UK Intellectual Property Office

For Creativity and Innovation

BL O/036/08

8th February 2008

PATENTS ACT 1977

APPLICANT Shaw Pittman LLP

ISSUE Whether patent application number GB 0524306.8 complies with section 1(2)

HEARING OFFICER R C Kennell

DECISION

1 This application results from the entry into the national phase of international application no. PCT/US2004/014398. This was filed on 7 May 2004, claiming a priority of 7 May 2003 from an earlier US application, and was published under serial no. WO 2004/102340 on 25 November 2004. It has been reprinted under serial no. GB 2418278 A. No search has been made during either the international or the national phase of the application.

2 Despite amendment of the claims during substantive examination, the applicant has been unable to persuade the examiner that this is a patentable invention within the meaning of section 1(2) of the Act. The applicant had requested a hearing, but in its letter of 10 December 2007 it asked for the matter to be decided on the papers on file.

The invention

3 The invention is directed to analysing the operation of an organisation, typically in the context of a customer outsourcing business functions to a supplier. The specification explains that, although the theory of outsourcing is that a customer should specify the outputs it wants and allow the supplier the latitude it needs to deliver them, in practice an outsourcing agreement will be based on a highly negotiated schedule which mitigates the risks for both customer and supplier. This, the specification further explains, has led to a number of disadvantages:

- focus on what the customer does today and the price to be charged by the supplier rather than how the supplier might improve the operation;
- unwillingness of suppliers to make any meaningful changes during the term of the agreement;

- the fracturing of the operation, particularly in IT outsourcing, into “towers” or “silos” comprising sets of established services for which a “best-of-breed” supplier is then sought;

- and overlooking interactions which are of critical importance for creating or destroying value.

4 The invention defines the customer’s operation in terms of a “value chain” identifying the processes of which it is composed. Processes in the value chain are mapped in a matrix against the elements which are subject to the processes and the intersections in the matrix are populated with the actor (the organisation, the supplier, or a third party) responsible for delivering that association of processes and elements. For example the elements to be associated with a customer relationship management process could include a PC workstation on which the process was performed. According to the specification, this approach allows the construction of a model for the whole operation covering both the outsourced and the retained components which puts the interactions between customer and supplier into a better context for deciding outsourcing strategies. As is stated at paragraph [00195], this approach will be useful “for any situation in which a company desires to analyse a business operation to determine who is going to do what and where.”

5 It is envisaged that the invention can be implemented on a computer: paragraphs [00184] and [00185] and Figure 24 describe a graphical user interface for creating and manipulating a process-element matrix and paragraph [00196] explains that the instructions can be stored on a computer-readable medium.

6 In their latest amended form the claims comprise a single main claim, claim 1, which reads:

> “A method of controlling a display to illustrate interactions between an organization and a supplier participating in an outsourcing based on user input comprising:
> receiving, from a user, input defining a value chain including a plurality of processes;
> receiving, from the user, input defining a plurality of elements, wherein one or more of the plurality of elements is subject to one or more of the plurality of processes;
> displaying, for each process, the one or more elements subject to the process;
> receiving, from the user, input identifying at least one actor assigned to each process and the one or more elements subject to the process, wherein the at least one actor is either the organization, the supplier for the organization, or a third party to the organization and the supplier;
> displaying, for each process, an actor responsible for completing the process with the one or more elements subject to the process; and
> displaying, along the value chain, interactions between the organization and the supplier, said interactions defining a sequence by

which to complete the plurality of processes and information that is to be passed between the organization and the supplier;

mapping in a matrix, the plurality of processes against the plurality of elements;

populating at least some of the intersections in the matrix between the mapped plurality of processes and the mapped plurality of elements with the actor responsible for the corresponding process and the one or more elements subject thereto; and

displaying the matrix."

The law and its interpretation

7 Section 1(2) reads:

> "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) a discovery, scientific theory or mathematical method;
>
> (b) a literary, dramatic, musical or artistic work or any other aesthetic creation whatsoever;
>
> (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 purposes of this Act only to the extent that a patent or application for a patent relates to that thing as such."

8 It is not disputed that the assessment of patentability under section 1(2) is now governed by the judgment of the Court of Appeal in *Aerotel Ltd v Telco Holdings Ltd* and *Macrossan's Application* [2006] EWCA Civ 1371, [2007] RPC 7 (hereinafter "*Aerotel*"). In this case the court reviewed the case law on the interpretation of section 1(2) and approved a new four-step test for the assessment of patentability, namely:

1) Properly construe the claim

2) Identify the actual contribution (although at the application stage this might have to be the alleged contribution)

3) Ask whether it falls solely within the excluded matter

4) Check whether the actual or alleged contribution is actually technical in nature.

9 The operation of the test is explained at paragraphs 40-48 of the judgment. Paragraph 43 confirms that identification of the contribution is essentially a matter of determining what it is the inventor has really added to human knowledge, and involves looking at substance, not form. Paragraphs 46-47 explain that the fourth step of checking whether the contribution is technical may not be necessary because the third step should have covered the point, and that a contribution

which consists solely of excluded matter will not count as a technical contribution. It will not therefore be necessary for me to go on to the fourth *Aerotel* step if the invention falls at the third step - notwithstanding that the Court followed *Merrill Lynch's Application* [1989] RPC 561 approving the European Patent Office Board of Appeal decision in *Vicom* (T 208/84) that a technical contribution was decisive of the matter[1].

Argument and analysis

10 The applicant argues that the invention as now claimed is directed to a method of controlling a display, and that it is therefore sufficiently tethered to an industrial activity to avoid exclusion under section 1(2) in accordance with *Halliburton Energy Services v Smith International* [2005] EWHC 1623 (Pat), [2006] RPC 2 and *Touch Clarity's Application* (BL O/198/06). In *Halliburton* at paragraphs 215-218 Pumfrey J held claims to methods of designing a drill bit to be excluded as mental acts, but capable of being restricted so as to tie them down to an industrial activity. In *Touch Clarity* the hearing officer similarly held that although certain claims to the control of an operating system were excluded, constraining them to the control of a robot could form the basis of a patentable claim. These decisions predate *Aerotel*, but, as the applicant points out, *Touch Clarity* is mentioned on the Office's website as an example of a case in which the same result would follow from applying the *Aerotel* test.[2] In respect of *Touch Clarity* the applicant sees no difference between controlling the motors in a robot and controlling the electrons in a cathode ray tube display in the present invention.

11 The examiner did not consider that the restriction of the claims to a method of controlling the display affected the substance of the invention. He believed that the invention used entirely conventional hardware to display business related information and was excluded as a business method, a computer program, or the presentation of information.

First step - construction of the claims

12 Applying the four-step *Aerotel* test, the first step – the construction of the claims – is not in issue.

Second step – identifying the contribution of the invention

13 The dispute turns on the identification of the contribution of the invention in the second step of the test. As explained above under *Aerotel* this has still to be determined as a matter of substance, rather than the particular form of claim. Irrespective of anything said in *Halliburton* and *Touch Clarity*, it is the test in *Aerotel* which I must apply.

14 I do not think that the present invention makes any contribution of substance to the control of a display as the applicant alleges. It seems to me that such control as takes place is due entirely to the execution of a computer program on a

[1] See *Oneida Indian Nation's Application* [2007] EWHC 954 (Pat), paragraphs 10-11
[2] www.ipo.gov.uk/patent/p-decisionmaking/p-law/p-law-notice/p-law-notice-subjectmatter/p-law notice-subjectmatter-test.htm

processor and the manipulation of the display at a graphical user interface. I think it is quite clear from the passages in the specification mentioned above that the techniques used are entirely conventional. Accordingly I do not think the invention can be regarded as a new way of controlling the electrons in a cathode ray tube in the sense that there was a new way of controlling the operation of a robot in *Touch Clarity*. If the invention was patentable as a new method of controlling electrons, then it would follow that manifestly unpatentable things, such as forms and questionnaires, could in theory become patentable under the guise of methods of controlling a display simply by executing and displaying them on a computer. That cannot be right.

15 Rather, it seems to me that that in regard to claim 1 (as amended) what the inventors have contributed as a matter of substance, as distinct from the form and wording of the claim, is a method of displaying the interactions which take place in a business on the basis of user input defining:

- a value chain of processes carried out by the organisation,
- the elements in the organisation which are subject to the processes, and
- the actors (organisation, supplier to the organisation or third party) responsible for the individual processes and their associated elements

the display including

- the interactions between the organisation and a supplier along a value chain, and
- a matrix in which processes are mapped against elements and the intersections of the matrix are populated with the responsible actors.

The contribution therefore has two aspects - analysing the operation of an organisation on the basis of input from a user, and displaying the results of the analysis in a particular form.

Third step – does the contribution fall solely within the excluded matter?

16 In my view, as I have explained above, the “control” in claim 1 involves nothing more than the execution of a computer program and the manipulation of a display at a graphical user interface. The fact that carrying out the invention may involve a computer program does not necessarily mean that the invention is excluded, as paragraph 22 of *Aerotel* makes clear. Indeed in the present case, the use of a program was a purely optional feature in the specification as originally drafted and is not specifically mentioned even in the amended claims. However, it seems to me that that the contribution of claim 1 as amended is something effected purely by running a computer program on conventional hardware in order to analyse and display data. The hardware is conventional and there is nothing in the contribution which makes the hardware any better or overcomes any technical problem in its operation. I therefore consider that the contribution falls wholly within the computer program exclusion.

17 I think that the second limb of the contribution is all about how information is presented to the user and is nothing more than the provision and expression of information. This aspect is therefore within the presentation of information exclusion.

18 In correspondence relating to previous versions of the claim, the applicant sought to draw a distinction between "functional" information relating to the essence of the invention – how the associations between processes, elements and actors are arranged and compared – which did not change and would not be excluded, and "cognitive" information relating to particular implementations over which the user had a choice. However, I do not think this distinction between different types of information has any bearing on the presentation of information exclusion as it applies in this particular case.

19 In regard to the business method exclusion, I do not think that the contribution of claim 1 is a "method for doing business" as is required by section 1(2)). *Aerotel* makes clear at paragraphs 68-71 that the exclusion is not limited to abstract matters or to completed transactions, and that the fact that a new tool - which this undoubtedly is - is provided does not solve the question. Even so, I do not think that analysing and the way an organisation operates in order to inform subsequent decisions about outsourcing can really be regarded as a way of running a business or conducting an outsourcing operation. However, the business method exclusion could arguably apply to, eg, claim 6, which includes the further step of incorporating the matrix into an outsourcing contract, and the corresponding disclosure relating to the development of sourcing strategies.

20 Although the examiner initially raised objection under the mental act exclusion, he did not press this after the *Aerotel* judgment. I note that the scope of this exclusion seems to be in some doubt in the light of the comments in *Aerotel* at paragraphs 62 and 96-98. However I do not need to decide this point.

21 I therefore find that the contribution relates solely to a program for a computer and to the presentation of information, and possibly in some cases to a method for doing business. The contribution is therefore solely within the scope of the section 1(2) exclusions.

Fourth step - is the contribution technical in nature?

22 In the light of my finding, it is not necessary for me to consider this question. However, I do not think that the contribution that I have identified is in fact technical in nature, notwithstanding the applicant's contention that the mapping of processes against elements allows a tangible, real-world result to be achieved by populating the matrix with appropriate actors and elements. It may be useful in the real world, but that does not necessarily mean that it is technical.

Conclusion

23 I therefore conclude that the invention as now claimed is excluded from patentability by virtue of section 1(2). Having read the specification, I am unable

to identify any field of activity which might tether the claim to something patentable as in *Halliburton* and *Touch Clarity*, or indeed any other possible saving amendment. I therefore refuse the application under section 18(3).

Appeal

24 Under the Practice Direction to Part 52 of the Civil Procedure Rules, any appeal must be lodged within 28 days.

R C KENNELL
Deputy Director acting for the Comptroller