



Case No: 3YQ02354

IN THE LEEDS COUNTY COURT

The Combined Court Centre , 1 Oxford Row , Leeds

Date: 12 May 2015

Before :

HIS HONOUR JUDGE GOSNELL

Between :

MRS JOAN HINCHLIFFE **Claimant**

and

SIX CONTINENTS LIMITED **First Defendant**

and

CADBURY UK LIMITED **Second Defendant**

Mr Alistair Wright (instructed by Roberts Jackson Ltd) for the Claimant
Mr Doug Cooper (instructed by DAC Beachcroft Claims Ltd) for the Defendant

Hearing dates: 21st and 22nd April 2015

Approved Judgment

I direct that pursuant to CPR PD 39A para 6.1 no official shorthand note shall be taken of this Judgment and that copies of this version as handed down may be treated as authentic.

.....
HIS HONOUR JUDGE GOSNELL

His Honour Judge Gosnell:

1. This claim is brought by the Claimant against the Second Defendant for personal injuries arising out of the development of noise induced hearing loss consequent upon her employment as a machine operator by the Defendants. The claim against the First Defendant has been compromised but the claim against the Second Defendant is disputed by them in terms of both causation and damage.
2. The Claimant worked for the Second Defendant from 1988 to 2007 initially in the LAN Packing department and later in the Liquorice Novelties Department. The point in time where she moved departments was never clear but was probably around 2006. The Second Defendant had already conceded breach of duty from 1988 until the late 1990's before the trial but during the course of the trial conceded breach of duty until 2005 or 2006. Both counsel agreed that in the light of that admission no lay evidence in relation to her exposure to noise or hearing protection would be required. A report had been obtained from a single joint expert Mr Hanson on the issue of noise exposure but it is unnecessary to record his findings, given the Second Defendant's admission.
3. The real issues in this case were :
 - a) Is the Claimant suffering from Noise Induced Hearing Loss?
 - b) If she is suffering from this condition is she "appreciably worse off" as a consequence of it (the de minimis argument)?

Although the Claimant was called into the witness box and confirmed that the contents of her witness statement were true she was not cross-examined by counsel for the Defendant and her evidence went unchallenged. This case turns on an assessment of the expert evidence in the case.

4. The expert evidence

The expert witness for the Claimant was Mr Hisham Zeitoun who is a consultant otolaryngologist, head and neck surgeon from Glan Clwyd Hospital in Denbighshire. He examined the Claimant and prepared a report dated 29th April 2011. He also provided a letter dated 1st August 2012 in answer to question posed by the Claimant's solicitors. The expert witness for the Second Defendant was Mr Philip H. Jones a retired consultant ENT surgeon from South Manchester. He prepared a desktop report dated 6th February 2014 and later in 2014 answered a large number of part 35 questions posed by the Claimant's solicitors. Both experts met and produced two joint statements the first of which is undated and the second dated 16th January 2015.

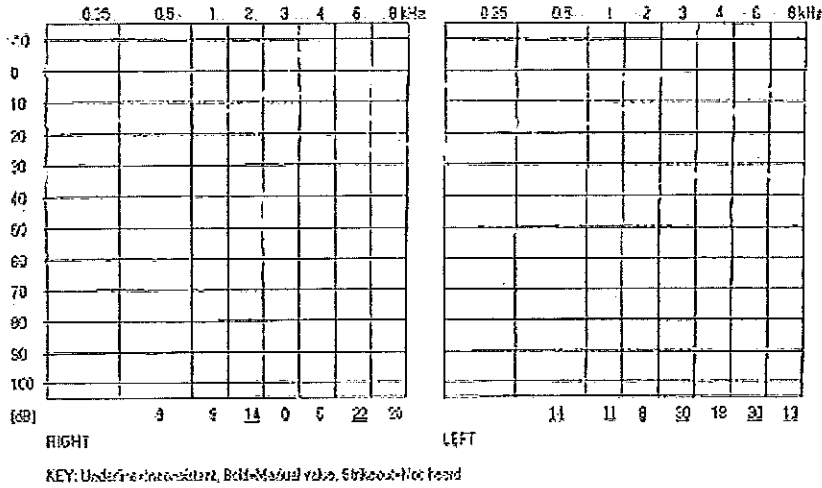
5. There were a number of issues that the experts were in agreement about which I record as follows. The Claimant was exposed to noise in her occupation with the First Defendant from 1967 to 1972 and with the Second Defendant from 1988 to 2006 with ear protection from 2005. If her exposure was not above 85 dBA () Lepd she cannot have developed Noise Induced Hearing Loss. She has no tinnitus. She had otitis media, particularly on the left and vertigo in 2006. The occupational health records record mastoid surgery in the left ear. There are audiograms carried out by the Second Defendant in 1991 and 2006 and an audiogram carried out by an audiologist

instructed by Mr Zeitoun in 2011. The 1991 audiogram either shows a temporary loss or is inaccurate and therefore should be disregarded. The 2011 audiogram has a notch at 4 kHz bilaterally of similar size although the hearing in general on the left is worse than the right. The 2011 audiogram itself is consistent with at least a minor noise induced hearing loss of 10 to 15 dB at 4 kHz. If the audiogram of 2006 is accurate the Claimant had no noise induced hearing loss from exposure before February 2006 as this audiogram shows no evidence of noise induced hearing loss. If she had no noise induced hearing loss in 2006 she could have developed none after that time from her continued employment until 2007 (if the noise exposure had not altered after 2006). They agreed that industrial audiometry is a technique designed to be used by Occupational Health Department Personnel who have undergone brief training to enable them to perform air conduction screening audiometry. It does not require a trained audiologist. The 2006 audiogram was carried out in this way.

6. In his initial report Mr Zeitoun opined that the Claimant was suffering with a hearing loss in both ears. The total of the hearing thresholds for 1,2 and 3 kHz is equal to 50dB in the right ear (average 16.7dB) and 70 dB in the left ear (average 23.3 dB). An average female of similar age to the Claimant (who was then 63 years of age) is expected to have an average hearing threshold of 15dB. He concluded that her average hearing loss was 18dB of which age associated hearing loss was 15 dB which resulted in a noise induced hearing loss of 3dB. In his opinion this hearing loss had brought forward the need for hearing aids by about five years.
7. By the time of the expert's joint statement Mr Zeitoun had refined his views in the light of Mr Jones' opinion as expressed in his report. He confirmed that his diagnosis of noise induced hearing loss was based on the well known paper by Coles, Luttmann and Buffin (Guidelines on the diagnosis of noise induced hearing loss for medico-legal purposes, Clinical Otolaryngology, 2000, 25, 264-273). The Claimant had a high-frequency sensorineural hearing impairment, she was exposed to noise with a noise immission level of over 100 dBa, and the audiometric configuration showed a notch in the 3-6kHz range. He did not feel her prior history of otitis media and a mastoid in the left ear was sufficient to raise an alternative diagnosis. He had used the generally accepted methodology in his report of comparing the Claimant's hearing to the average individual of her age and gender that had not been exposed to noise in the 1-3 kHz range. The average loss over both ears was 3 dB which he categorised as "slight" for the purposes of the Judicial College Guidelines.
8. He had already accepted that the 2006 audiogram taken by the Second Defendant's staff on an automated machine was not consistent with noise induced hearing loss. He reached the conclusion however that he had significant reservations whether the 2006 audiogram should be considered of sufficient quality to be used as evidence. One problem was that the record of the audiogram had been damaged in a flood and whilst the entries were still visible the trace was no longer visible. The record appears below:

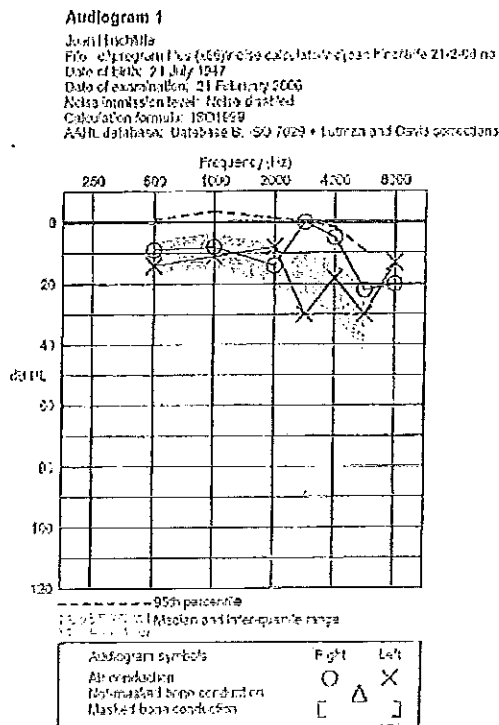
21/02/2008

Audiogram. Patient: Mrs Joan Hinchliffe



There was no previous audiogram available for comparison to produce this categorisation

9. This proved difficult to read and so for the purposes of the trial Mr Zeitoun prepared a diagram showing how the trace would have looked based upon the figures which are recorded in the original audiogram. He also included what someone in the 95th percentile of the age relevant population would have in terms of hearing thresholds and the median and inter-quartile range.



10. Mr Zeitoun opined that the findings in the 2006 audiogram are slightly unusual in that the Claimant has unusually well-preserved hearing in the right ear in the 3 kHz and 4 kHz frequencies. He felt this meant that the audiogram was less likely to be accurate. At trial he also relied on the fact that on the original audiogram seven out of fourteen readings were recorded as unreliable by the computer software which runs the automated audiogram. He attempted to assist the court by trying to explain what was likely to cause the computer to reject a particular reading and actually brought a specimen reading from a comparable machine for that purpose. It appeared that the machine may reject a reading where the peaks and troughs of the particular reading exceeded set tolerances. In addition at trial he criticised the fact that it appeared from contemporaneous records that the Claimant had been exposed to noise for four hours before the test which would give rise to the risk of Temporary Threshold Shift. He also relied on an entry made contemporaneously at page 706 of the trial bundle which recorded that the Claimant had wax in both ears. All these factors led him to the conclusion that the 2006 audiogram was not reliable. If it was ignored there was no reason why a diagnosis of noise induced hearing loss could not be made.
11. On the issue of whether the noise induced hearing loss had caused any appreciable disability to the Claimant Mr Zeitoun opined that damage will have been caused to the Claimant's cochlea. In cross-examination he accepted that the Claimant was only 1.7 dB worse off in her right ear than the average person her age across the range 1-3 kHz. In her left ear she was 8 dB worse than average but there was an idiopathic reason why the left ear was worse than the right which made the measurement of the noise induced hearing loss element more difficult to measure. He accepted that, taken in isolation, a loss of 1.7db was neither serious nor significant and would not be susceptible to the patient. Whilst he sought to say that comparisons with average patients was meaningless he accepted that it was impossible to say which percentile of the uninjured population the Claimant could be categorised on before she was damaged by noise. He felt that the loss of 10-15 dB at 4 kHz was significant. He relied on extensive research which was referred to in the joint statement which showed that loss of hearing at the frequency 4 kHz and above is a contributing factor to an individual's hearing handicap. He opined at trial that damage at 4 kHz is likely to affect intelligibility and discrimination of speech. He also relied on the Claimant's subjective complaints about the worsening of her hearing. Unfortunately neither party had actually disclosed the academic publications relied on and I was not in a position to consider them, nor were either counsel in a position to challenge or rely on them.
12. Mr Jones in his report concluded that the Claimant's left ear is worse than the right probably due to childhood middle ear disease and mastoid surgery. He relies on the fact that although there is a notch on the 2011 audiogram at 4 kHz it was not present on the 2006 audiogram and therefore cannot be due to noise exposure. He did not feel that there could be any hearing loss in the frequencies below 3 kHz. Whilst he accepted that noise damage usually occurs first at 4 kHz and can over a number of years spread to the frequencies surrounding, it does so gradually. On the right side the Claimant has very well preserved hearing still at 3 kHz and Mr Jones' view is that noise cannot affect 1-2 kHz without the 3 kHz frequency being affected at all. He accepted that the minor loss at 4 kHz would advance the need for a hearing aid by about 2 years. He relies on the 2006 audiogram to prove that as no noise induced hearing loss had occurred during the Claimant's exposure to noise, any hearing loss thereafter incurred cannot be noise induced. He maintained this position in the

expert's joint statement. His only contribution to the debate about whether the Claimant's loss was more than de minimis and the academic literature relied on by Mr Zeitoun was that he did not think Professor Moore (one of the authors of the academic papers) would not claim that 3 dB was a significant or handicapping loss.

13. At trial Mr Jones sought to robustly defend the authenticity of the 2006 audiogram. Whilst he accepted that there was a record of the Claimant having wax in her ears that was also the case when she was examined by Mr Zeitoun. He made the point that if her ears had been adversely affected by wax it would have artificially made her hearing seem worse than it actually was. In fact most of the readings taken in 2006 show marginally better hearing than in 2011 and so it is unlikely that wax had any effect. The same argument applies with Temporary Threshold Shift and there was no evidence of the Claimant having reported that problem to Mr Zeitoun when he took a history. Mr Jones accepted that half of the readings are categorised as unreliable but on the crucial right side only two out of seven are so categorised and the crucial frequency of 4 kHz on both sides is recorded as reliable. He also made the point based on Mr Zeitoun's example that unreliable readings may in fact be close to accurate where the only reason for rejection is the length of the trace being beyond a set tolerance. Mr Jones also contends that there are significant similarities between the 2006 and 2011 audiograms when allowances are made for conversion between automated audiology and a pure tone audiogram.
14. At trial Mr Jones expanded on his view that whatever the cause of her hearing loss, the Claimant has no actual disability. He remains of the opinion that there can be no hearing loss caused by noise below 3 kHz because damage does not skip frequencies. In any event he considered a loss of 1.7 dB on the right side incapable of perception by the subject. He pointed out that human speech is normally discerned in the frequencies below 2 kHz and whilst 4 kHz does play a part in speech perception it is very limited. He was cross-examined about the various academic papers relied on by Mr Zeitoun but his reply was that he was not an expert in sensory psychology. He relied on the fact that the so called "Black Book" which is regularly used to assess the level of disability in deafness cases only assesses hearing loss over the 1, 2 and 3 kHz range.

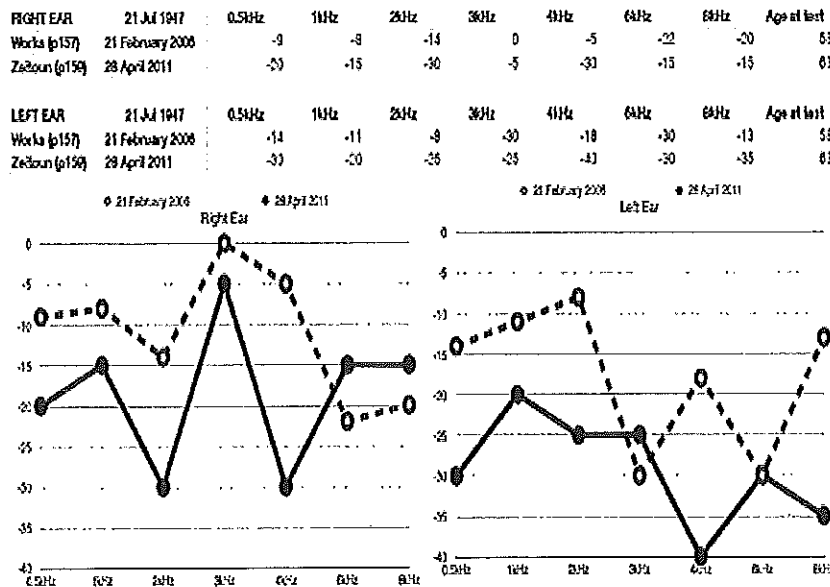
15 **Analysis**

Both of the expert witnesses gave evidence for some time and were robustly but fairly cross-examined. They are both experts who tend almost exclusively to report in cases involving only Claimants or Defendants respectively. Both of them exhibited tendencies at various times to adopt a fixed position and defend it. This is not a case where one of the experts was overwhelmingly more convincing than the other. My analysis has not been assisted by the failure of the experts to disclose and produce the academic papers they sought to rely on. I had some sympathy with the submission put forward by counsel for the Claimant that the de minimis argument, whilst pleaded, was not thought to be likely to be pursued with any vigour, given the very limited reference to it in the experts' reports and joint statements.

16. The first part of the case is about whether the Claimant has satisfied the court on balance of probability that she in fact suffers from noise induced hearing loss. Both of the experts have agreed that this basically turns on whether the 2006 audiogram is reliable and what weight should be given to it. On any view the Claimant is not

significantly handicapped in her hearing whatever the cause. Some of her thresholds are better than average and some worse on the right side, with her hearing being worse on the left partly for idiopathic reasons. In cases like this the influence of audiology is crucial to the diagnosis. Both experts accept that the 1991 audiogram is unreliable and the Claimant suggests that the 2006 audiogram which perhaps was taken at the same location using the same method is equally unreliable. I think it possible to exclude both ear wax and recent noise exposure as complicating factors. Both of these problems would affect the test by artificially increasing thresholds and making hearing appear worse. In fact only two of the readings out of fourteen show higher thresholds in 2006 compared with 2011 and so these factors can be ignored. In addition I accept that the entries completed by the audiometric tester shown at 706 and 708 of the trial bundle suggest that the test was carried out in a professional manner, a point conceded by Mr Zeitoun.

17. In order to decide whether the audiogram record of 2006 is reliable it is necessary to carry out a fairly careful analysis of the respective readings from 2006 and 2011. Mr Cooper, counsel for the Defendant prepared a very helpful comparison which shows the two tests both in numerical and graphic form.



It is obvious that there are differences between the two tests particularly on the left ear. It should be remembered however that both experts agreed that because something idiopathic was making the hearing in the left ear worse than the right it would be wise to consider the right ear mainly for diagnostic purposes. This is obviously logical. There are differences between the thresholds but it should be borne in mind that audiometric testing machines are calibrated plus or minus 3 dB and that the margin for test / re-test error is, according to Mr Zeitoun 5-10 dB. Evidently converting readings from an automated machine to pure tone audiograms like the 2011 test is controversial but many clinicians add 3dB with some clinicians also increasing the reading to the next threshold used in pure tone audiometry (5 dB thresholds). If this latter adjustment is carried out all the readings on the right ear are

within test/ retest error of 10 dB save for the readings at 4 kHz. It is also fair to say that the general shape of the graphic is remarkably similar save for the readings at 4 kHz.

18. The fact that seven of the fourteen readings in 2006 are marked as “unreliable” is troubling but I accept the general thrust of Mr Jones’ argument that an unreliable reading may well be one in the right general area which has been rejected for technical reasons but which still gives a reasonable impression of where the threshold is. The fact that the 4 kHz reading is not marked as unreliable is also important as is the fact that only two out of seven on the crucial right side are unreliable. Mr Zeitoun sought to argue in the joint statement that the reading at 3 kHz on the right side is unusual and tends to suggest unreliable recording. This is because the threshold is recorded at 0 dB which would place the Claimant on the 95th percentile with the hearing threshold at that frequency of a young woman. I accept this is an unusual feature and if it was not replicated elsewhere would be troubling. In fact this unusual feature is repeated in the 2011 audiogram when the reading is 5 dB which would be the same figure as in 2006 once a correction was made for a pure tone audiogram in accordance with the method previously described. This means that a particular feature which is statistically unusual in this lady has been replicated in both audiograms. If counsel for the Claimant is right and the 2006 audiogram is unreliable this would mean that the Claimant has pressed to indicate she has heard a sound at a threshold below her hearing capacity. When these points are added to the overall impression of the shape of the two audiograms being very similar it provides the necessary evidence to convince me on balance of probability that the audiogram taken in 2006 was reliable.
19. Both of the experts agree that if the 2006 audiogram is considered a reliable record then it is not possible to justify a diagnosis of noise induced hearing loss. This is because there was no “notch” in the 3-6 kHz range shown on the audiogram taken towards the end of the Claimant’s admitted noise exposure. Both experts agree that if the 2006 audiogram is reliable then the “notch” shown in the 2011 audiogram is due to idiopathic causes. Whilst I accept that this is a Claimant with a history of noise exposure over a number of years it is not inevitable that her hearing has been damaged due to noise. Mr Jones stated that approximately half of patients with a “notch” around 4 kHz are found not to have been exposed to noise and the cause is therefore idiopathic. In the light of this analysis, on balance of probability, I find that any hearing loss the Claimant suffers from is not caused by her previous exposure to noise. In the light of this finding the claim must be dismissed.
20. For the sake of completeness , and in case there is an appeal , I will deal with the second issue in the case , namely the de minimis argument , but as this is clearly *obiter* in much less detail than I otherwise would have done. The legal basis for this argument emanates from the decision of the House of Lords in *Johnston v NEI International Combustion Limited* [2007] UKHL 39. This was the case which decided that symptomless pleural plaques were not actionable. Counsel for the Defendant relies on the following passage from the speech of Lord Hoffman:

“It seems to me, with respect, that Smith LJ asked herself the wrong question. One is not concerned with whether the plaque is in some sense “injury” or (as she went on to decide) a “disease”. The question is whether the claimant has suffered damage. That means: is he appreciably worse off on

account of having plaques? The rare victim whose plaques are causing symptoms is worse off on that account. Likewise, the man with the disfiguring lesion is worse off because he is disfigured. In the usual case, however (including those of all the claimants in these proceedings) the plaques have no effect. They have not caused damage.”

Counsel for the Defendant accordingly submitted that the appropriate test in this case should be “but for the noise induced hearing loss, would the Claimant be appreciably better off?”

21. This gives rise to the difficulty of assessing what “appreciably better or worse off” might mean. Some further guidance is given in the speech of Lord Hope who said as follows:

*“The question then is whether an alteration in a claimant's physical condition of this kind is actionable. If the alteration is taken by itself there can be only one answer to this question. As Lord Reid put it in *Cartledge v E Jopling & Sons Ltd* at p 771-772, a cause of action accrues as soon as a wrongful act has caused personal injury beyond what can be regarded as negligible. I do not think that it is an abuse of language to describe pleural plaques as an injury. The question whether they can also be described as a disease is less easy to answer. But the use of these descriptions does not address the question of law, which is whether a physical change of this kind is actionable. There must be real damage, as distinct from damage which is purely minimal: Lord Evershed at p 774. Where that element is lacking, as it plainly is in the case of pleural plaques, the physical change which they represent is not by itself actionable.”*

The search in this case appears to be for real damage as distinct from damage which is purely minimal.

22. Both experts appeared to agree that the Claimant’s hearing loss on the right side alone over the 1-3 kHz frequencies can be measured at 1.7 dB using the traditional comparison with the average person of the same gender and age. Both agreed that if this was the only loss caused by noise it would not be noticeable to the Claimant and so it could not be said that the Claimant was “appreciably worse off”. The assessment on the left side is more problematical in that although her hearing is worse, there is an idiopathic element involved which is impossible to measure. It is agreed however that there is a further loss at 4 kHz which it is alleged was caused by noise amounting to around 10-15 dB. The dispute between the experts is what additional effect this loss has. Mr Zeitoun felt it had a significant effect on speech recognition and processing whereas Mr Jones felt the effect was “very limited”.
23. I indicated to both counsel during the hearing that I felt very uncomfortable in making an assessment as to the effect of this particular hearing loss as I had not been able to read the academic papers that Mr Zeitoun relied on. However, I have his evidence that in his professional opinion, having read and considered the five papers he referred to, the loss of hearing at that frequency is a contributing factor to an individual’s hearing handicap which he placed in the witness box at about 25% of the total. There is evidence from the Claimant that she has difficulty talking to other people on the telephone and across the table and it seemed to me she was describing difficulty in speech recognition and intelligibility of the type described in the various papers

- referred to by Dr Zeitoun. If Mr Zeitoun is right then the Claimant is reporting symptoms caused by hearing loss which are appreciable and more than minimal.
24. I have considered Mr Jones' arguments on this issue but they seem to me to be based mainly on assertion. His retort that he was not an expert on sensory psychology may of course be accurate but it is not a convincing response to academic papers which report the influence of high frequency hearing loss on speech intelligibility. I have to accept his point that the Black Book assessment only normally measures the frequencies at 1, 2 and 3 kHz but a Coles and Worgan assessment can also take into account slight difficulty with speech in noise which would move the assessment from 0 to 1. This was Mr Zeitoun's assessment of the Claimant on that scale. It should also be borne in mind that both experts felt that the Claimant's need for a hearing aid had been brought forward by two or five years respectively. This begs the question why this would be necessary if her hearing were not already worse.
25. Counsel for the Defendant also criticised Mr Zeitoun for taking into account the Claimant's subjective symptoms without distinguishing which symptoms were caused by noise. In the case of the hearing loss at 4 kHz however the difficulties in speech intelligibility would have been easier to attribute to noise represented by the 10-15 dB notch had I found they were caused by the Second Defendant's breach of duty. It follows that if I had found for the Claimant on the issue of causation I would not have dismissed the claim on the basis that the Claimant was not appreciably worse off as a consequence of the breach.
26. Although of academic interest only I record the fact that counsel for both parties helpfully agreed the quantum of the claim at £2800 after apportionment reflecting the contribution to the damage made by the First Defendant.
27. This Judgement will be handed down on a date to be fixed by the court in public. The time for appealing the Judgment shall not start to run until it is handed down. CPR Practice Direction 40E shall apply. If the parties can agree the form of an order and any consequential directions arising from this Judgment then the attendance of counsel and solicitors will be excused.

Permission to appeal refused:

No real prospect of success: fact that D₁ compensated C not relevant.

Both experts agreed turned on interpretation of

Even if 70% wrong to ^{say} assert that 50% of patients with noise @ 6 kHz
= not noise related = only part of remaining. Given if test not out.
remaining studies.

Permission to appeal refused

final order.

Permission can be reviewed before CA.