

PATENTS ACT 1977

IN THE MATTER OF an application under
section 40 by Bernard Frederick Fellerman
for compensation from Electrolux Limited
in respect of various British and foreign patents

DECISION

Introduction

1. This application concerns inventions in the area of electric hobs and microwave ovens/grills that use as a heat source infra-red lamps, particularly halogenated lamps with tungsten filaments. The hobs are known colloquially as “halogen hobs”.
2. Prior to these inventions the idea of using infra-red lamps for hobs and ovens was known, but practical difficulties had apparently prevented this idea being commercialised. In 1982 and 1983 the applicant, Bernard Fellerman, was one of a team of workers in the Thorn EMI group that was developing the use of such lamps to make them a practical proposition. Mr Fellerman says he was the leader of the team, and this does not seem to be disputed. He and his co-workers jointly made several inventions in the course of this work to different aspects of infra-red heat sources for hobs and microwave ovens, and these were patented here and abroad. Mr Fellerman says that it was these inventions that turned the “halogen hob” into a marketable product, and again this does not seem to be disputed.
3. Mr Fellerman was made redundant by the company towards the end of 1986 but has maintained a watch on the cooker market in this area. He has now concluded that benefits have accrued from the patents that justify compensation to him as an inventor, and this application under section 40 is the result. It was heard before me 27 March 1998, when Mr

Fellerman appeared in person and Electrolux Limited, standing as the employers, were represented by Mr Mark Vanhegan of Counsel, instructed by Withers and Rogers.

The patents

4. The number of patents in this action has changed as the case has progressed, but by the time of the hearing we were left with seventeen. They are: GB patents 2132060, 2152790, 2170665, European patents (UK) 0146215, 0150087, US patents 4631390, 4751370, 4864104, 4868371, Canadian patents 1205842, 1228104, Australian patents 560468, 561574, New Zealand patents 206677, 209683 and South African patents 8309303, 8407703.

5. Neither side has taken me through the details of the inventions covered by these patents, but from an examination of the priority dates claimed it would seem that there are at least five patent families here, ie groups of patents originating from the same patent application or applications. Thus *prima facie* these patents embrace at least five inventions. Both sides have been content to treat these inventions *en bloc* for the purposes of these proceedings. It is not immediately evident to me that lumping together patents relating to different inventions is legitimate for a section 40 claim. I am aware that some earlier decisions, such as *British Steel plc's patent [1992] RPC 117*, accepted that a section 40 claim could relate to more than one patent, but those patents were all part of the same family and therefore presumably related to the same invention, whereas in the present case the patents relate to several different inventions. Nevertheless since both sides in the present dispute were happy to lump the patents together, I am content to go along with that for the purposes of this decision.

6. A further complicating factor is that Mr Fellerman is not the sole inventor of most of these inventions. For those patents for which the documents supplied to me name the inventor, Mr Fellerman is sole inventor on only one: there are two other inventors on some patents, four other inventors on another. For some of the patents, the documents supplied to me do not show who the inventors were at all and Mr Fellerman has not provided me with any evidence of his own on this, though both sides accept that he was an inventor.

7. Finally, there is one other complication that I will mention. Five of the patents do not have the employer company as either grantee or even original applicant, and at the hearing Mr Vanhegan submitted that they should be excluded on that ground. In the event, I have not found it necessary to consider this point, but I will simply say that if this were a material issue one might need to look at how the patentee, Thorn EMI Patents Limited, derived its right to these inventions.

The employer and the owners of the rights

8. It is common ground that the inventions were made whilst Mr Fellerman was employed by a company in the Thorn EMI group. However, for the purposes of this action the employer is identified as Electrolux Limited. This is part of the Electrolux group which has nothing to do with the Thorn EMI group, so some explanation is necessary.

9. The history of the companies that feature in the evidence, and the history of the patents, is complex, and in particular, the change and interchange of company names within the Thorn EMI group in the early eighties were very involved. The parties appreciated that the best way to identify the employer company with certainty was to refer to its company registration number rather than its various names, and I shall adopt that practice too.

10. Our starting date must be the date of the inventions. The only apposite evidence here is the date on which the first patent applications (ie the “founding members” of the patent families) were made, and the earliest of these is dated 24 December 1982. Mr Fellerman had then for some time been working for a company having the registration number 230753: at the date of the patent applications this company was called Thorn EMI Domestic Appliances (changing to Thorn EMI Appliances in April 1985), and it was this company that applied for these early patents. Later applications in 1984 and 1985 were however made by Thorn EMI Patents Limited, another company of the group. The end of 1986 saw the grant of the first two British patents to company 230753, and also the retirement of Mr Fellerman from the company.

11. The year of 1987 was a significant one: the Thorn EMI group decided to divest itself of certain companies involved in manufacturing domestic appliances, and company 230753 was one of these. The buyer was AB Electrolux of Sweden and the date of the sale was 5 June 1987. The terms of the sale were set out in a Share Purchase Agreement, a document of some 146 pages of which 21 were put in evidence. Thorn EMI did not however wish to include its patents in the company sale and shortly before it, on 28 May 1987, assigned at least some of them to Thorn EMI Patents Limited. I have been supplied in evidence with a copy of the assignment of 15 European patents and patent applications, including the two in the present action, on this day for a total consideration of £1. I have not been supplied with a copy of the assignment of the GB patents, but the fact that they were assigned on this day is recorded in extracts from the Patent Office Register which were put in evidence. The assignment of the other patents is not documented in the evidence. It seems possible that some had already been transferred to Thorn EMI Patents, but whatever the position, it is common ground that they were not transferred to the Electrolux group with company 230753. At this point therefore the patents and the employer company went their separate ways: the patents stayed with the Thorn EMI group, while company 230753 transferred to the Electrolux group, its name changing finally to Electrolux Limited in January 1992.

12. This is the second application made by Mr Fellerman under section 40 for these inventions. In the first application Mr Fellerman claimed compensation from Thorn EMI Patents Limited. One can understand why he did so if that is where the patents, and thus the benefit from the patents, now reside. The Hearing Officer however held (decision SRIS O/11/96) that the target of a section 40 action must be the employer or the person who now stands in his shoes, wherever that company or person may now be, not the current proprietor. The Hearing Officer further held that the employer, or rather the successor to the employer, was a company called Kenwood plc, on the basis of a letter from that company. Accordingly the first application foundered because Mr Fellerman had claimed compensation from the wrong legal person.

13. The present application, of course, is not in fact directed against Kenwood plc even though the Hearing Officer had found this company to be the employer. This is because after

the Hearing Officer had made his decision further information came to light which cast serious doubt on the information that had been supplied by Kenwood plc. Indeed, trying to identify the employer has been the subject of extensive correspondence between the various companies involved, and the difficulty in doing so is a reflection of the complicated structure of the Thorn EMI group and the many changes of name which the companies in that group underwent. The outcome of the correspondence since the Hearing Officer's decision is that both sides in the present action now agree that Electrolux Limited is the employer for section 40 purposes, and I am happy to proceed on that basis.

The issues

14. It is convenient here to consider what needs establishing if a section 40 application is to succeed. Both sides accept that the inventions belong to the employer under the provisions of section 39 of the Act, and accordingly that this claim for compensation is being made under section 40(1), not 40(2). Section 40(1) says:

Where it appears to the court or the comptroller on an application made by an employee within the prescribed period that the employee has made an invention belonging to the employer for which a patent has been granted, that the patent is (having regard among other things to the size and nature of the employer's undertaking) of outstanding benefit to the employer and that by reason of those facts it is just that the employee should be awarded compensation to be paid by the employer, the court or the comptroller may award him such compensation of an amount to be determined under section 41 below.

15. The application must be made by the employee and the burden of proof is therefore on him. This was confirmed by Aldous J in *Memco-Med Ltd's Patent [1992] RPC 403* at page 415. To discharge that burden of proof it seems to me that the employee will need to:

C provide evidence to establish the benefit that the employer has received from the patent;

- C provide evidence to establish the size and nature of the employer's undertaking;
- C demonstrate by comparing the two that the benefit is outstanding, and persuade the court or comptroller that an award would be just.

As section 43(7) says, “benefit” in this context means benefit in money or money’s worth.

16. If the employee succeeds in establishing an entitlement to compensation under section 40, the amount of compensation is determined by section 41, and for this the employee needs to provide evidence of the various factors mentioned in that section. This would include, for example, evidence of the nature of his duties, his remuneration and the effort devoted to making the inventions, and Mr Fellerman has indeed supplied this. However where, as here, several inventors were involved but only one is seeking compensation, evidence as to the relative contributions made by each to each invention is also required, and this, I must observe, Mr Fellerman has not supplied.

17. The first step, though, is to establish the benefit the employer has received from the patent. I am sure that intuitively Mr Fellerman suspects that the benefit is huge, and I can see why. Before these inventions were made, the halogen hob was no more than what I might call a theoretical possibility. Now, as a result of the work of Mr Fellerman and his team, halogen hobs can be seen in every cooker showroom in the UK and, very likely, throughout much of the rest of the world too. Large numbers must have been made, and therefore, he assumes, large profits must have been made.

18. However, intuitive reasoning like this is not sufficient. It can be flawed, in the sense that merely because a product has sold widely doesn’t necessarily mean someone has made a lot of money from it, and in any case it does not quantify the profits made. As Mr Fellerman rightly recognised, therefore, hard evidence of the benefit to the employer is required.

Mr Fellerman's case

19. Mr Fellerman's case relied on the circumstances under which the employer company 230753 was sold to the Electrolux group in 1987. He cites a passage in the published Annual Report of the Thorn EMI group for 1987 at page 46 which reads (with emphases that I have added):

Business disposals

The losses less profits realised on the sale of all businesses disposed of during the year, including THORN EMI Major Domestic Appliances, amounted to a net figure of £20.0m as shown in Note 6. The related combined net assets disposed of amounted to £93.8m and are included in the acquisitions and disposals column of the source and application of funds on page 43.

THORN EMI Major Domestic Appliances. This sale to Electrolux AB of the Group's businesses engaged in the manufacture and sale of cookers and other large domestic appliances, as well as the associated businesses dealing in catering equipment, was announced on 10 April 1987 and completed on 5 June 1987. As the sale was made with effect from 1 April 1987 with results thereafter accruing to the purchasers, the individual assets and liabilities of the businesses sold have been treated as though disposed of on 31 March 1987 and the net sales proceeds of £43.8m, of which £41.8m will be received on 30 September 1987 have been included as a debtor. The losses before interest of the businesses sold, amounting to £17.1m for the year to 31 March 1987, have been included in the Group results for the year and the loss on disposal of £23.3m has been charged as an extraordinary item.

20. Mr Fellerman notes that the combined assets disposed of amounted to £93.8 million, but the sales proceeds were only £43.8 million, a difference of £50.0 million. The losses of £17.1 million which are also mentioned in this extract account for part of that difference, but that still leaves £32.9 million. This, Mr Fellerman avers, represents the benefit of the patents. As he put it, the Thorn EMI Group would not throw away nearly £33 million of assets just to secure a quick sale, but they were prepared to reduce the sale price by this amount because they were retaining the patents. Thus the amount of the alleged reduction - £32.9 million - represents the value of the patents. His argument then runs as follows. The Electrolux group were therefore in pocket by £32.9 million. This is not something they expected - it was just a

bonus. Moreover that sum will have appreciated in the succeeding years at a rate of around 10.98% (a figure Mr Fellerman has computed from the 1996 Annual Report of the Electrolux group as their average return on investment over the years 1986 to 1996) to give a present sum of £102 million. This is the amount by which his employer has benefitted from the invention.

21. That, as I understand it, is the core of Mr Fellerman's case, but he supports it with an article in the Financial Times of 11 April 1987 on the announcement of the sale of Thorn EMI's domestic appliance subsidiaries to the Electrolux group, which said that domestic appliances had sales of £200 million in the previous year. Mr Fellerman contrasts the £200 million turnover with the £43.8 million sale price, presumably inviting me to infer that £43.8 million cannot possibly have represented the total value of the businesses and thus supporting his argument that there is a large sum unaccounted for.

22. He also supports his case by attempting to calculate the global royalties accrued by the patents. I assume his purpose in doing this is to show that £32.9 million was a plausible valuation for the Thorn EMI group to ascribe to the patents. He starts by estimating annual sales of cookers in the United Kingdom, USA, Canada and Australia, estimates what proportion of those use halogen infra-red sources, and assumes each of those is subject to a royalty payment under the patents of £3 (an average of two halogen heaters per cooker at a royalty of £1.50 each). This produces an annual royalty in 1995 of £4.17 million and Mr Fellerman projects this forward and backward to arrive at a total of £60 million over the patent lifetimes. He postulates a final figure of £135 million if Europe were included.

Assessment of Mr Fellerman's case

23. I regret to say that there seem to me to many flaws in Mr Fellerman's reasoning, most of which were pointed out by Mr Vanhegan. Firstly the sum of £93.8 million was the combined assets of *all* the companies disposed of during the year, of which company 230753 was only one. Similarly, the £43.8 million represents the net sales proceeds of *all* of the group's large domestic appliance businesses, and again company 230753 was merely one of

these. Thus these figures clearly do not relate solely to the employer company. It is possible, as Mr Fellerman appeared to allege, that company 230753 accounted for the major part of these assets and sales proceeds, but I cannot assume that without evidence, and there is none.

24. Secondly, I can see no reason to suppose that the valuation of assets as represented in a balance sheet ought to equate to the actual sale price of a company having those assets. The sale price will depend on many factors, such as general market conditions at the time of sale, how keen one side is to acquire, or the other side to get rid of, the business, whether the purchaser's own assessment of the assets matched the seller's, and how the company being sold is performing. For example, on this last point the Financial Times article on which Mr Fellerman relies goes on to say that the division had losses of about £10 million, and would have cost an immediate £20 million and up to a further £50 million over the next 5-6 years to turn it round, and this would clearly have depressed the sale price substantially. Thus whilst Mr Fellerman links the whole of the £32.9 million "gap" to the patents, there are many other factors that could have contributed to it. Indeed, it is quite conceivable that the bulk of it is attributable to other factors. It may well be true, as Mr Fellerman alleges, that of all the divisions of the companies that were being sold, the cooker division was the one that was making a profit, but one cannot deduce from that that the £32.9 million was all down to these patents.

25. Thirdly, even if all the figures do relate more or less solely to company 230753 and even if the "gap" is due solely to the patents, it is clear that there were many more patents than just those which form the subject of the present application. For example, the Share Purchase Agreement lists 28 patents and patent applications relating to the halogen heat cooking hob and the halogen heat microwave oven/grill. Although I do not have the complete Agreement, it seems fairly clear from the context that the Thorn EMI group were granting, or agreeing to grant, the Electrolux group a licence to work these inventions. However, of the 28, only 4 are included in the present reference. Thus even if Mr Fellerman were right in saying "the patents" were worth £32.9 million, that does not mean the particular patents which form the subject of this application were worth that amount.

26. As for the evidence on turnover from the Financial Times, merely because a business has a turnover of £200 million does not mean it must necessarily be worth more than £43.8 million. The turnover tells me nothing about the true value of the business, especially since it was making a loss.

27. I must also say I do not find Mr Fellerman's calculation of the global royalties persuasive. I must first observe that the way in which the evidence to support his calculations has been presented is far from satisfactory. For the UK, Mr Fellerman names some but not all of the manufacturers, retailers and other bodies he approached, largely by telephone, to gather information, but he does not tell us exactly what he asked them and what each of them said, merely his own overall conclusion based on all the responses. For the US, he simply tells us he got people he knew there to make similar enquiries, and again all he gives us are his final conclusions. Further, at the hearing he told me that he and his wife had just repeated their telephone survey to check that nothing had changed since the previous survey, but again he provided no detailed evidence of exactly what had been done. I am not for one moment suggesting Mr Fellerman has been anything other than absolutely straight and honest in all this. I am sure he has done his best to arrive at figures which he sincerely believes are right. However, without a lot more information about the details of the survey, it is difficult to be sure that the conclusions Mr Fellerman draws from it are sound. In particular, the methodology Mr Fellerman has used to derive his £135 million figure appears to depend on a number of questionable assumptions, such as:

- ! That all the cookers described by those who answered his enquiries as having a halogen hob used the technology of his patents. Under cross examination, even Mr Fellerman conceded that this was not the case because some companies had invented around the patents. For example, Electrolux Limited provided evidence that in 1991 they had successfully developed an alternative infra-red source - not employing a halogen filler - for cookers. Whilst these are not strictly “halogen” hobs, they could very easily be confused with them in a telephone survey like this.
- ! That other manufacturers will continue to use the technology of his patents in the

future and continue to pay a royalty under a licence agreement for use of that technology. The fact that one manufacturer, Electrolux Limited, has invented around the patents casts doubt on this assumption.

- ! That the potential royalties are entirely related to the patents that are in suit. As indicated earlier, there are a number of other halogen hob patents owned by the Thorn EMI group that are not in suit here.
- ! That Mr Fellerman's estimates of cooker sales are accurate. Mr Fellerman has not taken his historical sales figures from published data but has chosen to estimate the sizes of the markets by working from population size. Without some validation from published data the accuracy of his figures is unknown, and they must therefore be treated with caution.
- ! That Mr Fellerman's figures for the percentage of cooker sales that are electric and the percentage of these that are halogen hob are accurate. Mr Fellerman only contacted a sample of retail outlets, and without knowing which ones he contacted we cannot be sure his sample is statistically representative.
- ! That the suggested royalty of £3 per cooker is reasonable. This may be too high, because we do have in evidence a licence to work the halogen heat patents granted by Thorn EMI Patents Limited to A B Electrolux which shows a basic royalty of per cooker, subject to some adjustments.

28. My doubts about the soundness of Mr Fellerman's estimates are confirmed by some figures for royalties received which are set out in a statutory declaration by Mr Leaman, the sole Director of QED Patents Limited (formerly Thorn EMI Patents Limited). I must stress that these figures relate to a whole portfolio of halogen hob patents, many of which are not subjects of the present application. It is not possible to isolate figures for just the patents in suit because the portfolio was licensed as a whole - individual patents were not licensed. They show a total world-wide licensing income from this portfolio of £1,706,000 over the years

1986 to 1994. (These figures do not include income from the halogen-heat microwave oven/grill patents, but Mr Leaman says these were not generally licensed.) Mr Leaman also says that the expenses incurred in maintaining and defending this portfolio have been high, at £1,355,000. Allowing for money paid out as a licence fee, Mr Leaman concludes that the profit made for the patentee by the patent portfolio in the period 1986-94 was only £210,000.

29. £210,000 is not a huge sum, especially as it includes profits on other patents. Even allowing for the fact that it does not cover the few years prior to 1986, it is very different from the sort of figure postulated by Mr Fellerman. At the hearing Mr Fellerman indicated that in his opinion Mr Leaman had not been as forthcoming as he could have been. However, he provided no evidence to disprove what Mr Leaman had supplied and declined an invitation to cross examine him. Accordingly, as I said at the hearing, I cannot attach any weight to Mr Fellerman's unsubstantiated assertion. I am more convinced by Mr Leaman's figures than by Mr Fellerman's calculations, and the former do not support the view that the Thorn EMI group would have recognised in 1987 that the patents were as valuable as Mr Fellerman supposes.

30. Returning now to the core of Mr Fellerman's case, I have an even more fundamental difficulty. The patents were not sold to the Electrolux group, they were retained within the Thorn EMI group. Thus it is quite wrong to say that the Electrolux group suddenly found themselves with an unexpected £32.9 million bonus. Even if all Mr Fellerman's other arguments are right, all this tells us is that when Thorn EMI said they were going to retain £32.9 million's worth of assets, the Electrolux group said they would pay £32.9 million less. There is no bonus for the Electrolux group in this: they were simply not paying for something they weren't getting.

31. At one stage Mr Fellerman appeared to put a slightly different slant on this last point. He suggested that the Electrolux group must have had the £32.9 million in the bank in preparation for buying the company, and when they didn't need it they were left with £32.9 million to invest. This is pure speculation, because we do not know whether the Electrolux group ever expected to spend that £32.9 million on the purchase or whether they ever had the

money in the bank. In any case, this is hardly a benefit to his employer from the patents. At best it is a benefit that the employer gained from *not* having the patents.

32. Finally, there is another fundamental problem with Mr Fellerman's case. The £93.8 million is the value of the assets that were disposed of. Since the patents were not disposed of by the Thorn EMI group, their value cannot be part of this £93.8 million anyway.

33. The Share Purchase Agreement is silent both as to the value of the patents at the time of the company sale and as to the benefit they may have generated beforehand. Indeed, there is no reason for it to have mentioned these at all. At the hearing there was some discussion of figures appearing on page 41 of the Agreement (a corrected version of that page was handed up at the hearing) since Mr Fellerman seemed to believe they showed what the Electrolux group had paid for the company. However, it is clear from the context that the figures relate to what is termed a Hive-Out Agreement by which company 230753 sold "the TEMI businesses" to its parent Thorn EMI shortly *before* its sale to the Electrolux group. Neither side could tell me what the TEMI businesses were, but despite this, I am at a loss to see how these figures can be of any assistance in establishing what the Electrolux group paid for the company. Indeed, Mr Fellerman conceded as much in cross examination.

I will also observe that the Hive-Out Agreement was concluded *after* company 230753 had apparently divested itself of its patents, so the sums involved in this Agreement can have nothing to do with the patents.

34. In conclusion, Mr Fellerman has in my judgement failed to establish *any* credible figure for the benefit obtained by his employer from the patents in suit, let alone establish that the benefit was or is outstanding.

Other arguments

35. Although Mr Fellerman did not maintain any other arguments at the hearing, Mr

Vanhegan helpfully covered two other points that Mr Fellerman might have made on the evidence available. For Mr Fellerman's sake, I will look at these briefly.

36. Firstly, we have in evidence an agreement dated September 1986 between company 230753 and Thorn EMI Patents Limited allowing the latter to licence to third parties all patents relating to infra red cooking hobs "now or hereafter applied for", with company 230753 getting 60% of the royalties. Unfortunately we had no idea how much, if anything, was paid to the employer company under this agreement, and even if we did, we would have no way of separating moneys received in respect of the patents in suit from moneys received in respect of other patents. This evidence, therefore, gets us no further in identifying any benefit the employer has received from the relevant patents.

37. Secondly, since it seems possible that any benefits there might have been in respect of these patents may have gone to other parts of the Thorn EMI Group rather than company 230753, there is the question of whether the benefit received by persons connected with the employer might be taken into account for the purposes of section 40(1) of the 1977 Act. Section 41(2) provides for such further benefit to be taken into account when assessing the quantum of compensation, but on the face of it does not apply to section 40. If this interpretation is correct, there would be a difference between the meaning of the term "benefit" in sections 40 and 41. This could cut both ways. As Mr Vanhegan argued, if the benefit to connected persons is to be taken into account under section 40, it would follow that the benefit received by the Thorn EMI group would have to be compared with the size and nature not just of company 230753 but of the whole of the Thorn EMI group to determine whether it was outstanding, and this could create a stiffer test. However, since I have no evidence about any benefits "diverted" to other parts of the Thorn EMI Group, I make no finding on this point.

Findings

38. In conclusion, I find Mr Fellerman has failed to establish what benefit the patents are or have been to his employer. Indeed, he has failed to establish what benefit - in money or

money's worth - the patents have been to *anyone*. In saying that I am not suggesting that the patents have been of no benefit, but simply pointing out that Mr Fellerman has not satisfactorily succeeded in quantifying the benefit. Thus the question of whether the benefit is outstanding does not even arise. I therefore make no award for compensation under section 40(1).

39. I know Mr Fellerman will be bitterly disappointed by this. Having seen him in the witness box, I am convinced he is an honest and sincere person who genuinely and strongly believes in the rightness of his case. He feels he put a lot of effort into these inventions, which he now sees in showrooms across the world, and in his eyes his only reward was to be made redundant when his job moved from Havant to Durham. However, I come back to the observation I made at the outset: the fact that a product has sold widely doesn't necessarily mean someone has made a lot of money from it. I must also observe that even if Mr Fellerman had established outstanding benefit, I would have had considerable difficulty deciding on an appropriate level of compensation without a lot more information about how his contribution compared with those of all the co-inventors.

40. Mr Vanhegan said at the hearing that Electrolux Limited would not press for costs. I have to say that I think this is very generous on their part. This application must have put them to very considerable expense. In particular, I am aware that they have voluntarily dug out and supplied a lot of evidence which should have been supplied by Mr Fellerman. Their task has been made all the more difficult by the fact that many of the events took place in the Thorn EMI group, which has no connection with the Electrolux group. However, I am happy to make no order on costs.

41. Any appeal from this decision must be made under Order 104 Rule 19 of the Rules of the Supreme Court and lodged within six weeks.

Dated this 12th day of May 1998

P HAYWARD

Superintending Examiner, acting for the Comptroller

THE PATENT OFFICE