

## PATENTS ACT 1977

APPLICANT                      Encompass Corporation Pty Ltd

ISSUE                          Whether patent application GB1506976.8 complies  
with section 1(2) of the Patents Act 1977

HEARING OFFICER              Phil Thorpe

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### DECISION

#### Introduction

- 1 Patent application GB1506976.8 was filed on 24<sup>th</sup> April 2015 and published as GB 2527895 A on 6<sup>th</sup> January 2016.
- 2 An abbreviated examination report was issued on 16<sup>th</sup> October 2015, in which the examiner objected that the invention is excluded from patentability under section 1(2) of the Patents Act 1977. This was followed by an examination report on 23<sup>rd</sup> February 2018, which repeated the objection and suggested the applicant request a hearing. As a result of this objection, the examiner was of the opinion that the search would not serve a useful purpose and no search has been performed
- 3 The matter came before me at a hearing by videoconference on 19<sup>th</sup> December 2018. The applicant was represented by Ms Sarah Le Mesurier and Dr James Short of Boulton Wade Tennant.

#### The invention

- 4 The invention relates to managing corporate data. In particular, it relates to updating a network representation of the corporate data, as shown in figure 1f below, based on updated reports.
- 5 According to the application, the network representation comprises a number of nodes 151. The nodes represent entities, such as companies, real estate, persons or individuals within companies. Connections 152 between the nodes represent relationships between the entities such as parent, director, associate or secretary. The network representation allows the user to better visualise the relationships between entities and to manipulate the corporate data. Different users may have different permissions to perform different actions on the data, such as read only, read and write, read and manipulate.

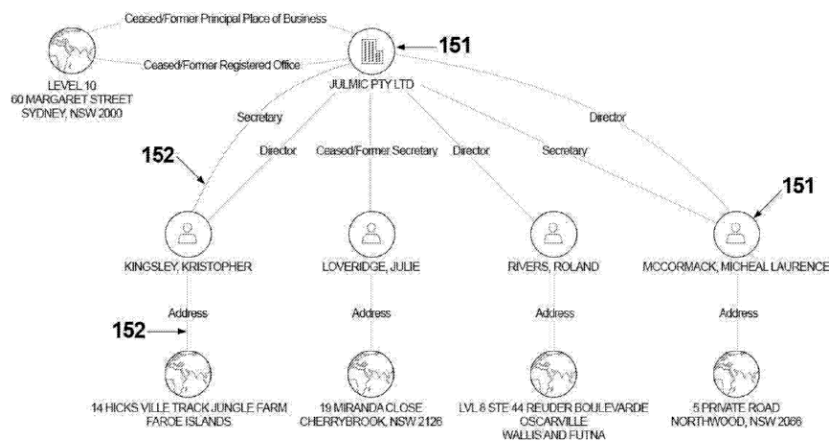


Fig. 1F

- 6 The corporate data that is used to produce the network presentation is stored in a number of reports in a database in a base station. These reports contain information defining the relationships between the nodes in the network. The base station can provide information as to if and when any of the reports has been updated. The user can then decide whether to acquire updated reports and to incorporate the updated reports into the network representation of the data. The network representation is then updated accordingly.
- 7 The latest claims were filed on 24th April 2017. Independent claim 1 reads as follows:

*A method of managing corporate data, the method being performed in one or more electronic processing devices (300, 400) of a base station (201) and a computer system (203), the base station (201) being coupled to the computer system (203) via a communications network (202, 204), the method including:*

- a) *in the base station (201), hosting a workspace associated with workspace corporate data in a database (211) of the base station (201), wherein the workspace corporate data includes one or more reports relating to one more entities;*
- b) *in the base station (201), generating a network representation of the workspace corporate data, wherein the network representation includes:*
  - i) *a number of nodes (151), each node (151) being indicative of a corresponding entity; and,*
  - ii) *a number of connections (152) between nodes (151), the connections (152) being indicative of relationships between the entities;*
- c) *in the computer system (203), displaying a workspace representation, the workspace representation including the network representation of the workspace corporate data;*

- d) *in the base station (201), providing users access to the workspace in accordance with user access permissions to thereby allow the users to perform actions relating to the workspace corporate data by interacting with the network representation of the workspace corporate data using a user interface of the computer system (203), the actions including at least one of:*
  - i) *selecting workspace corporate data to be acquired from one or more corporate data sources;*
  - ii) *viewing the workspace corporate data;*
  - iii) *manipulating the workspace corporate data; and,*
  - iv) *updating the workspace corporate data; and,*
  
- e) *in the base station (201), updating the workspace corporate data by:*
  - i) *identifying changes in a plurality of reports by comparing report details of each report to report details from the report source;*
  - ii) *displaying, on a display of the computer system (203), an indication of the changes to allow a user to select reports for updating; and,*
  - iii) *selectively updating each selected report by:*
    - (1) *acquiring an updated report from the report source in accordance with input commands from the user via the user interface of the computer system (203);*
    - (2) *comparing the acquired updated report to the workspace corporate data to identify duplicate reports; and,*
    - (3) *recording, in the database (211) of the base station (201) an indication of the acquired updated report; and,*
  - iv) *updating the network representation of the workspace corporate data in accordance with any acquired updated reports.*

8 Claim 33 is a corresponding independent apparatus claim. It was accepted that it would stand or fall with claim 1.

### **The Law**

9 The examiner has raised an objection under section 1(2) of the Patents Act 1977 that the invention is not patentable because it relates to one or more categories of excluded matter. The relevant provisions of this section of the Act are shown 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*

—  
 (c) *a scheme, rule, or method for...doing business, or a program for a computer;*  
 —

*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.*

- 10 As explained in the notice published by the UK Intellectual Property Office (IPO) on the 8<sup>th</sup> 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>.
- 11 The interpretation of section 1(2) has been considered by the Court of Appeal in *Symbian*<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.
- 12 Subject to the clarification provided by *Symbian*, it is therefore appropriate 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 (although at the application stage this might have to be the alleged contribution).*
  - (3) *Ask whether it falls solely within the excluded matter.*
  - (4) *If the third step has not covered it, check whether the actual or alleged contribution is actually technical.*

## **Applying the Aerotel test**

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

- 13 As noted, the invention relates to displaying and updating a network representation of data held in various reports in a database. The database is held in a base station, which is a conventional computer system. The base station maintains the network representation, which may be displayed on a user's computer system. Again, the user's computer system is a conventional computer system connected to the base station using a conventional computer network in a conventional client/server arrangement.

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<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] RPC 7

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

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

- 14 Ms Le Mesurier suggested that the term “corporate data” should be construed broadly and could be construed to include for example manufacturing data. Dr Short emphasised that it should not be restricted to refer merely to financial data. I agree that the disclosure was broader than financial data. However, the claims are restricted to corporate data and the specific examples given in the description are restricted to data about an organisation, such as relationships between individuals, roles in the organisation and addresses of particular locations. As such, I am of the opinion that “corporate data” should be construed as relating to data about or pertaining to or held by a corporation or organisation.
- 15 Ms Le Mesurier clarified that the reports are information or details associated with the entities. This could be a list of addresses or details about a certain person. The reports are from a report source, which is external to the claimed invention. Claim 1 states that these reports are held in a database in the base station. As such, I am of the opinion that the reports are database tables, including information about the entities under consideration.
- 16 Step d) of claim 1 gives a number of different operations that a user may carry out on the data, one of these being updating the data. Step e) however goes on to suggest that updating the data based on an updated report is an essential part of the claimed invention. Ms Le Mesurier and Dr Short confirmed that the reference to “at least one of” in step d) should be construed as “at least one of including updating the data”.

*Step 2— Identify the actual contribution*

- 17 No search has been performed yet for the invention in this application. Neither have the documents submitted by a third party been considered. Hence, I am content to accept the contribution suggested by the applicant. Ms Le Mesurier admitted that displaying corporate data from reports held in a database as a network of nodes was known. However, she suggested prior art systems rebuild the complete network if the data in a report changes. In contrast, the claimed invention updates the existing network. As such, in the absence of any prior art, I will proceed on the basis that the contribution is updating a computer implemented network representation of corporate data when the data in a report in a database changes, without rebuilding the whole network.

*Steps 3 and 4—Ask whether it falls solely within the excluded matter and check whether the actual or alleged contribution is actually technical.*

- 18 I will consider steps 3 and 4 together.
- 19 Ms Le Mesurier suggested that the contribution made by the invention is improving the efficiency of a system that generates a network representation of corporate data contained in reports relating to one or more entities. In a prior art system, a user would need to receive and review all reports from a report source on a regular basis and then create a network representation each time they wanted an updated version. Using the present invention, only the updated details are extracted from the report store and the network representation is updated using those details. As such, the amount of computational power required is reduced. This also reduces the storage requirements as only the updated details need to be stored. Dr Short was also keen to emphasise that the data from which the representation is generated can be held in

a range of reports and that extracting information can be a complex task. As an example, Dr Short noted that the addresses for the various people in the network representation in figure 1f above could be held in a number of reports and that extracting that data into a single representation can be computationally challenging.

20 The examiner considered that the invention here was excluded as a computer program. During both the examination of the application and the hearing the relevance of the signposts in *AT&T/CVON*<sup>5</sup> were therefore considered. Lewison J (as he then was) set out five signposts that he considered to be helpful when considering whether a computer program makes a technical contribution. In *HTC*<sup>6</sup> the signposts were reformulated slightly in light of the decision in *Gemstar*<sup>7</sup>. The signposts so 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 to operate in a new way.*
- iv) *Whether the program makes the computer a better computer in the sense of running more efficiently and effectively as a computer.*
- v) *Whether the perceived problem is overcome by the claimed invention as opposed to merely being circumvented.*

21 Ms Le Mesurier was keen to stress that the signposts may or may not apply in certain cases and that they are not intended to be used to show that an invention teaches away from a technical contribution. I agree. Ms Le Mesurier suggested that signpost iv) was useful in this case. She noted that the invention here reduces both the processing power and the storage capacity required to maintain the network representation of the corporate data and the program made the computer more efficient and effective. Ms Le Mesurier noted that this signpost was derived from *Symbian*, and sought particular support from paragraph 57 of that decision which notes:

57 In particular, in *IBM Corp./Data processor network*, the “technical” contribution identified by the Board was, as explained in [88] of *Aerotel*, “the removal of limitations of prior art systems with the result that the data processing system was more flexible and had ... ‘improved communication systems between programs and files’ ...”.

and also paragraph 6 of the referred to *IBM*<sup>8</sup> decision which reads:

6. *The Board holds the view that an invention relating to the coordination and control of the internal communication between programs and data files held at different processors in a data*

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<sup>5</sup> *AT&T Knowledge Venture/CVON Innovations v Comptroller General of Patents* [2009] EWHC 343 (Pat); [2009] FSR 19

<sup>6</sup> *HTC v Apple* [2013] EWCA Civ 451

<sup>7</sup> *Gemstar-TV Guide International Inc v Virgin Media Ltd* [2009] EWHC 3068 (Pat); [2010] RPC 10

<sup>8</sup> *Decision T6/83 IBM CORP./Data processor network* [1990] O.J. E.P.O. 5; [1990] E.P.O.R. 91, Board of Appeal, EPO

*processing system having a plurality of interconnected data processors in a telecommunication network, and the features of which are not concerned with the nature of the data and the way in which a particular application program operates on them, is to be regarded as solving a problem which is essentially technical. Such an invention therefore is to be regarded as an invention within the meaning of Article 52(1) EPC.*

22 Ms Le Mesurier took from these paragraphs that an application made a technical contribution if it operated independently of the data being processed. She suggested that since the application here was not limited to a specific type of corporate data then this also pointed to it providing a technical contribution.

23 It is important however to understand the context in which these findings were made and in particular the nature of the underlying inventions. The invention under consideration in *IBM* for example is discussed in paragraph 5 of that decision which reads:

*5. It can be concluded from the foregoing that the invention is concerned with the internal workings of the processors and the transmission equipment irrespective of the nature of the data and the way in which a particular application program operates on the data files. In so far as the proposed control program is comparable to the conventional operating programs which are required for any computer to control and coordinate its internal basic functions and thereby permit the running of a number of programs for specific applications.*

24 I suggested to Ms Le Mesurier and Dr Short that in contrast, the invention in issue here is an application program operating at a user level on specific data, albeit possibly a range of corporate data, from specified databases. Whilst the program may be a better program and may indeed allow the updating of the graphical representation to be done quicker using less computing and computer memory, that is only because of how the program manages the updating. It is not because the “internal workings of the processors and the transmission equipment” has been modified as in *IBM*.

25 Dr Short suggested that that argument was more relevant to signpost ii) rather than signpost iv). I am not persuaded it is. The level at which the invention works can also point to whether the practical reality of the invention is a better computer program or a better computer. The invention here does not remove any technical limitations nor solve any technical problems within the computer. It does not cause it to run more quickly or to be more reliable. Rather the effect provided by the invention results from how the program arranges and manages the updating of the graphical representation. This as noted may be more efficiently done than in the prior art but that is because it provides a better computer program for doing that rather than because it changes how the computer running the program operates. I would add that the process of generating, updating and presenting corporate data is also in my opinion a method of doing business so the program here also embodies such a method.

26 For completeness I should note that Ms Le Mesurier also referred to *Fujitsu*<sup>9</sup>, in which Laddie J stated that applicants should be given the benefit of the doubt in cases of excluded subject matter. However, as confirmed in *Aerotel*, applicants are not allowed the benefit of the doubt on questions of law. However, where the facts have not been fully established, such as in determining the actual contribution made

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<sup>9</sup> [2006] EWHC 3186 (Pat)

by the invention, the applicant may be given the benefit of the doubt and the applicants alleged contribution can be accepted for the purposes of this decision.

### **Conclusion**

- 27 Having carefully considered the arguments, I am of the view that the problem addressed by the claimed invention is purely administrative, with no technical content. That the invention is implemented by a computer which in itself is technical does not confer a technical contribution to an invention which would be otherwise lacking in that respect.
- 28 I therefore find that the invention claimed in GB1506976.8 falls solely within matter excluded under section 1(2) as a program for a computer as such and a method of doing business as such. Having carefully considered the specification as a whole, I can see nothing that could be reasonably expected to form the basis of a valid claim. I therefore refuse this application under section 18(3).

### **Appeal**

- 29 Any appeal must be lodged within 28 days after the date of this decision.

**Phil Thorpe**

Deputy Director, acting for the Comptroller