

**PATENTS ACT 1977**

APPLICANT LexisNexis Risk Solutions Inc.

ISSUE Whether patent application  
GB1012091.3 complies with Section 1(2)

HEARING OFFICER Phil Thorpe

---

**DECISION**

**Introduction**

1. This decision concerns whether the invention set out in patent application GB1012091.3 relates to excluded matter. The examiner has maintained that the claimed invention is excluded from patentability under section 1(2)(c) of the Patents Act 1977 as a program for a computer and as a scheme for doing business.
2. The applicant has not been able to overcome the objections. The matter therefore came before me for a decision on the papers.

**The Patent**

3. GB1012091.3 was filed as PCT application PCT/US2008/087745 on 19<sup>th</sup> December 2008 with a claim to priority of 20<sup>th</sup> December 2007. The application was subsequently published as GB 2469948 A on the 3<sup>rd</sup> November 2010.
4. The application relates to detecting mortgage fraud. The description outlines a number of methods by which mortgage fraud may be committed, and identifies a need for improved detection methods. The solution offered is said to broadly lie in the provision of a database, a fraud detection system for detecting signs of fraud within the database, and methods for analysing data to effect this detection. The application refers to end users who would typically be the party providing the mortgage loan inputting into the system data relating to the mortgage application. The data is then analysed either at the time that it is inputted or subsequently to identify any indication of possible fraud. That analysis is based on comparing records to identify those with common data in certain predetermined fields for example the address of the

property referred to in the mortgage application. Those records with common data are then checked for any inconsistencies in other fields with any inconsistencies signalling possible fraud. The application notes that the database operator does not need to be a human being. Instead the whole process can be performed by a computer system. Indeed the general teaching of the application is towards a computer implemented fraud detection system. This is also reflected in the claims.

5. The claims on which this decision is based are those contained in the application as-filed. These include 6 independent claims. Claims 1 and 9 do not specifically refer to the invention being implemented on a computer though this is I believe implied by the references to the "processing module". Claims 17, 21 30 and 38 are however clearly limited to the computer implementation of the invention. Claim 1 reads as follows:

Claim 1:

A fraud detection system to detect fraud in a financial loan application process by analyzing a plurality of data from multiple sources, the system comprising:

one or more interfaces configured to receive data from a plurality of unique data sources, the data comprising data records comprising at least one of information related to a financial loan application, parties involved in a loan transaction, and property involved in a financial loan;

a database configured to receive data from the plurality of unique data sources and to store the data with an identifier configured to distinguish data received from the plurality of unique data sources;

a processing module configured to determine if one or more of the data records contain one or more matching data fields and to flag data records containing the one or more matching data fields by storing match information in a table; and

the processing module further configured to determine if one or more of the flagged data records contain different information in one or more other data fields contained in the data records and storing information corresponding to differences in the table.

## The Law

6. The examiner has raised an objection under section 1(2) of the Patents Act 1977 that the invention is not patentable because it relates inter-alia to one or more categories of excluded matter. The relevant provisions of this section of the Act are shown in bold below:

**1(2) It is hereby declared that the following (amongst other things) are not inventions for the purpose of the Act, that is to say, anything which consists of –**

**(a) a discovery, scientific theory or mathematical method;**

(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 provisions shall prevent anything from being treated as an invention for the purposes of the Act only to the extent that a patent or application for a patent relates to that thing as such.

7. As explained in the notice published by the UK Intellectual Property Office on 8 December 2008<sup>1</sup>, the starting point for determining whether an invention falls within the exclusions of section 1(2) is the judgment of the Court of Appeal in *Aerotel/Macrossan*<sup>2</sup>.
8. The interpretation of section 1(2) has been considered by the Court of Appeal in *Symbian Ltd's Application*<sup>3</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>4</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.
9. Subject to the clarification provided by *Symbian*, it is therefore still appropriate for me to proceed on the basis of the four-step approach explained at paragraphs 40-48 of *Aerotel* namely:
  - 1) Properly construe the claim.
  - 2) Identify the actual contribution.
  - 3) Ask whether it falls solely within the excluded matter, which (see paragraph 45) is merely an expression of the “as such” qualification of section 1(2).
  - 4) If the third step has not covered it, check whether the actual or alleged contribution is actually technical.
10. The applicant has followed this approach in its submissions.

### **Step 1 - Properly construe the claim**

11. Construction of claim 1 does not pose any particular difficulties save for the point referred to above about whether it is a requirement that each of the steps is carried out by a computer.

---

<sup>1</sup> <http://www.ipo.gov.uk/pro-types/pro-patent/p-law/p-pn/p-pn-computer.htm>

<sup>2</sup> *Aerotel Ltd v Telco Holdings Ltd and Macrossan's Application* [2006] EWCA Civ 1371; [2007]

<sup>3</sup> *Symbian Ltd v Comptroller-General of Patents*, [2009] RPC 1

<sup>4</sup> *Merrill Lynch's Application* [1989] RPC 561

## Step 2 - Identify the actual contribution

12. In its submission of 23 July, the applicant suggests that the contribution is:

“an improved data processing system capable of identifying data records which have matching data fields and non-matching data fields in order to identify possible fraudulent activity.”

13. I am happy to accept that as the contribution. I would however note that the applicant in its submission also comments on the examiner's assertion that the hardware used to implement the invention is entirely conventional. The applicant argues that this is not substantiated by the examiner with an example and in any event the issue relates to inventive step and not whether the invention relates to excluded matter. That has to be wrong. Identifying the contribution necessarily involves looking at what the inventor has added to the stock of new knowledge. The example often cited of a hard drive loaded with a piece of music makes this clear. If the hard drive is also new and inventive then the inventor has clearly added more than just a piece of music – assuming that is new.

14. In this case the examiner having considered the application concluded that the invention did not disclose any new hardware. Having read the description a number of times, I can see why the examiner came to that conclusion. It follows therefore that the contribution does not include any new aspects of hardware.

## Steps 3 & 4 - Does the contribution fall solely within excluded matter and is it actually technical in nature

15. The applicant argues that the contribution involves “technical considerations relating to security, data collation, data processing and data outputs from the fraud detection system” and that these considerations result in the invention being more than a business method or computer program. It refers specifically to the “technical contribution” provided by the improved data processing system that is better able to identify data records that have matching and non-matching data fields. I am not persuaded by this argument. Computers and computer programs by their very nature are technical and configuring a computer system or programming such a system will invariably require technical considerations. But that on its own is not sufficient otherwise virtually every computer implemented invention or computer program would be patentable. Something more is required. What this something extra is has been discussed at length. Recently in *Halliburton*<sup>5</sup>, Birss J. noted in a section that seems particularly relevant to the case here that:

35 The business method cases can be tricky to analyse by just asking whether the invention has a technical effect or makes a technical contribution. The reason is that computers are self evidently technical in nature. Thus when a business method is implemented on a computer, the patentee has a rich vein

---

<sup>5</sup> *Halliburton Energy Services Inc's Patent Applications* [2011] EWHC 2508 (Pat);

of arguments to deploy in seeking to contend that his invention gives rise to a technical effect or makes a technical contribution. For example the computer is said to be a faster, more efficient computerized book keeper than before and surely, says the patentee, that is a technical effect or technical advance. And so it is, in a way, but the law has resolutely sought to hold the line at excluding such things from patents. That means that some apparently technical effects do not always count. So a computer programmed to be a better computer is patentable (Symbian ) but as Fox L.J. pointed out in relation to the business method exclusion in Merrill Lynch , the fact that the method of doing business may be an improvement on previous methods is immaterial because the business method exclusion is generic.

36 The Aerotel approach is a useful way of cutting through the cases like Merrill Lynch , Macrossan and Gale in which more than one exclusion is engaged. Take a patent claim consisting of a claim to a computer programmed to perform a business method. What has the inventor contributed? If the answer is a computer program and method of doing business and there is nothing more present, then the contribution falls solely within the excluded subject matter. It can be seen not to be patentable at step 3, before one gets bogged down in the argument that about whether a book keeping system running more efficiently on a computer is a technical effect. Following Aerotel the question has answered itself.

37 The “better computer” cases—of which Symbian is paradigm example—have always been tricky however one approaches this area. The task the program is performing is defined in such a way that everything is going on inside the computer. The task being carried out does not represent something specific and external to the computer and so in a sense there is nothing else going on than the running of a computer program. But when the program solves a technical problem relating to the running of computers generally, one can see that there is scope for a patent. Making computers work better is not excluded by s1(2) .

38 What if the task performed by the program represents something specific and external to the computer and does not fall within one of the excluded areas? Although it is clear that that is not the end of the enquiry, in my judgment that circumstance is likely to indicate that the invention is patentable. Put in other language, when the task carried out by the computer program is not itself something within the excluded categories then it is likely that the technical contribution has been revealed and thus the invention is patentable. I emphasise the word “likely” rather than “necessarily” because there are no doubt cases in which the task carried out is not within the excluded areas but nevertheless there is no technical contribution at all.

39 So in Merrill Lynch and Macrossan the computer programs were unpatentable because the task the program performed was a business method. In Gale the program was unpatentable because the task it performed was a mathematical method (albeit the reasoning was the other way round, starting from the mathematical method rather than the computer program aspect).

16. In this case I am prepared to accept that the method of detecting fraud may indeed be a better method. It may be more efficient and speedier but in the same way as the above mentioned better book keeping system was excluded, then so is the system here. It is excluded because it is still a business method.
17. The applicant also argues that the invention has a technical effect on a process which is carried on outside of a computer. This is the detection of fraudulent financial loan applications. This argument appears to pick up on the

first of the so called signposts set out in *AT&T*<sup>6</sup>. Whilst it is important not to substitute these guidelines for the proper statutory test, they can in some cases nevertheless provide some pointers to help determine whether an invention provides a “technical effect” or makes a technical contribution”.

18. I do not however believe that the first signpost helps the applicant here. The process outside of the computer that the invention might be said to have an effect on, is the detection of fraudulent loan applications. That is not a technical process. It is a business method. Any effect that the invention has on that process is in my view clearly not a technical effect. I would add for completeness that in addition to being a method of doing business, I am also of the opinion that the invention is excluded as a program for a computer.

### **Conclusion**

19. I conclude that the invention as claimed is excluded under section 1(2) because it relates to a method of doing business as such. In addition I am also of the opinion that the invention so far as it is claimed also relates to a computer program as such.

20. I have carefully read the specification and can find no saving amendment. I therefore refuse the application under Section 18(3).

### **Appeal**

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

### **PTHORPE**

Deputy Director, acting for the Comptroller

---

<sup>6</sup> *AT&T and CVON* [2009] EWHC 343 (Pat)