

PATENTS ACT 1977

APPLICANT Apptio, Inc.

ISSUE Whether patent application GB1617238.9 is excluded under section 1(2)

HEARING OFFICER H Jones

DECISION

Background

- This application is the GB national phase of a PCT application filed in the name of Apptio, Inc. on 11 February 2015. The application was initially published as WO 2015/123344 and has been republished as GB 2539602.
- Despite amendments to the claims in response to his first examination report the examiner has maintained his objection that the application clearly relates to a method of doing business and a computer program. In the light of this, consideration of all other issues, such as novelty and inventive step, has been deferred.
- The examiner offered the applicant an opportunity to be heard, but having initially accepted this invitation the applicant subsequently decided that they are content for a decision to be made on the basis of the arguments already on file.

The invention

- 4 Larger businesses use financial models that employ budgeting, forecasting and cost accounting techniques to improve their efficiency. These often use sophisticated computers and computer programs. The number of items and entities required for financial modelling makes it difficult to develop modelling applications, and the size and complexity of financial allocation models makes it difficult to design allocation rules for the cost allocations between groups and/or items in the model. The invention seeks to overcome these issues by providing a new method for modelling cost items using a network computer.
- There are independent claims directed towards a method, a system, a computer program, and a computer. Though the claims are in different categories they plainly relate to the same subject-matter and will stand or fall together. Claim 1 reads as follows:

A method for modeling cost items using a network computer, wherein the network computer is operative to perform actions, comprising:

instantiating a budgeting and forecasting application that performs actions including:

selecting template information that corresponds to a technology tower, wherein the template information defines at least one cost item, at least one cost pool, one or more sub-towers, and at least one cost driver for the technology tower, wherein each cost pool is arranged in a cost pool structure that is used for unified modelling of the technology tower, and wherein the unified modelling shares the technology tower with another application that integrates the unified modelling of the shared technology tower into a financial model for an organisation;

employing another network computer for an external data source to provide a dataset over a network to the network computer;

determining cost information from a dataset, wherein the cost information corresponds to the at least one cost item;

mapping at least a portion of the cost information to the at least one cost pool based in part on the template information;

determining cost driver information for the at least one cost driver based on the at least portion of the cost information determined from the dataset:

generating the technology tower for the at least one cost item based on the at least one mapped cost pool and the at least one determined cost driver, wherein each generated technology tower represents one or more different categories of resources that includes one or more portions of an organisation's one or more assets or services;

generating the one or more sub-towers, wherein the one or more sub-towers are included in the technology tower:

allocating costs from the one or more cost pools to cost items in the sub-tower; and

instantiating a modelling application to generate one or more financial data models of the at least one cost item that includes a generated technology tower model that is based on at least the generated technology tower, wherein each generated technology tower model represents one or more different categories of resources.

The Law

- The relevant provision is section 1(2) of the Patents Act 1977, which says that certain things cannot be protected by a patent:
 - 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) a discovery, scientific theory or mathematical method;
 - (b) a literary, dramatic, musical or artistic work or any other aesthetic creation;
 - (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 There is well-established case-law providing guidance on determining whether an invention falls within this exclusion. In *Aerotel Ltd v Telco Holdings Ltd & Ors*¹ the Court of Appeal set out the following four-step test for determining whether a proposed invention is excluded under section 1(2):
 - 1) properly construe the claims;
 - 2) identify the actual or alleged 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.

and in *Symbian Ltd's Application*², the Court made it clear that when determining whether a proposed invention is excluded, it does not matter whether the question of "whether the contribution is technical" is asked at step (3) or (4).

The examiner has correctly based his analysis on Aerotel and Symbian. He has also made appropriate use of the signposts set out in *AT&T v CVON* ³ and *HTC/Apple*⁴. There is no disagreement between the examiner and the applicant as to the relevant law.

Arguments and analysis

- The examiner has not identified any difficulties in construing the claims. The applicant has explained what is meant by the phrase "technology tower" it represents or more different categories of resources that includes and organisation's assets or services. The term "instantiating" is used by computer programmers to signify the loading of code into memory and making it available to be used by the relevant computer program.
- 10 The examiner considers the contribution to be:

a computer implemented method of modelling cost items using a budgeting and forecasting application and a modelling application, wherein template information corresponding to a technology tower, identifying at least one cost item, at least one cost pool, one or more sub-towers, and at least one cost driver is selected. Each cost pool is arranged in a cost pool structure that is used for unified modelling of the technology tower, and wherein the unified modelling shares the technology tower with another application that integrates the unified modelling of the shared technology tower into a financial model for an organisation. Cost information corresponding to the at least one cost item is determined from a received dataset and a portion of the cost information is mapped to the at least one cost pool based in part on the template information. Cost driver information for the at least one cost driver is determined based on the portion of the cost information determined from the dataset. The technology tower for the at least one cost item is generated based on the at least one mapped cost pool and the at least one determined cost driver, wherein each generated technology tower represents one or more different

² [2008] EWCA Civ 1066

¹ [2006] EWCA Civ 1371

³ [2009] EWHC 343 (Pat)

⁴ [2013] EWCA Civ 451

categories of resources that includes one or more portions of an organisation's assets or services. One or more sub-towers included in the technology tower are generated and costs from the one or more cost pools are allocated to cost items in the sub-tower. The modelling application generates one or more financial data models of the at least one cost item that includes a generated technology tower model that is based on at least the generated technology tower, wherein each generated technology tower model represents one or more different categories of resources. The specific data structure may provide the advantage of improving the way a computer stores and computes unified modelling of a technology tower in memory.

- 11 Since the applicant has not disputed this, I am content to accept the examiner's assessment of the contribution.
- The applicant has offered very little by way of reasoned argument that this contribution is outside the excluded fields and is instead technical. They have drawn attention to the specific data structure defined in the claims which they submit provides an improvement in computer functionality. They also assert that the fact that their method instantiates different applications (the "budgeting and forecasting application" and the "modelling application") for specific tasks means that the overall impact on computer resources is reduced. Finally, they suggest that the invention is tied to something external to a computer, namely the technology towers.
- 13 The examiner considered these arguments and addressed them in detail in his final examination report, with reference to the first and fourth *AT&T* signposts and additional relevant case law. The examiner was not convinced that processing data pertaining to the assets and services of a real-world organisation amounted to a technical effect on a process carried on outside a computer. Likewise, the examiner was not persuaded that the contribution extends to causing a computer to operate more efficiently or effectively.
- The applicant has provided no further argument to persuade me that the examiner has erred in his analysis. Having reviewed the examiner's objections, I can find no fault in his reasoning and I agree with his conclusions.

Conclusion

The application is refused under section 18(3) because the application relates to subject-matter excluded from patentability under section 1(2)(c).

Appeal

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

Huw Jones

Deputy Director, acting for the Comptroller