foam as a sound-absorbing body which produced much the same effect as the foam described in the patent i.e. a reduction in higher frequency noise.

Mr Games's response to this analysis was to state that while the prior art acknowledged that foam could be used to attenuate noise, it taught away from the use of any foam, including polyurethane foam, to attenuate all of the high frequency noise. The unexpected finding that this was possible was however demonstrated by figure 6 of the patent. He further argued that this figure (together with the statements at page 8) represented evidence in favour of a valid selection invention being present and thus that the selection criteria were satisfied. He also sought to rely on the high regard for the Long Prosper product expressed on the Linstol website (which describes the Long Prosper product as a "market leader") as evidence of inventiveness, although as I have already remarked, it is not clear whether the headsets described on

the website are those covered by the patent, so this does not help me a great deal.

- I am unable to accept Mr Games's argument regarding the "teaching away" of the prior art documents from the notion that foam in general, including polyurethane foam, could be used to attenuate all of the higher frequency noise. In order for the use of polyurethane foam to be obvious to try there must merely be a reasonable expectation of success. Polyurethane foam is stated as an example of "acoustic damping material" in D4. Thus the choice of this particular material in this instance appears obvious to try and can only be deemed inventive if it is a valid selection invention.
- 43 In order for a selection to be inventive it "must not be arbitrary but must be justified by a hitherto unknown technical effect" as stated in Dr Reddy's Laboratories (UK) Ltd v Eli Lilly & Co Ltd (and repeated as the first of the criteria from the Manual of Patent Practice referred to above). In this context, I cannot find much support for Mr Games's argument from page 8 and figure 6. Although it may be assumed from the embodiment described at page 7 that polyurethane foam (presumably compressed polyurethane foam) is used in the comparison, the description is silent on the precise nature of the prior art acoustic device, and in particular on whether any foam is present and if so what material it comprises. Certainly no clear comparison is provided between a device with polyurethane foam and a device with an alternative non-polyurethane foam. In addition, the fact that the results for the prior art device are described as "the imaginary line" cast further doubt on the usefulness of this figure. Thus no evidence for a hitherto unknown technical effect has been provided that allows it to be plausibly stated that the use of polyurethane foam (as opposed to any other foam) in this instance is any more than an arbitrary selection.
- I therefore conclude that the selection of polyurethane foam as specified in claim 2 lacks an inventive step.

Sufficiency

- There remains the issue of sufficiency of the disclosure. At the hearing, Mr Robey put it to me that the patent is caught in a "squeeze" in that if it is not obvious to use polyurethane foam and if this material has unexpected advantages (as Mr Games had argued) then there is not enough information in the specification to explain how the benefit provided by the invention is obtained with other materials. Similarly it was argued if it is not obvious to combine portions of noise reduction other than in the fashion disclosed in the prior art then there is nothing in the specification to tell a third party how to do it.
- In response Mr Games argued that the application is sufficient because: an example is given; there is no "squeeze argument" because, for example, the compression of foam is disclosed; and the example allows for some non-

inventive experimentation within the compression ratios stated to allow a suitable arrangement to be found.

These arguments are clearly tightly bound up with the questions of novelty and inventive step, and as such I do not think it is practicable to consider the question of sufficiency in isolation. In view of my conclusions above I shall therefore refrain from doing so.

The conditional amendments offered at the hearing

- Having heard the parties on novelty, inventive step and sufficiency, I requested submissions in writing on whether, in the event that I decided that either or both of the claims as granted was invalid, Mr Huang should be permitted to put into consideration the two sets of amended claims which had been offered at the hearing on a conditional basis. In doing so I observed that the offer amounted to a request to amend the counterstatement in accordance with Rule 82 of the Patents Rules 2007 ("the Rules"), and referred to paragraph 72.43 of the Manual of Patent Practice which cites *Niken Kosakusho Works v Pioneer Trading Co.* [2006] FSR 4.
- 49 Both parties duly made submissions which I discuss below.
- Mr Games on behalf of Mr Huang referred me to the comments of the Court Of Appeal in *Cobbold v London Borough of Greenwich* (9 August 1999, unreported) as cited in the Patents Hearings Manual at 2.41:

"The overriding objective is that the court should deal with cases justly. That includes, so far as practicable, ensuring that each case is dealt with not only expeditiously but also fairly. Amendments in general ought to be allowed so that the real dispute between the parties can be adjudicated upon provided that any prejudice to the other party or parties caused by the amendment can be compensated for in costs, and the public interest in the efficient administration of justice is not significantly harmed."

- Mr Games argued that as the case progressed to a hearing "tolerably swiftly", despite the introduction of additional prior art by Linstol, the efficient administration of justice was not significantly harmed. It was also noted that Mr Huang was prepared to agree to pay the "off scale" costs of the hearing and to offer security of costs. Thus, in view of these concessions, it was argued that Linstol will suffer no prejudice were the amendments to be admitted for consideration.
- By contrast Linstol submitted that Mr Huang should not be allowed to proceed with these conditional offers to amend. In so doing my attention was drawn to the overriding objective set out in Rule 74 which includes ensuring that the case is dealt with expeditiously and fairly. In referring to paragraphs 2.40 to 2.43 of the Patents Hearings Manual the following points were made:

- Allowance of the amendment in this instance will lead to effective loss of the hearing date as a further hearing may then be necessary rendering the previously hearing effectively worthless.
- The amendments sought to introduce matter into the claims which has never previously been in a claim. Thus this represents a significant change to Mr Huang's case, which was not foreseeable by Linstol and amounts to a "last minute surprise".
- As Mr Huang sought an alternative amendment to the claims in the skeleton arguments to that set out in the (amended) counter-statement and then sought to change his position again at the hearing, this clearly indicates that, for whatever reason, he had not put forward his best case in the first instance. The request to further amend his counterstatement to include new conditional amendments was made after the request to withdraw the admission that claim 1 of the patent as granted lacks novelty and should therefore receive less sympathetic treatment.
- Whether or not the patent is valid is of significant commercial interest to Linstol as well a matter of wider public interest, and thus any delay resulting from the allowance of Mr Huang's request could lead to a delay which would be prejudicial both to Linstol and the public at large.
- In relation to *Niken Kosakusho Works v Pioneer Trading Co.* [2006] FSR 4 (henceforth "the Pioneer case"), Linstol drew my attention to the situations in which Jacob LJ noted that the exercise of discretion to allow amendment of a patent may be sought:
 - a) before a trial:
 - b) after a trial, at which certain claims have been held valid but other claims held invalid...; and
 - c) after a trial in which all claims have been held invalid but the patentee wishes to insert what he hopes are validating amendments.
- Linstol further noted Jacob LJ's remarks that:

"class c) involves something different, a proposed claim which was not under attack and could not have been under attack prior to trial. If the court is to allow such a claim to be propounded after trial, there is almost bound to be a further battle which would arise in the proposed amendment proceedings"

thus highlighting that the amendments in that case fell under category c) and were refused for reasons including the need for the court to comply with the overriding objective of the Civil Procedure Rules (CPR), and in particular to save expense and deal expeditiously and fairly with matters.

Linstol acknowledged that the facts of the present situation differ from that decision in that amendment was sought at, rather than after, the hearing. However they argue that, as the amendment sought could not have been

under attack prior to the hearing, the amendments should still fall under category c) and thus be refused as the same overriding objective, albeit as recited in Rule 74 rather than in the CPR, applies.

Finally Linstol referred to Mr Games's comments at the hearing regarding their introduction of additional prior art to the statement of grounds before the hearing. They regretted the late introduction of D3, while it was argued that the introduction of D4 and D5 was evidence in reply as a result of an unforeseeable amendment to the counter-statement (that was itself objected to) and thus its introduction was reasonable.

Discussion

- I am bound by the Patents Rules 2007 rather than the Civil Procedure Rules, although procedural decisions of the Courts under the latter have strong persuasive authority. The main consideration here is the overriding objective set out in Rule 74 that the case is dealt with justly. This includes the requirements to deal with the case expeditiously and fairly, but also to ensure that the public interest is served. Clearly in this instance as I have found the claims of the granted patent to be invalid, a decision to refuse leave to amend would entail revocation and should not be made lightly.
- While this case is not quite on all fours with *Pioneer*, there are many similarities. In particular Jacob LJ noted that "what is proposed here will, or could, lead to two trials instead of one." The same is true in this instance as a second hearing on validity would appear to be at least a possible result of admittance of the amendments. This is significant because in the *Pioneer* case Jacob LJ went on to note "[i]n my judgment, an exercise of discretion to allow that [i.e. a second trial] would be improper for three distinct reasons, which in the end all amount to the same thing." These reasons include that the courts in the field of patents have made it plain that post trial amendment should not be allowed if it would involve a second trial on validity.
- In this instance both parties have put forward amendments to their respective cases in the course of the proceedings, including the introduction by Linstol of the documents D3-D5. Of these D3 was made long enough in advance of the hearing to allow Mr Huang to respond (by making the first offer to amend the claims), and it was possible to agree a modified timetable which enabled the hearing date to be maintained. However, D4 and D5 were first raised only in Linstol's skeleton argument just ahead of the hearing.
- Mr Robey has pointed out, and I accept, that D4 and D5 were cited in response to the amended claims submitted on 4 August 2011, although there was a gap of over a month between the submission of the amended claims and the hearing date. The new claims included the incorporation of a feature (the use of compressed foam) not previously present in any claim. They did however also retain the substance of the original claim 2.

- D5 is not of crucial importance to my finding that claim 1 lacks novelty, so its very late introduction does not have a great bearing on matters. However it is a different story for claim 2 and D4. While I acknowledge that Linstol's case has been consistent throughout and claim 2 has been under attack from the beginning of the proceedings, the citation of D4 strengthened their case in this aspect very significantly. Mr Huang was only confronted with this situation and the greatly increased prospect of having no pre-existing claims to fall back on, at the point of exchange of the skeleton arguments when D4 was first raised.
- Mr Games could have stood firm against the late admission of D4, but he did not do so. I do not criticise him for this as it is in nobody's interests for a patent to remain on the register with a potentially relevant but untested prior art document on the record. While there are other ways in which such a situation can be resolved, none are straightforward and I do not consider it unreasonable that Mr Games should have come along to the hearing with a modified case to put before me and that this included a further offer of amended claims.
- This leads me to conclude that it would not be in the interests of fairness between the parties to refuse to allow the amended claims to be considered, as it would entail revocation of the patent in circumstances where Mr Huang will not have had the opportunity to respond fully to the case before him. In the light of *Pioneer*, this is far from an ideal situation from a procedural viewpoint, however I am bound by the overriding objective and, for the reasons I have set out, I believe that this is the right thing to do.
- A complicating factor is that during the hearing Mr Games offered two alternative sets of amendments. Before proceeding it will be necessary to settle on only one of these, because it will need to be advertised for opposition.

Costs to date

- Linstol has succeeded as regards the validity of the granted claims and are therefore entitled to their costs. They have requested in written submissions that interim an award for costs be granted covering the proceedings to date and that further security for costs be ordered in respect of the future proceedings. They have also argued for the award of actual costs associated with preparation for and attendance at the hearing, in the event (as has happened) that I should confirm what Mr Huang had previously admitted and then withdrawn in respect of the validity of claim 1. This was not resisted by Mr Huang, who was prepared to pay off-scale costs associated with the hearing in the event that I admitted the requested amendments thereby permitting the proceedings to continue.
- Taking all this into account, together with the preliminary telephone hearing which dealt with the matter of security for costs, I conclude that an award of

£3,200 (three thousand two hundred pounds) is appropriate as a contribution toward the claimant's costs to date.

Order as to costs

I accordingly order the defendant David Huang to pay the claimant Linstol UK Limited the above sum within seven days of the expiry of the appeal period below. In the event of an appeal, payment may be suspended.

Security for costs

Linstol asked that Mr Huang be requested to provide further security for costs. The sum requested was £500 initially, to be increased in the event that a telephone or oral hearing is in prospect. This was not resisted, and I see no reason not to grant the request.

Directions as to further procedure

- I allow Mr Huang a period of two weeks to file an amended counterstatement specifying which amended claims are to be offered under section 75 of the Act. The proposed amendments will then be advertised for opposition in accordance with standard procedure. If no such amended counterstatement is received I shall issue a final decision revoking the patent.
- Linstol will be allowed until the end of the period for opposition to the amendments to file an amended or supplementary statement, should they wish to do so. A further oral hearing will be arranged if either party desires it, and further directions will be given if it becomes necessary to do so.
- In parallel the parties are invited to submit within one week an agreed order for further security for costs.

Appeal

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

A C Howard

Divisional Director acting for the Comptroller