



**PATENTS ACT 1977**

APPLICANT

Logined BV

ISSUE

Whether patent application  
GB0907334.7 complies with section 1(2)

HEARING OFFICER

H Jones

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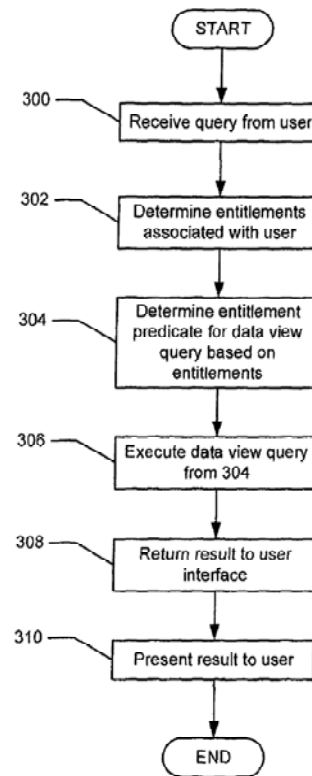
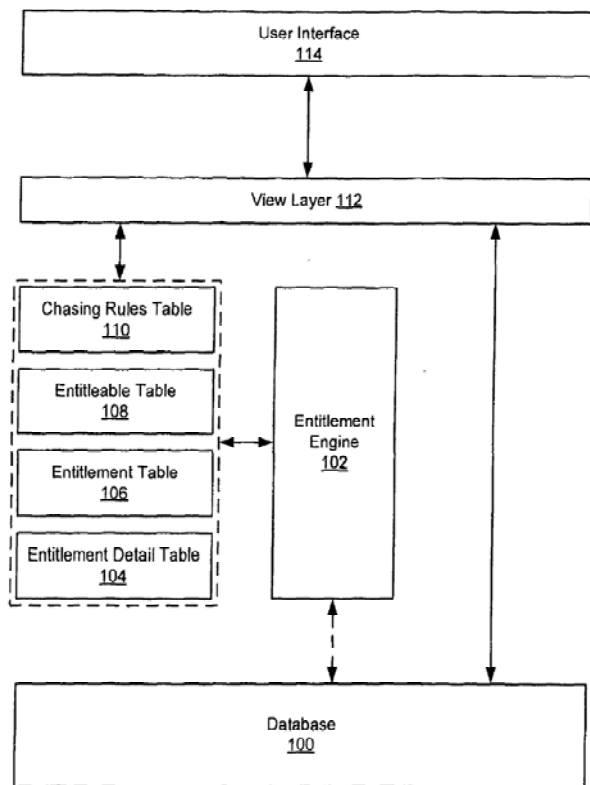
**DECISION**

**Introduction**

- 1 The patent application relates to a method for accessing data stored in a database in such a way that avoids the need to append access permissions to the data or to data tables stored therein. The method also allows access entitlements to be determined in a relational database on the basis of workflows rather than on individual tables.
- 2 The issue to be decided in this case is whether the invention as claimed in the application consists solely of a program for a computer which the Act excludes from patentability. The applicant has asked for the issue to be decided on the basis of arguments set out previously in correspondence.

**The invention**

- 3 Figures 1 and 3 of the application, reproduced below, serve to illustrate a specific manner in which the method is performed. A query for data from the database is received by the view layer 112 through user interface 114. The view layer determines an entitlement predicate for a data view query using an entitlement detail table 104. This entitlement detail table is populated by the entitlement engine 102 using data from the chasing rules table 110, the entitleable table 108, and the entitlement table 106. In other words, the entitlement predicate takes account of the data sets that the user has access to, the additional data sets that the user has access to as determined by chasing rules, and also the operations that a user can perform on the data sets. If the user is entitled to access a particular chasing rule, this will allow access not only to the original data set but also to the additional data sets as determined by the chasing rule. A particular workflow function may consist of a number of chasing rules.
- 4 Once the entitlement predicate is determined, the data view query, which includes the entitlement predicate, is then sent to the database and the results returned to the user interface via the view layer.



5 The application has two independent claims, claims 1 and 9, directed to a method for enforcing access control and to a system for putting such a method into effect. For the purpose of this decision it is only necessary for me to refer to the wording of claim 1 currently on file:

1. A method for enforcing access control when retrieving data from a table in a database, the method comprising:
  - creating a query identifying data to be retrieved and a user at a user interface, the query comprising a workflow;
  - receiving the query at a view layer;
  - determining an entitlement predicate at the view layer and using the entitlement predicate in a data view query;
  - retrieving data from the database using the data view query; and
  - presenting the data to the user interface;
 wherein the step of determining the entitlement predicate comprises using an entitlement detail table that has been populated using data from the following:
  - chasing rules tables defining how to traverse data tables within the database, the workflow being related to a number of chasing rules;
  - an entitlementable table defining which data tables and/or data within the tables is accessible by users; and
  - an entitlement table specifying the data to which the user has access.

## The law

- 6 The relevant provision in relation to excluded inventions is section 1(2), which 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.*

- 7 From the account of the invention given above, it is quite clear to me that the invention relates to the field of computer programming and that is potentially caught by the exclusion to patentability set out in section 1(2)(c) of the Act. In order to decide whether it is caught by this exclusion or not, the Court of Appeal has said that the issue must be decided by answering the now well-established question of whether the invention reveals a technical contribution to the state of the art (cf *Symbian*<sup>1</sup>, *Aerotel*<sup>2</sup>).

## Arguments and analysis

- 8 In his letter dated 14<sup>th</sup> January 2011, the applicant's patent attorney, Mr Martin Hyden, explains that the problem addressed by the invention is to overcome the need to append access permissions to the data and the data tables in the database. The invention solves this problem by using the view layer to generate the data view query that includes the necessary access permissions to execute a workflow in the query itself from the entitlement predicate. He goes on to explain that by separating the data from the necessary information for access control, it is no longer necessary that the user interface must address the issue of access control, this can be done at the view layer. All that the user interface must do, he says, is identify the workflow and the user; the view layer can construct the data query using this information and the entitlement and chasing information in the entitlement predicate. He adds that by using chasing rules, it is possible for the invention to accept queries that comprise workflows related to a number of chasing rules and allows more flexibility to change access control.
- 9 Although he does not explicitly say so in his letter, by setting out the problem to be solved and the manner in which this is achieved, what Mr Hyden is addressing is the nature of the contribution made by the invention. This is clear from what the Court of Appeal said in *Aerotel* (para. 43) that identifying the contribution is "more problematical" as it involves an exercise of judgment "probably involving the problem said to be solved, how the invention works, what its advantages are". Mr Hyden argues that the invention provides a solution to the problem of having to append

<sup>1</sup> *Symbian Ltd. v Comptroller-General of Patents* [2008] EWCA Civ 1066

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

access data to the data and data tables. This problem is solved through chasing rules and entitlement tables that are accessible to the view layer without reference to the data itself. Mr Hyden goes on to say that a consequence of this is that the invention also allows more flexibility to change access control and to add or delete data.

- 10 I agree with Mr Hyden's assessment of the contribution made by the invention, namely that it concerns the availability of access permission data, be that in the form of entitlement tables or rules concerning particular workflows accessible to the user, that is separate from the main body of data in the database.
- 11 The examiner argues that the contribution made by the invention is not technical. He points to the fact that there is no technical effect discernible outside the computer and that the computer program does not result in a faster more reliable computer. In response to Mr Hyden's argument that "the computer is able to execute faster and more reliably", the examiner argues that this is only whilst processing the received enquiry, i.e. "at the level of the application software and not at the level of the computer architecture".
- 12 I find myself persuaded by the examiner's argument that the contribution made by the invention is not technical. The contribution is quite clearly a modification to the access control functionality of data within a database, which has the aim of improving the flexibility (and possibly speed, although I cannot find any explicit reference to the suggested speed benefits in the specification) in the way that data is accessed by changing the way in which access permission data is stored and/or determined. I consider that this improved flexibility (and possibly speed) is not borne out of technical considerations relating to the performance of the computer system but more out of a desire to improve the functionality of a computer program and to provide a better interface between the data and the user.
- 13 In summary, I agree with the examiner that the contribution made by the invention is not technical and that the invention is excluded as a program for a computer. This is the case both for the method set out in claim 1 and the system set out in claim 9, where, regardless of the form of the claim, the contribution is considered to be the same.

### **Conclusion**

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

### **Appeal**

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

**H Jones**

Deputy Director acting for the Comptroller