Intellectual Property Office

BL O/395/19
12 July 2019

PATENTS ACT 1977

APPLICANT	Adobe Inc.
ISSUE	Whether patent application GB1512512.3 is excluded under section 1(2)
HEARING OFFICER	H Jones

DECISION

Introduction

1 The application to which this decision relates and several others from the same applicant are all broadly concerned with the marketing activities in a digital environment. In each case the examiner is of the view that the applications relate to subject-matter excluded from patentability by virtue of section 1(2) of the Patents Act 1977 ("the Act"), more specifically as methods for doing business and programs for a computer as such. I have already issued a decision refusing three of the other applications on this basis (BL O/360/19).

2 The invention seeks to assist marketing professionals to leverage social media by monitoring posts for references to keywords related to a brand or product. A comparison chart is generated in real-time based on the comparative sentiments found in social media in respect of the product and of competing products.

3 The examiner reported that a search would serve no useful purpose under section 17(5)(b) and, following several rounds of correspondence and some amendments to the specification, it falls to me to reach a decision based on the papers on file as to whether the application complies with section 1(2).

4 I will deal with the law first and then with this particular application.

The law

5 Section 1(2) of the Act lists certain categories of subject-matter which are not considered to be inventions. These categories of subject-matter are often referred to as excluded subject-matter:

> *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.

6 The Court of Appeal in *Symbian*[1] stated that the question of whether a computer-implemented invention is patentable has to be resolved by answering the question whether it reveals a technical contribution to the state of the art. It proceeded to answer the question with the aid of the four-step test for excluded subject-matter set out in its earlier judgment in *Aerotel*[2], the steps of the test are as follows:

(i) properly construe the claim;
(ii) identify the actual contribution;
(iii) ask whether it falls solely within the excluded subject-matter;
(iv) check whether the actual or alleged contribution is actually technical in nature.

7 Paragraph 43 in *Aerotel* provides some guidance regarding the second step:

"43. The second step – identify the contribution - is said to be more problematical. How do you assess the contribution? Mr Birss submits the test is workable – it is an exercise in judgment probably involving the problem said to be solved, how the invention works, what its advantages are. What has the inventor really added to human knowledge perhaps best sums up the exercise. The formulation involves looking at substance not form – which is surely what the legislator intended.

8 According to paragraph 46 of *Aerotel,* applying the fourth step may not be necessary because the third step should have covered the question. This is because a contribution which consists solely of excluded matter will not count as being a "technical contribution" and thus will not, as the fourth step puts it, be "technical in nature".

9 Lewison LJ has provided five helpful signposts in *AT&T/CVON*[3] and *HTC v Apple*[4], which summarise where the Courts have identified a technical contribution in computer-implemented inventions when the task carried out falls within an excluded category. These so-called "*AT&T* 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; and
v) whether the perceived problem is overcome by the claimed invention as opposed to merely being circumvented.

[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
[3] AT&T Knowledge Ventures LP, Re [2009] EWHC 343 (Pat)
[4] HTC v Apple [2013] EWCA Civ 451

10 For further commentary on points raised by the attorney about the binding nature of Office decisions and the standard of proof then I need only refer to paragraph 10 of my earlier decision.

The application in suit

11 GB1512512.3 was published as GB2532307 and describes methods of monitoring and responding to social media posts. As amended there is a single independent claim, as follows:

> 1. A method of analyzing social medias for consumer ratings, comprising:
>
> monitoring, by a computing device comprising at least one processor, a plurality of social media posts related to a product and at least one competing product;
>
> determining, by the at least one processor, features of the product or the at least one competing product mentioned in the plurality of social media posts;
>
> determining, by the at least one processor, comparative sentiments of the plurality of social media posts with regard to the determined features by parsing the plurality of social media posts using natural language processing to identify one or more comparative adjectives and/or comparative adverbs associated with the product and the at least one competing product in the plurality of social media posts;
>
> generating, by the at least one processor, a comparison chart of the product and the at least one competing product based on the determined comparative sentiments of the social media posts with regard to the features;
>
> updating, by the at least one processor, the comparison chart in real-time in response to a new social media post.

12 The first step is to properly construe the claim, although the examiner and the attorney believe that the claim is sufficiently clear such that they see no need to elaborate this step further. With two small exceptions I too see little need to construe the claim. In the context of the invention, I take it that "social medias" referred to at the start of the claim are the same as the social media posts used throughout the method. Similarly, the "consumer ratings" at the start of the claim seem to correspond to the "comparative sentiments" elsewhere in the claim.

13 The next step is to identify the actual contribution. The attorney and the examiner are effectively agreed here, although the examiner includes the updating step from the end of claim 1 in the following contribution:

> A system for analysing text (social media posts) to identify and extract comparative statements about features of two or more entities (a product and an at least one competing product) such that a summarised feature-based comparison of the entities can be autonomously generated. The identification and extraction being carried out through natural language processing of comparative statements (i.e. usage of comparative adjectives and/or adverbs) between at least two of the entities and updating a comparison chart in real time.

14 The attorney and examiner agree that the contribution lies in a system, whereas the claims only refer to a method. This does not seem to be significant to my decision and I am happy to accept the agreed contribution quoted above.

15 Now I must consider whether the contribution I have identified falls solely within excluded subject-matter, either as a method for doing business as such or a program for a computer as such.

16 While acknowledging that the system in the contribution can lead to "business effects", the attorney argues that the contribution solves "a technical problem of how to provide a technical implementation capable of maintaining an up to date comparison of entities". Thus, it is their view that the contribution "is far more than a business method as such".

17 I think it is fair to say that the attorney and the examiner are agreed that a technical solution to the problem of providing real-time information on sentiments regarding competing products expressed in social media posts might well not be excluded. Where they differ is whether the contribution identified above actually provides such a solution.

18 The use of a computing device and a processor in the method of claim 1 undoubtedly points to a technical implementation in some sense. However, as the examiner points out this does not necessarily mean that the contribution provides a technical advance, as discussed by HHJ Birss QC in *Halliburton Energy Services Inc.*[5], where he said:

> *35. The business method cases can be tricky to analyse by just asking whether the invention has a technical effect or makes a technical contribution. The reason is that computers are self evidently technical in nature. Thus when a business method is implemented on a computer, the patentee has a rich vein of arguments to deploy in seeking to contend that his invention gives rise to a technical effect or makes a technical contribution. For example the computer is said to be a faster, more efficient computerized book keeper than before and surely, says the patentee, that is a technical effect or technical advance. And so it is, in a way, but the law has resolutely sought to hold the line at excluding such things from patents. That means that some apparently technical effects do not always count. So a computer programmed to be a better computer is patentable (Symbian) but as Fox LJ pointed out in relation to the business method exclusion in Merrill Lynch, the fact that the method of doing business may be an improvement on previous methods is immaterial because the business method exclusion is generic.*

19 In my view, the heart of the contribution in this case lies in comparing competing products which is a business method as such. The employment of tools such as natural language processing, a computing device and at least one processor which in themselves are all technical on some level, does not alter my view.

20 It could be sufficient for me to decide that the invention is excluded as a business method and not necessarily go on to consider whether it is also excluded as a program for a computer. However, having considered the *AT&T* signposts I agree with the examiner that there is no technical effect from the claimed invention. I note that the attorney has had little to say about the signposts except to assert that the contribution falls into the third and fifth signposts. I will consider each signpost in turn.

[5] Halliburton Energy Services Inc., [2011] EWHC 2508 (Pat)

21 The first signpost asks whether the claimed technical effect has a technical effect on a process which is carried on outside the computer. It seems to me that the effect is not technical and that the method is performed entirely within a computing system. The second signpost asks 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. As the examiner says, this is not the case here, as the data involved must be in the form of social media posts or derived from those posts.

22 For the third signpost I must consider whether the claimed technical effect results in the computer being made to operate in a new way. Here again, I agree with the examiner that it does not. The computing device used for the claimed method and found in the system of the agreed contribution does not operate in a new way beyond performing the required steps; in effect, the computer runs a program or application, but is otherwise unchanged by that programme or application.

23 In a similar fashion, for the fourth signpost the contribution does not make the computer a better computer in the sense of running more efficiently and effectively as a computer.

24 The attorney states that the claimed invention falls under the fifth signpost, i.e. the perceived problem is overcome by the claimed invention as opposed to merely being circumvented. They argue that the contribution solves a technical problem of how to provide a technical implementation capable of maintaining an up to date comparison of entities. Page 1 of the description describes the perceived problem, namely that "accurately monitoring and leveraging social media manually is generally difficult and time consuming" (see paragraph 4). Although I can accept that the claimed method or the system in the contribution could address this problem, I agree with the examiner that the solution is not a technical solution and that the problem is not in itself technical. Technical means may be used in the method, but there is not a technical effect from the claimed invention.

25 The final *Aerotel* step is to check whether the contribution is actually technical in nature and I think it is clear that I do not believe this to be the case.

26 Returning briefly to the attorney's point about the standard of proof, I do not feel that they have raised substantial doubt regarding what is claimed in the current application. Consequently, it is my view that the subject-matter claimed is not patentable as it is both a method for doing business and a computer program as such.

Conclusion

27 Patent application GB1512512.3 does not comply with section 1(2) as it relates to a method for doing business and a program for a computer, these being areas of subject-matter excluded from patentability. I therefore refuse the applications under section 18(3).

Appeal

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

H JONES
Deputy Director, acting for the Comptroller