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PATENTS ACT 1977

IN THE MATTER OF a reference to the Comptroller under Section 8(1)(a) by John Edward Bolwell in respect of Patent Application No. 8915325.8 (Serial No. GB 2234063A) in the name of British Gas plc

DECISION

Patent Application No. 8915325.8 was filed on 4 July 1989 in the name of British Gas plc and a corrected Form 7/77 filed on 18 August 1989 identified John Edward Bolwell as the sole inventor. The application was published under Section 16 on 23 January 1991 with the Serial No. GB 2234063 and, although substantive examination in accordance with Section 18 of the Act was requested on 26 November 1990, the examiner's first report has still to issue.

The reference under Section 8 was filed by Mr Bolwell together with a statement on 28 November 1990 seeking an order that, by virtue of Section 39(2), the application should proceed in his name alone. The matter came before me at a Hearing on 24 July 1992 at which Mr Bolwell presented his own case and Mr R Miller appeared as counsel on behalf of British Gas.

After the completion of the normal rounds of evidence provided for by Rules 7(4) and 7(5) of the Patent Rules 1990, further declarations were filed by Mr Bolwell and on behalf of British Gas; both Mr Bolwell and Mr Miller were agreeable to their admission and I therefore decided, as a preliminary matter, to admit these further declarations under Rule 7(6).

The invention which is the subject of the patent application is concerned with an apparatus for detecting underground leakages of gas, for example from a buried gas pipe. When a leakage of gas is suspected a hole (a 'bar-hole') in the ground is bored or punched using a bar and a probe which forms a part of the detecting apparatus is inserted into the hole; a sample is then drawn up the probe and analysed by a sensor connected to the probe. A problem which is commonly encountered in the use of such detectors is that water present in the hole can be drawn up with the sample. If this occurs the apparatus must be dried out which, depending upon the degree of contamination, can be a difficult and tedious operation. The invention addresses this problem and provides that a pump used to suck the sample up the probe is reversed automatically to blow out any water from the probe when it is detected in the sample line.

At the time when the invention disclosed in the patent application was made the inventor, Mr Bolwell, was employed by British Gas in the position of Scientific Officer in the Scientific Services Department of British Gas West Midlands. Prior to a reorganisation in 1984 Mr Bolwell had a job within the Scientific Services Department of supervising a team responsible for servicing and maintaining gas detectors known by the Registered Trade Mark "GASCOSEEKER". It is detectors of this general type on which the invention is based and it was during this period that Mr Bolwell experienced at first hand the problem of water being drawn into the detectors. As a consequence of the 1984 reorganisation, this instrument servicing work was transferred, with Mr Bolwell's team but without him, to another department called the Instrument Section. While the Scientific Services Department has not serviced any GASCOSEEKER detectors since the 1984 reorganisation, it is not in dispute that Mr Bolwell has continued to use such detectors.

In December 1988, some four years after the responsibility for servicing GASCOSEEKER detectors had been transferred from the Scientific Services Department, Mr Bolwell had the germ of an idea which led to the present invention. He went on to construct a working prototype of the invention in his employer's time and using materials and components supplied by British Gas. It is not disputed by Mr Bolwell or by British Gas that Mr Bolwell

undertook this development of a GASCOSEEKER detector of his own volition. Indeed from the evidence before me I am satisfied that Mr Bolwell made the prototype in secret and only showed it to his superiors and others in British Gas on completion in the Spring of 1989.

It was recognised that the invention might have some merit and it was referred to Mr Kinrade, the Senior Patents Adviser based at the Midland Research Station of British Gas, and the patent application was duly filed in the name of British Gas with Mr Bolwell's agreement.

Mr Bolwell subsequently became dissatisfied with the efforts being made to exploit the invention and it was this discontent that led him to question the ownership of the invention and, eventually, to instigate this action under section 8.

The rights in an invention as between employee and employer are set out in Section 39 of the Act in the following terms:

- "(1) Notwithstanding anything in any rule of law, an invention made by an employee shall, as between him and his employer, be taken to belong to his employer for the purposes of this Act and all other purposes if -
 - (a) it was made in the course of the normal duties of the employee or in the course of duties falling outside his normal duties, but specifically assigned to him, and the circumstances in either case were such that an invention might reasonably be expected to result from the carrying out of his duties; or
 - (b) the invention was made in the course of the duties of an employee and, at the time of making the invention, because of the nature of his duties and the particular responsibilities arising from the nature of his duties he had a special obligation to further the interests of the employer's undertaking.

(2) Any other invention made by an employee shall, as between him and his employer, be taken for those purposes to belong to the employee."

Sub-section (a) of section 39(1) thus provides for an invention made by an employee to belong to the employer in either of two distinct situations:

- (i) where it was made in the course of the normal duties of the employee; or
- (ii) where it was made in the course of specifically assigned duties falling outside the employee's normal duties.

In Mr Bolwell's submission, neither of these situations apply in the circumstances surrounding the present invention. Mr Miller, on the other hand, argued that the invention belongs to British Gas by virtue of the provisions of Section 39(1)(a) and that the invention was made either in the course of Mr Bolwell's normal duties or in the course of duties specifically assigned by Mr Bolwell to himself or in the course of duties specifically assigned to Mr Bolwell by his manager, Mr Sixsmith.

In dealing with the question of his normal duties Mr Bolwell submitted that the Service Department in which he was employed was not in the business of research and development but did routine scientific work on demand. However, when I asked him whether he had ever undertaken innovative work during the course of his normal duties, he acknowledged that he had. He explained that he had done such work out of good will and not because of any special obligation. In support of his contention that his normal duties did not embrace innovation, Mr Bolwell provided two examples which, he alleged, showed that his line management had discouraged him from undertaking innovative work. These allegations relate to two projects, one concerning a calibration rig for GASCOSEEKER detectors and the other to monoethylene glycol analysis, which Mr Bolwell was instructed to abandon. In declarations by Mr Sixsmith on behalf of British Gas, it is explained that Mr Bolwell had been instructed to stop work on these projects in view of uncertain reliability or accuracy in one case and safety fears in the other. I cannot therefore conclude that these particular examples demonstrate that as a general rule Mr Bolwell was discouraged from innovating.

Mr Miller went further by asking rhetorically, why should an employee be allowed to undertake work as described by Mr Bolwell in the first place if the outcome of such work was not to become the property of British Gas? This is, I think, a point of some merit.

The job specification of a Scientific Officer in the Scientific Services Department of British Gas West Midlands, which was the position held by Mr Bolwell at the relevant time, is set out in Exhibit BS I which accompanies a declaration by Mr B Sixsmith on behalf of British Gas who was the Scientific Services Officer responsible for the day to day running of the department in which Mr Bolwell worked; the appendix to this exhibit sets out the duties performed by scientific staff in the department.

Mr Miller explained that this job specification inter alia requires that the job holder:-

"Actively participates in scientific investigations, routine monitoring and experimental programmes both in the laboratory and in the field. The ability to interpret test results quickly and make "on-the-spot" recommendations is especially important when working on the district remote from the laboratory and direct supervision";

and has

"A thorough understanding of the application of scientific principles to operational problem solving in the Gas Industry";

"Will also be required to undertake specialised duties";

"Will determine the suitability of test methods, procedures, chemical treatments, etc. so as to provide the best practicable service to the Region in terms of efficiency, cost effectiveness";

and by way of qualifications has a

"Degree in a Science and/or membership of an appropriate professional institution"; and

"At least 7 years experience of scientific work in the Gas or Fuel Industries".

Specific duties identified in an appendix to the job specification include operational problem solving, atmospheric monitoring, leakage location and investigations into failed components.

Mr Bolwell explained that the comprehensive list of duties set out in the appendix could be regarded as the normal duties of the Scientific Services Department, that the duties are not specific to one member of staff and that it is quite possible that individual members may not be competent in all of these areas. In Mr Miller's submission, however, the job specification clearly required Mr Bolwell to recognise problems and make recommendations and, in support of this view, he directed me to various declarations made on behalf of British Gas by employees of the Scientific Services Department and describing innovative work done by Scientific Officers, including Mr Bolwell, and employees of a lower grade. Although some of the examples pre-date the formal job specification in Exhibit BS I, there is no suggestion that they are not typical of the work of the department. Of these I have particularly noted:

- (i) a device constructed by Mr Bolwell for viewing tell tale signs on gas meter pinion gear wheels of meter fraud;
- (ii) a method developed in 1977 and 1978 by Mr Beasley, who at that time was employed in the Scientific Services Department as a Chemist (Analytical) (a lower grade than the Scientific Officer grade held by Mr Bolwell), of calculating glycol content in gas. This method was developed on the back of a published paper on measuring glycol in motor oil; and
- (iii) solutions devised by Mr Jones, as a Chemist I (a position below Mr Bolwell's grade of Scientific Officer) in 1980 to overcome problems following a request to investigate failure of pump glands and corrosion of heat exchangers in use with British Gas, and in 1983, still as a Chemist I, cost saving proposals for

combatting the development of the bacteria causing Legionnaires' Disease in water cooling towers.

Taking this evidence with Mr Bolwell's own admission that he has undertaken innovative work as part of his normal duties, I am satisfied that at least it is the custom and practice of employees of the Scientific Services Department to innovate in the course of their normal work.

In his submission to me and in his declaration of 13 September 1991 Mr Bolwell sought to distinguish such innovative work from that involved in producing the present invention by characterising the former as work on "service aids" but, after considering Mr Bolwell's submission on the nature of his normal duties as a Scientific Officer in the Scientific Services Department, I have been unable to come to a clear view as to the exact scope of what he intends by the term "service aids".

Mr Bolwell also put forward the argument that the invention had no application in the business of British Gas West Midlands since his employer was not a manufacturer of scientific instruments from which he concluded that providing a solution to the problem behind the present invention could not have been part of his normal duties.

In response to this argument Mr Miller submitted that although British Gas may not manufacture the GASCOSEEKERS, this does not detract from the fact that they have a strong interest in solving the problem of water ingress: in view of the extensive use made of these instruments, a successful solution to the problem would result in a considerable saving to British Gas in terms of the servicing of the instruments, a fact of which Mr Bolwell was well aware from the period up to 1984 when he was responsible for servicing GASCOSEEKERS and from his continuing use of them since. In Mr Miller's view this is exactly the sort of problem to which employees in the Scientific Services Department are supposed to give their attention and I agree with him that the fact that British Gas do not manufacture the instrument does not of itself take the invention beyond the scope of Mr Bolwell's normal duties.

In a further declaration on behalf of British Gas Mr Eric Swindells, a manager within British Gas West Midlands having responsibility for departments including the Scientific Services Department, describes a function of the Scientific Services Department as providing a scientific service to British Gas West Midlands. He goes on to explain that this involves personnel employed in Scientific Services using scientific principles and methods and technology to do the job, to investigate and observe problems and, if possible, to suggest solutions. That can include modifying apparatus used to do the job if there are problems with it or it has shortcomings. This view is certainly consistent with an admission by Mr Bolwell that at the time he conceived the invention he was carrying out a minor modification to a GASCOSEEKER. Furthermore, in the absence of any evidence to the contrary I am also prepared to accept that the improvement to GASCOSEEKER gas detectors constituting the present invention is one that might be expected to arise out of the normal duties of a Scientific Officer, who was well aware of the problem of water being drawn into these instruments and used such instruments in the course of his duties, notwithstanding the fact that the prime responsibility for servicing the instruments lay with another department within British Gas. Moreover, it seems to me that GASCOSEEKERS might well fall within a definition of a "service aid" in view of their use in Mr Bolwell's job.

It seems to me moreover that the circumstances in which the invention was made tend to support the view that the task of modifying GASCOSEEKERS is not inconsistent with Mr Bolwell's normal duties. There is no dispute that Mr Bolwell constructed the prototype in his employer's time and using components supplied by his employer and there has never been any suggestion in these proceedings that Mr Bolwell was making inappropriate use of the Company's resources or was reprimanded for carrying out this work. On the contrary Mr Bolwell confirmed that he had the trust of his employer not to abuse the use of British Gas's time and materials and the high regard in which Mr Bolwell is held by his employer has been demonstrated subsequently by his promotion from the grade held at the time of making the invention. On the evidence I have heard it would have been wholly uncharacteristic for Mr Bolwell to have abused this trust and do something which he did not believe fell within the scope of his normal duties.

I also note that, having made his prototype, Mr Bolwell contacted the Legal Department of British Gas West Midlands to suggest that the invention be patented. There was no suggestion at that time that he considered that he had any rights in the invention. Indeed at the Hearing Mr Bolwell directed my attention to a memorandum he sent to his Region's Legal Department in which he writes "The device is the invention of a single person (J.E.Bolwell) employed in the Scientific Services Department of British Gas West Midlands." This statement suggests to me that, at that time, it did not occur to Mr Bolwell that the invention had arisen other than through the normal conduct of his duties. It was only when he became dissatisfied with the lack of progress in exploiting the invention, it would seem, that Mr Bolwell began to consider whether he could claim ownership of the invention.

I will now deal briefly with Mr Miller's alternative submission that even if the invention did not arise out of Mr Bolwell's normal duties, it did flow from duties specifically assigned to him either by himself or by his manager, Mr Sixsmith. The essence of Mr Miller's argument, as I understood it, was that having identified the problem of water ingress with the GASCOSEEKER, Mr Bolwell assigned to himself the problem of solving it and that there is nothing in Section 39(1)(a) to preclude the inventor from assigning tasks to himself. Mr Miller did not develop this reasoning, which I find somewhat artificial, at any great length and I am not persuaded that it is a correct interpretation of the second leg, as it were, of sub-section 39(1)(a).

Mr Miller also sought to persuade me that Mr Bolwell was specifically assigned the job of modifying the GASCOSEEKER instrument by Mr Sixsmith by virtue of Mr Sixsmith having authorised the purchase of components for the prototype. At the time Mr Sixsmith authorised these purchases, however, he had no idea what they would be used for since it is not in dispute that Mr Bolwell did not disclose his invention to a group of colleagues including Mr Sixsmith until he had made a working prototype. In such circumstances I cannot agree that Mr Sixsmith's authorisation constitutes a specific assignment to Mr Bolwell to look into the problem of water being drawn into GASCOSEEKER detectors.

A further criterion of section 39(1)(a) is that for a invention to belong to an employer, the circumstances must be such that an invention might reasonably be expected to result from the employee's normal or specifically assigned duties. That this is so in the present case has already been established in my view by what has gone before, particularly the custom and practice of Scientific Service Department employees to innovate in the course of their normal duties to overcome problems they encounter.

Before coming to a final conclusion I must consider the case law dealing with the rights of employees and employers in intellectual property. Mr Bolwell drew my attention to two authorities which he believed were significant. These were Harris' Patent [1985] RPC 19 and Mellor v. William Beardmore Co. Ltd. [1926] 43 RPC 361. The Mellor case addresses the question of the apportionment of rights in an invention under common law, which became established prior to the regulation of such matters by statute under the Patents Act 1977. Nevertheless, Mr Miller did not suggest that this 1926 authority is not relevant in the determination of the normal duties of an employee.

In referring to Mellor Mr Bolwell directed my attention to the legal rules applicable prior to the 1977 Patents Act in cases such as the present one. These rules were that in the absence of special contract the invention of a servant, even though made in the employer's time and with the use of the employer's materials and at the expense of the employer, does not become the property of the employer. It may very well be that under the circumstances of a particular case it is inconsistent with the good faith which ought properly to be inferred or implied as an obligation arising from the contract of service, that the servant should hold the patent otherwise than as trustee for his employer or it may be proved to the satisfaction of the Court that the position of trustee can be inferred from the servant's duty, and that he was a trustee for his employer. Lord Constable, in applying these criteria to the facts of the Mellor case, was unable to hold that the retention of the patent by Mellor, who was a Superintendent of a gas producer plant in engineering works of William Beardmore & Co. Ltd., was contrary to the good faith to be implied from Mellor's contract of service. He was also unable to hold it proved that in the circumstances it was Mellor's duty to hold the patent as trustee.

Mr Miller sought to distinguish the circumstances arising in Mellor from those of the present case in various ways. He drew my attention to Lord Constable's observation that Mellor "certainly did not intend that the benefit should go exclusively to his employers. That is obvious from the taking out of the Patent". Mr Miller submitted that initially Mr Bolwell had no qualms that British Gas should apply for a patent for the invention and that there is no evidence to suggest that Mr Bolwell expected anything from British Gas until he became dissatisfied with the lack of exploitation of the invention. Thus Mellor and Mr Bolwell had different perceptions as to their rights in the respective inventions from the outset. Mr Miller further submitted that the expectation of inventive ingenuity must be different as between Mellor, in his role of Plant Superintendent, and Mr Bolwell as a Scientific Officer in a Department where the custom and practice is to innovate to overcome problems. I accept these submissions by Mr Miller. I am also satisfied, in the absence of persuasive evidence to the contrary from Mr Bolwell, that in determining ownership of the modification to GASCOSEEKER detectors Mr Bolwell's position was equivalent to that of a trustee for his employer as inferred from the servant's duty, that is the invention was made during the normal course of his duties.

Mr Bolwell's main purpose in referring to Harris was to establish that the provisions of section 39(1)(b) did not apply to the circumstances of the present case, that is the invention did not belong to British Gas because the nature of his duties and the particular responsibilities arising from the nature of his duties meant that he had a special obligation to further the interests of his employer's undertaking. Such an argument did not form part of Mr Miller's submissions. In so far as Harris was the manager of a department primarily concerned with the sale and after sales service for a particular type of valve on which his invention was based, the circumstances of this authority are distinguished from those of the present case where Mr Bolwell has a scientific background, works from a laboratory and is employed in part to solve operational and technical problems. I am also satisfied that Mr Bolwell did not have a special obligation to British Gas West Midlands in view of his position within that organisation, which Mr Bolwell likened to that of a Second Lieutenant to a Colonel.

Accordingly I find that the circumstances of Mr Bolwell's duties and employment are such as to satisfy the requirements of section 39(1)(a). As a result Mr Bolwell fails in his reference and is not entitled to an order that patent application no. 8915325.8 proceed in his name.

British Gas are therefore entitled to the costs for which Mr Miller asked and I award them the sum of six hundred and fifty pounds (£650) as a contribution thereto, this sum to be paid by the referrer, Mr Bolwell.

Dated this 21 day of September 1992



P J HERBERT Superintending Examiner, acting for the Comptroller