

7 February 2008

## PATENTS ACT 1977

APPLICANT                      Dell Products L.P.

ISSUE                          Whether patent application number GB  
  0403747.9 complies with section 1(2)

HEARING OFFICER              R C Kennell

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## DECISION

### Introduction

- 1    This application was filed on 19 February 2004; no earlier priority is claimed. It was published under serial no. GB 2411260 A on 24 August 2005.
- 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. This matter therefore came before me at a hearing on 12 December 2007. The applicant was represented by Mr Steven Howe of the patent attorneys Reddie & Grose, and the examiner, Mr Ben Buchanan, assisted via videolink.
- 3    Although for the time being the examiner was not pressing any novelty and inventive step objections he noted that it might be necessary to revisit these matters if the patentability issue was resolved in the applicant's favour. I do not need to consider them at this stage.

### The invention

- 4    The invention is concerned with customising the “out of box experience” when setting up a built-to-order information handling system such as a personal computer. On-line stores allow the customer to select a system, customise it according to selected options, and price and procure it. However, as Mr Howe explained in his letter of 5 February 2007, the opportunity to select and order services such as Internet services does not usually arise until the customer first initialises the system. This means that the system has to be configured with the options for different service providers and the ability to operate with different operating systems, and the maximum amount of software has to be included in order to provide these opportunities.

- 5 The invention aims to provide a more user-friendly experience by allowing the customer to specify service options when configuring the system. Appropriately customized out of box experience files can then be placed on the system during manufacture, thus minimising the amount of software which has to be provided. Claim 1 in its latest amended latest form defines the invention thus:

“A method of manufacturing an information handling system with a customised out of box experience, including the step of configuring an information handling system with options selected according to user input, the options selected including service options, and customising an out of box presentation based upon the selected service options, including:  
detecting an operating system version of the information handling system;  
determining, based upon the detected operating system version, which out of box experience pages to display when the information handling system is initially started and which control file is appropriate for the detected operating system; and  
executing a program during factory download that places customised out of box experience files on the information handling system during manufacture of the information handling system.”

- 6 The out of box experience files can be stored on the system on the basis of a system part number determined by the services ordered. The part number will identify the appropriate screen presentations to be made to the user.

### **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, i.e.

“an exercise in judgment probably involving the problem said to be solved, how the invention works, what its advantages are”

and involves looking at substance, not form.

10 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<sup>1</sup>.

### **Argument and analysis**

11 The basic positions of the applicant and the examiner were clearly set out in their respective letters of 5 and 27 February 2007. The applicant was of the view that the claimed method resulted in a new product, which was different from the prior art because it was configured differently so as not to have all the software files previously necessary and therefore operated in a different way. On the other hand, the examiner, assessing the contribution of the invention in the following terms:

“The actual contribution is the downloading of required customised out of box experience files in accordance with user selected options and the detected operating system version of the information handling system during manufacture so that the appropriate out of box experience pages are displayed when the information handling system is originally started. Thus the system is in an ‘optimal form’ for first use, the requirement for initial ‘out of the box’ configuration having been reduced and the order and nature of information presented to a user ‘out of the box’ is adapted in accordance with user selected options.” ,

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<sup>1</sup> See *Oneida Indian Nation's Application* [2007] EWHC 954 (Pat), paragraphs 10-11

considered it related solely to a combination of a mental act, a program for a computer and a method for doing business. I must consider these arguments in the light of the four step *Aerotel* test, to which I now turn.

#### First step – construction of the claims

- 12 The construction of claim 1 and claims 2-7 dependent on it is not in dispute. However, there is a final product claim 8 in the following terms:

“An information handling system including a processor and a memory coupled to the processor, the information handling system being manufactured in accordance with the method of any one of the preceding claims, and including means for detecting an operating system version ... [see claim 1], a means for determining, based on the detected operating system version, ... [see claim 1] and a means for executing a program ... [see claim 1].”

- 13 At the hearing, I queried whether the integers of the claim following “any one of the preceding claim” were correctly included: it appeared to me that these were the means required to produce the product, not something which remained in it after manufacture. Mr Howe accepted that the claim would require clarification if the application proceeded. However, I do not think this point affects the assessment of the contribution of the invention.

#### Second step – the contribution of the invention

- 14 Mr Howe thought that the examiner’s definition had identified the particular steps in the implementation of the invention which enabled the contribution to be achieved, but not the contribution itself. In his view it was misleading to focus on the difference between the methods of the prior art and the invention and to say that because it was a different computer program then the invention must be excluded. He stressed that what was being claimed was an overall method of manufacturing an information handling system which produced a better system than before and that was how the contribution ought to be assessed.
- 15 The examiner noted that Mr Howe, although not accepting his definition of the contribution, had not suggested an alternative formulation. He accepted however that it was necessary in the light of paragraph 43 of *Aerotel* to look beyond the wording of the claim but felt that the concluding sentence of his definition did attempt to do this.
- 16 In order to show that the contribution was in reality a method for making a better product, Mr Howe drew attention to the difficulties that the invention overcame. As he explained it, some of the software loaded on to known systems would be redundant, and some of it might be incompatible with the bespoke hardware system that the customer had ordered or might lead to the user choosing inappropriate services at the installation stage. Additional software would need to be added in order to determine what portions of the installed software should be allowed to run and to prevent inappropriate selections by the user. The invention was therefore a combination of hardware and software which produced a system less likely to have technical failures.

- 17 However, I do not think there was at bottom any dispute between Mr Howe and the examiner as to the difficulties that the invention was trying to overcome, or how it overcame them. Indeed, despite the arguments before me, I do not actually think there was really any dispute about what the contribution was even if Mr Howe might have worded it differently from the examiner. It seems to me that the examiner's definition correctly identifies the differences between the invention and the known systems for manufacturing an information handling system in accordance with user requirements and the advantages that result. In particular, having regard to the points made by Mr Howe, it brings out that the downloading of customised files takes place during manufacture and that the selection of options is made at an earlier stage than before.
- 18 I therefore accept the examiner's definition of the contribution, which in my view identifies it as a matter of substance rather than tying it to the particular form of the claim. To my mind the real question, to which much of the argument before me was actually devoted under the guise of determining what the contribution was, was whether the contribution lay wholly in excluded matter – the third *Aerotel* step.

Third step – is the contribution solely within the excluded matter?

- 19 In my view this question turns on whether the contribution is, as Mr Howe argued above, a method for making a new information handling system which operates in a different way from known systems so as to have less risk of technical failure, or, as the examiner argued, a method of configuring a system in accordance with customer requirements, the system itself not necessarily being new.
- 20 The examiner's view was that the advance made by the invention was entirely a matter of implementing software which imposed rules and constraints on the way the system was set up; only if these were satisfactory could the system have any potential for being new. As he saw it, the software performed the same role as an "expert salesman" in optimising a customer's selections. Accordingly he argued that the contribution fell entirely within excluded matter, principally a program for a computer and a method for doing business (although he accepted that the latter category might have been more apparent if the invention had been directed to influencing a customer's selections). On reconsideration he did not press the mental act exclusion since the invention as presently claimed did not really lie in the selection of user options.
- 21 Mr Howe did not think that a claim which actually included physical assembly or configuration steps would fall within the business method exclusion, and contrasted this with abstract ways of carrying out a function (such as organising component supply) which did not affect the end product. He also saw dangers in concentrating too much on the business aspect, since virtually any patentable system would make something that was more efficient or better and would have business advantages. Also, he thought that the method of the invention was not fundamentally dependent on a customer placing an order and might to some extent at least be carried out as a self-assembly method, which therefore militated against it being a method for doing business.

- 22 On the computer program exclusion Mr Howe maintained in line with his previous arguments (see paragraph 14 above) that the invention was directed to producing a combination of hardware and software which could not be distinguished in the end product, both being necessary for the customer to get the invention to work.
- 23 I accept that the invention does not relate purely to abstract matters, but, as *Aerotel* makes clear at paragraph 68, the business method exclusion is not limited to abstract matters. I do not think that an invention necessarily avoids the exclusion simply because it is claimed in terms of physical assembly and configuration steps: it depends on what the substance of the contribution is, not the particular form in which the invention is claimed. Nor am I persuaded that the invention necessarily avoids the exclusion because it might be implemented as a self-assembly method (although I am not convinced that is a realistic possibility in this case).
- 24 It is clear from paragraph 22 of *Aerotel* that just because an invention involves the use of a computer program it is not necessarily excluded. However, notwithstanding Mr Howe's arguments, I do not think there is any contribution in the hardware aspects of the invention as there was in *Aerotel* (see paragraphs 53-56 concerning the "special exchange" in *Aerotel*'s invention). It seems to me that the invention supplies and assembles the same hardware system as before, but programs it during its manufacture and assembly so as to make it easier for the user "out of box" to install and operate the services that he or she wants.
- 25 Further, although Mr Howe has referred to the system being less likely to suffer "technical failure", I do not think the contribution is really about making an information handling system which operates in a technically new or better way. The improvement seems to me to arise purely because the execution of the program to customise the "out of box" files makes more efficient use of the system's resources by avoiding having to incorporate redundant software which would otherwise complicate the installation by the user.
- 26 Accordingly, I agree with the examiner's conclusion. I find that the substance of the contribution in this case lies wholly within the excluded area as a method for doing business - supplying an information handling system with installation instructions which are appropriate to a choice of service options previously made by the user - which is implemented by means of a computer program.

Fourth step – is the contribution technical in nature?

- 27 As explained above, having found that the contribution fails the third *Aerotel* step, there is no need for me to go on to this step. However, in the light of paragraphs 23-25 above I do not think the contribution is technical in nature.

**Conclusion**

- 28 In the light of my finding above, I conclude that the invention is excluded under section 1(2). Having read the specification, I do not think that any saving amendment is possible. In particular, having regard to a possibility canvassed by Mr Howe at the hearing, I do not think that the objection under section 1(2) can

be excluded by claiming the invention in a different way.

29 I therefore refuse the application under section 18(3).

**Appeal**

30 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