



## PATENTS ACT 1977

APPLICANT	Adobe Systems Incorporated
ISSUE	Whether patent application GB1513359.8 is excluded under section 1(2)
HEARING OFFICER	B Buchanan

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### DECISION

#### Introduction

- 1 This decision relates to patent application GB1513359.8, entitled “Content creation, deployment collaboration and subsequent marketing activities”, which is broadly concerned with the creation of marketing activities in a digital environment. The Examiner is of the view that the application covers subject-matter excluded from patentability by virtue of section 1(2) of the Patents Act 1977 (“the Act”), more specifically a method for doing business and a program for a computer as such under section 1(2)(c). The application claims a priority date of 26 November 2014 from US patent application number 62/085,040 and was subject to a request for combined search and examination.
- 2 On 21 January 2016 the Examiner reported that a search would serve no useful purpose under section 17(5)(b) and issued an abbreviated examination report at the same time, raising objections to patentability under section 1(2), clarity, conciseness and conflict with a co-pending application. This application was published as GB2532824A on 1 June 2016. Following several rounds of correspondence and some amendments to the specification, the objection under section 1(2) remained unresolved.
- 3 In his examination report of 26 September 2018 and his letter of 25 March 2019 the Examiner set out the procedure to be followed in the event that a hearing was not requested; namely that under certain circumstances the application would be referred to a Hearing Officer. It now falls to me to reach a decision based on the papers on file as to whether the application complies with section 1(2). For the avoidance of doubt, I note that in his most recent letter the Examiner has considered the latest claims filed on 24 January 2019 and that the the only objection set out relates to section 1(2)(c). These are the relevant claims and that is the only issue considered in this decision.

## The law

- 4 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.*

- 5 The Court of Appeal in *Symbian*<sup>1</sup> 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*<sup>2</sup>. 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.*

- 6 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.”*

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<sup>1</sup> *Symbian Ltd v Comptroller-General of Patents* [2008] EWCA Civ 1066

<sup>2</sup> *Aerotel Ltd v Telco Holdings Ltd and Macrossan’s Application* [2006] EWCA Civ 1371

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".

7 Lewison LJ has provided five helpful signposts in *AT&T/CVON*<sup>3</sup> ("AT&T") and *HTC v Apple*<sup>4</sup>, 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.*

8 In related decisions from the same applicant as at present (e.g. BL O/360/19) the Hearing Officer has commented on the reference by their Attorney to BL O/112/18 (*Landmark Graphics*). In their letter of 24 January 2019 on this application, the Attorney describes it as "**binding case law** which should be applied when assessing whether an invention should be considered as constituting excluded subject-matter" [original emphasis]. I will also cover this point. The earlier office decision is not binding case law (although it may be persuasive), in contrast with the decisions of the Courts quoted above. I think the key points from *Landmark Graphics* are firstly that the Hearing Officer was simply acknowledging what Mann J said in paragraph 9 of *Macrossan*<sup>5</sup> and secondly that, for an application to succeed, there should be "substantial doubt", in the words of Mann J, rather than the Applicant being given the benefit of **any** doubt. In the present case therefore the question is whether such substantial doubt has been raised. I must answer this question on the basis of the reasoning of the objections put forward and the arguments provided in response.

## The invention

9 The invention is used within a digital environment, which may include an online community of users such as marketers and content creators, and seeks to improve the provision of information regarding content processing in previously deployed marketing activities. Tracking data from previous deployment can enable marketers

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<sup>3</sup> AT&T Knowledge Ventures LP, Re [2009] EWHC 343 (Pat)

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

<sup>5</sup> Macrossan v Comptroller-General of Patents [2006] EWHC 705 (Ch)

to identify content processing best suited to the current marketing activity being created and consequently to make suggestions for processing available to content creators. This is achieved by comparing content creation metadata corresponding to potential marketing characteristics with content creation metadata used in prior marketing activities based on tracked deployment. The metadata describes processing performed to edit the content as part of creation of the content.

- 10 In other words, campaigns that have worked well in the past are identified by tracking previous marketing deployment, and the characteristics of the content processing from successful campaigns is compared with a campaign being designed, to make suggestions for content processing that is likely to be successful in future.

### **The claims**

- 11 There are two independent claims, a method and a system. The claims appear to relate to the same inventive concept. There has been no suggestion that the claims do not provide the same contribution. The claims therefore would seem to stand or fall together under section 1(2). This is the basis on which I shall proceed.

- 12 Method claim 1 reads as follows:

1. In a digital medium environment for creating a marketing activity, where the marketing activity involves creation of content as part of the marketing activity, a method comprising:

receiving one or more inputs, at one or more computing devices, describing potential characteristics of the marketing activity and content to be included as part of the marketing activity;

locating metadata, by the one or more computing devices, that describes creation of content that corresponds to the described potential characteristics of the content and the marketing activity, and locating metadata based at least in part on tracked deployment of prior created content as part of respective ones of a plurality of other marketing activities, wherein the metadata describes processing performed to edit the content as part of creation of the content;

generating, by the one or more computing devices, one or more suggestions describing suggested processing of the content for inclusion as part of the marketing activity based on a comparison of the located metadata and corresponding data that describes the tracked deployment of the respective ones of the plurality of other marketing activities; and

exposing, by the one or more computing devices, an offer for output in a user interface for viewing by one or more content creators, the offer indicating the content to be included as part of the marketing activity and including the generated one or more suggestions.

- System claim 6 reads as follows:

6. In a digital medium environment for creating a marketing activity, where the marketing activity involves creation of content as part of the marketing activity, a system to generate suggestions to create the content comprising one or

more modules implemented at least partially in hardware, the one or more modules configured to perform operations comprising:

receiving one or more inputs describing potential characteristics of the marketing activity and content to be included as part of the marketing activity;

locating metadata that describes creation of content that corresponds to the described potential characteristics of the content and the marketing activity, and locating metadata based at least in part on tracked deployment of prior created content as part of respective ones of a plurality of other marketing activities,

wherein the metadata describes processing performed to edit the content as part of creation of the content;

generating one or more suggestions describing suggested processing of the content for inclusion as part of the marketing activity based on a comparison of the located metadata, and corresponding data that describes the tracked deployment of the respective ones of the plurality of other marketing activities; and

exposing an offer for output in a user interface for viewing by one or more content creators, the offer indicating the content to be included as part of the marketing activity and including the generated one or more suggestions.

### **Argument and analysis**

- 13 Both the Examiner and the Attorney have followed *Aerotel* in making their arguments. Likewise, I shall apply the four steps of the test in reaching my decision.

#### Step 1: Construe the claim

- 14 Both the Examiner and Agent consider the claims to be clear enough and to be readily construed. I note that in his letter of 25 March 2019 the Examiner specifies this is the case *for the purposes of assessing excluded matter*. I have construed the claims as above under “The invention” and I agree they present no problem for the purpose of this decision.

#### Step 2: Identify the actual contribution

- 15 The Applicant has identified the contribution as set out in their Attorney’s letter of 24 January as:

*...a new method and system for autonomously generating suggestions for content, using a comparison of located metadata and tracked deployment data which is collected from external devices*

- 16 This formulation is problematic for a number of reasons. Firstly, I can see no basis for the feature of the contribution being “autonomous”. On the contrary, the claims define a step of receiving inputs (with reference to the description for example at paragraph [0079], these inputs are received from users of the digital environment) which would suggest the system is configured and operates according to this configuration, as opposed to autonomously. Secondly, the specification that the tracked deployment data is collected from external devices is not an essential feature of the claims. From Figure 1 of the specification it can be seen that the

deployment data (122) which includes tracking information (paragraphs [0055] & [0056]) is collected from the content deployment service (104). The deployment service may obtain tracking information from networked devices. This element of the contribution then would seem to be at best indirect; even if the deployment service is included within the scope of the invention (which is not clear from the claims) it is not clear how the nature of the devices from which the tracking information originates, or the nature of the network that connects them to the deployment service influences the contribution. Finally, I note that the novelty of the invention has not been established, so the specification that the method and system is *new* can, at this stage, only be alleged.

17 The Examiner characterises the contribution in his letter of 25 March 2019 as:

*...detecting patterns in metadata of content used in prior marketing activities corresponding to processing utilised in the creation of that content, to generate suggestions of processing to be performed on content for future marketing activities*

18 I think this is a more authentic interpretation, although it omits the step of comparison with potential characteristics of the content and marketing activity. In substance I suspect the two formulations are not so far apart but I would reconcile them as follows:

*Comparing metadata which describes processing performed during the creation of content that corresponds with potential characteristics of a planned marketing activity, with corresponding data from tracked previously deployed marketing activities to generate suggestions for processing content to be made available within a digital environment; and thus enable content creators to generate content for inclusion as part of the marketing activity with an improved likelihood of success.*

19 This formulation takes account of paragraphs [0079] and [0080] of the specification in particular.

Step 3: Does the contribution fall solely within the excluded subject-matter?

20 The Examiner has objected that the claims define a method for doing business and a program for a computer. If I find that the contribution falls solely within either of these things as such, then it is excluded from patentability. The determination of “as such” invites consideration as to whether the contribution is technical in nature at this stage although it is explicitly set out in step 4; that is to say whether it provides a technical effect. If it does, then the invention does not fall *solely* within the excluded subject-matter and is not excluded.

Method for doing business

21 In their letter of 24 January 2019 the Attorney has argued that the distinction of a patentable invention over a method for doing business *as such* is the distinction of the implementation of the invention over its aim. They explain that the invention solves the problem of **how** to provide a technical means **capable of autonomously generating suggestions for content** [original emphasis]. They argue that the implementation involves technical considerations. I accept that undoubtedly the invention is implemented on programmed computer hardware.

22 The aim of the invention is to generate suggestions for content, or more specifically suggestions for processing of content to edit the content during its creation, for inclusion as part of a marketing activity. Although I do not agree that the generation of suggestions is autonomous (because it relies upon user input) the point is moot because it is the comparison of the metadata describing creation of content with corresponding tracked deployment data that is the basis for generating suggestions. The implementation, whether it is autonomous when it is put into effect or not, is by means of one or more appropriately programmed and networked computers. Does this involve *technical considerations*?

23 This strikes me as a question that might be answered by considering the “rich vein” discussed by HHJ Birss QC in *Halliburton Energy Services Inc.*<sup>6</sup>, where he said:

*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.*

24 It may well be that the locating, generating, exposing, comparison, etc. to which the claims refer could be described as “technical processes” because they are performed in a digital environment involving one or more computing devices. However, that does not mean that technical considerations were necessarily involved. There is nothing to suggest, nor has any argument been made (beyond assertion) that implementation of the invention by means of suitably programmed computer hardware required any consideration beyond the conventional definition of business requirements and their implementation in software. Following *Halliburton*, generating suggestions for content processing to include in a marketing activity to improve its likelihood of success may constitute an improvement, but its computerisation does not render the contribution technical in nature. Ultimately, the invention is concerned with improving a marketing activity by taking account of previous activities, which is a method for doing business. That the activity takes place in a digital environment employing computing devices does not change this.

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<sup>6</sup> *Halliburton Energy Services Inc.*, [2011] EWHC 2508 (Pat)

## Program for a computer

- 25 Whilst I have found that the invention is excluded as solely a method for doing business and do not necessarily need to consider the position with regards to the computer program exclusion, I will consider the issue for completeness.
- 26 Both the Attorney and the Examiner have referenced the *AT&T* signposts in making their arguments as to whether the invention relates to a program for a computer as such. The Examiner has argued that there is no technical effect, whereas the Attorney believes that signposts (i), and (iii)-(v) of *AT&T* point towards the application being technical in nature. I will now consider the signposts myself to see whether they provide an indication that there is a technical contribution.
- 27 The first signpost asks if there is a technical effect outside the computer. The Attorney has argued that data is collected from external devices – thus indicating an effect outside the computer. Following *Lantana*<sup>7</sup>, as referenced in the Examiner’s letter of 25 March 2019, I consider these other devices to be part of “the computer” which provides the digital medium environment of the claims. It follows from this that there is no activity outside the networked devices of the computer and signpost (i) does not suggest a technical effect. In any case, as I have identified it, the contribution does not include the collection of data from networked devices, but rather its collection from the content deployment service and subsequent comparison with potential characteristics of marketing activity and content. In other words, even if the “external devices” to which the Attorney refers are regarded as outside the computer, the tracking of their interaction with previous marketing activity does not form a part of the contribution. I should also say that the step in the claims of exposing an offer for output in a user interface does not constitute a technical effect. The offer indicates content and suggestions for content processing and even if it were considered “outside the computer” it would not seem to be technical as it relates to the design of a marketing activity.
- 28 Signpost (ii) requires the technical effect to work at the level of architecture of the computer. I consider that the Examiner is correct in his assertion that this is not so and the Attorney has not contested this issue.
- 29 Signpost (iii) requires the computer to operate in a new way; the Attorney has stated this is indeed the case as the invention results in a new means for generating content suggestions, involving a comparison of located metadata and tracked deployment data. I agree that is what the computer does, but I do not agree that in doing so it operates in a new way. The computer is operating under the control of appropriate application software, in the conventional way. The computer may be implementing a new method of accessing and processing data, but to interpret this as the computer operating in a new way is tantamount to saying any “new” software must provide a technical effect which cannot be so. In this case the operation of the computer would seem to be conventional; running application software to control the access and processing of data in a particular (and allegedly new) way.
- 30 Signpost (iv) asks whether the computer is a better computer. The Attorney’s position is that the claimed invention results in a computer which is more efficient

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<sup>7</sup> *Lantana v Comptroller-General of Patents* [2013] EWHC 2673 (Pat)

and effective as a computer because it compares content metadata and tracked deployment data, *removing the need for computationally expensive predictive means in order to produce content suggestions*. It is possible that this does enable a more efficient and effective basis for suggesting content processing, as the comparison is computerised. Nonetheless, as the contribution identified above indicates, what is improved is the likelihood of success of a marketing activity, not the computer itself. I see no suggestion that running the present method would make any aspect of the computer system itself better. The Examiner considered signposts (iii) and (iv) together and I agree with his reasoning. Implementing the invention on a computer may improve the efficiency and effectiveness of the method carried out but does not change the operation of the computer itself.

- 31 Signpost (v) requires that a perceived problem be overcome rather than circumvented. The problem set out in the application, for example in paragraph [0005], is related to reliance on professional intuition and the understanding of the reasons why certain past activities were successful. The problem, as the application puts it, is that a marketing professional is often reliant on a best guess to make a successful decision which could be complicated, time-consuming and inaccurate. In their letter of 24 January 2019 the Attorney frames the problem as *how to provide a technical means capable of autonomously generating suggestions for content*. As I have explained above, I am not sure that really is the problem addressed by the invention. Even if the “technical means” is interpreted as meaning “computer-implemented” (which we know following *Halliburton* does not necessarily confer the requisite technical character) and the specification of “autonomously” is understood to mean some degree of automation, the problem is really how to use past tracked deployment data to generate suggestions for content processing with an improved likelihood of success in future marketing activity.
- 32 It seems to me that the problem is a business one, framed in technical language. I do not think there is a technical problem to be solved, because the difficulty is replacing a best guess or intuitive marketing decision with the results of a comparison of data. The problem is how to program a computer to do that using its conventional capabilities for accessing and processing data. If there is a problem which is overcome it is not a technical one; any technical character of the implementation is conventional and is unrelated to solving the specific problem. I agree with the Examiner that this signpost does not indicate a technical contribution.

Step 4: Is the contribution actually technical in nature?

- 33 The final step in *Aerotel* is to check whether the contribution is technical. I have done so throughout my reasoning above and have found no further indication that the contribution is technical in nature.
- 34 I find that the application relates to a method for doing business which is implemented by means of a program for a computer. The *AT&T* signposts do not indicate that the claimed invention provides a technical effect.

**Benefit of the doubt**

- 35 Returning briefly to the Attorney’s point about doubt from the *Landmark Graphics* decision, I do not feel that they have raised substantial doubt regarding the

objections against what is claimed in the current application. Having fully considered the arguments on file, it is my view that the subject-matter claimed is not patentable as it is both a method for doing business and a program for a computer as such.

### **Conclusion**

- 36 Patent application GB1513359.8 does not comply with section 1(2) as it relates to a method for doing business and a program for a computer as such, these being areas of subject-matter excluded from patentability. I therefore refuse the application under section 18(3).

### **Appeal**

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

**B BUCHANAN**

Deputy Director, acting for the Comptroller