

PATENTS ACT 1977

0/3/94

IN THE MATTER OF a reference under Section 8(1)(a) by Mr Donald A Cooper in respect of Patent Application No 9115113 in the name of Environ Limited

INTERIM DECISION

Patent application No 9115113.4 was filed without any claim to an earlier priority date on 12 July 1991 in the name of Environ Limited, and was subsequently published on 13 January 1993 as GB2257428A. The application is currently awaiting substantive examination following the filing of a Patents Form 10/77 on 24 June 1993. Donald Cooper and Robert Anthony Shiels were originally named as joint inventors on Patents Form 7/77 which further stated that they were employees of the company and that the invention was made during the course of their duties. However, a Patents Form 47/77 (for correction of an error) was filed on 9 October 1991 on behalf of Environ requesting deletion of the reference to Mr Shiels as an inventor and, as a result, the application is now proceeding with Mr Cooper named as sole inventor.

On 21 October 1991 Mr Cooper filed Patents Form 2/77 together with a statement referring to the Comptroller the question of whether he is entitled to the sole rights for the invention of the application in suit. The applicants in their turn have filed a counterstatement dated 24 December 1991 asking the Comptroller to confirm that the application should proceed in their name. Following completion of the procedures set down in Rule 7 for the filing of evidence, the matter came before me at a hearing. On the date originally set down for the hearing the applicants' representative was unavoidably delayed by transport difficulties and the hearing was adjourned until 22 November 1993 when Environ were represented by their patent agent, Mr J G Lawrence. Whilst the referrer was represented at the adjourned hearing by Mr A W Neill, his patent agent, neither Mr Cooper himself nor Mr Neill attended the reconvened hearing and a written statement by Mr Neill was admitted in lieu of personal representation on behalf of Mr Cooper.

The application in suit relates to a chemical formulation for the treatment of sewage and industrial effluents to reduce the emission of odours, claim 1 reading as follows:

"A chemical formulation comprising one or more mono-terpene oils dissolved in alcohol with at least 1-chloro-anthroquinone and 2-chloroanthroquinone."

The formulation may also contain an aqueous solution of an iron compound and an additional anthroquinone such as 1-sulphonic acid-5-chloroanthroquinone and 1-8 disulphonic acid-anthroquinone. The exemplified mono-terpene component is a mixture of anethole (aniseed oil), isoeugenol (clove oil or nutmeg oil), thymol (oil of thyme), safrole (sassafrase oil) and alpha-terpineol (lime oil) dissolved in terpene alcohol (pine oil).

It is not in dispute that Mr Cooper is the sole inventor of the invention of the application in suit. While Mr Shiels, who is Managing Director of Environ, was originally named as co-inventor, the applicants admit in their counterstatement that Mr Shiels made no inventive contribution whatsoever and they have already requested that Patents Form 7/77 be corrected in this respect. The questions at issue are whether Environ have rights to the invention under Section 39(1) by virtue of their employment of Mr Cooper and whether there was any effective assignment by Mr Cooper of the invention to Environ.

Mr Cooper was employed by E I Du Pont De Nemours & Company in the United States of America up to some date in April 1991. The evidence shows that, prior to leaving Du Pont, Mr Cooper anticipated employment with Environ and had made preparations to move to the United Kingdom for that purpose, but a formal offer of employment was not made to him by Environ until 12 April 1991 and acceptance by Mr Cooper was not until 24 April 1991. Mr Cooper took up employment with Environ on either 6 May 1991 or the day after. He subsequently terminated his employment with Environ by means of a letter dated 15 August 1991 having, according to the applicants, walked out of their employ on 1 August 1991.

Mr Cooper has filed evidence (DAC 1) in the form of dated pages from his experimental notebook to establish the date of his making the invention. I am satisfied that these pages

do illustrate the invention in that they teach the use in odour and sulphide inhibition of 1-chloro- and 2-chloroanthroquinone together with a mono-terpene oil/terpene alcohol component with or without an iron compound. Mr Cooper states that the notebook pages have the date 10 April 1991. Whilst the pages themselves are not unambiguously so dated, since they carry the date "4/10/91" which could instead be read as 4 October 1991, the applicants have not disputed the point and given that Mr Cooper was then employed in the United States of America, I would interpret the date in the 'American Style' of month/day/year and hence dated as Mr Cooper submits. It seems clear, therefore, that Mr Cooper had conceived the invention, at least in essence, on or by 10 April 1991, that is before he was offered employment by Environ.

This being the case, the question arises whether Environ can claim any entitlement by virtue of any further development of the invention whilst Mr Cooper was subsequently employed by them. Mr Cooper and Mr Shiels together went to Mr Lawrence to discuss the filing of the patent application on 8 July 1991, which gives a potential period of just two months for such development to have taken place. Mr Cooper contends in his declaration of 20 August 1992 that the invention was in a developed stage prior to his joining Environ and there is some support for this in the evidence of his experimental notebook pages which disclose not only the broad invention as defined by claims 1 and 8 of the patent application, but also the preferred embodiments of claims 2 to 5.

The applicants for their part point out that Mr Cooper has stated in his evidence that he worked on and refined the chemical formulation which is the subject of the disputed patent application in a series of documented experiments after leaving Du Pont in April 1991 and, further, that pages 2 to 4 of the experimental notebook suggest that much work was still to be done to develop the invention and are, in large measure, a programme of work to be done. They argue that Mr Cooper had a maximum of just over one month to do such work before entering the employ of Environ and that was a month during which, they contend, he would have been pre-occupied with the difficulties of moving himself and his family from the USA to England. They compare this with the two months during which he had freedom to work on his invention following employment with Environ until the filing of the patent application

and argue that more time was spent working on the formulation whilst in the employ of Environ than out of it.

Whether such further work actually took place at Environ, however, is not clearly established. Although Mr Cooper refers in his two declarations to his invention "already being in a developed stage" and "made" before he took up employment, he does not make an unequivocal statement that he did not work on the invention at Environ. On the other hand, whilst the applicants testify that they believed Mr Cooper to be working on the development of technology for odour control during his period of employment with them and contend that Mr Cooper was given total freedom and whatever facilities he requested to further his developments, and that numerous supplies of chemicals were obtained and much literature research was undertaken, they have not provided any conclusive evidence to show that he was working on the invention in suit; indeed, Mr Shiels states in his declaration that he does "not know to what extent (if indeed any) Mr Cooper's invention was furthered or perfected during his employment by my company". The matter is thus unresolved. However, as the applicants point out, Mr Cooper apparently did not think that his work had reached the stage at which patent protection should be sought until early July 1991 after he had been working for Environ for two months and, whilst there is dispute between Mr Cooper and Mr Shiels as to who suggested that a Patent Agent should be consulted, the balance of probabilities does suggest that Mr Cooper did carry out further work on his invention whilst in the employment of Environ.

Turning now to the question as to whether the applicants have any entitlement to the patent application by virtue of any explicit or implicit agreement between Mr Cooper and Environ, it is submitted by the applicants that the manner in which Mr Cooper solicited employment and his subsequent conduct amount to an equitable assignment of any proprietary interests he might otherwise have held before his employment with the company. There seem to be two aspects to this. First, Mr Cooper's statements of intent prior to joining the company and, in particular, the reference in his letter of 18 March 1991 to two particular sulphide control technologies about which he wrote "I am going to be working on obtaining exclusive rights for Environ in England and Europe for both of these technologies. I believe they could be

very profitable for Environ". Second, there is Mr Cooper's agreement to the patent application in suit being filed in the name of Environ.

For his part Mr Cooper denies that, at any point, he relinquished or intended to relinquish his rights. He submits that the sulphide control technologies referred to in the letter of 18 March were not his invention but existing Du Pont technology and Mr Neill argues that this is why Mr Cooper refers in the letter to "working on obtaining" exclusive rights rather than to obtaining the grant of exclusive rights for his own invention, and points to a letter dated 17 May 1991 (DAC 7) from Mr Cooper to Du Pont as evidence that Mr Cooper did indeed try to obtain such technology for Environ. Whilst this evidence does not unambiguously resolve the issue, it is consistent with Mr Cooper's submission and, further, the reference in the 18 March letter to odour emission reduction (which is the principal feature of the invention in suit) does seem to me to read as relating to existing Du Pont technology rather than to something the writer personally had invented. I would observe, however, that Mr Cooper's evidence is not entirely consistent in this respect since, in the second paragraph of his resignation letter of 15 August 1991 (DAC 5), he appears to link the odour control patent (that is the application in suit) with his 18 March letter, but I do not see that this clearly establishes that Mr Cooper promised the technology of the invention in suit to Environ when soliciting employment, nor would there appear to be any evidence on the part of the applicants to controvert the claim in his declaration of 22 March 1993 that he did not mention the invention to Environ prior to June 1991.

It is the case, however, that Mr Cooper did agree to the filing of the patent application in the name of Environ and naming himself and Mr Shiels as joint inventors and was content for Environ to pay the costs of the filing and subsequent prosecution, and that he subsequently represented the invention as the property of the company to at least one customer as shown in the evidence by a letter dated 25 July 1991 from Mr Cooper to Yorkshire Water (RAS 2). There is some dispute as to what was said when Mr Cooper and Mr Shiels visited Mr Lawrence on 8 July 1991 to discuss the filing of the patent application in suit. Mr Cooper says that he was not asked when the invention had been made and that no explanation was given to him of the different considerations which would apply if he had made the invention before or after the commencement of his employment with Environ, and

it is submitted by Mr Neill on his behalf that, as an American, he would think in terms of United States law where transfer of ownership from an inventor to a company would not be possible without the inventor specifically signing a document to that effect. Mr Lawrence, on the other hand, states that he questioned Mr Cooper and Mr Shiels concerning inventorship and how the company derived title from the inventors and that he was advised that the two were joint inventors and that the invention had been made in the course of their employment by Environ; Mr Lawrence has included in his evidence (JGL1) a copy of his notes of the meeting as evidence of his understanding of the position at that time and this is corroborated by Mr Shiels.

I do not see that what transpired at this meeting is of any great help. I am satisfied that Mr Lawrence quite properly enquired of Mr Cooper and Mr Shiels as to the provenance of the invention and was informed that they were joint inventors and that the invention had been made in the course of their employment by Environ. While I can accept Mr Cooper's assertion that Mr Lawrence did not fully explain the different considerations which govern the ownership of inventions, I note that, in his reply evidence, Mr Cooper does not deny the advice which Mr Lawrence says he was given. In the absence of any indication whatsoever that Mr Cooper and Mr Shiels may not have been co-inventors or that the invention had not been made in the course of their employment by Environ, it seems to me to be quite understandable that Mr Lawrence did not embark upon an explanation of some of the finer points of patent law concerning ownership. Nevertheless it is not in doubt that Mr Lawrence was incorrectly informed at least to the extent that Mr Shiels was one of the inventors. Whether Mr Cooper acquiesced to the filing in Environ's name because he was requested to do so by his employers without realising that he may have been giving away rights to which he was entitled or whether he consented to transfer of the patent rights in the expectation of profit-sharing or other reward is not established. It would appear that profit-sharing was discussed prior to Mr Cooper entering the employ of Environ, but no such arrangement was in fact offered to him in his terms of employment, although the company acknowledges telling him that its policy was to recognise and reward their employees for their contributions. Mr Cooper himself states that he was led to believe that he would be properly rewarded, and that when he realised in July/August 1991 that there was no prospect of this occurring and that Environ were laying claim to his independent invention by applying for

a patent in the name of Environ and designating Mr Shiels as a co-inventor, he tendered his resignation. This is disputed on behalf on Environ, Mr Lawrence pointing out that Mr Cooper's contract of employment stated that he would be employed on probation for a period of nine months and that his employers intended to review the Industrial Department's progress every three months. Mr Lawrence argued that since Mr Cooper walked out before the first three monthly review, he could not possibly have known of any plans Environ might have had to reward him and whether they would satisfy his expectations or not, and further contended that the real reason for the resignation was to be deduced from Mr Cooper's letter of resignation where he states that he would have no dealings with Mr Shiels' partner. Once again this matter is not resolved by the evidence. The evidence sheds very little light on the events which followed the filing of the patent application but in the absence of evidence of any written contract regarding the invention or that Mr Cooper received any remuneration from Environ for the invention, I am not persuaded that the entire relationship was such as to give rise to an equitable assignment as Mr Lawrence submitted.

This leaves the question as to whether Mr Cooper's action in acquiescing to the filing of the patent application in the name of Environ amounts to a parol assignment as argued by Mr Lawrence. Again I do not see this as being clearly established. Environ seek to interpret Mr Cooper's action as evidence of an intent that he intended to assign his rights in the invention to them, which is denied by Mr Cooper. The conclusion I have drawn is that in their enthusiasm to protect and exploit the invention and in the atmosphere of good-will which apparently existed at the time of their meeting with Mr Lawrence, Mr Cooper and Mr Shiels neglected to give serious thought to the ownership of the intellectual property rights to the extent that they were casual when informing Mr Lawrence about the history of the invention. Environ assumed, apparently, that the invention belonged to the company but do not seem to have taken any steps to confirm that this was the case whereas Mr Cooper, whose evidence suggests that he was protective of his invention, was apparently prepared to allow the patent application to be filed in the name of the company without any firm promise of financial reward. I am not persuaded, therefore, that Mr Cooper's actions are indicative of any clear intention on his part to assign the invention to Environ or that they amount to a parol assignment.

In summary, the evidence in this case leaves several important questions unanswered both as regards what work was done by Mr Cooper during his employment with Environ and what was understood or agreed between the parties in relation to the patent rights in respect of the invention in suit. The onus is upon Mr Cooper, as referrer, to persuade me that he should have sole rights in the invention. This he has not done to my satisfaction. Whilst I am satisfied that Mr Cooper conceived the essence of the invention before joining the employ of Environ, I am not convinced that he had completed all work on the invention before joining Environ and I am of the view that the likelihood is that he did carry out further development work on the invention whilst in their employ. This being the case, Environ are entitled to some rights in the invention by virtue of their employer status. Equally, however, although it is the case that Mr Cooper was a willing party to the filing of the patent application in the name of Environ and it seems only equitable that they should obtain some return for the costs they have incurred, I am not convinced that there was a clear or unambiguous assignment of the invention, whether equitable or parol, from Mr Cooper to Environ such as to justify my giving sole rights in the invention to the applicants.

In my judgement the equitable decision in this case, therefore, is that neither party should be awarded exclusive rights but that both Mr Cooper and Environ should be allowed to derive benefit from the invention. The manner in which this result can best be achieved has caused me some difficulty, not only because the evidence does not allow me to apportion the relative benefit with any great degree of confidence, but also because the patent application has still to be prosecuted through to grant.

Section 8(2) gives me considerable freedom as to the order I can make and I have considered the options available on the assumption that the parties will not be prepared to cooperate and to enable each to exploit the invention without being dependent upon the other. The last paragraph of Mr Cooper's resignation letter of 15 August 1991 (DAC 5) suggests that, at that time, Mr Cooper was prepared to come to some agreement but I do not think that I can presume that his position has remained unchanged.

The options as I see them are as follows.

First, I could direct that the application should proceed in the name of Mr Cooper alone with the grant of an irrevocable, royalty-free, non-exclusive licence to Environ. Whilst this option is perhaps the most consistent with the evidence that Mr Cooper devised a significant part of the invention prior to joining Environ, it has the disadvantage that Environ would have no control over the further prosecution of the patent application and raises the question of whether Environ should be re-imbursed by Mr Cooper for the expenditure which they have already incurred by way of fees and professional services. The circumstances of this case and the fact that Mr Cooper did not attend the adjourned hearing personally and was not represented at the re-convened hearing also suggest that he may have limited means and I cannot discount the possibility that he may decide not to proceed with the prosecution of the application, or indeed with the payment of renewal fees on the patent, if and when it is granted, for reasons which may be unrelated to any potential commercial success of the invention; this would leave Environ without the protection to enable them to obtain a fair return for their investment during the period of Mr Cooper's employment with them and in filing and prosecuting the patent application to date.

Second, I could direct that the application should proceed in the joint names of Mr Cooper and Environ. This solution would appear to reflect most accurately my finding that both parties have rights in the invention but, if the parties are not prepared to cooperate, would cause problems during the subsequent prosecution of the application and could inhibit the subsequent exploitation of the patent having regard to the provisions of Section 36 of the Act. This solution might be particularly unsatisfactory for Mr Cooper who, as an individual living abroad in the United States of America, in practice may only be able to exploit the patent by licensing it to a company operating in the United Kingdom. The terms of Section 36 inter alia would prevent him from doing this without the agreement of Environ who might not feel inclined to cooperate in the circumstances. I would be reluctant to direct joint ownership, therefore, without giving Mr Cooper greater freedom to enter into licensing agreements than a joint proprietor would normally enjoy.

The third option is for me to allow the application to proceed in the name of Environ as at present, but to grant Mr Cooper an irrevocable, royalty-free, non-exclusive licence such as to allow him to exploit the invention either personally or by sub-licensing to a third party.

This would leave the onus of the continued prosecution of the patent application with Environ, who look to have the resources and immediate interest to do so, it merely continues the arrangement for obtaining patent protection to which Mr Cooper consented at the meeting with Mr Lawrence on 8 July 1991, and it would leave Mr Cooper free to benefit from his inventive efforts in whatever way he sees fit. I recognise that this approach may not fully reflect Mr Cooper's ownership rights in the patent and there are disadvantages as I have indicated earlier when I considered the possibility of granting sole ownership to Mr Cooper and the provision of a licence to Environ, but in all the circumstances it seems to me to be the most pragmatic solution and I am minded to make an order in these terms.

As I have already indicated, the evidence before me is limited and I am not in possession of all of the facts concerning the current position of the parties, or the potential value of the invention and the patent rights. It is possible, for example, that either party might wish to consider the sale of their patent rights or prefer a licensing arrangement whereby one would pay royalties to the other.

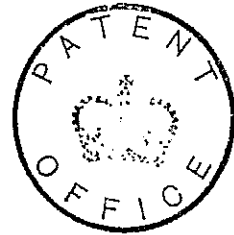
Since my finding that both Mr Cooper and Environ have rights in the invention does not go as far as the relief which either sought and is an outcome which perhaps neither envisaged, I am reluctant to impose a solution upon the parties without giving them an opportunity to consider the matter with their professional advisers and make their views known.

In summary, therefore, I give Mr Cooper and Environ two months from the date of this decision in which to submit observations upon the form of order I should make which is consistent with my judgement on ownership and I will give them the opportunity to be heard again if they so wish. Following this, I will reconsider the matter in the light of any submissions received and issue a final decision.

Since I have concluded that both parties have a beneficial interest in the invention, neither has been entirely successful in this action and I make no award as to costs.

Dated this 29 day of December 1993

P J Herbert
Superintending Examiner, acting for the Comptroller



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