

IN THE MATTER OF an application under  
Section 72(1) by A S Elektrofabriken for  
the revocation of Patent No 2220116  
in the name of Hans Rune Rosander

10 / 1 / 95

### DECISION

Patent Application No 8913063 in the name of Hans Rune Rosander was filed on 7 June 1989, claiming priority from Swedish Patent Application No 8802158-9 dated 9 June 1988. Mr Rosander was named as sole inventor. The application was published on 28 December 1989 and Patent No 2220116 was granted on 22 July 1992. It is concerned with microphones.

On 16 September 1992 A S Elektrofabriken filed an application for the revocation of the patent accompanied by a statement setting out the grounds of revocation, viz that:

- (a) the invention claimed is not a patentable invention, and
- (b) the matter disclosed in the specification of the patent extends beyond that disclosed in the application for the patent as filed.

As regards the first ground, the applicants allege firstly, in effect, that the invention of claim 1 of the patent in suit is not new having regard to Austrian Patent No 292087 (Akustische U. Kino-Geräte GMBH - "AT087"). It is not explicitly stated when AT087 was published, but the certified translation declares that it was issued on 10 August 1971 and that the beginning of duration of the patent was 15 December 1970. It does not appear to be in issue that it was made available to the public before the claimed priority date of the invention of the patent in suit.

The applicants allege secondly, in the alternative in relation to the first ground, that the invention of claim 1 does not involve an inventive step in that it is an obvious development of known microphone constructions as exemplified in figure 7 of the patent in suit and the related description, and in the light of AT087, German Patent No 2206996 (Sennheiser electronic KG - "DE996") and UK Patents Nos 992570 (American Danish Oticon - "GB570"), 706808 (Cosmocord - "GB808") and 602432 (Permoflux - "GB432"). In none of these documents is it in dispute that they were made available to the public before the priority date of the invention of the patent in suit. Since no argument is adduced in relation to GB570 in either the pleadings or the evidence, it appears that the applicants are not in fact relying upon it. I am satisfied that it adds nothing to the considerations arising in relation to the other citations, and I will refer to it no further.

The applicants' statement goes on to allege that claim 2 is obvious in the light of the above citations, that claim 3 either adds nothing of substance to the preceding claims or is obvious in the light of the citations, and that claim 4, an omnibus claim, is an obvious development of the prior art microphone construction of figure 7 of the patent in the light of the citations.

With reference to the second ground of revocation the applicants' allegation is concerned with a definition of the word "symmetric" present in the patent as granted but not in the application as filed. While they do not dispute that the particular form of microphone shown in figures 1 to 6 of the patent satisfies this definition, they allege that the definition imports a generality into the meaning of the term which is not justified on the basis of the application as filed, and thereby adds new matter.

As relief, the applicants ask for revocation of the patent in its entirety and for costs.

The patentee filed a counterstatement refuting the applicants' case. In particular, he asks that the German and UK patents be deleted from the case since, he says, they are not discussed in the applicant's submission. He further argues that none of the cited prior art challenges the novelty or inventiveness of the invention and he rejects the allegation that the granted patent extends the disclosure as compared to the as-filed application. He seeks dismissal of the application for revocation and he too asks for costs.

Following the filing of evidence-in-chief by both sides (the applicants declining to file evidence-in-reply), both parties stated that they did not wish to be heard. That remaining the position, I will proceed to determine the matter on the basis of the papers on file.

Evidence for the applicants comprises an affidavit with exhibit by Esben Wingerei, who is described as "an independent industrial designer" who has been "working on the design of industrial products moulded in both metallic and plastics materials for 14 years", an affidavit with exhibit by Joseph Harold Addy, described as production manager of Symfon AS, "a recently formed company engaged in the manufacture of a range of audio equipment, including microphones", who has been "involved in the manufacture of such equipment for many years", having had previous experience as a "sound technician in studios and on stage since 1970", and a statutory declaration by Esmond Antony Hitchcock, partner in Lloyd Wise, Tregear & Co, patent agents for the applicants. Evidence for the patentee consists of an affidavit made by Mr Rosander.

The claims of the patent in suit are as follows:

- "1. A microphone comprising a handle part, an intermediate part, and a head part, wherein at least the handle part of the microphone consists of two symmetric (as hereinbefore defined) halves arranged in contact with each other along a plane through the longitudinal axis of the handle part.
2. A microphone according to claim 1, wherein the assembly of the handle part, the intermediate part, and the head part of the microphone consists of two said symmetric halves arranged about a plane of symmetry passing through their longitudinal axis.
3. A microphone according to claim 1 or 2, of the type intended to be either carried by hand or attached to a stand.

4. A microphone constructed and arranged substantially as hereinbefore described with reference to, and as illustrated in, Figures 1 to 6 of the accompanying drawings."

In the specification the discussion of prior microphones of the type to which the invention relates centres on the difficulties associated with assembling the component parts into the casing and the consequent difficulties in dismantling such microphones for the purposes of repair and maintenance. A specific prior microphone is shown in figures 7A and 7B in which the handle is in the form of a single tubular construction. As described, the electronics of the microphone, comprising printed circuit boards, switches and a connector for connecting the microphone to an amplifier, have to be fed into the handle from the open end to which eventually the intermediate part will be attached and to which in turn the microphone head, which converts sound into corresponding electrical signals, will be attached. It is suggested that this process is complicated, requiring special tools and necessitating pre-twisting of the internal conductors so that they do not become twisted further when the intermediate part is screwed onto the handle before being held in place by thread glue. It is also suggested that the components must be made very complicated to allow admittance from the outside without using a special tool for servicing. The casting of the handle and intermediate part is stated to be complicated due to the tubular shape.

In contrast, the microphone construction according to the main embodiment of the invention comprises a two-part casing. The head, the intermediate part and the handle are formed integrally in each of two halves. Each half is substantially semi-cylindrical in cross-section and is provided on its interior surface with various formations to receive the internal components of the microphone. In particular, there is a through hole for a screw joint or the like to hold the handle together, there are within the handle slots to receive circuitry boards and holders for receiving tightening means and a connector, and there are further holes in arms formed at the head of the half-casing for the passage of screws to hold the microphone head in place, although it is also possible that the head could be retained by the arms alone.

The outer edges of the handle and intermediate parts are provided with recesses which combine with corresponding recesses in the other half to define spaces in which are located

switches, indicators or other devices attached to the circuit board. It is stated that, since the handle parts are "symmetric", recesses are present on each side of the handle, and that if recesses are only used on one side a blanking plate is preferably placed over the unused recesses.

It is stated that this construction makes it:

"very simple to assemble all parts. They will be fitted as into an open box. It is considerably more simple to fit in the tightenings needed ... . It is also possible to produce ... handle, intermediate part and head part as one unit. The *[said three]* parts can easily be produced by moulding in comparatively simple tools."

The passage goes on to state that:

"One drawback of the construction is this part or parts are relatively difficult to produce manually. The construction is as evident from above very cast adapted *["adopted" in the specification as filed]* and should also be produced in this way to be able to reduce the cost maximally."

Finally this passage states that:

"the assembly is very simple and no special tools are needed ... . . . disassembly and reassembly at service can be made in a simple way at each workshop ... . A further advantage is that switches, indicating means and other means can be placed directly onto *[the]* circuit board and are thus accessible from outside without any special tools."

As granted the body of the specification includes a final paragraph which did not appear in the specification as filed:

"The term 'symmetric' as used herein is intended to denote the arrangement in which there are two halves which are each truly one half of the whole, and are therefore

identical to one another. One form of the invention incorporating such identity of the two microphone parts is shown in Figures 1-6".

Claim 1 as granted qualifies "symmetric" by the words "(as hereinbefore defined)". I understand the purpose of the first sentence quoted above to be to provide that definition.

Although neither party has made any submission as to the approach that I should adopt in construing the claims, I am satisfied that I am bound to follow the purposive construction first set down in *Catnic Components Ltd v. Hill & Smith Ltd* [1982] RPC 183 and recently endorsed in *Glaverbel SA v British Coal Corp & anr* [1994] RPC 443. In particular, I am required to view the specification objectively and in its entirety through the eyes of a man of ordinary skill in the art. In the words of Mummery J in *Glaverbel*, I must ask:

"what are the matters disclosed in the specification which the technician skilled in the art would, with relevant knowledge and experience, understand to be the essential and novel features of the [invention]. Although the language of the specification must be examined with care to discern the relevant purpose, the court must be wary of the danger of losing the true meaning in a word by word or line by line textual dissection of the language of the claims."

I also note Mummery J's observation that:

"it is for the court, not for any witness, however expert, to decide the question of construction in accordance with the meaning of the language used",

although I may take account of any enlightenment which such witnesses may give:

"on the meaning which those skilled in the art would give to technical or scientific terms and phrases and on unusual or special meanings given by such persons to words which might otherwise bear their ordinary meaning."

One thing which can be simply concluded in construing claim 1, and which does not appear to be in dispute, is that, taking into account the particular embodiment described, the term "intermediate part" is not intended to imply a limitation to anything more specific than the general portion of the microphone which links the handle part to the head part.

According to claim 1, at least the handle part is required to consist of two "symmetric" halves, and it is the word "symmetric" which is the main source of dispute in this case in relation to the issues of both patentability and added subject matter. At one level it appears a relatively straightforward matter to construe the word "symmetric" in the patent as granted, since the definition which I have already quoted is provided. Although I do not find the first part of this definition, which states that "there are two halves which are each truly one half of the whole", especially informative in itself, the second part, which states that the two halves are "therefore identical to one another", leaves no room for doubt as to at least one aspect of the intended meaning of "symmetric" in the granted patent, namely that the two halves of the handle part are identical to each other. In considering the documents cited in relation to the ground of unpatentability, therefore, I might compare them with claim 1 construed so as to incorporate this definition of "symmetric".

However, the second ground for revocation alleges that:

"the definition [*of 'symmetric'*] imports a generality into the meaning of the term which is not justified on the basis of the Application as originally filed, and thereby adds new matter."

In seeking to apply the proper construction to the invention, therefore, it will be helpful to consider the sense in which the word "symmetric" is used in the application for the patent in suit as filed, since an interpretation of the word in the granted patent which differed from or went beyond that in the application as filed would be likely to lead to a conclusion that matter had been added impermissibly. This approach leads most conveniently to my dealing with the issue of alleged added matter before addressing the allegations of lack of novelty or inventive step.

The first use of the word "symmetric" or its equivalent in the application as filed follows immediately after the description of the drawbacks of the prior art construction which I have already summarised. It is stated that:

"It has now surprisingly been shown possible to be able to overcome most of these above mentioned drawbacks by means of the present invention which is characterised in that at least the handle part of the microphone consists of two symmetrical halves arranged to each other in a plane through the longitudinal axis of the handle."

I am satisfied that there is no significance in the use of "symmetrical" rather than "symmetric". From the words "characterised in that ..." this passage corresponds precisely to the form of claim 1 in the application as filed. The above-quoted passage is followed by a reference to a preferred embodiment of the invention in which:

"the handle part, the intermediate part, and the head part consist of two symmetric halves arranged to each other in a plane through the longitudinal axis of these parts."

This in turn corresponds to claim 2 as filed, though in the claim "symmetrical" is used.

There are only two uses of the word "symmetric" in the particular description of the application as filed. They both appear at a point at which assembly of the complete microphone is being described. The first is as follows:

"At the assembly the connector is mounted into its holder 8, said circuit board in its holder 5 and the sound head in its groove 11 in one symmetric half."

The only other use of "symmetric" in the application as filed is in a passage following directly on from the above quotation, corresponding to the one to which I have already referred in the granted patent, stating that the recesses are present on each side of the handle since the handle parts are symmetric, and going on to note that if the recesses are only being used on one side of the handle a covering plate ("blanking plate" in the granted patent) is preferably placed over the recesses not used.

The drawings show various views of only one half of the microphone, so they shed no further direct light on the issue of symmetry as it might relate to a comparison of the two halves, although they do appear to show that the right- and left-hand sides of the half illustrated, as viewed in a direction perpendicular to the plane in which the two halves are intended to be joined, are mirror images of each other. This is consistent with the statement that, because of the symmetric character of the handle parts, the recesses are present on each side of the handle, although this feature is not separately discernible from the drawings themselves.

The only other passage in the application as filed to which I need to refer at this stage is the one which I have already quoted from the granted patent to the effect that the construction "is very cast adopted (adapted?) and should also be produced in this way to be able to reduce the cost maximally". I take this to mean that the construction in accordance with the invention is particularly suited to being manufactured by casting, and that this is the recommended method in order to minimise costs. I observe at this point, for reasons which will emerge later, that there is no explicit suggestion in the specification, either as filed or as granted, that a particular advantage of the construction of the invention is that it permits the same mould to be used to cast both halves of the structure.

Mr Hitchcock suggests that the normal meaning of "symmetric" is "matching" or "balanced", or "having a correspondence on either side of a straight line or plane". Mr Addy also opts for "matching" or "balanced", but suggests that there is a somewhat more precise mathematical definition which requires "exact correspondence about a given point, line or plane". Mr Rosander does not offer a definition as such, but I note that he declares that the microphone disclosed in his patent "is made of two fully identical symmetrical halves", which in its reference to identity is consistent with, although not worded in precisely the same manner as, the definition of "symmetric" incorporated into the patent as granted, which I have already quoted. The Shorter Oxford Dictionary offers me:

"said of a figure or body whose points or parts are equably distributed about a dividing line, plane or point, ie arranged in pairs or sets so that those of each pair or

set are at equal distances on opposite sides of such line, plane or point; consisting of, or capable of being divided into, two or more exactly similar and equal parts."

I note that, although the applicants' pleadings expressly do not dispute that the particular form of microphone shown in figures 1 to 6 of the patent (which do not differ from the figures of the application as filed) satisfies the introduced definition of "symmetric", the evidence of both Mr Hitchcock and Mr Addy appears to suggest otherwise. Mr Hitchcock notes that, whereas the granted patent refers specifically to the casing halves being "identical", the application as filed does not even mention the word "identical", and he states that he cannot accept that "identity" is a natural consequence of "symmetry". He argues that while there are formations in the half of the casing shown in figure 1 which are indeed consistent with the casing halves being identical, there are other formations which suggest complementarity. He cites as the only example the provision of the screw joint which, he says, "suggests...a symmetrical but non-identical arrangement". Elsewhere in his declaration Mr Hitchcock states that the nature of the screw joint:

"is not explained in detail, but reference is made to a screw being placed through the hole 6 (in one microphone half 1), which is presumably received in a complementary element or section in the other microphone half."

Although this point is not elaborated any further I take Mr Hitchcock's argument to be that if the screw passes through one half and is screwed into the other there must be a structural difference between the respective halves, perhaps as regards the diameter of the holes or the provision of a screw thread in one half and not in the other, resulting in the two halves not being identical in this respect. Mr Addy makes a similar point, arguing that:

"if the screw passing through one [half] is secured in the other it seems to me that the halves cannot be truly identical as called for by the term 'symmetric', as it is particularly defined."

In his affidavit Mr Rosander does not attempt to demonstrate directly how the skilled reader of the patent would interpret "symmetric" or to show that identity was implicit in the disclosure of the application as filed. Instead he simply declares:

"that the microphone disclosed in my patent is made of two fully identical symmetrical halves, which A/S Elektrofabrikken is full *[sic]* aware of as they are in possession of the tool for manufacturing said microphone."

In his counterstatement, however, in rebutting the allegation of added matter, the patentee draws attention to certain of the passages in the text of the application as filed to which I have already referred, and states:

"This *[the passage referring to the recesses being present on each side of the handle, as a result of the 'symmetry' thereof, and the use of blanking plates in unused recesses]* makes it quite clear that the term 'symmetric' used at line 12 of page 4 requires complete identity of the parts ... We submit, therefore, that ... it is quite clear that that this use of the term 'symmetric' is precisely foreshadowed in the documents as originally filed on 7 June 1989."

Elsewhere in the counterstatement, in discussing the relationship between the invention and one of the cited prior art documents, the patentee states that the microphone of the prior document:

"would not ... be subject to the requirement that the moulding costs be reduced (by using one mould instead of two) and the two parts would not be symmetrical as required by claim 1."

The applicants' statement says that:

"Reference will ... be made to the submission on behalf of the Patentee dated 31 March 1992 in which the term *['symmetric']* is extensively discussed."

In fact no such reference has subsequently been made in the proceedings, but it may nevertheless be helpful to look at the submission in question, made in a letter from the patent agents of the patentee-to-be, Mr Rosander, during the pre-grant proceedings on the application for the patent in suit in response to an objection by the examiner, since it represents the patentee's argument in relation to the crucial term, at least at that early stage. This may be of particular assistance in the present circumstance in which, although I have before me pleadings and evidence in the case, I have not had the benefit of hearing any argument at a hearing. The letter states:

"Quite clearly, the meaning of this term 'symmetric' is such that it does not read onto the mere use of two components which are connected together along a plane of join which passes through the longitudinal axis of the microphone body. The two parts, in accordance with the present invention, are truly 'symmetric', ie they are identical to one another (even to the extent that this may give rise to redundant formations in the assembled microphone body)."

The letter goes on to state:

"The basis for this definition [*of 'symmetric'*] stems from the discussion of recesses 10 in the paragraph bridging pages 4 and 5, and the comparison between the inventive microphone of Figures 1-6 and the conventional microphone of Figures 7A and 7B, which indicate that the microphone of the present invention is intended to have a shape analogous to that of the conventional microphone by an alternative manufacturing process."

"The reference to simplicity of the tools at lines 22 and 23 of page 5 does not bring out the principle advantage which is evident to the reader of the present specification in the light of the applicants' discussion of the meaning of 'symmetric' in that not only is it (a) simpler to provide two microphone parts which are split along a diametral plane rather than being a continuous tubular moulding which, by virtue of its taper, requires a degree of split tooling, it is also (b) simpler to mould such halves when they are truly 'halves'".

It appears that neither Mr Hitchcock nor Mr Addy, as readers of the specification, found it "evident" that, in particular, it was a principle advantage of the invention that it was simpler to mould the microphone parts since they were "truly halves", which in the context is clearly intended by the agent to mean that they were identical. I must add that neither is it evident to me. I do not find anything in the specification which would direct me to this conclusion.

No objection has been made on behalf of the patentee that the evidence of Mr Hitchcock and Mr Addy, in alleging that the microphone disclosed in the application as filed does not satisfy the introduced definition of "symmetric", is inconsistent with the applicants' pleadings, which expressly declines to make that allegation. Although it would have been helpful to have had this confirmed at a hearing, I am nevertheless therefore satisfied that I may take it that the patentee has no dispute with the structure of the case against him (although of course he disagrees with its content). Rule 75(1) of The Patents Rules 1990 requires the statement to set out fully the grounds for revocation and the facts upon which the applicant relies. The relevant ground is that set out in section 72(1)(d), namely that the matter disclosed in the specification of the patent extends beyond that disclosed in the application for the patent as filed. I consider it correct to regard the "fact relied upon" in this respect to amount to the statement that the definition of "symmetric" does not appear in the application as filed. All the rest, and in particular Mr Hitchcock's and Mr Addy's allegations that the application as filed did not disclose identity of the two halves of the handle, constitutes evidence and/or argument in support.

The purposive approach to claim construction requires me to be more concerned with the overall teaching of the specification in relation to the purpose of the invention than with disputes as to the exact meanings of individual words, and this might be seen as a case in which it is possible to lose sight of the former by pursuing the latter. I am also conscious of Mummery J's dictum that, although I must seek to look at the specification through the eyes of a skilled man, it is for me alone, rather than witnesses, to construe the invention.

On this basis I am persuaded that the disclosure of the microphone, and in particular of its handle, in the application as filed does not clearly imply the identity of the two halves which was later made explicit by the introduction of the definition of "symmetric". I do not

find Mr Hitchcock's and Mr Addy's arguments in relation to the screw holes entirely conclusive in themselves in this regard, although they do provide some support for the view that exact identity may not have been envisaged by the drafter of the specification. The presence of what appears to be counter-sinking at the outer end of the screw hole in the illustrated half of the handle does not immediately suggest to me, in the absence of further indication as to the nature of the screw joint between the two halves, that exactly the same formation is likely to exist on both halves. However, what leads me to my conclusion is my understanding of what the application as filed teaches as a whole, combined with an analysis of the use made in that application of the term "symmetric".

As to the overall teaching, the specification is well-constructed to the extent that it discusses the disadvantages of the prior art and then shows how the invention overcomes them. As I have outlined above, this essentially entails ease of access for assembly and maintenance relative to the conventional tubular handle which has access only at the end of the tube. The suitability of the inventive microphone for manufacture by casting is mentioned, but only in general terms, and with no indication of the advantage later implied in the counterstatement, and perhaps also less directly in the pre-grant proceedings, that the use of identical halves permits a single mould to be used for both halves. The particular benefit of "symmetry" as such, whatever that term might be intended to mean, is not explained. Thus, the general teaching of the application as filed does not in my view direct the reader towards a conclusion that the two halves are identical. There is nothing in the evidence which influences me away from this view.

I have already described all uses of the term "symmetric" in the application as filed. There is in my judgement an ambiguity running through the text which leaves the reader in real doubt as to whether the symmetry referred to is intended to apply as between the two halves or within an individual half. Perhaps leaning somewhat towards the former interpretation is the passage which describes the "surprising" overcoming of the drawbacks of the prior microphone by use of handle parts which consist of "two symmetrical halves arranged to each other in a plane through the longitudinal axis of the handle." However, this impression is much weakened by my analysis of the general teaching of the application, which does not suggest that symmetry across the plane joining the two halves, or identity of the two

halves, would contribute to the overcoming of the prior art drawbacks. Leaning equally inconclusively towards the latter sense of "symmetry", in which each handle half is in itself symmetrical about a plane perpendicular to the plane in which the two halves join, are the passages which respectively state that during assembly the connector, circuit board and sound head are mounted "in one symmetric half", and that the symmetry of the handle parts results in the recesses being present on each side of the handle. This latter form of symmetry is certainly disclosed in figure 1, whereas I cannot conclude that the other form of symmetry is equally unambiguously disclosed. Nowhere is it stated or, in my judgement, necessarily implied that the internal formations within the two halves are identical. It may be true, subject to the uncertainties that I have discussed above in relation to the screw holes, that the disclosure as filed is **consistent with** the two halves being identical, but it is equally consistent with some variation, for example of the internal formations, between them.

Guidance from the Patents Court as to how I should approach the task of determining whether there has been an extension of disclosure contrary to section 72(1)(d) is to be found in *Bonzel & anr v Intervention Limited & anr* [1991] RPC 553, where Aldous J stated that:

"The comparison [*of the disclosures in the application as filed and in the patent as granted*] is strict in the sense that subject matter will be added unless such matter is clearly **and unambiguously** [*my emphasis*] disclosed in the application either explicitly or implicitly."

Since I have been unable to conclude that the feature of identity of the two halves of the handle is unambiguously disclosed in the application as filed, I am bound to find that its inclusion in the definition of "symmetric" incorporated into the patent as granted constitutes the addition of subject matter, and I therefore find that the ground of revocation under section 72(1)(d) is established.

Although my finding on section 72(1)(d) is sufficient for me to order revocation of the patent, I will, in the event that I may be wrong in this finding, and in order to inform my decision as to what further action, if any, to seek, also consider the applicants' allegations of lack of novelty or inventive step under section 72(1)(a).

The applicants firstly allege that the invention of claim 1 of the patent in suit is not new having regard to AT087. AT087 addresses the problems caused by moisture contamination from users of hand-held microphones in terms of hygiene and acoustic performance. The invention consists of a jacket which is designed to be fitted around a conventional, generally cylindrical microphone and is easily removable for cleaning the jacket and/or the microphone. The jacket is in two parts divided along an axial plane and provided with various formations, including grooves, for attaching a cover for the transducer or "head part" of the microphone, where contamination is worst. The two parts of the jacket are symmetrical and appear to be identical. There is no clearly identifiable "intermediate part" but, as I have already noted, I do not consider that this implies anything more specific than the general portion of the microphone which links the handle part to the head part.

Neither the applicants' statement nor any of their supporting evidence elaborates upon the bare charge that AT087 anticipates claim 1. The patentee's counterstatement points out that the disclosure of AT087 is of a complete microphone mounted within an outer jacket, with no suggestion that the microphone itself is of the form required by claim 1 of the patent in suit.

I am satisfied that there is a real distinction between AT087 and claim 1, in that the jacket of AT087 is not the casing of the microphone itself. The description in AT087 makes it quite clear that the jacket is ancillary to the microphone, the microphone being referred to in the translation as "fully equipped and fully operative" and as having its own inner "smooth sheet metal cylinder" casing. By contrast, the entire teaching of the patent in suit is that the handle part which comprises two symmetric halves itself constitutes the casing of the microphone. If this were not so, and if the two handle halves were merely ancillary protective additions, as in AT087, the clearly stated advantages in relation to assembly and maintenance would not apply. I find, therefore, that AT087 does not anticipate the terms of claim 1 of the patent in suit, and that the applicants' allegation of lack of novelty does not succeed. I would add that I consider that this reasoning and conclusion is equally valid in relation to claim 1 as it would stand to be construed in the absence of the definition of "symmetric" which I have found to be impermissible in the patent.

The applicants' alternative allegation under section 72(1)(a) is that the features of claim 1 as granted are no more than an obvious development of known microphone constructions as exemplified in figure 7 of the patent in suit and the related description, and in the light of the teachings of prior documents AT087, DE996, GB808 and GB432 (I have already rejected GB507 as not having been pursued by the applicants and as having no bearing on the matters in dispute).

I have already described the prior microphone of figures 7A and 7B and the disclosure of AT087. I will complete the review of the cited prior art by summarising the disclosure of the other documents.

DE996 is concerned with reducing the battery consumption in a microphone. The microphone is provided with an on/off switch to connect a battery supply to active circuits in the microphone. The switch has a contact which makes a momentary connection to an optical indicator with a threshold value, *eg* an LED, which informs the user of the condition of the battery supply. Whilst the bulk of the disclosure is concerned with the battery condition indicator aspect, the microphone housing is described as consisting of two semicylindrical shell parts, or half shells, held together by detachable ring parts. It is shown in plan view in figure 2. The housing forms a transducer part and a handle part. An inspection of the shell half shown in figure 2 reveals that there are various partitions or baffles, not specifically referred to or labelled, which appear to support connections for the battery and act as cable guides or clamps, and there are openings to the right for the switch and indicator. These openings appear to be formed by co-operation between part openings in each shell half, very much as in the patent in suit.

It is plain that the construction of the partitions and baffles in figure 2 of DE996 is such that there is no symmetry relative to the longitudinal axis of the microphone or to a plane through that axis perpendicular to the plane of the drawing. In his counterstatement the patentee concedes that if the handle halves have a parting line in the plane of figure 2 then they "are likely to be mirror images of one other", but he argues that they would not be identical as required by claim 1 of the patent as granted. Alternatively, he conjectures that the housing halves may have a parting line in the plane of figure 1, which is clearly at a right angle to

that of figure 2, but adds that even so there would still be no symmetry since the openings for the switch and indicator would then lie in only one half shell. I would observe that on my reading of DE996 I am in no doubt that the "parting line" of the two half shells is in the plane of figure 2, which is described in the text, in translation, as "a plan view ... following the removal of one of the half shells". The effective part of the counterstatement in this respect is therefore that in which the patentee argues against identity of the two handle halves in DE996, but concedes that the halves are likely to be mirror-symmetric relative to the plane of parting. Nothing in Mr Rosander's affidavit detracts from this argument and concession.

Mr Addy states on the one hand that the microphone in DE996 satisfies the requirements of claim 1 of the patent in suit "on a normal reading of the term 'symmetric'" (which he interprets in the sense of "matching" or "balanced"), but on the other hand concedes that the halves are not symmetric when the term is accorded "the particular meaning given to it in the patent in suit" (by which I understand him to mean "identical"), on account of the location of the switch and indicator openings. I have to differ from him as to the facts of the disclosure of DE996 when he asserts that "with the exception of openings for the switch and [*power supply monitoring*] attachment, the symmetrical shell parts which form the handle part are indeed identical". It is certainly not evident to me, on the basis, for example, of the way in which the cables are shown as running straight along the length of the handle, that the baffles and partitions in the respective shell parts are necessarily intended to be identical, and indeed I consider that the likelier interpretation of the drawings is that made by the patentee, in which the two shell halves are mirror images of one another.

I am satisfied that the disclosure of DE996 does not include, admit or even point the reader in the general direction of identity of the two half shells, but that, as accepted by Mr Rosander, the natural conclusion for the reader to reach on the basis of the description and drawings is that the two half shells are mirror-symmetric with respect to each other relative to the plane in which they join; viz the plane of figure 2.

GB808 describes a microphone with a casing in two parts, shown separated in figure 2. The two parts are quite different in shape, appearance and function. The back part is bulbous and

contains a hanging loop and a pull-out stand while the front part is comparatively flat and contains a grille for sound to reach the transducer, and an on/off switch. The back part also contains projections to locate a pair of microphone elements. The casing is held together by a single screw.

Nothing of substance is said about the disclosure of GB808 in the pleadings or evidence. Although it was included in the examiner's search report issued in the pre-grant proceedings before the Patent Office on the application for the patent in suit, it was not pursued as a citation during the section 18 examination. I therefore have no guidance, either from the applicants for revocation or from elsewhere, as to how it might contribute to the ground of lack of inventive step in relation to the patent in suit.

The two parts of the casing in GB808 are plainly neither identical nor display mirror symmetry relative to one another. Examination of figure 2 shows that, in their detailed construction, neither part of the casing is internally symmetrical. There appears to be nothing in the specification which would point to such identity or symmetry as an alternative to the construction illustrated. I therefore find nothing in this document which contributes in any material way to the alleged ground of lack of inventive step in claim 1 of the patent in suit.

GB432 describes an early hand-held microphone with a head part attached to an elongate handle part which, in the preferred embodiment, comprises a housing separable longitudinally into two sections, shown in figures 8 and 9 respectively, secured for example by a self-tapping screw. The open ends of the sections, on assembly together, are covered by metal end caps, one of which accommodates the microphone unit within matching recesses in the two housing sections. Further matching, but as shown in the drawings clearly not identical, recesses in the two housing sections define a chamber which accommodates electrical elements, such as the switch. On assembly all the electrical elements are mounted in one of the two housing sections. The switch-operating means are mounted in the other section so as to engage the switch when the two sections are assembled. Access for the user to the switch-operating means is achieved through an aperture in the second section, and it is this aperture which causes the two sections to be non-identical. The metal end cap at the opposite

end of the housing to the microphone unit is removable to allow access to a terminal chamber to permit servicing without disturbing the other elements of the device, and in particular without separating the two sections of the housing.

The pleadings do not discuss GB432 in any detail. In his affidavit Mr Addy concedes that the two handle sections of this document are not symmetric in the sense of being identical as required in claim 1 of the patent as granted, in that each section has been particularly adapted in some way. He does not go on to state in what way he nevertheless considers this document to be relevant to the allegation of lack of inventive step, and I have received no assistance in this respect from any other part of the evidence.

GB432 was also cited in the pre-grant proceedings before the Patent Office, but unlike GB808 it was pursued in the section 18 proceedings and was therefore discussed in the patent agents' letter of 31 March 1992 to which I have already referred. However, at that stage the agent was concerned to support an interpretation of "symmetric" which implied identity of the two halves of the handle, and the letter therefore focusses in this respect entirely on pointing out the self-evident truth that the two handle sections of GB432 are not identical.

Although the text of GB432 does not explicitly discuss the symmetry or otherwise of each of the two housing sections, the drawings are very detailed and clear. Close inspection of figures 8 and 9 in conjunction with the other drawings persuades me that the reader of the document would be led to conclude that each of the two sections is in fact symmetrical in the sense that, looking at each section separately relative to a plane passing through the longitudinal axis of the section and perpendicular to the plane in which the sections are to be joined (*ie* the plane of figures 8 and 9), each half of the section is the mirror image of the other half.

Mr Wingerei's affidavit makes it clear that the only issue on which he was asked to comment was the use of a single die in the moulding of identical halves in two-piece plastics products. He states that this is common practice in the moulding industry and exhibits two photographs, respectively of a cable casing and a suitcase, by way of example. He states that the former has been in production for about 7 years (as at June 1993) and that the latter was "designed

by an Italian 25 years ago". Interestingly, but not, I think, crucially, I note that because of the particular fixing arrangements used in both of these two products, neither of them displays the mirror symmetry across the plane of joining of the two halves which is implicit in the patent in suit when it incorporates the feature of identity introduced in the definition of "symmetric". Mr Wingerei's right to speak as one with long experience in the plastics moulding art is not challenged by the patentee, and neither is his basic assertion as to the use of identical halves in a two-piece plastics moulding. I therefore have no reason not to accept his assertion, as far as it goes.

In addressing the issue of the alleged obviousness of claim 1 Mr Addy focusses most of his attention on DE996, which he appears to regard as the most relevant of the citations. He comments, correctly in my view, that in this document the assembly of the microphone body is not an essential part of the disclosure, and he goes on to observe that, in following the teaching of the document, he would therefore have no reservations about making minor changes in the construction of the housing. He moves on from this position to state that, since the moulding of identical matching parts is a common cost-saving practice in the plastics industry (and I take it that in this he is drawing primarily on the evidence of Mr Wingerei, since his own experience does not seem to give him any special expertise in this particular field), this is an option that he would consider as "self-evident" in the commercial production of the microphone of DE996. He argues that reference to AT087, in which, as I have noted, the two halves of the outer protective jacket appear to be identical, would make it more likely that he would consider using identical halves for the microphone of DE996. Mr Addy does not seek to apply the same logic to the microphones of either GB808 or GB432, and I can only conclude that he is right so to refrain, since, on the basis of the analyses of these documents which I have already discussed, I am satisfied that the inherent nature of the handles disclosed in both documents leads the reader very firmly away from the notion that they could be made identical.

The sum total of the applicants' case for a lack of inventive step in claim 1 of the patent in suit therefore appears to be that, given that it was well-known at the priority date of the claim to use identical halves in two-part plastics mouldings, it would have been obvious to the reader of DE996 to have modified the design of the handle so as to make this technique

possible. According to Mr Addy, awareness of AT087 would have made this even more likely.

I find this argument unconvincing. I have already differed from Mr Addy in my understanding of the details of DE996, and have indicated that I can find nothing in this document which would suggest to the reader that the use of identical halves would be a practicable option. I therefore cannot conclude that the notional skilled reader would have found such an idea to be obvious, even though I can accept that he would be aware that the use of identical halves in general had some advantages. I do not believe that an awareness of AT087, which addresses a different problem and which does not in itself lay any particular stress upon identity of the two halves, would have influenced his thinking. I am also not persuaded by any of the applicants' submissions that it would have been obvious to apply the prior art knowledge established in the evidence to the known construction of figure 7 of the patent in suit and thereby to have arrived at the invention of claim 1. I therefore find that the applicants have failed to establish that claim 1 of the patent as granted lacks an inventive step.

Since claim 1 survives this particular attack it follows that so do the appendant claims 2 and 3. No significant separate submissions have been made with respect to the omnibus claim, claim 4, and it follows that I similarly find that lack of inventive step has not been established in relation to this claim either.

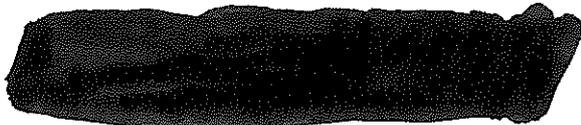
My consideration of inventive step has so far been solely in relation to claim 1 as granted, incorporating the definition of "symmetry" which I have previously found to be impermissible. My discussion of the relationship of the present invention to the disclosure of DE996 and GB432 makes it clear that, had I been construing claim 1 in its form as filed, not requiring identity of the two halves of the handle part, I would have concluded that the claim was not clearly distinguished from either of these documents. In relation to DE996 this conclusion would have been based on the interpretation which the patentee himself placed upon the document, by which the two half shells are symmetric in the sense of being mirror images of one another relative to the plane in which they join. As regards GB432 such a conclusion would have been based upon my view that, as disclosed, each half of each

respective housing section is the mirror image of, and thus symmetric with respect to, the opposite half of the same section relative to a plane through the longitudinal axis of the section and perpendicular to the plane in which the two sections are to be joined. With both likely intended interpretations of "symmetric", in the absence of the inserted definition, thus anticipated by prior documents, it appears to me that there is in practice no scope for the patent to be amended in such a way as would enable a claim to a patentable invention to be defined.

I therefore summarise my findings as follows. Whilst I have found that the grounds under section 72(1)(a) of lack of novelty or inventive step against the claims of the patent as granted have not been established, the ground under section 72(1)(d) that the matter disclosed in the specification of the patent extends beyond that disclosed in the application for the patent as filed has been established. Furthermore, I have concluded that to seek to overcome this ground by deleting the added matter would render claim 1 into a form in which it would not be distinguished from published prior art, and I am not persuaded that an alternative permissible amendment exists which would result in a claim to a patentable invention. I therefore order that Patent No 2220116 in the name of Hans Rune Rosander be revoked.

Both parties requested an award of costs. In all the circumstances, including the fact that no hearing was sought by either party and that the applicants for revocation were successful in achieving revocation of an invalid patent, I award the applicants for revocation the sum of £450 as a contribution to their costs in these proceedings and order that this sum should be paid to them by the patentee. Any appeal against this decision must be lodged within a period of six weeks from the date of this decision.

Dated this 10 day of January 1995



**Dr P FERDINANDO**

Superintending Examiner, acting for the Comptroller

**THE PATENT OFFICE**

