### **PATENTS ACT 1977**

IN THE MATTER OF GB Patent Application No 0101578.3 in the name of Hiroki Ashizawa

#### **DECISION**

#### Introduction

- Patent Application No GB 0101578.3, entitled "Building condition checking system and building condition checking method" was filed on 22 January 2001 and published on 20 February 2002 as GB 2365574.
- A combined search and examination report under sections 17 and 18(3) was issued on 4 December 2001 in which the examiner reported that the application was excluded from patentability by section 1(2)(c) and (d) because the claims related to a method of doing business, a program for a computer and/or the presentation of information. The examiner also raised a novelty objection on the basis of a document cited on the search report. The applicant's agent, Mr Lamb, submitted three sets of amendments and comments which, whilst disposing of the novelty objection, failed to satisfy the examiner that the invention claimed was patentable. It was agreed that further correspondence was unlikely to resolve the patentability issue and the case came before me at a hearing on 19 March 2003 where the applicant was represented by Mr Lamb.
- I note in passing that one of the amendment rounds introduced subject matter which the examiner objected to as extending beyond that disclosed in the application as filed, contrary to section 76. That added matter has now been removed from the claims currently on file but still remains in the consistory clauses.

## The application

The application relates to a system which allows the purchaser of a new building (the client) to monitor the construction process without having to visit the construction site. The building contractor is provided with a computer terminal into which he can input a photograph showing the current condition of the building. The client is provided with a terminal through which he can request information on progress of the building. Standard construction figures corresponding to photographs of the building at each stage of construction are stored in a memory device. When a client wants to assess progress, he inputs a request for progress information into his terminal. The photograph of the actual building is provided to the client's terminal along with the standard figure representing how the building should look at that particular stage of construction. The photograph and the figure are then displayed on the client's terminal to allow the client to compare them.

- 5 The claims in their latest form (as filed on 15 January 2003) comprise a single independent claim (claim 1), dependent claims 2 to 12 and an omnibus claim (claim 13). The method claims were deleted during the amendment stages.
- 6 Claim 1 reads as follows:
  - 1. A building information provision apparatus, having an acquiring means for acquiring from a building contractor information terminal a site construction photograph,
  - a receiving means for receiving from an owner information terminal a request to provide the site construction photograph,
  - a standard information memory device which stores a plurality of construction figures for which objectivity can be guaranteed and which correspond to site construction photographs for each stage of execution works, and a provision means for providing to the owner information terminal, in response to the request, the site construction photograph with the standard construction figure which corresponds to the site construction photograph, to allow comparison of the standard construction figure with the site construction photograph.
- At the hearing Mr Lamb identified claims 9 and 11 as giving a particularly clear indication of how the invention is put into effect and it is worth me reproducing them here. Those claims read as follows:
  - 9. A building information provision apparatus according to claim 1, wherein the provision means is configured to provide a site construction photograph and the corresponding standard figure for simultaneous display on the owner information terminal.
  - 11. A building information provision apparatus according to claim 10, wherein the receiving means is configured to receive from the owner information terminal, a request to provide a site construction photograph, together with an identification of a construction stage, the provision means being for providing, in response to the request, to the owner information terminal the site construction photograph corresponding to the construction stage identification and the standard construction figure corresponding to the construction stage identification.

## The law

- The examiner has maintained that the application is excluded from patentability under section 1(2)(c) and (d) of the Act, as relating to a method for doing business, a program for a computer and/or the presentation of information as such. The relevant parts of this section read:
  - "1(2) It is hereby declared that the following (among other things) are not inventions for the purposes of this Act, that is to say, anything which consists of -
  - (a) ....
  - (b) ....

- (c) a scheme, rule or method for performing a mental act, playing a game or doing business, or a program for a computer;
- (d) the presentation of information;

but the foregoing provision shall prevent anything from being treated as an invention for the purpose of this Act only to the extent that a patent or application for a patent relates to that thing as such."

These provisions are designated in Section 130(7) as being so framed as to have, as nearly as practicable, the same effect as Article 52 of the European Patent Convention, to which they correspond. I must therefore also have regard to the decisions of the European Boards of Appeal that have been issued under this Article in deciding whether the present application is patentable.

### **Interpretation**

In his responses to the examination reports issued on this case and at the hearing, Mr Lamb referred to the Patent Office Practice Notice "Patents Act 1977: interpreting section 1(2)" issued in April 2002. The effect of that Practice Notice is that if an invention relates to any of the excluded fields set out in section 1(2), it will not be refused as being unpatentable *if it provides a technical contribution*. This technical contribution test derives from the decision in *Fujitsu Limited's Application* [1997] RPC 608, in which Aldous LJ said in respect of the computer program exclusion at page 614:

"However, it is and always has been a principle of patent law that mere discoveries or ideas are not patentable, but those discoveries and ideas which have a technical aspect or make a technical contribution are. Thus the concept that what is needed to make an excluded thing patentable is a technical contribution is not surprising. This was the basis for the decision of the Board in *Vicom*. It has been accepted by this court and by the EPO and has been applied since 1987. It is a concept at the heart of patent law."

- This approach is consistent with the decision of the EPO Board of Appeal in *Sohei's Application* T769/92 to which Mr Lamb also referred in his correspondence and at the hearing. In that decision the Board decided that a technical invention was not excluded from patentability just because it was used for a non-technical purpose such as financial management.
- I am in complete agreement with Mr Lamb that if the present invention makes a technical contribution then it should not be excluded from being patentable even if it relates to otherwise excluded subject matter.

### **Argument**

Mr Lamb did not address me specifically on whether the invention constituted a program for a computer, a method of doing business or the presentation of information, either at the hearing or in the correspondence leading up to it. Instead, he sought to demonstrate that the invention provided a technical contribution and thus did not

amount to one of those excluded items "as such". I will address each of his lines of argument on that in turn. However, before I do that I first need to consider which, if any, of those exclusions the invention might be caught by.

# Rule, scheme or method for doing business

The exclusion relating to methods of doing business has traditionally been subject to quite a broad interpretation. However, when I consider the claimed invention as a whole, as I am required to do, I am not convinced that the present invention can be said to comprise a method of doing business "as such". The invention provides a tool that can be used in a business environment, namely the surveying of a building. But that does not mean it amounts to a method of doing business any more than say a calculator used in completing a set of accounts. I do not find the invention to fall within the exclusion relating to methods of doing business.

## Program for a computer

The claims of the present application are drafted as apparatus claims and at first sight do not appear to constitute a program for a computer. However it is very well established in UK case law that it is the substance of the claims that I need to consider, not their form. This principle was clearly set out by the Court of Appeal in *Fujitsu Limited's Application* [1997] RPC 608. At page 614 Aldous LJ quoted with approval the decision of Fox LJ in *Merrill Lynch* [1989] RPC 561 where he said:

"It seems to me to be clear.... it cannot be permissible to patent an item excluded by section 1(2) under the guise of an article which contains that item - that is to say, in the case of a computer program, the patenting of a conventional computer containing that program. Something further is necessary."

### Aldous LJ then went on to say:

"By that statement Fox LJ was making it clear that it was not sufficient to look at the words of the claimed monopoly. The decision as to what was patentable depended upon substance not form."

16 Claim 1 defines apparatus which comprises a system of networked computers including a client terminal, a contractor terminal, storage means for holding construction data and the means to allow these integers to exchange information. Following the reasoning of the Court of Appeal, which I am of course bound to do, I consider that the substance of the claimed invention is a computer program (or a series of programs) run on a network of computers.

### The presentation of information

When amending the application in an attempt to overcome the patentability objection, one of the routes the Applicant sought to follow was to focus on the "comparison" stage of claim 1. I do not need to consider that particular form of amendment in great detail because the examiner objected that it was contrary to section 76 and it was subsequently removed from the claims. However, it is I think worth mentioning

because it illustrates that the output of the system - the end result - is the display of the site photograph and the standard construction figure alongside each other on the client terminal screen so that the client can view them. That, in my opinion, is the presentation of information.

### **Technical Contribution**

- I have found that the invention relates to a program for a computer and that the end result achieved by the invention is the presentation of information. However, as I indicated above, that is not the end of the matter. Inventions covering such subject matter are only excluded to the extent that they amount to those things "as such". Moreover, the Courts have made it clear that they amount to more than that if they provide a technical contribution. What I now need to do is to decide whether the invention provides such a technical contribution.
- Mr Lamb sought to demonstrate the existence of the required technical contribution in a number of ways:

# a) Implementation through hardware

The passage from the *Fujitsu* judgment I quoted above is but one example of the case law I could draw upon to show that merely implementing an invention through hardware does not necessarily make an invention patentable but that something more (a technical contribution) is required. That contribution can of course be provided by the hardware upon which a program is run if the hardware meets the novelty and inventive step requirements of the Act. However, in the absence of any indication to the contrary in the application as filed I can only assume that the hardware employed to implement the present invention is entirely conventional and does not in my opinion provide the required technical contribution.

### b) Implementation over a network

- Mr Lamb sought to distinguish the facts pertaining to the present application from those in *Fujitsu*. In the present application, he said, the invention resides in a server giving it the ability to provide bespoke information to a plurality of users. That, he said was in contrast to the invention in *Fujitsu* which was essentially operated on a PC and thus had no potential to produce a technical act.
- I am not persuaded by that line of argument. The facts existing on *Fujitsu* are undoubtedly different to those on the current application, but that in no way devalues the worth of *Fujitsu* in providing guidance on what constitutes the technical contribution required to make an excluded item patentable.
- I said above that whatever the form of claim employed, I consider the invention to comprise a computer program. I fail to see how there is any distinction between a program controlling a single computer and one controlling a networked system in terms of the patentability of the program. The advantages of using a network in the present system are precisely what you would expect from using a network; provision of remote access to multiple users. Provision of the service over a conventional network

does not, in my opinion, provide the required technical contribution.

## c) <u>Functionality</u>

- In the correspondence leading up to the hearing, and at the hearing itself, Mr Lamb placed a good deal of emphasis on the fact that the images presented to the client are related and that technical issues are addressed to enable them to be compared. To use the specific wording of claim 1, "the standard construction figure which **corresponds** to the site construction photograph" is presented to the client terminal "to allow **comparison**" of the figure and photograph (my emphasis).
- Mr Lamb said that this comparison requires the system to interrogate two separate databases to obtain the site construction photograph appropriate to a particular client and the standard figure representing the current stage of execution. These are then transmitted to the client terminal where they can then be compared. Without referring to any specific precedents, Mr Lamb said that plenty of decisions had issued where a technical effect was provided by affecting the internal working of a computer and he suggested that the technical contribution made by the present invention resided in the interrogation and transmission steps.
- To say that the interrogation and image transmission steps provide a technical contribution is, I feel, over-egging the pudding. There are undoubtedly technical aspects to the invention; it is after all implemented through a computer network. But that is not the test which I am required to apply. The invention must make a technical contribution for it to be patentable.
- That the technical contribution can reside internal to as well as external to the computer is not in dispute. However, not all modifications to the workings of a computer constitute a technical contribution. That point was considered by the Board of Appeal of the EPO in its decision on an application from *IBM* (T935/97) which Mr Lamb indicated an intention to rely upon prior to the hearing but which in the event was not referred to. In that decision (at paragraph 6.2) the Board said that

"physical modifications of the hardware (causing, for instance, electrical currents) deriving from the execution of the instructions given by programs for computers cannot *per se* constitute the technical character required for avoiding the exclusion of those programs.

Although such modifications may be considered to be technical, they are a common feature of all those programs for computers which have been made suitable for being run on a computer, and therefore cannot be used to distinguish programs for computers with a technical character from programs for computers as such."

I do not consider that running the program embodying the present invention causes the computer systems to operate in a technically different way and does not provide the required technical contribution.

I mentioned earlier the importance Mr Lamb placed on the comparison stage in claim 1 and his efforts to increase the significance of this step when amending claim 1(which have now been removed as adding matter beyond that disclosed in the application as filed). It was not disputed that what the system does is retrieve information from various sources, transmit it to the client's terminal and display it there for comparison. The system stops short of actually automating the comparison stage which is an entirely manual process. As such I can see no way that the comparison stage can be said to be technical, let alone make a technical contribution.

### d) Reducing the burden on users

- Mr Lamb also sought to persuade me that the invention made a technical contribution by virtue of the way it facilitated the retrieval and display steps. Without the system, he said, users would have to initiate their own searches to find standard construction figures, work out which photograph related to which stage of execution and manipulate them for display on a screen. The claimed system would, he said, do all this more efficiently, more accurately and more reliably than a user could.
- That may well be so. But the Court of Appeal considered those very same points in *Fujitsu* in relation to a system for computer modelling of crystal structures. Having acknowledged that the computer system set up in accordance with the teaching of that application provided a new tool which avoids labour and error, Aldous LJ said at page 618 line 40:

"But those are just the sort of advantages that are obtained by the use of a computer program. Thus the fact that the patent application provides a new tool does not solve the question of whether the application consists of a program for a computer as such or whether it is a program for a computer with a technical contribution."

Thus, just because a computerised system reduces what would otherwise be a manual burden does not necessarily mean the system makes a technical contribution. I do not consider implementation via a computerised system to provide a technical contribution in the present application.

### e) Field of Use

- 33 The information being processed and transmitted undoubtedly relates to a real world application the world doesn't get much more tangible than the construction industry. Mr Lamb sought to persuade me that this concrete application was sufficient for the invention to be said to make a technical contribution. I do not agree. As I said above, the end result of running the program is the display of two images for consideration by the client to enable him to monitor progress. Whilst the construction process might ultimately be affected, (for example the client might sack the contractor if he considers the work done to be substandard) there is no causality between the provision of the information and the construction process itself.
- When discussing the Court of Appeal's decision to reject the claims to the method of manufacture in *Fujitsu*, Mr Lamb said he thought the Court did so because it felt there

was no connection between the steps of imaging the crystal and actually manufacturing it. In my opinion there is no such link between the display step and any subsequent operation in the present application either. The invention seems to me to be distinguished solely by the information that is displayed and that does not provide the required technical contribution.

## f) <u>Implicit technical problem to be solved</u>

In presenting his case (and in the correspondence) Mr Lamb also referred to the decision of the Boards of Appeal of the EPO in *Sohei*. In that case, it was the Board's view that

"the non-exclusion from patentability (of computer programs) also applies to inventions where technical considerations are to be made concerning the particulars of its implementation."

and

"The very need for such technical considerations implies the occurrence of an (at least implicit) technical problem to be solved and (at least implicit) technical features solving that technical problem."

- Mr Lamb conceded that the present application was silent as to the detail of the considerations that a programmer would have to make in implementing the present invention. However, it was implicit, he said, that technical considerations would underlie the computer implementation. The programmer would have to consider the size and configuration of the images to be compared in writing the program. That, he claimed, amounted to technical considerations and an implicit technical problem to be solved which, following *Sohei*, demonstrated that the invention made a technical contribution.
- As I said at the hearing, I am more than a little vexed by Mr Lamb's interpretation of the "implicit technical problems" aspect of the *Sohei* case. The first two pages of the application in suit outline the problems that exist in the traditional client/contractor relationship. These include lack of mutual trust, the client's lack of specialist knowledge and inadequate discussion and communication between the parties. I take those as being administrative problems resulting from human shortcomings. Mr Lamb would have me read implicit technical problems into the description. I am not prepared to do that in this instance. Having gone to the trouble of identifying problems to be overcome, I find it difficult to believe that the application is silent on the technical problems to be overcome if they had indeed been envisaged by the inventor at the time of filing.
- I have a further difficulty with Mr Lamb's interpretation of the *Sohei* decision. It seems to me that before writing <u>any</u> program, a programmer has to take technical considerations into account. He will need to consider his choice of programming language, the form he wants the end result to take, the format of data to be input to the program etc before starting to write the program. Taken to its logical conclusion, it would seem to me that Mr Lamb's interpretation of *Sohei* would mean that any

- computer program would be patentable. That cannot be right for it would drive a coach and horses through the exclusion.
- Were I to accept that technical problems to be overcome are implicit in the application, they amount to no more than sizing and configuring the site photograph and standard construction figure images so that they can be displayed for comparison within the constraints imposed by the web page format. As I said earlier, the application as filed disclosed nothing beyond this and amendments suggesting it did were withdrawn following an objection that they added matter contrary to section 76. Any such problems seem to me to be trivial and considering and solving them prior to commencing programming does not in my opinion provide any technical contribution.
- At the hearing Mr Lamb asked me to give particular consideration to claims 9 and 11 as giving the clearest indication of the technical considerations that the invention seeks to put into effect. To my mind claim 9 says nothing more than that the standard figure and the site photograph are displayed on the client terminal simultaneously. Claim 11 merely recites the steps involved in the request making and request answering steps. They do not in my opinion add anything that can be said to amount to a technical contribution.

#### Conclusion

I have considered carefully all the arguments advanced by Mr Lamb to demonstrate that the present invention provides a technical contribution but I am not persuaded by any of them. In my opinion, the invention relates to a program for a computer and the presentation of information. Furthermore, in the absence of any technical contribution, I conclude that the invention amounts to those things "as such".

### **Decision**

I have found that the invention as claimed in this application is no more than a program for a computer and the presentation of information as such. I have read the specification in its entirety but cannot envisage any amendment that would be allowed having regard to section 76 that would overcome the exclusion from patentability. Accordingly I refuse the application under section 18(3) on the grounds that the invention is excluded by sections 1(2)(c) and 1(2)(d).

#### **Other Matters**

As I mentioned earlier, some material extending beyond that disclosed in the application as originally filed was introduced into the specification during the amendment rounds, contrary to section 76(2). The matter in question was subsequently deleted from the claims but not from the consistory clauses on pages 3 and 3a. Should this decision be reversed on appeal, that consistory clause will need to be brought into line with the claims by removing this added matter before the application can be granted.

# **Appeal**

Under the new Civil Procedure Rules any appeal to this decision must be lodged within 28 days of the date of this decision.

Dated this 18th day of August 2003.

# A BARTLETT

Deputy Director acting for the Comptroller

THE PATENT OFFICE