

PATENTS ACT 1977

BLO / 104 / 90

IN THE MATTER OF a
reference under Section 37(1)(a)
by Philip Geoffrey Farmiloe
and Charpin Limited in respect
of Patent No 2161072 in the
name of John Theophilus Brueton

DECISION

The patent in suit, which relates to a hydrotherapy apparatus, was granted upon patent application no 8521277 filed on 27 August 1985 claiming the priority of an earlier application no 8427759 filed on 2 November 1984. The application was published under serial number 2161072 on 8 January 1986, and the patent was published on 25 June 1986. James Theophilus Brueton is identified as both inventor and applicant/patentee.

On 23 June 1988 the referrers filed Patents Form No 2/77, accompanied by a statement of case alleging that in about April 1984 Thomas David Fitzpatrick made all or part of the invention the subject of the patent in suit, and referring to an affidavit and exhibits of Mr Fitzpatrick sworn on 11 December 1986 in an action before the Patents Court. A copy of Mr Fitzpatrick's affidavit was appended to the statement. It was stated that at all material times Mr Fitzpatrick was employed by Universal Thermal Insulations Limited ("UTI") and that UTI were accordingly entitled to all his rights and benefits in the invention, including the right to be granted a patent therefor.

Alternatively, it was alleged that the patentee made the invention pursuant to a joint venture agreement made December 1983 between David Jones, David Paul Devoti and the patentee, and that Messrs Jones and Devoti and the patentee were accordingly jointly entitled to all rights and benefits in the

invention, including the right to be granted a patent therefor.

The statement went on to assert that, by assignments dated 5 January 1987, UTI inter alia assigned all its rights and benefits in the invention to Mr Jones, and Mr Jones inter alia assigned all his rights and benefits in the invention to the first referrer, Philip Geoffrey Farmiloe. By an assignment dated March 1987, Messrs Fitzpatrick and Jones and UTI inter alia assigned all rights and benefits they possessed in the invention to the second referrer, Charpin Limited.

It was asserted that the first and/or second referrers are

- (a) the true proprietors of the patent in suit, or alternatively
- (b) persons to whom the patent in suit should have been granted either alone or jointly with the patentee and/or Mr Devoti.

An order was sought that the patent in suit be transferred to the first and/or second referrers and that the names of the first and/or second referrers be entered as proprietors of the patent in suit alone or alternatively jointly with the patentee and Mr Devoti. The referrers also sought an order for costs.

In a counterstatement filed 25 November 1988 both alternative allegations were denied by the patentee, who referred to and appended to the counterstatement his own affidavit and exhibits sworn on 2 December 1986 in the Patents Court action.

It was asserted that the joint venture agreement, a copy of which, headed "Summary of Agreement between David Jones, David Devoti and John Brueton", apparently signed by all three, and dated 8 December 1983, was exhibited to the affidavit, does not

provide for any joint intellectual property rights between the parties in respect of inventions conceived by the parties during the currency of the agreement. It was denied that Messrs Fitzpatrick, Jones and Devoti and UTI had any rights and benefits in the invention which could form the subject matter of assignments, and it was averred that the referrers were not entitled to be granted the relief sought as a result of the purported assignments since neither of them was entitled to have the patent granted to them at the date of grant. The patentee asked for the dismissal of the reference together with an order for costs.

Evidence in chief in support of the reference was filed in the form of a statutory declaration and exhibits by Mr Jones, Managing Director and majority shareholder of UTI, and a statutory declaration by Eileen Brady, Loft Insulation Canvas (sic) Supervisor at UTI. A statutory declaration by Mr Brueton was filed for the patentee and a second statutory declaration by Mr Jones was filed in reply, to complete the evidence rounds prescribed by Rule 55.

Some weeks later, on 16 January 1990, the referrers sought to introduce further evidence in the form of a statutory declaration by Douglas Gill, UTI Sales Manager for loft insulation from Spring 1981 to September 1984. The patentee opposed such introduction.

In later correspondence the referrers requested that Mr Brueton attend for cross-examination at the hearing. Since the patentee declined the request the issue, together with introduction of the late-filed evidence of Mr Gill, stood to be resolved at the hearing.

At the hearing before me on 2 and 3 July 1990, Mr James Mellor appeared as counsel for the referrers, and Miss Denise McFarland appeared as counsel for the patentee .

After hearing submissions by both counsel, I decided to allow

the statutory declaration of Mr Gill to be introduced into the proceedings, and also to allow cross-examination of Mr Brueton.

The invention of the patent in suit concerns hydrotherapy apparatus, that is apparatus in which a bather receives body massage from one or more jets of water. According to the evidence, one very widely known form of hydrotherapy apparatus involves pumped recirculation of bath water via one or more venturis in which air is entrained into the water before being returned to the bath in an air/water mixture. This system has the shortcomings of being unsuitable for use with more than about six jet outlets and it is difficult to convert a standard domestic bath to such a system. Air-only systems overcome these shortcomings to a greater or lesser degree, but have a major problem which is not experienced in pumped water systems in that the streams of air create an extremely unpleasant sensation on the body, rather like needles. The air-only jets also tend to produce rapid cooling of the bath water even if the air is preheated, which is much less pronounced with pumped water systems.

The solution offered in an earlier patent application no 8518167 by the patentee, published under serial no 2159404 and referred to in the specification of the patent in suit, lies in feeding water by gravity from the bath into an air flow, from which it is returned to the bath by blowing through jet outlets in its wall in an air/water mixture.

The invention of the patent in suit has as its aim to provide hydrotherapy apparatus capable of maintaining the temperature of the bath water throughout the entire period of use.

The invention is clear from claim 1, which reads:

"Hydrotherapy apparatus comprising a bath for holding a body of water and means for blowing air into the body of water through jet outlets in the wall of the bath, the

apparatus including means for introducing hot water into the air flow to the jet outlets from a source other than the body of water in the bath".

In the described embodiment, air is blown through the outer jacket of a manifold and through a plurality of outlets, each connected by a length of tubing to a respective outlet jet mounted in the bottom wall of the bath. Hot water, for example from the normal hot water supply of the building, or alternatively from a separate hot water supply or from the cold water supply via an in-line heater, is fed through the inner jacket of the manifold and into the air flow via branch pipes that each pass for a short distance within a corresponding length of tubing carrying the air flow to the jet. The jets thus supply an atomised mixture of air and hot water to the bath so that the temperature of the bath water can be maintained indefinitely with the overall temperature adjusted by controlling the proportion of hot water in the air/water mixture.

In his evidence Mr Jones explains that UTI is primarily involved in the sale and installation of loft insulation, and that David Devoti was the Sales Manager and Tom Fitzpatrick, now deceased, was the Administration Manager. According to Mr Jones, John Brueton, formerly an employee of UTI, had set up a company called Almatich Limited through which he marketed a system, purchased from Aquatech Marketing of Newbury, for converting ordinary baths into jacuzzi-style whirlpools. Lacking the necessary capital and sales expertise to expand the business, in about November or December 1983 Mr Brueton proposed that UTI should set up a bath conversion installation business using the Aquatech system. As a result Messrs Jones, Devoti and Brueton signed the joint venture agreement of 8 December 1983 to which I have already referred.

The agreement was expressly to promote the sales of jacuzzi conversions to existing baths and the sale of allied goods and services. UTI was to be the underwriting company and a bank

account was to be opened with the sum of £3000 to be used as promotional expenses. £100 per week to a maximum of £1000 was to be paid to Mr Brueton as advanced profits, and all and any profits were to be equally divided between the members. The official "launch" date was to be 3 January 1984, and it was intended that after six months of trading, upon agreement, a limited company was to be set up, the equity being distributed in specified percentages to the three members. Mr Jones states that David Devoti was responsible for and organised exhibitions of the whirlpool system and co-ordinated sales, and John Brueton ordered the parts for the systems from the various suppliers. At the hearing Mr Devoti was described as being "at the helm" of the venture, Mr Brueton as being the practical man who installed the systems, and Mr Jones as being in overall supervision, although I would note that in his evidence Mr Jones claims to have taken an active interest in all the technical aspects of the whirlpool bath business as well as the installation, and recalls attending an installation, while Mr Brueton described him as taking "a back seat".

The six months duration of the agreement terminated on 8 June 1984. According to Mr Jones, on that day John Brueton came to see him and claimed that he could no longer work with David Devoti and that he was forced to leave. Mr Jones admits that, as he knew UTI had nobody else who had the necessary experience or the time to install the systems which were on order, he had no alternative but to ask Mr Brueton to continue. After after much persuasion Mr Brueton agreed to install the systems on a sub-contract basis for UTI whilst working for his own company Almatich. In this way, Mr Jones says, UTI trading as Whirlpool Spa continued to be involved in the whirlpool business for a while longer.

Although the joint venture started out with Aquatech systems it changed to installing systems purchased from Sanroy Marketing. According to Mr Brueton, the Sanroy systems installed under the joint venture had heaters already built

into them to try to introduce hot air, and in his statutory declaration he states that these heaters proved negative to the end result. Mr Brueton says that at the end of January 1984 an alternative air-only system manufactured by a company called Unipools was found, and he developed a system using a Unipools, and later a Massor Purl, blower. In the course of Mr Brueton's cross-examination there appeared to be some confusion as to whether Massor Purl and Unipools blowers were distinct, but I do not think that resolution of this matter is of significance to the main issue before me. In his affidavit in the Patents Court action Mr Brueton states that about thirty systems with Massor Purl blowers were installed, but customers started to complain that the water became cold and uncomfortable. According to Mr Jones, customers started to complain that the systems produced an uncomfortable sensation in use because air at ambient temperature blown into the bath felt cold in comparison with the hot water of the bath, and one particular customer was refusing to settle his account because he found the sensation so unpleasant.

As this seemed to be a very serious problem, Mr Jones says he held a series of meetings with Messrs Devoti and Brueton under the joint venture, and they decided to introduce a heater into the system to heat the air. In practice, though, however hot the air was it still felt cool compared with the bath water when blown in under pressure. Around the end of April or early in May 1984 a meeting was held involving Tom Fitzpatrick who, according to Mr Jones, had a good technical aptitude and had spent most of his career working in engineering at Longbridge for BMC and latterly Austin. Mr Jones asserts that at the meeting Mr Fitzpatrick suggested heating the air with a hairdryer type arrangement before it was blown into the bath, but when it was pointed out that this had already been tried without success he suggested that hot water be used to heat the air.

In his evidence in chief Mr Jones says:

"He said our options were either to draw water from the bath as a sort of reservoir and to mix that with the air, or to mix the air with water of a higher temperature than the water from the bath. During the meeting he explained his ideas with rough sketches. Initially he sketched out an arrangement to heat the air using a converter. This allowed the heat of the water to be transferred to the air. The jets consisted of an internal pipe supplying the air surrounded by a pipe full of hot water. The hot water in the surrounding pipe helped to warm the air before it was mixed with the water and the mixture propelled into the bath."

Mr Jones says that at the end of the meeting he asked John Brueton to experiment with Tom Fitzpatrick's ideas to test their viability, and in his reply evidence, he says:

"We recognised at the time that Tom Fitzpatrick had not produced an idea which required no further testing or refinement. That was why John Brueton was asked to research and develop the ideas. Having said that I fail to see how Mr Brueton can say his system is or was unlike the one suggested by Tom Fitzpatrick. It was Tom Fitzpatrick who had the idea which forms the basis of the patent."

Mr Jones recognises three sketches, exhibited to Mr Fitzpatrick's affidavit, as the ones Mr Fitzpatrick drew during the meeting, and having read the affidavit, Mr Jones agrees with Mr Fitzpatrick's recollection of events, admitting that "not surprisingly his recollection of the technical aspects then was slightly better than mine is now".

In his affidavit Mr Fitzpatrick described his work with UTI as making arrangements for the installation of loft insulation, the paperwork relating to those installations and liaising with customers and local councils generally. He was aware that in early 1984 UTI had begun a jacuzzi conversion business

following an approach by John Brueton. However, within a short space of time he was told that the jacuzzi system was impractical through reasons that he did not understand, and that there was a potential problem with the new air-spa system being sold. As he understood it, because the air blowing through the jets inserted at the bottom of customers' baths was at room temperature only, it produced a cold and unpleasant sensation to the occupant when it bubbled into the warm bath water. He recalled that a particular customer had complained to him on the telephone on more than one occasion about this unpleasant sensation, and this caused the management to have a number of meetings over a period of weeks on ways in which the air-spa system could be improved to avoid this complaint.

Around the end of April, at a meeting at which David Jones, David Devoti and John Brueton were present, Mr Fitzpatrick says he suggested that a heater be used to warm the air before it was blown into the bottom of the bath. It was pointed out to him, however, that this would not work since it would run the risk of affecting or melting the plastic air pipes. He then suggested adopting a system under which air and water were used in conjunction with each other.

In paragraph 5 of his affidavit, Mr Fitzpatrick said:

"As I saw the problem, we needed to convert the air blowing through the jets from cold to warm air and I suggested that the best way to do this would be to warm up the air in some way using hot water. I suggested that the air be warmed by hot water via a converter. In effect the air pipe should be encased in a larger pipe through which hot water flowed thereby heating up the air prior to it being blown into the bath through the jets at the bottom of the bath. I termed this the double pipe theory. I made a series of drawings to illustrate these ideas. These are now produced and shown to me marked exhibits 'TDF1', 'TDF2' and 'TDF3' which I have since

signed. The first drawing 'TDF1' can be ignored. The second drawing 'TDF2' represents my first thoughts whilst the third drawing 'TDF3' is an improvement on that idea. My theory was for hot water and air, in close proximity to each other, to be blended as it was blown into the bottom of the bath through a number of jets. The sketches were viewed by each person present at the meeting".

TDF2 shows a water heater or hot supply and an air pump linked via separate channels to a converter from which a plurality of broken lines appear to lead to jets in the bottom of a bath. In TDF3, the channels from a hot water heater and a cold air blower unite into a single conduit which leads to one of a plurality of jets in the bottom or well of a bath. Both TDF2 and TDF3 include a sketch identified as "jet" showing an airpipe encased in a larger hot water pipe.

Mr Fitzpatrick recalled discussion between David Jones, John Brueton, David Devoti and himself as to whether the air pipes should be surrounded by the hot water pipe or vice versa. At that time, he felt it might be preferable to have the air pipe on the inside surrounded by water as giving more heat to the air. He also recalled Mr Jones asking John Brueton to assemble a system encompassing the points made expressly relating to the "double pipe" theory in order to solve the problem of cold air flow into the bath.

This is denied by Mr Brueton who, in his statutory declaration, says:

"I do not recall any of the meetings to which David Jones refers Likewise, I cannot recall the alleged meeting with Tom Fitzpatrick to which David Jones refers I was never present at any meeting with Tom Fitzpatrick and I know very little of his experience and whether he had ever been engaged in scientific and technical matters. In any event, the system described by

David Jones purportedly on behalf of Tom Fitzpatrick would not work. Even if an air pipe was run through the middle of a hot water pipe, the air would still emerge at a cool temperature because of the small size of the opening of the pipe. Furthermore, as soon as the air within the pipe under an arrangement of this nature were to come into contact with the water within the bath, heat dissipation would be instant and the customer would not feel any benefit from the air being warm within the pipe as mentioned above I have no recollection of this meeting taking place. I do not recall any ideas purportedly emanating from Tom Fitzpatrick, nor do I recall any request from David Jones to experiment from such ideas. The only work carried out by way of research and development in this field was done independently at my house, the only participants being myself and Barry Best who was the only other fitter engaged in the business of UTI."

Mr Brueton also says:

"As mentioned above, any idea of the type described, whether it did emanate from Tom Fitzpatrick or not, would not have worked. My system is unlike the one supposedly described by Tom Fitzpatrick".

In reply, Mr Jones says:

"When giving his explanation of why the system described 'would not work' he appears to ignore the fact that Tom Fitzpatrick's proposal involved the air inside the pipe being warmed by the water outside it, the air and the water then mixing together before the mixture of hot air and water was propelled into the bath"
and

"Mr Brueton seems to concentrate only on the warming of the air by the water through the wall of the pipe which

was only the first stage of the solution proposed by Mr Fitzpatrick, the second stage of the solution being the mixing of the air with the hot water before injection into the bath".

In his evidence, Mr Brueton relies upon the contents of his affidavit in the Patents Court action, in which he outlines the progress of the joint venture agreement and the developments which took place during its six month duration which ended on 8 June 1984. He says that it was in the middle of June 1984 that he thought of circulating warm water from the bath through the system and blowing it with the air through the holes in the base of the bath. Patent application no 8418640 was filed on 21 July 1984 and, with patent application no 8511997 filed on 11 May 1985, constitutes the priority documents for patent application no 8518167 filed on 18 July 1985 and published on 4 December 1985 under serial number 2159404.

About two months after he thought of the idea of circulating the bath water, Mr Brueton says it occurred to him that the warm water could instead be obtained from the hot water supply. Patent application no 8427759 for this system was filed on 2 November 1984, followed by patent application no 8521277 on 27 August 1985 upon which the patent in suit was granted.

Mr Brueton repeated during cross-examination that these thoughts came to him after the end of the agreement. He became aware of the unpleasant sensation caused by the air-streams when, as a result of experiments he conducted on his own bath after the cessation of the agreement, his wife mentioned a sensation as though there were needle pricks coming up through the base of the bath.

Mr Brueton explained that the "magic" in the invention of the patent in suit was to use a hot water supply independent of the bath water. The principle remained the same, whether the

domestic water supply or a special heater was used, provided the water was introduced into the air stream, both then being injected into the bath. He emphasised under cross-examination that it was important for the air and heated water to be mixed before they reached the bath. It is convenient for me to state at this point that I consider this to be consistent with the proper construction to be placed upon the invention of the patent in suit. Claim 1 includes "means for introducing hot water into the air flow to the jet outlets", and I consider that the natural meaning of these words is that the blending of air and water is required to take place before the elements reach the jet outlets into the bath. This is borne out both by the particular description and, I consider, by the statement in the body of the specification that the jets supply an atomised mixture of air and hot water to the bath so that the temperature of the bath water can be maintained indefinitely - the stated object of the invention. There is no suggestion that such an atomised mixture would occur if the first point at which the air and hot water supplies came into contact with one another was at the moment of injection into the body of water in the bath.

With reference to Mr Fitzpatrick's sketches, Mr Brueton stated that they illustrated air coming out of the centre of the jet and water around the outsides of the jet. He considered that there would still be a pin-prick or an adverse cold sensation as the air would be in contact directly with the body. However, Mr Brueton agreed that if the air and water were blended away from body contact, a warm sensation would be created, the hot water disguising the cool air sensation, and he agreed that the system described by Mr Jones in his reply evidence, and attributed there to Mr Fitzpatrick, was his (Mr Brueton's) system.

As I see it, Mr Brueton is correct in agreeing that the account of Mr Fitzpatrick's proposal given by Mr Jones in his reply evidence is in essence the system of the patent in suit. However, in his evidence in chief, Mr Jones states that he

agrees with the recollection of events as presented by Mr Fitzpatrick in his affidavit, and also acknowledges that Mr Fitzpatrick's recollection of the technical aspects when the affidavit was sworn was "slightly better than mine (Mr Jones') is now (April 1989)". Accordingly, I conclude that it is unsafe for me to accept as reliable Mr Jones' version of the technical aspects of Tom Fitzpatrick's proposal in so far as it significantly differs from or extends beyond that presented in his affidavit by Mr Fitzpatrick.

The problem addressed by Mr Fitzpatrick was the cold and unpleasant sensation caused by blowing air at room temperature through jets in the bottom of the bath, and his solution was to convert the air blowing through the jets from cold to warm air by warming up the air. To do this he suggested using hot water via a converter and he also proposed the "double pipe theory" which entailed air passing through an inner pipe heated by hot water passing through an outer pipe. I accept that this arrangement is illustrated, albeit roughly, in sketches TDF2 and TDF3. Thus, I construe Mr Fitzpatrick's proposal, as described and illustrated, as a system in which hot water and air, the air warmed by heat exchange with the hot water, are supplied separately to the jets. I can find no hint of a suggestion, other than in Mr Jones' account which, as I have indicated, I do not find persuasive where it differs from Mr Fitzpatrick's, that the hot water and warmed air should be blended before they reach the jets. This conclusion is consistent with the affidavit of Mr Fitzpatrick in which, immediately after referring to sketches TDF2 and TDF3, he said:

"My theory was for hot water and air, in close proximity to each other, to be blended as it was blown into the bottom of the bath through a number of jets" (my emphasis).

Furthermore, no evidence has been adduced to indicate that Mr Fitzpatrick's theory was tested or refined, or that had the

theory been put into practice with the intended purpose of warming the air, the results would have led to a recognition of the principle of blending the hot water with the air before they reached the jet outlets into the bath.

It follows that I find no support in Mr Fitzpatrick's evidence for Mr Jones' assertion that Mr Fitzpatrick proposed mixing the air and water before they were propelled into the bath, or indeed that any such mixing was contemplated by Mr Fitzpatrick.

Accordingly, the referrers have failed to satisfy me that the idea described and illustrated in the evidence of Mr Fitzpatrick would have led to the invention of the patent in suit.

Consequently, it is not necessary for me to decide whether or not Mr Brueton was present at the meeting at which Mr Fitzpatrick made his proposal.

Turning to the alternative allegation, at the hearing I was addressed by counsel as to whether the joint venture agreement implicitly covered the intellectual property rights for research and development work ("inventive steps") carried out during the period of the agreement. The referrers have adduced no evidence to establish that the research and development work which resulted in the invention was performed other than as described in the affidavit of the patentee, that is, after the period of the agreement. No assertion has been made that the joint venture agreement extended to cover the period when the patentee was involved in completing the outstanding installation orders for UTI when development leading to the invention of the patent in suit did take place. Consequently it is not necessary for me to interpret the terms of the agreement and I find the alternative allegation to lack foundation.

In the result, the referrers have failed to satisfy me that

Thomas David Fitzpatrick made all or that part of the invention the subject of the patent in suit and accordingly that UTI were entitled to the right to be granted a patent therefor, or that the patentee made the invention pursuant to the joint venture agreement and accordingly that Mr Jones, Mr Devoti and the patentee were jointly entitled to the right to be granted a patent therefor.

I determine therefore that the status quo should be maintained, ie that the entitlement to the grant of the patent should remain with John Theophilus Brueton, and I make no order in respect of the reference under Section 37(1)(a).

In the matter of costs, having regard to all the circumstances in the proceedings, I award John Theophilus Brueton the sum of £800 as a contribution to his costs, and direct that this sum be paid to him by the referrers Philip Geoffrey Farmiloe and Charpin Limited.

Dated this 27 day of AUGUST 1990.



DR P FERDINANDO

Superintending Examiner, acting for the Comptroller

THE PATENT OFFICE