

13 December 2010

**PATENTS ACT 1977**

APPLICANT                                      Dell Products L.P.

ISSUE    Whether patent application number  
GB0813248.2 complies with section 1(2)

C L Davies

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**DECISION****Introduction**

- 1 This decision concerns the issue of whether the invention claimed in UK patent application GB 0813248.2 relates to non-excluded subject matter as required by section 1(2) of the Act.
- 2 The application, entitled “Intelligent system for determination of optimal partition size in a build to order environment”, was filed in the name of Dell Products L.P. (the “applicant”) as a divisional application from parent application 0709337.0 having the filing date of 15<sup>th</sup> May 2007 and claims priority from a US patent application US 11/436322, dated 18<sup>th</sup> May 2006. The application was published as GB 2448633 A on 22 October 2008.
- 3 During the course of substantive examination, the applicant has been unable to convince the examiner that the application is patentable under section 1(2) of the Patents Act 1977, with the examiner maintaining throughout that the invention relates to a method of doing business, method of performing a mental act and a computer program. The applicant requested a decision based on the papers to resolve the issue.
- 4 At the time of requesting a decision on the papers, the applicant also filed a set of replacement claims to replace those on file. This decision is therefore based on the new set of claims filed 13 October 2010.

**The application**

- 5 The application relates to build-to-order manufacture of information handling systems considering spare download capacity for each system.
- 6 A factory install server may maintain optional, locked or trial software. Loading

some or all of this software onto a customer system can induce additional sales for the manufacturer of the information handling systems by providing the customer with examples of software of which they might otherwise not be aware.

- 7 A manufacturer can determine factory usage needs for any given time period and factory build times allotted for said time period. Using the information the manufacturer can determine an efficiency parameter for the factory. The efficiency parameter identifies any excess download capacity of the factory and downloads additional content to a customer's system accordingly.
- 8 The application comprises a method for determining an efficiency parameter for a factory and loading the additional content onto the information handling systems during build-to-order based on said efficiency parameter.

### The claims

- 9 This decision is based on the replacement set of claims filed 13 October 2010. The amended set of claims has not been examined by the examiner. There are 4 claims in total (including one omnibus claim), with claim 1 being the main independent claim and which reads as follows:

1. *A method for loading locked additional content onto an information handling system in build to order manufacturing environment comprising:*

*determining an efficiency parameter for a factory where content is being downloaded onto the information handling system, the efficiency parameter identifying download capacity of the factory for locked additional content for the information handling system, wherein the efficiency is based on the quotient of a number of information handling system to be built per time unit with and of the product of parallel working cells times the number of information handling systems built by one cell per time unit;*

*determining a quality\* of locked additional content to download onto the information handling system, wherein the quality\* of locked additional content is based on the product of the extra download time per information handling system and an average download speed in the factory, wherein the extra download time is based on the quotient of the product of one minus the efficiency parameter times the time unit and the number of information handling systems to be built per time unit; and*

*loading the locked additional content onto the information handling system.*

- 10 In the claim above the underlined wording is believed to be a typographical error and should read "**quantity**" for consistency with the application as filed. I have taken the underlined wording to be "**quantity**" in the following decision. Whilst I am not deciding on any issues of clarity, the above typographical error could easily be amended should I find in favour of the applicant.
- 11 I would also add at this point that amended claim 1 does not appear to be supported by the application as filed. In present claim 1 in determining the

efficiency, the feature of “parallel working cells...” should refer to “parallel working cells per time unit...” for consistency with the application as filed. As such, claim 1 appears to contain added matter. Again this could easily be amended should I find in favour of the applicant.

- 12 Both of the above do not have any material effect on considering the issue of patentability with respect to section 1(2).

### **Issue to be decided**

- 13 The issue before me to be decided is whether the claims satisfy section 1(2)(c) of the Patents Act 1977 (the Act).

### **The law and its interpretation**

- 14 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.*

- 15 Current IPO examination practice is to use the structured approach set out by the Court of Appeal in its judgment in *Aerotel/Macrossan*<sup>1</sup> for deciding whether an invention is patentable. 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.

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<sup>1</sup> *Aerotel Ltd v Telco Holdings Ltd and Macrossan's Application* [2006] EWCA Civ 1371, [2007] RPC 7

- 16 More recently, the Court of Appeal in the case of *Symbian*<sup>2</sup> confirmed that this structured approach is one means of answering the question of whether the invention reveals a technical contribution to the state of the art. In other words, *Symbian* confirmed that the four-step test is equivalent to the prior case law test of ‘technical contribution’, as per *Merrill Lynch, Gale and Fujitsu*.
- 17 Operation of this test is explained in paragraphs 40-48 of the judgment. Paragraph 43 confirms that identification of the contribution is essentially a matter of determining what it is that the inventor has really added to human knowledge and involves looking at the substance of the invention claimed, rather than the form of the claim. Paragraph 46 explains that the fourth step of checking whether the contribution is technical may not be necessary because the third step – asking whether the contribution is solely of excluded matter- should have covered that point.

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

#### **First step: Properly construe the claim**

- 18 The first step in the *Aerotel/Macrossan* test requires me to construe the claims. Whilst the examiner has not examined the claim set before me there were two issues concerning the construing of the previous claims during the examination that the examiner and applicant failed to reach agreement upon. These two issues are relevant to the current claims. The first being the scope of the feature of “locked additional content” and the second being whether the claimed method implicitly includes a degree of “sensing and analysing” in order to determine the efficiency parameter of the factory.

#### Locked additional content

- 19 The examiner has argued that “locked additional content” read in light of the description should be interpreted as being wider than merely referring to the provision of safe recovery partition content. In reply the applicant has argued that “locked additional content” is not simply trial software that can only be used after registration, but relates to content that cannot be accessed, manipulated, damaged, deleted or the like by the user. Furthermore the applicant states that trial software would not fall within the understood definition of “locked additional content”.
- 20 Considering the application as a whole, I draw attention to page 1, line 27 to page 2, line 9; page 2, lines 24-29 and page 9, line 26 to page 10, line 3 of the application as filed. I am persuaded by the applicant’s argument and consider that it is clear from these passages that “locked additional content” is intended to be different from optional and/or trial content. Therefore I consider that “locked additional content” does give restriction to the claimed invention.

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<sup>2</sup> [2009] RPC 1

## Sensing and analysing

- 21 I turn now to the issue of whether the claimed method implicitly includes a degree of "sensing and analysing" in order to determine the efficiency parameter of the factory. The examiner argues that there is nothing in the application which requires the provision of "sensing" as part of the determination of excess capacity and that the skilled person is not taught how to set up a sensing arrangement or that such sensing is implicit.
- 22 The applicant argues that in a build to order environment there can be a significant variation in the rate at which products are to be manufactured and in the specification of each product being manufactured, including variations in the amount of data that must be downloaded onto information handling systems being built. Therefore within the confines of the claimed build to order manufacturing process, sensing would be understood to be required in order to determine the efficiency parameter of the factory.
- 23 I am not persuaded by the applicant's argument in this regard. I can see no requirement for the provision of "sensing" as part of the determination of excess capacity. Looking at claim 1 and the example given on page 10, line 17 to page 11, line 10 it appears that the amount of additional content that can be loaded onto each system is determined from the efficiency parameter. The efficiency parameter is calculated by the equation set out on page 10 and in claim 1:

$$\text{Efficiency} = R/C/(M/C)$$

where

R = Orders for time period T in the factory

C = Cells working for time period T

M/C = Maximum throughput per cell for time period T

- 24 It would appear that each element that feeds into the equation above for calculating the efficiency parameter is obtained without any degree of sensing. Furthermore I do not consider that any degree of sensing is implied.
- 25 I therefore consider that the amended claim relates to a method of loading locked additional content onto an information handling system in a build to order environment based upon the determined efficiency parameter for the factory.

## **Second step: Identify the contribution**

- 26 The applicant has stated in their letter of 6 August 2010 that a proper interpretation of the contribution made by the claims is an improvement in a method of manufacture of information handling systems in a build to order environment, the improvement being the particular combination of features, including the determination of an efficiency parameter through sensing, which enables information handling systems to be manufactured with the optima amount of additional locked content as is possible within the limitation of the capacity of the manufacturing plant.

- 27 As I do not consider that the claims contain any degree of sensing I therefore disagree with the applicant's definition of the contribution.
- 28 In line with paragraph 43 of *Aerotel/Macrossan*, in identifying the contribution, I must consider what it is the inventor has added to human knowledge as a matter of substance not form.
- 29 I consider that the contribution is a method of manufacturing information handling systems in a build to order environment in order to load the optimum amount of locked additional content onto each information handling system to be manufactured based upon an efficiency parameter to determine download capacity during the manufacturing process.

**Third step: Ask whether it falls solely within the excluded matter**

- 30 During the examination stage, the examiner reported that the invention defined in the previous claims was excluded as a method of doing business, a mental act and/or a program for a computer.
- 31 The applicant's argument that the contribution of the invention defined by the claims includes a sensing step in determining the efficiency parameter is central to their opinion that the contribution does not lie solely within the excluded matter. The applicant considers that such a sensing step constitutes a specific technical step in the manufacturing process that takes the invention outside the exclusion.
- 32 This might have been the case if the invention did include a sensing step. However, as I do not consider this to be the case, I do not agree with this line of argument. I will now consider each of the three exclusions in turn.

**Method of doing business**

- 33 The applicant has argued that the invention cannot simply be dismissed as being a method of doing business in that it results in more efficient manufacture of a product for sale. I do not consider this to be the case. The method simply determines excess capacity in the production process and subsequently loads locked additional content onto the information handling systems in order to attempt to increase sales. This is done regardless of whether the customer wants any of the additional locked content or not and seems slightly at odds with a build to order environment and the passage on page 2 of the description as filed that states that customers can become upset with any portion of their hard drive being taken up with locked content. The factory is not being run more efficiently but uses any spare capacity to load potentially unwanted content onto information handling systems being built. This is simply a sales technique to provide customers with software of which they might otherwise be unaware. This is simply solving a business problem and not a technical problem.
- 34 I consider that the contribution relates solely to a business method as such since it relates to a method of manufacturing information handling systems in order to load the optimum amount of locked additional content onto each information

handling system to be manufactured.

#### Mental act

- 35 The examiner contended that the previous claims were excluded as a mental act as the determination of the efficiency parameter could simply be based upon empirical knowledge of the factory capacity and the order book. A technician could obtain the information required to calculate the efficiency as given in paragraph 23 above to determine the efficiency. The technician could simply use the determined efficiency parameter to calculate the quantity of locked additional content to be downloaded onto each information handling system to be manufactured using the mathematical steps set out in claim 1. I fail to see any features in the claim that add a technical effect. The claim only includes a series of steps which a technician could conceivably work through to determine the quantity of locked additional content to be downloaded. Therefore I consider the contribution to be no more than a mental act as such.

#### Computer program

- 36 In all likelihood the method of manufacturing information handling systems in a build to order environment in order to load the optimum amount of locked additional content onto each information handling system to be manufactured based upon an efficiency parameter to determine download capacity during the manufacturing process would not be carried out by a technician in his/her head but rather be automated as a computer program.
- 37 In order to decide whether the contribution does include a technical effect I have also considered the useful signposts set out by Lewison J in *AT&T/CVON*<sup>3</sup>. In paragraphs 39-41 of *AT&T/CVON*, Lewison J went on to say:

*It seems to me, therefore, that Lord Neuberger's reconciliation of the approach in Aerotel (by which the Court of Appeal in Symbian held itself bound, and by which I am undoubtedly bound) continues to require our courts to exclude as an irrelevant "technical effect" a technical effect that lies solely in excluded matter.*

*As Lord Neuberger pointed out, it is impossible to define the meaning of "technical effect" in this context, but it seems to me that useful signposts to a relevant technical effect are:*

*i) whether the claimed technical effect has a technical effect on a process which is carried on outside the computer;*

*ii) whether the claimed technical effect operates at the level of the architecture of the computer; that is to say whether the effect is produced irrespective of the data being processed or the applications being run;*

*iii) whether the claimed technical effect results in the computer being made*

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<sup>3</sup> AT&T Knowledge Ventures LP [2009] EWHC 343 (Pat)

*to operate in a new way;*

*iv) whether there is an increase in the speed or reliability of the computer;*

*v) whether the perceived problem is overcome by the claimed invention as opposed to merely being circumvented.*

*If there is a technical effect in this sense, it is still necessary to consider whether the claimed technical effect lies solely in excluded matter.*

- 38 I have given careful consideration to each of the signposts and clearly the contribution in this case does not meet any of them. The contribution clearly lies in method for loading locked additional content onto an information handling system wherein said method is a number of mathematical steps to determine excess capacity in a production process which can be automated as a computer program. In light of all of this I conclude that the contribution does not have a relevant technical effect and simply consists only of excluded subject matter and is no more than a business method implemented through computer software.

**Step four: Check whether the contribution is actually technical in nature**

- 39 As reasoned above, the contribution does not have a relevant technical effect. Thus the application also fails the fourth *Aerotel/Macrossan* step.

**European case law**

- 40 As a Hearing Officer at the IPO, I am bound to follow the decisions of the UK courts. The applicant has argued in their letter of 6 August 2010 that, contrary to the position taken by the Court of Appeal in *Symbian*, the case law of the European Patent Office (EPO) with regard to excluded matter is “settled”, and accordingly I should follow European case law. The argument is made that a referral was made to the Enlarged Board of Appeal<sup>4</sup> regarding excluded matter. The Enlarged Board of Appeal rejected the referral as being inadmissible on the basis that there was no divergence in European case law, but merely a legitimate development in the case law. As such, it is argued, the case law of the EPO with regard to excluded matter is in fact “settled”.
- 41 The applicant has further argued that in paragraph 35 of *Symbian*, the Court of Appeal indicated that it would be desirable for the English Courts to adopt and follow the same principles as those of the EPO.
- 42 I do not accept this argument. In paragraphs 33-36 of *Symbian*, the Court of Appeal considered the role of precedent and the question of whether the UK should follow EPO practice. The Court of Appeal stated that “*this Court*”, i.e. the Court of Appeal, *may* depart from, although it is not bound to depart from, its previous decision if it is satisfied that the Board have formed a “settled” view on an issue. However, the Court of Appeal clearly did not consider the law at the EPO to be “settled” at the time of *Symbian*.

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<sup>4</sup> Opinion of the Enlarged Board of Appeal (12 May 2010) G0#003/08



- 43 The decision that the Court of Appeal may choose to depart from its own previous decisions does not allow me, as a Hearing Officer within the IPO, to choose to depart from the Court's previous decisions even if, and I do not decide this issue here, I consider the law to be settled within the EPO.
- 44 I therefore consider my approach in following established UK case law to be correct.
- 45 In their argument the applicant has referred to European case law Pension Benefits (T931/95), Hitachi (T258/03), Microsoft (T424/03) and Duns Licensing (T154/04) and stated should I choose to follow European case law that these decisions show the present application not to be excluded from patentability. As I am bound to follow established UK case law, I do not need to consider these decision any further. Furthermore in paragraphs 43-45 of *Symbian*, the Court of Appeal dismissed these decisions as being inconsistent with previous Court of Appeal decisions and decisions of the EPO Technical Board of Appeal.

### **Conclusion**

- 46 After taking into full consideration both the applicant's and the examiner's arguments and also the patent specification, I am satisfied that the claims define non-patentable inventions which fall within the business method as such, mental act as such and program for a computer as such exclusions of section 1(2)(c). I can see nothing in the remaining claims or the rest of the specification that could form the basis of a valid claim. I therefore refuse the application under section 18(3) for failing to comply with section 1(2)(c).

### **Appeal**

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

**C L Davies**

Deputy Director acting for the Comptroller