



## PATENTS ACT 1977

APPLICANT Innoplexus AG

ISSUE Whether patent application GB1810802.7 complies  
with Section 1(2) of the Patents Act 1977

HEARING OFFICER J Pullen

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### DECISION

#### Introduction

- 1 Patent application GB1810802.7 entitled 'System and method for regularizing data between data source and data destination' was filed on 30 June 2018 and published as GB2575255A on 8 January 2020.
- 2 The search report, dated 19 December 2018, reported under Section 17(5)(b) that a search would serve no useful purpose and the examiner set out their reasoning that the claimed invention was excluded from patentability as a computer program and/or a method of doing business as such in an accompanying abbreviated examination report. Several rounds of correspondence followed but the applicant failed to persuade the examiner otherwise and a decision on the papers was requested. I confirm that I have considered all the documents on file in reaching my decision.
- 3 As stated, the examiner has not performed a search and has deferred completion of the examination. If I find the claimed invention allowable then it will be necessary for me to remit the application to the examiner to perform the search and complete examination.

#### The invention

- 4 The invention relates to systems for regularizing data between a data source and a data destination. Problems are said to arise because different electronic documents store data in various fields in different formats. The described system is said to overcome these problems by providing data processing arrangement in which pre-defined (standard or desired) data format for values of data fields for specific data categories are used to transform data fetched from a data source that deviates from this format and transmit the resulting regularized data to a data destination database.
- 5 Data categories refer to the type of digital content, such as patents, research papers, sales report, business plans, medical reports and the like. The desired data format defines data fields, such as title, date, name of author, abstract, description,

conclusion and the like, and their order. In one example data from a data source including a date field in the format year-month-date is transformed into a desired date format of date-year-month for storage at a data destination database.

6 There are three independent claims which relate to the same inventive concept: claim 1 to a system, claim 12 to a method and claim 19 to a computer program. They will stand or fall together. Claim 1 reads:

*1. A system for regularizing data between a data source and a data destination, the data corresponding to a given data category of a plurality of data categories, wherein the given data category includes specific data fields, characterized in that the system comprises:*

*a data processing arrangement comprising:*

*a data fetching module operable to fetch data from the data source, wherein the fetched data includes one or more data fields having values in corresponding data formats;*

*a data transformation module operable to receive the fetched data from the data fetching module, wherein the data transformation module is operable to:*

*receive pre-defined data formats for the values of data fields for a specific data category;*

*compare data formats of values of data fields of the fetched data with received pre-defined data formats for the values;*

*determine, based on the comparison, a deviation between a data format of at least one value and a corresponding pre-defined data format for the at least one value; and*

*transform the data format of the at least one value to the corresponding pre-defined data format, if the deviation is determined;*

*a data validation module operable to:*

*receive from the data transformation module, the predefined data formats, and the transformed data if the deviation is determined, or the fetched data if the deviation is not determined;*

*confirm if data formats of values of all data fields of a received data are same as corresponding pre-defined data formats;*

*identify from the received data, based on the confirmation, regularized data having data formats of values of all data fields same as the corresponding pre-defined data formats;*

*transmit the regularized data to the data destination;*

*and*

*a database arrangement for implementing the data destination, the database arrangement being communicatively coupled to the data processing arrangement, wherein the database arrangement is operable to store the received regularized data.*

## **The Law**

7 The relevant section of the Act is s.1(2), the most relevant provisions of which are shown below with my emphasis added:

*1(2) 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... method for... 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.*

8 The Court of Appeal in *Aerotel/Macrossan*<sup>1</sup> set out the following four-step approach to help decide the issue:

- (1) Properly construe the claim;*
- (2) Identify the actual contribution;*
- (3) Ask whether it falls solely within the excluded subject matter;*
- (4) Check whether the actual or alleged contribution is actually technical in nature.*

9 The operation of the approach is explained at paragraphs 40-48 of the judgment. Paragraph 43 confirms that identification of the contribution is an exercise in judgment involving the problem said to be solved, how the invention works and what its advantages are; essentially, what it is the inventor has really added to human knowledge, looking at substance, not form. Paragraph 47 adds that a contribution which consists solely of excluded matter will not count as a technical contribution.

10 In *Symbian*<sup>2</sup> the Court of Appeal reaffirmed the *Aerotel* approach while considering a question of “technical contribution” as it related to computer programs emphasising the need to look at the practical reality of what the program achieved, and to ask whether there was something more than just a “better program”.

11 The case law on computer implemented inventions was further elaborated in *AT&T/CVON*<sup>3</sup> which provided five helpful signposts to apply when considering whether a computer program makes a relevant technical contribution. In *HTC v Apple*<sup>4</sup>, Lewison LJ reconsidered the fourth of these signposts and felt that it expressed too restrictively. The signposts 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.*

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<sup>1</sup> *Aerotel Ltd v Telco Holdings Ltd & Ors* Rev 1 [2007] RPC 7

<sup>2</sup> *Symbian Ltd's Application* [2009] RPC 1

<sup>3</sup> *AT&T Knowledge Ventures/Cvon Innovations v Comptroller General of Patents* [2009] EWHC 343 (Pat)

<sup>4</sup> *HTC v Apple* [2013] EWCA Civ 451

- 12 The examiner also refers to the decisions in *Shopalotto*<sup>5</sup>, *Lantana*<sup>6</sup>, *Kapur*<sup>7</sup>, *Autonomy*<sup>8</sup> and *Raytheon*<sup>9</sup> in presenting their objection. The applicant's arguments refer to the Hearing Officers' decisions in *Landmark Graphics*<sup>10</sup> and *Lenovo*<sup>11</sup> and the EPO Board of Appeal decisions in *T1177/97*<sup>12</sup> and *T0424/03*<sup>13</sup>. Although not binding, decisions on patentability given by EPO Boards of Appeal and Hearing Officer's decision can be of persuasive value.

## **Assessment**

### **(1) Properly construe the claim**

- 13 The examiner, applicant and I agree that the claims are clear and that there is no need to further construe the terms used.

### **(2) Identify the actual contribution**

- 14 The analysis in the examiner's letter of 27 April 2021 is based on an alleged contribution identified by the applicant in the letter of 30 June 2020 which is said to be:

*"A system and a method for regularising data between a data source and a data destination"*

- 15 I am mindful that such a contribution does not capture the essence of problem to be solved, how the invention works and what its advantages are. I therefore propose the following as better reflecting the alleged contribution is a system and a method for producing regularised data in a desired format including specific data fields corresponding to a given data category from data in a different format fetched from a data source and transmitting the regularized data to a data destination.

### **(3) Ask whether it falls solely within the excluded subject matter and (4) Check whether the actual or alleged contribution is actually technical in nature**

- 16 I will consider steps (3) and (4) together.

## **Computer program**

- 17 The examiner proposes that the invention is implemented by computer programs on standard configurations of computer hardware. The disagreement between the examiner and applicant has focussed on the first, fourth and fifth *AT&T* signposts.

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<sup>5</sup> *Shopalotto* [2005] EWHC 2416 (Pat)

<sup>6</sup> *Lantana Ltd* [2014] EWCA Civ 1463

<sup>7</sup> *Kapur v Comptroller General of Patents, Designs & Trade Marks* [2008], EWHC 649 (Patents)

<sup>8</sup> *Autonomy v Comptroller General of Patents, Trade Marks & Designs* [2008] EWHC 146 (Pat)

<sup>9</sup> *Raytheon v Comptroller General of Patents, Designs and Trade Marks* [2007] EWHC 1230

<sup>10</sup> *Landmark Graphics* BL O/112/18

<sup>11</sup> *Lenovo* BL O/017/20

<sup>12</sup> (Translating natural languages/SYSTRAN) *T1177/97*

<sup>13</sup> (Clipboard Formats I/Microsoft) *T0424/03*

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

- 18 The examiner asserts that the invention is carried out entirely within the computer system, hence there is no technical effect outside the computer system. The applicant disagreed stating that a technical effect is provided by the data being regularized outside a software application, during transit from the data source. The examiner disputes this, highlighting that any data conversion that occurs is not because of the transmission medium itself; rather the transformation is affected by the data processing arrangement of the claims. I agree, the first signpost does not assist the applicant.

**iv. whether the program makes the computer a better computer in the sense of running more efficiently and effectively as a computer**

- 19 The examiner proposes that the computer is not operating more efficiently or effectively as a computer. The applicant disagrees, submitting that the context of the invention should be considered based on the decisions in *Landmark Graphics* and *Lenovo*. They say that the input is a plurality of incompatible documents and the output is the result of successful processing is a compatible document which provides an improved document processing engine.
- 20 The examiner disagreed with these conclusions and the applicant then provided further arguments drawing analogy with the EPO Board of Appeal decision *T-0424/03* to assert that the contribution was technical in nature improving the computer.
- 21 The EPO Board of Appeal decision in *T424/03* is referenced in *Aerotel* as an example of the “any hardware” approach to the consideration of Art. 52(2) EPC which the court rejected and I am bound to do the same.
- 22 The context of this application concerns transforming the format of data fields, such as a date, within documents, such as patents, research papers, sales report, business plans, medical reports and the like, into a standard format defined for each category for storage in a database. This may provide an improved document processing engine, but it does not provide an improved computer in the sense of running more efficiently and effectively as a computer. The fourth signpost does not assist the applicant.

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

- 23 The examiner identifies that the problem concerns the correct formatting of data for storage in a database which they regard as not technical. The applicant asserts that the fifth AT&T signpost is fulfilled and that the problem overcome is indeed technical. They go on to reference *T1177/97* in support of their position as saying that the use of a piece of information in a technical system may confer a technical character on the information itself and that such information when used in or processed by the technical system may be part of a technical solution to a technical problem.

- 24 The examiner disagrees with these arguments; they consider the problem to be constrained to a specific application and that this is non-technical. They also do not agree that parallels can be drawn with *T1177/97*.
- 25 The EPO board of appeal decision in T1177/97 concerns a method of translating between source and target natural languages using a computer and was found to lack inventive step. The decision in T1177/97 came after the decision in T931/95 *Pension Benefits*, given in *Aerotel* as another example of the rejected “any hardware” approach to the consideration of Art. 52(2), and before T424/03 discussed above. As above, I am bound by the rejection of this approach in *Aerotel*.
- 26 That data in data fields, such as a date, within documents, such as patents, research papers, sales report, business plans, medical reports and the like, is provided from a data source in a format different from the desired format for a data destination is not a technical problem with any of the computers. The fifth signpost also doesn't assist the applicant.
- 27 Having fully considered the applicant's arguments I am not persuaded and agree with the examiner's conclusion. For completeness I considered the second and third signposts, but these do not assist the applicant. There is nothing more than a better program. I find the application to be excluded from being patented under Section 1(2) as a program for a computer as such.

### **Business method**

- 28 As I have found the application to be excluded as a program for a computer as such I do not need to consider whether the application is also excluded as a business method.

### **Conclusion**

- 29 I find the application to be excluded from being patented under Section 1(2) as a program for a computer as such. I therefore refuse the application under Section 18(3).

### **Appeal**

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

### **J Pullen**

Deputy Director, acting for the Comptroller