Intellectual Property Office

BL O/139/15
30 March 2015

PATENTS ACT 1977

APPLICANT Box, Inc.

ISSUE Whether patent application GB1301651.4 complies with section 1(2)

HEARING OFFICER H Jones

DECISION

Introduction

1 The patent application relates to a method of determining when to pre-generate a preview file in a web-based collaboration platform and it was published as GB2500967 on 9 October 2013. The issue to be decided 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. A divisional application relating to a slightly different aspect of the web-based collaboration platform (GB1304110.8) will be the subject of a separate decision.

The invention

2 The invention is concerned with reducing the time a requesting user is required to wait to view a preview file. This is achieved by determining whether it is likely for a preview of a file to be requested, converting an input format of the file to a target format suitable for providing a preview and then, upon receiving a preview request, providing a preview of the file to the requesting user. The likelihood of a file being requested is determined by identifying a criteria relating to the subset of files which are frequently accessed.

3 An amended set of claims was filed on 29 November 2013, having three independent claims 1, 20 and 22, considered to relate to the same invention. For the purpose of this decision I need only set out the wording of claim 1:

> 1. A computer-implemented method of determining when to pre-generate a target format of a file suitable for providing a preview of the file, the file being stored in a web-based collaboration environment, and wherein the file has an input format, the method comprising:
>
> collecting data on user activity for a plurality of files uploaded to the web-based collaboration environment;
>
> analysing the collected data to determine that it is likely for a preview to be

requested for a subset of the plurality of files;

determining a criteria for thesubset;

upon determining that a given file meets the criteria, converting a specific input format of the uploaded file to a specific target format;

upon receiving a preview request for the given file from a requesting user, using the specific target format to provide the preview of the given file to the requesting user.

The law

4 The relevant provision of the Act in relation to excluded inventions is section 1(2), which reads:

> *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 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.*

5 The examiner considers that the invention relates to the field of computer programming and that it is potentially caught by the exclusion to patentability set out in section 1(2)(c). In order to decide whether an invention relates to subject matter excluded from patentability under section 1(2), the Court of Appeal has said that the issue must be decided by answering the question of whether the invention reveals a technical contribution to the state of the art (cf *Symbian*[1], *Aerotel*[2]). The Court of Appeal in *Aerotel* set out the following four-step test to help decide the issue:

> *1) construe the claim;*
> *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.*

Arguments and analysis

6 With regard to the first of the four steps, the examiner has stated that the claims are perfectly clear in the context of the description and so this step causes no difficulty. I agree.

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[1] Symbian Ltd. v Comptroller-General of Patents [2008] EWCA Civ 1066

[2] Aerotel Ltd v Telco Holdings Ltd and Macrossan's Application [2006] EWCA Civ 1371

7 With regard to the second step of identifying the actual (or alleged) contribution, agreement has been reached between the examiner and the applicant that the contribution lies in a method of determining when to generate a preview file in a collaboration platform by analysing user activity for a plurality of files to determine a likelihood that a preview will be requested for a subset of the plurality of files. If a given file meets certain criteria then it is converted into the target format for preview prior to a preview request from the user. This has the advantage of reducing the time taken to process a preview request for certain types of file that meet the criteria. However, if a given file does not meet the criteria then a preview file is created upon request.

8 I agree with this assessment of the contribution.

9 The main area of disagreement between the examiner and applicant is in relation to the third and fourth steps of the test regarding whether the invention falls within excluded subject matter and whether the contribution is technical in nature.

10 Where a claim involves the use of a computer program, it does not naturally follow that the claim must be excluded. Instead, the contribution of a claim to a computer program must be assessed by reference to the process the program will cause a computer to perform, because, as stated in *Astron Clinica*[3]*,* the assessment is based on the substance of the invention. In the case of *Halliburton Energy Services' Applications*[4], HHJ Birss QC, as he then was, emphasised that "[a] computer programmed to perform a task which makes a contribution to the art which is technical in nature is a patentable invention and may be claimed as such." Therefore, a computer program that provides a technical contribution will not fall under the exclusion because it is more than a computer program as such. The crux of the matter therefore lies in determining whether the claimed invention makes a technical contribution.

11 One way of identifying whether a computer-implemented invention makes a "technical contribution" is to use the signposts set out by Lewison J in *AT&T/CVON*[5] and subsequently used by Mann J in *Gemstar v Virgin*[6]. In considering the signposts in *AT&T/CVON*, it goes without saying that these do not provide a definitive account of what is and what isn't technical, but they do provide useful guidance of where the Courts have determined a technical contribution can be made. The signposts are as follows:

> 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;

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[3] Astron Clinica Ltd & Ors v The Comptroller General of Patents, Designs and Trade Marks [2008] RPC 14
[4] *Halliburton Energy Services Inc's Applications* [2012] RPC 129
[5] AT&T Knowledge Ventures/CVON Innovations v Comptroller of Patents [2009] EWHC 343 (Pat)
[6] Gemstar-TV Guide International Inc & Ors v Virgin Media Ltd & Anor [2009] EWHC 3068 (Ch) [2010] RPC 10

(iv) whether there is an increase in the speed or reliability of the computer; and

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

12 The first three signposts are clearly not relevant in this case: the invention relates to a computer-implemented method of pre-generating preview files and therefore does not have a technical effect on a process outside the computer nor does it operate at the level of the architecture of the computer. The invention is concerned with the manner in which data files are processed and not in making the computer operate in a new way.

13 In considering the fourth signpost, I have taken into account the written submission from the applicant which argued that "to correctly assess whether a computer system is a better computer system in the sense of running more efficiently and effectively as a computer system, we believe a correct approach in accordance with established UK case law is to compare how the computer system runs with the claimed method compared with how the computer system would run without the claimed method and use that comparison to assess whether or not the computer is being made to run more efficiently and effectively as a computer system." In adopting this approach, however, one has to consider the process as a whole, and while the agreed contribution of the invention has the advantage of reducing the time taken to process a preview request from the user and reducing the time the user has to wait before accessing a preview of files that meet certain criteria, I do not consider that the total time involved in processing a preview request has actually been reduced - it is merely that some of the processing and hence the time taken has been carried out before the request is made for certain selected files. The invention gives the illusion that the computer is faster because much of the processing expected to be carried out has already been performed before the request is made by the user. Indeed, in the instance where no pre-generated file has been produced, the time between the sending of the request and receipt of the preview file would be exactly the same using the claimed method as without. Therefore, I consider that there is no actual increase in the speed or reliability of the computer.

14 With reference to the final signpost, it seems to me that in order to reduce the time the user has to wait for a preview file, the invention merely displaces the problem by carrying out some of the processing prior to the request being made. Therefore, rather than overcoming the problem of generating preview files in less time in response to a user request, the current method merely circumvents the problem by producing a library of pre-generated files in advance. The actual time it takes overall to produce the preview files is not reduced. There can be no technical contribution in a solution which circumvents the technical problem it sets out to solve.

15 On the basis of above, I have been unable to identify a technical aspect of the contribution and therefore I must conclude that the invention falls wholly within the meaning of a computer program.

Conclusion

16 I find that the claimed invention is excluded under section 1(2) because it relates to a computer program as such. I therefore refuse the application under section 18(3).

Appeal

17 Any appeal must be lodged within 28 days.

H JONES
Deputy Director, acting for the Comptroller