



plan review, the computer-implemented system comprising:

a supply chain visualizer including a graphical user interface providing a visual representation of one or more graphical elements in a graphical view of a supply chain network;

a plan display including a graphical user interface providing a visual representation of one or more graphical elements in a tabular view; and

a multi-directional capability for providing a context sensitive traversing between the supply chain visualizer graphical user interface and the plan display graphical user interface.

14. A computer-implemented method for providing supply chain network visualization and plan review, the method performed using one or more computer systems each comprising one or more processing units and one or more memory units at one or more locations, the method comprising the steps of:

providing a supply chain visualizer including a graphical user interface capable of visual representation of one or more graphical elements in a supply chain network;

providing a plan display including a graphical user interface capable of visual representation of one or more graphical elements in a tabular view; and

providing a multi-directional capability for a context sensitive traversing between the supply chain visualizer graphical user interface and the plan display graphical user interface.

21. A computer-readable medium having encoded thereon software for providing supply chain network visualization and plan review, the computer-readable medium comprising instructions for:

providing a supply chain visualizer including a graphical user interface capable of visual representation of one or more graphical elements in a supply chain network;

providing a plan display including a graphical user interface capable of visual representation of one or more graphical elements in a tabular view; and

providing a multi-directional capability for a context sensitive traversing between the supply chain visualizer graphical user interface and the plan display graphical user interface.

## The law

5 The examiner raised an objection under section 1(2)(c) that the invention is not patentable because it relates to a computer program and a method of doing business as such. The relevant parts of section 1(2) read as follows:

*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) ...;

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

- 6 The assessment of patentability under section 1(2) is governed by the judgment of the Court of Appeal in its judgment in *Aerotel*<sup>1</sup>. In this case the court reviewed the case law on the interpretation of section 1(2) and approved a four-step test for the assessment of patentability, namely:
- 1) Properly construe the claim;
  - 2) Identify the actual contribution;
  - 3) Ask whether it falls solely within the excluded matter;
  - 4) Check whether the contribution is actually technical in nature.
- 7 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. Paragraph 47 adds that a contribution which consists solely of excluded matter will not count as a technical contribution.
- 8 The interpretation of section 1(2) has been considered by the Court of Appeal in *Symbian Ltd's Application*<sup>2</sup>. *Symbian* arose under the computer program exclusion, but as with its previous decision in *Aerotel*, the Court gave general guidance on section 1(2). Although the Court approached the question of excluded matter primarily on the basis of whether there was a technical contribution, it nevertheless (at paragraph 59) considered its conclusion in the light of the *Aerotel* approach. The Court was quite clear (see paragraphs 8-15) that the structured four-step approach to the question in *Aerotel* was never intended to be a new departure in domestic law; that it remained bound by its previous decisions, particularly *Merrill Lynch*<sup>3</sup> which rested on whether the contribution was technical; and that any differences in the two approaches should affect neither the applicable principles nor the outcome in any particular case. But the *Symbian* judgment does make it clear, that in deciding whether an invention is excluded, one must ask does it make a technical contribution? It does not matter whether it is asked at step 3 or step 4. If it does, then the invention is not excluded.

### **Application of the Aerotel test**

#### Step 1: Properly construe the claims

- 9 The applicant and the examiner agree that the claims relate to a system, method and computer program for providing a supply chain visualizer, a tabular view graphical user interface and functionality to traverse between the views in a context sensitive multidirectional manner. So do I.

#### 10 Step 2: Identify the actual contribution

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<sup>1</sup> *Aerotel Ltd v Telco Holdings Ltd and Macrossan's Application* [2006] EWCA Civ 1371

<sup>2</sup> *Symbian Ltd's Application* [2008] EWCA Civ 1066

<sup>3</sup> *Merrill Lynch's Application* [1989] R.P.C. 561

- 11 This is defined by *Aerotel* as what the invention has added to the stock of human knowledge. There is no suggestion by either the examiner or the applicant that the contribution is, or should be, different for each of the respective independent claims set out above. The claims therefore stand or fall together.
- 12 In the applicant's view, the contribution lies in the provision of a tool that facilitates planning of a supply chain in which different representations are provided and linked such that a planner can traverse between representations in a context sensitive manner, which allows him to see associated parts or changes that are viewed or made in one representation in the other. This allows the extremely complex activity of planning a supply chain network possible as the system focuses the upcoming representation based on the context of the present representation.
- 13 What the inventor has added to the stock of human knowledge is clearly not the hardware. The hardware utilised in the present application is merely a conventional networked computer(s) (see paragraphs 37 and 38 for example). In addition, there is no interaction between the hardware and the software for it to be said there is a contribution made by the system as a whole. In my view, the contribution is a supply chain planning tool that provides a visual representation of inventory elements as both a supply chain network and a tabular view, in which the user has the ability to traverse between representations in a context sensitive multidirectional manner, so as to plan a supply chain by seeing associated parts or changes that are viewed or made in one representation in the other.
- 14 Since the driving force for supply chain planning is to attempt to match supply with demand to meet business objectives and avoid potential problems (paragraph 3), there is no doubt in my mind that the contribution involves aspects of doing business.

Step 3: Ask whether the contribution relates solely to excluded matter

- 15 It is clear that the contribution requires a computer program for its implementation – see claim 21 for example. However, in considering the nature of this contribution, I am mindful of paragraph 22 of *Aerotel*, which reminds me that just because a computer is used in an invention, it does not necessarily mean that the invention is excluded from patentability. What matters is whether or not the program provides a technical contribution.
- 16 The Court of Appeal in *Symbian* gave useful guidance at paragraphs 52-58 as to when a program might make a technical contribution sufficient to avoid the exclusion. It particularly emphasised (see paragraph 56) the need to look at the practical reality of what the program achieved and to ask whether there was something more than just a “better program”. At paragraph 58 the Court stated that a technical innovation, whether within or outside the computer, would normally suffice to ensure patentability.
- 17 The applicant states that: “... in practice, the planning system operates on one or more computers at one or more locations which may be operated by at least one planner within a supply chain network, wherein the planner is also a computer. Therefore the technical problem solved within the computer relates to the storage

of data within the computer thereby providing a planning system that compiles and provides a more efficient storage and transfer of data (with the result of traversing) to a planner computer.” Furthermore, he says: “The technical nature of the invention is a tool and method for controlling the context-sensitive traversing between different forms of data representation. We submit that this feature is technical given the efficient use of resources that result from its implementation.”

- 18 The applicant also argues that the invention is “more than a business method realized by a conventional computer system: instead it is a tool and associated method for traversing between views of a supply chain in a context sensitive manner, which makes for more efficient use of data and computer resources. The tool and method may be used for business but, generally, all inventions are used for business or commercial advantage – it does not stop them being technical. The tool ensures that changes in views or to the assets presented in those views are appropriately and efficiently processed on traversal between the representations.”
- 19 I have carefully read the application but I can see no hint that the system provides “the efficient use of resources” nor can I find any indication that the system “compiles and provides a more efficient storage and transfer of data”. The fact that the application provides a new tool does not answer the question as to whether the application consists of a computer program as such or whether it is a computer program with a technical contribution. Likewise, the computer system of the present invention may provide a new tool which reduces errors and aids the efficient storage and processing of supply chain planning data – but these are just the sort of advantages that you get by the use of a computer program. They do not indicate the presence of a technical contribution.
- 20 Furthermore, I do not believe that the present invention provides a technical contribution of the type found in *Symbian*. In particular, a computer with the program of the present application does not provide, as a matter of practical reality, a “faster and more reliable computer”. The program allows a planner to traverse between distinct visual representations of supply chain information in a context sensitive multidirectional manner – but this is just a computer programmed to provide a supply chain planning tool (i.e. a better computer program), it is not a better computer.
- 21 As discussed in decisions subsequent to *Symbian*, in particular *AT&T*<sup>4</sup>, I note that the patentable invention of *Symbian* operated at a high level of generality (i.e. low level programming) within the computer – in other words the increase in speed and reliability was not dependent of the type of data being processed or the particular application being used to do the processing. In contrast, in the present application any benefits are wholly dependent upon the application (traversing between visual representations) and type of data (supply chain information) being used.
- 22 I am therefore clear that the contribution made by the invention does not have the

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<sup>4</sup> *AT&T Knowledge Ventures LP & Cvon Innovations Ltd v Comptroller General of Patents* [2009] EWHC 343(Pat)

required relevant technical effect. I consider the contribution to reside solely in a computer program as such. Furthermore, I consider that planning a supply chain to meet business objectives or avoid potential problems sits squarely within the business method exclusion.

Step 4: Check whether the contribution is technical in nature

- 23 Having considered this under the third *Aerotel* step, I do not need to go on to the fourth step. For my reasons explained above, I do not consider the contribution to be technical in nature.

**Conclusion**

- 24 I find that the invention is excluded under section 1(2) because it relates to a computer program and a method of doing business as such. I have carefully reviewed the specification and do not think that any saving amendment is possible. I therefore refuse the application under section 18(3).

**Appeal**

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

**MRS S E CHALMERS**

Deputy Director acting for the Comptroller