PATENTS ACT 1977

IN THE MATTER OF an application under section 72 by Camfil AB for the revocation of Patent No GB2329854 in the name of Interfilta (UK) Ltd

DECISION

Introduction

- The patent in suit, GB2329854, was granted to Interfilta (UK) Ltd on 18 August 1999. The application was filed on 16 January 1998 and did not claim any earlier priority date.
- On 3 July 2000 Camfil AB applied for revocation of the patent under section 72(1)(a) of the Patents Act 1977 on the grounds that the invention was not a patentable invention within the meaning of sections 1(1)(a),(b) of the Act, i.e. it was not novel and did not involve an inventive step. Following the filing of a counterstatement on 15 August 2000, a supplementary statement of case was filed on 10 November 2000 requesting revocation under section 72(1)(c) on the grounds that the patent did not disclose the invention clearly and completely enough for it to be performed by a person skilled in the art. During the rounds of evidence a further supplementary statement of case was filed on 7 June 2001, again under section 72(1)(a). The proprietors raised no objection to these additional statements except to request an opportunity to file extra evidence to deal with the latter.
- A hearing was held on 4 October 2001 to determine some preliminary matters following which some of the evidence was struck out. The case came before me for substantive hearing on 13, 14 May 2002 where Camfil AB were represented by Dr Heather Lawrence, instructed by Boult Wade Tennant, and Interfilta were represented by their agent, Mr K Leaman of Laurence Shaw & Associates.
- Eight weeks after the hearing and just before I was about to issue my decision on whether or not the patent should be revoked, the defendants raised concerns about the conduct of the hearing and asked for certain matters to be re-opened or for certain evidence to be discounted. That led to a further hearing on 18 September 2002, and in the meantime my decision on the substantive issues has had to be held back. I have now issued my decision on the matters considered at the hearing on 18 September. In that decision I have declined the defendants' requests and also declined to hold back the present decision any longer.

The patent

The invention relates to a gas filter element having opposite walls of synthetic fibrous material joined to one another on three edges, with the gap between the walls partitioned into parallel pockets by strips of heat fusible material. The partitions have margins bent at right angles to the main plane of the partition and ultrasonically welded to the filter walls. Claim 1 reads:-

A gas filter element comprising a plurality of generally parallel partitions defining parallel pockets, each having an upstream open inlet end and a downstream closed end and having opposite walls of synthetic fibrous material, in which the parallel partitions extend from the upstream inlet end to the downstream end to form pockets and each partition has marginal portions which lie generally parallel to and are ultrasonically welded to the respective walls, whereby in use the air filter exhibits a low pressure drop and a high degree of dust efficiency and dust holding capacity.

I should perhaps say that both sides took the view that the "whereby" clause in claim 1 did not limit the claim in any meaningful way - these benefits were simply a consequence of the rest of the claim.

Claim 2 adds the additional feature that a short length portion of the partition adjacent the open inlet is not joined to the inner surface of the adjacent wall to permit flexure of the front end of the pocket so that it may be mounted in a header frame and claim 3 adds the feature that the partition is a thin flat strip of heat fusible material. There are no other claims.

The issues

- Revocation is sought under section 72(1)(a) on the grounds that claims 1 and 3 of the patent lack novelty in the light of:
 - (a) the public demonstration to the inventors of the patent of a prototype filtration bag making machine at Chase Machine and Engineering, Inc.("Chase") on 30 January 1997, nearly a year before the priority date of the patent in suit;
 - (b) the publication of a Newsletter (or Newssheet) produced by Chase which was circulated to over 800 of their customers in May and June 1997; and
 - (c) prior public use in the form of a demonstration by Chase of samples of their filter with distribution of "sell sheets" at a trade show in Chicago on 2 and 3 December 1997, still over six weeks before the priority date of the patent.

Failing this, lack of inventive step is asserted against these claims, based on a patent application, EP 0350192A, published in January 1990 taken in conjunction with either the Newsletter referred to above or an advertisement in the trade journal 'Filtration and Separation' in June 1997 from a firm called Delta Filtration.

8 Lack of inventive step is alleged against claim 2 on the basis of expert evidence that addition of the feature of this claim to the filter element of claim 1 would have be

obvious to a person skilled in the art at the date of filing of the patent specification.

The application for revocation under section 72(1)(c) is, the claimants readily admit, essentially a squeeze argument arising from one of the defences put forward by the defendants: if the documentation and demonstration referred to above is not considered sufficient to provide what is known as an enabling disclosure for the purposes of an attack under section 72(1)(a), then the patent is equally deficient and does not disclose the invention clearly and completely enough.

The law

- I have already referred to the relevant provisions of section 72, which allow the comptroller to revoke a patent on the grounds (*inter alia*) that the invention is not a patentable invention or that the specification of the patent does not disclose the invention clearly enough and completely enough for it to be performed by a person skilled in the art. However, there are other provisions in the Act that are relevant.
- To be patentable an invention must be new and involve an inventive step. The provisions for novelty are specified in section 2 of the Act, the relevant part of which reads:
 - (1) An invention shall be taken to be new if it does not form part of the state of the art.
 - (2) The state of the art in the case of an invention shall be taken to comprise all matter (whether a product, a process, information about either, or anything else) which has at any time before the priority date of that invention been made available to the public (whether in the United Kingdom or elsewhere) by written or oral description, by use or in any other way.
- 12 The provisions for inventive step are in section 3, which reads :-

An invention shall be taken to involve an inventive step if it is not obvious to a person skilled in the art, having regard to any matter which forms part of the state of the art by virtue only of section 2(2)...

- On novelty, probably the most important case law to which I was referred was the well known case of *Asahi Kasei Kogyo KK* [1991] RPC 485. This established the principle that for a disclosure to be effective against novelty, it had to be enabling, ie it had to be sufficient to enable the skilled person to work the invention.
- I was also referred to case law to help me decide the question of whether the demonstration on 30 January 1997 was "made available to the public" within the meaning of section 2(2). In *Quantel Ltd v Spaceward Microsystems Ltd* [1990] RPC 83 Falconer J held that, where there was a bar of confidentiality restricting the use or dissemination of information, disclosure of that information did not make it available to the public for the purposes of section 2(2) of the Patents Act 1977. In *Genentech Inc's Patent* [1989] RPC 147 Purchas LJ held that matter was not available to the public if it

was merely known to one or two individual research workers pursuing their own experiments in private. In *Macor Marine Systems* (European Patent Office decision T830/90) it was held that a secrecy agreement which rules out availability to the public may arise even in the absence of express oral or written agreement. Dr Lawrence argued that there were a number of peculiar circumstances in that case which did not apply in the present case, but I did not understand her to be disagreeing with the basic proposition that obligations of secrecy can exist even in the absence of express agreement. Whether they do will depend on the particular circumstances.

There is a significant body of well-known case law on inventive step. Amongst the cases to which Dr Lawrence referred me were *Windsurfing International v Tabur Marine* [1985] RPC 59 and *Hoechst Celanese Corporation v BP Chemicals Limited and another* [1997] FSR 547. However, the most important case so far as my decision is concerned is *Molnlycke AB and another v Proctor & Gamble Ltd and others (no 5)* [1994] RPC 49. In respect of the role to be played by properly qualified expert witnesses in reaching a decision on obviousness, the Vice-Chancellor held at page 113 that:

"The Act requires the court to make a finding of fact as to what was, at the priority date, included in the state of the art and then to find again as a fact whether, having regard to that state of the art, the alleged inventive step would be obvious to a person skilled in the art.

In applying the statutory criterion and making these findings the court will almost invariably require the assistance of expert evidence. The primary evidence will be that of properly qualified expert witnesses who will say whether or not in their opinions the relevant step would have been obvious to a man skilled having regard to the state of the art. All other evidence is secondary to that primary evidence."

Other case law was also drawn to my attention but for the purposes of this decision I think those I have mentioned above are sufficient.

The evidence and witnesses

- Both sides provided evidence from a number of key players. For Camfil Mrs Maria Gil, Vice-President of Chase gave evidence that she was responsible for making the arrangements for the printing of 2000 copies of the newsletter and the distribution to customers. This evidence, which was supported *inter alia* by an invoice from printer for the newsletter and Chase's 1997 customer list, was not contested.
- Camfil also presented expert evidence in the form of two witness statements from Mr Stephen Mulinos. Mr Mulinos retired in 1997 from a career in the filtration art going back to 1967, including 18 years as Executive Vice-President of an air filter manufacturing company where he had total responsibility for research and development, manufacturing, marketing and administration. He provided evidence on the state of the art at the relevant time and on what the skilled person would have understood from the Newsletter, sell sheet and sample which have been cited in support

of the allegation that claims 1 and 3 lack novelty.

- 19 Camfil's final witness was Mr George Gil, President of Chase, who provided four witness statements and was cross-examined over a video conference link from America. It was this aspect of the substantive hearing that led to the further hearing on 18 September. This was the first time the comptroller had been involved in crossexamination via video link, and I had been content to allow the parties to agree the arrangements between them. What they agreed was that Mr Gil's own patent attorney would supervise proceedings at the American end. The attorney was off-camera, but his hand appeared on-camera from time to time helping Mr Gil find the relevant papers, and at one time he even spoke up to object to a question. As I said at the conclusion of the cross-examination, I found this arrangement unsatisfactory because it made it much more difficult for me to be sure that there was no interference in the cross-examination at the American end, and in particular, that Mr Gil was not receiving prompts or advice. I recognise that in this instance the difficulties were exacerbated by a poor communications link, but I have to say that in future I would insist on independent supervision at the remote end, no matter what the parties have agreed between them. Indeed, as I explained in my associated decision on the matters raised on 18 September, I have already arranged for the Office's "Hearing Officers' Manual" to be amended in this respect.
- Having said that (and I have already quoted these conclusions in my associated decision), I do not feel the unsatisfactory nature of the arrangements have adversely affected the defendants in this instance. I became aware of the potential problems very early on and accordingly kept a close watch for signs of illicit help, but was satisfied from the promptness and confidence with which Mr Gil answered the questions that his answers were not being influenced by anything going on at the American end.

 Moreover very little of the cross-examination touched on factors that have, in the end, been material to my decision. However, insofar as there was anything material, Mr Gil struck me as a reliable witness whose evidence was consistent with the available facts.
- The defendants provided evidence from the two named co-inventors of the patent in suit, Mr Clive Holt, ex-Managing Director of Interfilta (and now Commercial Director of the parent company McLeod Russel Holdings plc) and Mr Charles Ridgeway, ex-Head of Engineering at Environmental Filter Corp ("EFC"), a sister company to Interfilta. Both Mr Holt and Mr Ridgeway were cross-examined.
- I did not find Mr Ridgeway and Mr Holt wholly convincing witnesses under cross-examination. It became clear that both of them felt Interfilta had been badly treated by Chase in respect of events that happened in 1997, and whilst I do not think they were consciously trying to mislead, I got the clear impression that their perspective on events was somewhat affected by this perceived grievance. Thus some of their assertions could not be squared with the unchallenged timetable of events and unchallenged contemporary documents, and accordingly I have treated their evidence with some caution.
- In the run up to the hearing Mr Leaman had made a comment in a letter which implied Mr Holt should be treated as an expert witness. Dr Lawrence took exception to this at the hearing and made clear that she was cross-examining him only on his factual

evidence since he had not been put forward as an expert. In his evidence Mr Holt had claimed long experience in the field and expressed some opinions as though he were an expert, but so for that matter had the claimants' witness Mr Gil. In truth neither of them constitutes a credible <u>independent</u> expert and accordingly I have attached little weight to their opinion on matters that properly belong to the province of a genuine expert witness.

Revocation under section 72(1)(a): novelty

- I will now turn to the main substantive issue. The patent is attacked on the basis of three separate instances of alleged prior publication and/or prior use.
- In view of a concession made at the hearing by Mr Leaman in connection with the third instance, in principle whether or not the first two instances destroy the novelty of claim 1 makes no difference to the end result. However, because of the lateness of the concession and also because the first two instances occupied so much of the evidence and of the time at the hearing, I decided that I ought to consider the first two instances notwithstanding the concession. Indeed, giving the defendants' attempt to resile from the concession on 18 September, my decision to do this may well turn out to be more helpful than I originally expected. Accordingly I will now look at the three instances in chronological order.
- The first instance is the demonstration that Chase made to the inventors on 30 January 1997. Right up to the hearing and even in Mr Leaman's skeleton argument the defendants had maintained that this demonstration was not an enabling disclosure within the meaning of *Asahi*. However, at the hearing Mr Leaman conceded that the demonstration was an enabling disclosure. Thus everything turns on the defendants' second argument in respect of this demonstration, that it was a private demonstration of equipment jointly devised by Chase and Mr Ridgeway. Accordingly, following the principles enunciated in *Quantel* and *Genentech*, it did not meet the requirement in section 2(2) of the Act that it be "made available to the public". It is clear from *Macor Marine* that, in order to determine whether the demonstration is in the public domain, I need to look at the circumstances carefully.
- In his statements and under cross-examination Mr Gil insisted that the demonstrated machine was the result of a Chase project and that he alone had made the machine used for the demonstration with no input from Mr Ridgeway who, Mr Gil asserted, was, at this time, considering "plunge welding". Customers had made him aware, in 1995, of the problems with sewn and glued filter bags and he had conceived the idea of ultrasonically welded pockets in early 1996 and developed it in the following months. That development culminated in a US patent application in Mr Gil's name, made on 9 January 1997 and granted as US Patent No 5846360 on 8 December 1998. It discloses a filter comprising first and second layers joined by a ribbon which is attached to both layers by ultrasonic welding and a machine for manufacturing it.
- Mr Gil's assertion that the machine was a Chase-only project was supported by evidence of the developments that led up to the filing of the patent application, in the form of copies dated August 1996 of drawings eventually used in the patent

- application, concept descriptions dated November 1996 and an invoice from his patent attorneys showing that he first met with them in October 1996. This supporting evidence has not been challenged.
- Mr Gil also asserted that he had first met Mr Ridgeway on 2 December 1996, at the Baltimore Filtration Show. Following a telephone call from Mr Ridgeway on 11 December, after meeting with Mr Holt at a show in Ashrae on 27 January 1997 he invited them to a demonstration on 30 January of a prototype machine. He had been advised by his patent attorneys to delay the visit until after his patent application was filed, but because that had now been done he saw no need for any confidentiality agreement in respect of the demonstration. He agreed that the demonstration he arranged for Interfilta used materials specified by them. The demonstration was one of several given by Chase in 1997 to customers interested in his filters; different materials were used for other customers. Chase and EFC did eventually sign a confidentiality agreement, but that was not until October 1997 when Chase were about to visit EFC to install a purchased machine.
- 30 For their part, the defendants assert that the prototype machine that was demonstrated had been a joint development between Chase and Interfilta. It was, they submitted (and this was not challenged), normal in the industry for a joint development to be confidential to the two parties, and hence the demonstration was not a public one. To support the assertion of joint development, in his witness statement Mr Ridgeway stated that Interfilta had been considering ultrasonic welding of filter bags since 1992 and had contacted many companies, in confidence, but none were capable of doing what was required. They disclosed to Chase, in November 1996, commercially sensitive information without which Chase could not have demonstrated the machine. However he then agreed under cross-examination that his first meeting with Mr Gil was at the Baltimore Show in December 1996, and when questioned about his input to the machine he could only mention provision of materials (which he considered important) and adjustments of dimensions to provide different pocket sizes. He was unclear why no confidentiality agreement had been signed in January 1997 but one had been signed in October 1997. He could not remember whether or not he had been told at the demonstration that the prototype machine had patent pending status.
- Mr Holt was also insistent in the witness box that the prototype machine had been a joint development, maintaining that much time was spent by Mr Ridgeway at Chase preparing for the demonstration. However, he did concede that he personally had not been involved in working jointly with Chase, so his evidence on this point really adds nothing to Mr Ridgeway's.
- Although Mr Holt and Mr Ridgeway were both adamant that Interfilta had played a considerable part in getting the demonstration machine to work, their inability to identify any substantial contributions they had made to the core design of the machine did not sit well with the assertion that the machine was what I might call a joint project between the two companies. The contributions identified, namely supply of suitable materials and adaptation of the machine to cope with filters of different dimensions, are, in my opinion, more concerned with helping Chase adapt a machine to meet their particular needs as a potential customer than with participation in a joint project to develop a machine for making ultrasonically-welded pocketed filters from scratch.

Indeed, Mr Gil's evidence and the documents that support it leave no doubt in my mind that Chase had come up with the basic idea of the present claim 1 by at latest August 1996, three months before Interfilta say they first disclosed anything to Chase. Further, there was no written confidentiality agreement between the parties and the defendants have not even suggested there was an oral agreement. Given that the parties did sign one rather later, I find the absence of any such agreement at the time of the demonstration surprising if, as the defendants say, this really was a joint project.

- Having looked at all the evidence, I am satisfied this was not a joint project. Chase had developed the concept of ultrasonically-welded pocketed filters, got some sort of prototype together and applied for a patent. They were now looking for customers, and their demonstration to Interfilta was part of that exercise. There was no obvious reason for them to insist their customers maintained confidentiality and no evidence that they sought this. In short, I accept Mr Gil's assertion that there was no confidentiality agreement because there was no need for confidentiality. Accordingly I am satisfied that the information Chase imparted to Mr Holt and Mr Ridgeway at the demonstration was not subject to any implicit bond of confidentiality. It is, of course, possible that information Interfilta had provided Chase about their specific requirements might have been subject to such a bond I make no finding on that point but that does not affect what I have found to be the public nature of the disclosure from Chase to Interfilta of filter elements in accordance with the present claim 1.
- I must make one other observation. The defendants have made allegations that Chase may have got the idea for the present invention from Interfilta via a Mr Skip Metcalfe who worked with a company called Branson Ultrasonics Corporation. They say Mr Ridgeway contacted Branson early in 1995 for details of their ultrasonic welding machines, that they put him in touch with Mr Metcalfe and that Mr Metcalfe was a frequent visitor to Chase. Quite apart from the fact that these points were unpleaded, the evidence in my view falls a long way short of establishing that Mr Ridgeway told Mr Metcalfe about the invention of the present claim 1, let alone of establishing that Mr Metcalfe passed the idea on to Chase. In any case, it is irrelevant. My task is not to resolve questions about who did or did not contribute to the invention but to establish whether the disclosure of the invention at the demonstration on 30 January 1997 was or was not confidential to the two parties involved. How Chase got to the position they had already reached when Mr Ridgeway first contacted them has no bearing on that.
- It follows that the demonstration counts as making the invention available to the public within the meaning of section 2(2) of the Act. As the proprietors have conceded that the demonstration was an enabling disclosure of the present claim 1, it follows that claim 1 is not new.
- I now turn to the second instance of prior publication/use, the distribution of the Newsletter in May and June of 1997. This states as its first item that Chase had developed a synthetic pocket air filtration media using ultrasonic bonding to replace stitching and gluing. It mentions a number of options, eg widths could be between 12" and 28", the number of pockets was adjustable and the media could be cut and sealed to almost any desired length or shape. There is also a schematic diagram of the filter.
- 37 Mr Leaman submitted it did not destroy the novelty of claim 1 because it was not an

enabling disclosure. One of his arguments was that Chase did not themselves have the ability to construct a working machine to make these filter bags at that time. Leaving aside the question of whether that is true, as Dr Lawrence correctly pointed out, it is irrelevant. What matters is what the document taught the person skilled in the art, not what the author of the document could or could not do, or even what the author of the document intended.

- The challenge to the enabling nature of this disclosure really centres on the diagram that accompanies the text. This diagram does not follow the usual convention of showing hidden parts by broken lines, and as a result the lower part of the drawing has a number of crossing lines which, at least at first glance, look rather confusing. This diagram was not of course a precision engineering drawing produced for the workshop. It was simply an illustration for advertising purposes, and accordingly it is perhaps unsurprising that it was not as precise as it might have been. However, the lack of precision has certainly caused difficulty in the present proceedings, because the defendants assert that a filtration engineer would not understand the structure and accordingly would not see the Newsletter as disclosing a practical product.
- Viewed with hindsight ie with knowledge of the invention I do not think a skilled person would have any difficulty recognising what the diagram was trying to depict (notwithstanding the fact that when Dr Lawrence handed Mr Holt during cross-examination a version of the diagram on which, she said, she had coloured the different parts to distinguish them, she failed to get it right!). The question, though, is what the skilled person would have made of it at the time? Was it sufficient to enable the skilled person to go away and work the invention of claim 1?
- 40 There is no doubt that the diagram is depicting a pocketed filter because its caption reads "Ultrasonic bonding more efficiently bonds the veins or pockets in a wide variety of pocket filtration media and makes consumables such as string, glue and sewing needles unnecessary" and the accompanying text talks about a new method of producing synthetic pocket air filtration media using ultrasonic bonding "to join the sections of filter fabric and to sew the edges". However, as became clear at the hearing, having partitions extending between the two side walls of the filter, as required by the present claim 1, is not the only way of creating pockets in a filter. EP 0350192 and later-published US 5846360 both show alternative ways of producing pocketed filters. To anticipate claim 1, the Newsletter must not merely disclose ultrasonic welding but do so in the specific context of a filter of the type required by claim 1. The question, therefore, is would the skilled person have concluded that the filter shown in the diagram has partitions extending between the side walls with marginal portions parallel to, and ultrasonically welded to, those side walls? If yes, the Newsletter anticipates claim 1 since there is no dispute that the other features of the claim are present. If no, it does not, though of course one would then have to go on to consider the question of obviousness.
- Mr Holt and Mr Gil both expressed opinions on this question. Neither opinion is admissible because, as I have said, neither counts as an expert witness. In any case, I could not attach any weight to Mr Gil's opinion that the diagram is perfectly clear because he obviously knew all along what it was supposed to represent, whilst in expressing his opinion that a filtration engineer would not understand the diagram, I felt

Mr Holt was trying hard <u>not</u> to make sense of it, whereas one must always assume the skilled person is trying to make sense of what is before him. Surprisingly, the one expert we do have, Mr Mulinos, did not address directly the question of what the skilled person would have understood from the Newsletter save in respect of the relative thicknesses of the material. He did address it indirectly in his second witness statement when he was addressing the sell sheet, because in all material respects the sell sheet has the same content as the Newsletter, but the force of his comments is weakened by the fact that he was considering the sell sheet and sample together. Thus his statement that "the drawing is therefore sufficiently clear, especially when considered in combination with [the sample], to enable a person skilled in the art to arrive at a filter claimed in claim 1" is consistent with the view that the answer to the question posed in my previous paragraph is yes, though one could argue that it is not an unambiguous endorsement of that view.

- Nevertheless, supplementing Mr Mulinos' comment with my own study of the drawing, I am satisfied that the correct answer is indeed yes. It seems to me that if the skilled person viewed the diagram in a constructive frame of mind, they would have concluded that it must be depicting a filter with partitions of the required form because nothing else is consistent with what is shown. Given the accompanying text (which implies all stitching is dispensed with) and the fact that all the joins between the separate pieces of fabric are depicted in the same way, I am also satisfied that they would have concluded that the ultrasonic bonding applied, *inter alia*, to the joins between the marginal portions of the partitions and the side walls. On that basis, claim 1 is anticipated by the Newsletter.
- I will now move on to the third instance of prior publication/use, namely, the exhibition of a filter sample and the handing out of the "sell sheets" at a show in December 1997. The sell sheet has exactly the same drawing and much the same text as the Newsletter. The sample is a small bag, about 140 mm long, made from synthetic fibrous material, closed on 3 sides by ultrasonic welding. The interior is divided into longitudinal partitions by thin ribbon like material ultrasonically welded to the two side walls of the bag.
- At the hearing, Mr Leaman argued that the sell sheet suffered from the same defect as the Newsletter and was not therefore an enabling disclosure. He did not, however, address the fact that sell sheet was not being handed out "cold". Enquirers who were being given the sell sheet could also see the sample displayed on the stand, so the question is not what the enquirers learned from the sell sheet on its own but what they learned from the sell sheet and sample together. This omission in Mr Leaman's submissions arose because there had been some confusion about when the sample had been displayed, and I do not think he had fully appreciated that the sample and sell sheets had both been available at a show that took place before the filing date of the patent in suit.
- When, at the end of his submissions, I asked Mr Leaman to address me on this point, having sorted out the timing of the events on the basis of unchallenged evidence, he conceded that the sell sheet and sample together did provide a disclosure which would enable a person skilled in the art to arrive at the filter of claim 1 and that consequently this claim was not novel. This concession was, I think, not only right but inevitable.

The sample clearly shows a filter that falls within the scope of claim 1, and it also leaves no doubt about what the sell sheet was attempting to depict. Thus even if I am wrong in my finding that the Newsletter - and hence the sell sheet too - were enabling disclosures in their own right, there is not the slightest doubt that the sell sheet when read in the light of the sample was enabling. It is, perhaps, a pity that Mr Leaman had not got his thoughts round this issue rather earlier, because a lot of time and effort might have been saved had he done so. Mr Leaman also conceded that consequentially claim 3, in so far as it is appendant to claim 1, was not novel either.

Thus claim 1 fails on three counts of novelty, and claim 3 also fails on novelty.

Revocation under section 72(1)(a): inventive step

- Following my finding that claim 1 is not novel, I do not need to consider the inventive step objection against this claim. I do, however, need to consider claim 2, because this claim was challenged only on the grounds of lack of inventive step. Since I have found claim 1 to be known, the "alleged inventive step" in claim 2 for the purposes of case law such as *Molnlycke* is the incorporation of the claim 2 feature in the filter element of claim 1.
- There was some confusion between the parties as to what had been conceded prior to the hearing in respect of claim 2. Mr Mulinos, the claimants' expert witness, addressed claim 2 in his first witness statement where he stated that he had been asked to verify that, prior to 16 January 1998, pocket air filter elements incorporated the additional feature of claim 2. Paragraphs 6 to 8 of his statement read as follows:
 - "6 As mentioned in the Patent, prior to 16 January 1998, filter elements were commonly formed by using stitching as the spacing or partitioning element.
 - 7 I verify that prior to January 16, 1998, for the filter elements wherein the spacing elements or partitions were stitches, it was common practice for the stitching machinery to be programmed so that the stitching was stopped for a few inches at the open end of the filter pocket. The reason for doing so was exactly that mentioned in the Patent, i.e. to provide the necessary flexure to facilitate assembly of the filter pocket onto a header frame.
 - 8 In conclusion, I hereby verify that pocket air filter elements wherein:

 A short length portion of the spacer or partition adjacent to the open inlet end is either absent or not joined to the adjacent walls to permit flexure of the front end of the pocket so that it may be mounted in a header frame therefor,

were known in the art prior to 16 January 1998. The stopping or elimination of the spacer or partition for a few inches at the open end of the filter pocket is not in any way novel or inventive but simply represents the application of a design feature of known filters."

In response, Mr Holt stated at paragraph 12 of his statutory declaration:

"I have read the Witness Statement of Stephen Mullins (sic), who I do not know. I endorse what he says in his paragraph 7 that in the case of stitched filter element the stitching was stopped to enable flexure for the element to be fitted to a header frame. Claim 2, however, refers back to claim 1."

- Dr Lawrence took this to mean that claim 2 was not being asserted as independently inventive over claim 1. However at the hearing Mr Leaman maintained that it was only accepted as known for bags in which the pockets were made by stitching the two faces of the bag to one another and that there was no evidence that it was known for bags having separator partitions.
- Having re-read what Mr Mulinos says very carefully, I have come to the conclusion that Mr Leaman is right. The prior art which Mr Mulinos acknowledges in paragraphs 6 to 8 of his witness statement does not go beyond filter bags in which the pockets were created by stitching, and I suspect the only reason he has used the somewhat inappropriate term "spacing elements or partitions" in relation to stitching is because he was given that expression from the present claim 2. However, bearing in mind that Mr Mulinos had read the patent and knew the context in which claim 2 had to be read, in my view he is going beyond this in the final sentence of his paragraph 8 and asserting that the application of this feature to the claim 1 filter would have been obvious. Mr Mulinos is a properly qualified expert witness whose evidence has not been challenged, and in view of *Molnlycke* his opinion in this respect must carry considerable weight. Consequently I find that claim 2 is obvious. Since I have found the claim 1/claim 3 combination to be known, it follows that claim 3 when appendant to claim 2 is also obvious.

Revocation under section 72(1)(c)

In view of my findings above, I do not need to consider this alternative ground for revocation. I will merely observe that the defendants' apparent allegation that disclosure of the idea of ultrasonic welding was insufficient if it was not accompanied by disclosure of suitable materials would, if true, clearly hit their own patent as much as the prior art cited against it. Indeed, Mr Ridgeway conceded as much under cross-examination.

Conclusions

- In conclusion therefore I have found that claim 1 is not novel and claim 2 lacks an inventive step. Further, I have found that claim 3 is not novel when just appendant to claim 1 and lacks an inventive step when appendant to claim 2. It follows that all the claims are therefore invalid.
- I cannot rule out the possibility that there might be some additional feature in the description which could provide support for a valid claim. Accordingly I have decided to give the defendants an opportunity to submit amendments should they so wish. I will allow them eight weeks for this. If they do not do so (or if they do submit amendments and, at the end of the day, I decide not to allow them), I will revoke the

patent. Should an appeal be lodged, this eight week period can be treated as automatically stayed, but the parties will need to come back to me for directions when the appeal is finally disposed of.

Costs

October 2001 in the order I made following that hearing, and I have dealt with costs in respect of the matters that gave rise to the hearing on 18 September in my decision on those matters. I now need to deal with costs in respect of the rest of these proceedings. Dr Lawrence and Mr Leaman were both content for me to make an assessment on the basis of the standard Patent Office scale. The applicant for revocation, Camfil AB, has been successful and accordingly, applying the scale, I order Interfilta (UK) Ltd to pay them £3000 as a contribution to their costs. This sum should be paid within eight weeks of the date of this decision, payment being suspended if an appeal is lodged.

Appeal

As this decision is not on a matter of procedure, the period within which an appeal may be lodged is six weeks.

Dated this 7th day of October 2002

P HAYWARD

Divisional Director, acting for the Comptroller

THE PATENT OFFICE