Intellectual Property Office

BL O/412/19

17 July 2019

PATENTS ACT 1977

APPLICANT	Adobe Systems Incorporated
ISSUE	The Patents Act 1977: Whether Patent application GB1513401.8 complies with Section 1(2)
HEARING OFFICER	Dr L Cullen

DECISION

Introduction

1 This decision concerns patent application GB1513401.8, entitled "*Content creation, deployment collaboration, and subsequent marketing activities*", which was filed on 30 July 2015 claiming an earliest priority date of 24 November 2014 from an earlier US application. It was published as GB2532826 on 1 June 2016.

2 This application and several others from the same applicant are all broadly concerned with the creation of marketing activities in a digital environment. In this case the examiner is of the view that the application relates to subject-matter excluded from patentability by virtue of section 1(2) of the Patents Act 1977 ("the Act"), more specifically as a method for doing business and as a program for a computer as such

3 The examiner in their official report, dated 20 January 2016, indicated that a search would serve no useful purpose and that the claimed invention was excluded from patentability as a business method and computer program as such. Several rounds of amendment and re-examination followed with the examiner maintaining that the invention was excluded throughout.

4 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) of the Act. I was assisted in this task by senior examiner Eleanor Wade.

The Invention

5 The invention seeks to assist marketing professionals in creating marketing activities by improving their awareness regarding the success of previously deployed marketing

activities. Tracking data from previous deployment can enable marketers to choose content and content creators best suited to the marketing activity being created.

6 In particular, this invention relates to a method and system to facilitate improved commissioning of marketing content based on attributes of content previously created by potential content providers. This allows a marketer to commission new content from creators that have previously created content of the type the marketer wants for a particular marketing activity. A user specifies desirable characteristics of a marketing activity to be created, including providing reference examples of content having the desirable characteristics, content is found based on the reference examples and matching the desirable characteristics, the user is provided with information to allow the user to contact the creator of the found content so that they can make an offer to them to create new content.

Application History

7 The prescribed period under Section 20 of the Act within which this application is required to comply with the requirements of the Act and the Patents Rules 2007, as amended ("the Rules") has been extended to 26 July 2019 under rule 108(3) of the Rules.

The Claims

8 The latest claim set currently on file is that dated 24 January 2019. It includes two independent claims, claim 1 to a method and claim 5 to a system. The claims stand or fall together. I will consider the issues in relation to claim 1, as amended, which reads:

> *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 desirable characteristics of the marketing activity and content to be included as part of the marketing activity,*
>
> *wherein the one or more inputs comprise reference examples of the type of content having desirable characteristics to be included as part of the marketing activity;*
>
> *finding one or more items of content, by the one or more computing devices and based on the one or more input reference examples, having metadata that describes creation of content that corresponds to the described desirable characteristics of the content and the marketing activity, wherein the metadata describes characteristics of a device used to create the content; and*
>
> *causing an output of an identifier of the found one or more items of content for output in a user interface by the one or more computing devices, wherein the identifier is user selectable to cause communication of an offer to the content creator to create content based on the desirable*

characteristics of the content.

The Issue to be decided

9 The main issue to be determined is whether the invention, as claimed, complies with Section 1(2) of the Act, in particular, whether the invention is excluded as a method for doing business or as a program for a computer.

10 If I find that the application does not relate to matter excluded under Section 1(2), I will remit the case to the examiner for further processing, i.e. to carry out a search and to complete substantive examination.

Excluded Matter – Section 1(2)

The Law

11 Section 1(2) of the Act sets out certain categories of invention that are not patentable as follows (my emphasis added in bold):

> *"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*** *scheme, rule or* ***method for*** *performing a mental act, playing a game or* ***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."*

12 These categories of invention are often referred to as excluded subject-matter.

13 Current IPO examination practice is to use the structured approach set out by the Court of Appeal in its judgment in *Aerotel*[1] for deciding whether an invention is patentable. The test comprises four steps:

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

[1] *Aerotel Ltd v Telco Holdings Ltd & Macrossan's Patent Application [2006] EWCA 1371; [2007] RPC 7*

Operation of this test is explained in paragraphs 40-48 of the *Aerotel* judgment. Paragraph 43 confirms that identification of the contribution is essentially a matter of determining what it is that the inventor has really added to human knowledge and involves looking at the substance of the invention claimed, rather than the form of the claim. Paragraph 46 explains that the fourth step of checking whether the contribution is technical may not be necessary because the third step – asking whether the contribution is solely of excluded matter - should have covered that point already. Paragraph 47 adds that a contribution which consists solely of excluded matter will not count as a technical contribution.

14 More recently, the Court of Appeal in the case of *Symbian*[2] confirmed that this structured approach is one means of answering the question whether or not the invention reveals a technical contribution to the state of the art. In other words, *Symbian*[3] confirmed that the four-step test is equivalent to the prior case law test of '*technical contribution'*, as discussed in *Merrill Lynch*[3], *Gale*[4] and *Fujitsu*[5]. The key question is what does the '*technical contribution*' amount to, not whether it happens to be implemented by a computer.

A method for doing business

15 As discussed at page 569 of *Merrill Lynch*[3], the business method exclusion is a generic one. Therefore, the fact that a patent application may provide a better way of conducting business is not relevant. In *Halliburton*[6], HHJ Birss QC at paragraph 35 noted that the use of a computer to implement a better business method did not confer patentability:

> *"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."*

A programme for a computer programme

16 Lewison J (as he then was) in *AT&T*[7] set out five factors or signposts that he considered to be helpful when considering whether, or not, a computer program makes a technical contribution. These signposts were modified slightly by Lewison LJ in *HTC v Apple*[8]. The five signposts are:

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[2] Symbian [2008] EWCA 1066; [2009] RPC 1
[3] Merrill Lynch's application [1989] RPC 561.
[4] Gale's application [1991] RPC 305.
[5] Fujitsu Limited's application [1997] RPC 608.
[6] Halliburton Energy Services Inc's Applications [2012] RPC 129
[7] AT&T/CVON Innovations [2009] EWHC 343 (hereafter AT&T)
[8] HTC Europe Co Ltd v Apple Inc [2012] EWHC 1789

(i) Whether the claimed technical effect has a technical effect on a process which is carried on outside of 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.

Decision BL O/112/18 (Landmark Graphics Corp.)

17 I will comment here on one point raised by the attorney for the applicant. In their letter dated 23 January 2019, the attorney referred to a decision of a hearing officer at the Intellectual Property Office (hereafter the "Office"*)*, namely BL O/112/18 (*Landmark Graphics Corp*., hereafter *Landmark*), and to the detailed discussion therein on the standard set out in the "***binding case law*** *which should be applied when assessing whether an invention should be considered as constituting excluded subject-matter*" [original emphasis]. Referring, in particular, to paragraph 17 of the decision, which reads as follows:

> *"Mr Russell and Dr Jones suggest that an applicant should be given the benefit of the doubt unless there is no reasonable doubt to be had. Insofar as this reasonable doubt is the same as the substantial doubt to which Mann J refers, I can agree with this principle. I consider that the question for me is whether or not there is such substantial doubt regarding each of these seven applications, such that where an applicant makes a reasonable case that their invention is patentable then I am bound to find in their favour. I shall proceed on this basis."*

and further noting that this paragraph is in-turn based on paragraphs 7-9 of *Macrossan*[9], the attorney states that

> *"We agree with the Hearing Officer's assessment of the case law of the courts, namely "where an applicant makes a reasonable case that their invention is patentable then [the Examiner is] bound to find in their favour*".

The attorney then goes on to state that their submissions in relation to the present application meet this standard and accordingly the claims of this application should not be rejected as constituting excluded matter.

18 In considering the relevance of this Office decision, I note the following[10]:

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[9] Macrossan's Patent Application [2006] EWHC 705.

[10] See also discussion of Section 1(2) in Office Manual of Patent Practice, especially paragraphs 1.10 to 1.12.2.2

a. Firstly, decisions issued by the Office are non-binding, although they can be persuasive in establishing an argument.

b. Secondly, the Office is bound to follow the decisions of the UK courts, per the English common law doctrine of binding precedent, which states that courts and tribunals must abide by the decisions of higher courts. Therefore, the Office must follow the interpretation of the Act and the practice set out in such higher court judgments, and apply the legal principles arrived at by the judges in those cases.

c. Thirdly, a decision of the office in relation to the grant, or not, of a patent must be judged on its merits, and the facts of the individual case are certain to be different.

19 In examining the case law, the Court of Appeal in *Symbian*[2] concluded that creating a precise test for determining whether a computer program was excluded was difficult, and to suggest that such a clear rule existed was perhaps dangerous when considering the pace of technological development. It emphasised the need to determine each case by reference to its facts.

20 The key point made in *Landmark*, in my view, is that, in line with what Mann J said in paragraph 9 of *Macrossan*[8], for an application to succeed, there should be "*substantial doubt*", rather than any doubt (factual or legal). It is necessary in my view for the applicant to make, in the words of *Landmark*, "*a reasonable case that their invention is patentable"* if so then *"[the Examiner is] bound to find in their favour*". The emphasis here is on making the case not just asserting it.

21 I note that, in consideration of some of the other applications in this current series of cases, the Hearing Officer in Office decision BL O/302/19 *(Adobe Inc)*[11] noted that:

> "*That standard does not import something like the criminal burden of proof into patent proceedings. It could equally be said that where an examiner makes a reasonable case that an invention is excluded then the applicant/agent must do more than assert that the examiner is incorrect, that their invention is "technical" and not excluded for the examiner to find in their favour.*"

22 I find that I am in agreement with the view expressed in the *Landmark* decision, where following their analysis of the case law, the hearing officer summed up the situation thus:

> *"It seems therefore that there is a burden upon an examiner to demonstrate that an invention falls foul of the exclusions and that to overcome such an objection an applicant must do more than "show that … it merely arguably covers patentable subject-matter". In other words, both the examiner and the applicant must do much more than simply assert that their view is correct*".

Asserting or stating that the application is technical is not enough for the applicant to succeed, equally showing that there is doubt as to the validity of the patent is not enough for the examiner to reject the application.

23 I take this to mean that the applicant must provide some further explanation supported by the reference to the application as filed showing how the invention meets the patentability requirements of section 1(2), for example, explaining the problem said to

[11] Office decision BL O/302/19 (Adobe Inc) – see https://www.ipo.gov.uk/pro-types/pro-patent/pro-p-os/p-challenge-decision-results.htm

be solved, how the invention works, what its advantages are. I agree that, if I find that the applicant has made a reasonable case, rather than simply asserting that their invention is patentable, I should find in their favour.

Analysis

24 The first step in *Aerotel* is to construe the claim –.

Step (1): Properly construe the claim;

25 The applicant submitted in their most recent correspondence that the claim as written is sufficiently clear so as to require no further consideration in order to construe it or the terms used therein. The examiner was not of this view. The examiner considered that the final feature of claim 1 and the final feature of claim 5, as amended, was unclear and potentially added matter (see Official report dated 25 March 2019 and below). The examiner did not reach a definitive view on added matter because, having considered the term "*identifier*" in light of the current claims on file, the description (see especially para [00131] and claims as originally filed; they concluded that, for the purposes of establishing if the invention related to excluded subject matter, it made no difference whether term "identifier" relates to the found content or to the creator of the found content.

26 I agree with this latter view. For the purposes of establishing if the invention related to excluded subject matter, it makes no difference whether the term "identifier" relates to the found content or to the creator of the found content.

27 The essential features of claim 1 currently on file (amendments filed 24 January 2019) are enumerated below. Claim 1 relates to a method for creating a marketing activity, including content, having a set of necessary characteristics, whereby:

(i) providing one or more computing devices with information as to the desirable characteristics of the marketing activity and content and examples of content having those characteristics,

(ii) the one or more computing devices finding one or more items of content having metadata corresponding to the desired characteristics, the metadata also describing a device used in creating the content, and

(iii) outputting *an identifier of the* ***found content*** *to a user interface*, wherein the identifier is user selectable to cause an offer to be sent to the creator of the selected found content to create new content.

Claim 1 of the application as originally filed differs from the above only in relation to feature iii) which states:

iii) outputting *an identifier of the* ***content creator of the found content*** to a user interface, wherein the identifier allows the marketer to make offers to create content to the creators of the found content.

There is no element of user selectability and offers to create content are not generated or sent in claim 1 as originally filed when compared to claim 1 as most recently amended.

28 I am satisfied that considerations relating to excluded matter apply equally whether the term “identifier” relates to the creator of the found content or to the found content itself. Furthermore, I consider that the removal of the feature that the output identifier is user selectable to cause communication of an offer to a content creator, so that the invention merely allows a marketer to make offers to content creators, would not make patentable, a claim assessed as excluded based on the presence of this feature. Thus, I will consider the issue of excluded matter based on the claims currently on file.

29 I will return to the issue of added matter below.

30 For the purposes of assessing excluded matter, I consider that claim 1 relates to an identifier associated with the creator of the content found to correspond to the desirable characteristics, which is output, and which can be used by the marketer to make an offer to the creator of that content to create (new) content for their marketing campaign.

31 My analysis below applies equally whether the identifier relates to content or to the creator of same.

32 The above issues also arise in relation to the other independent claim in this application, claim 5. Furthermore, I note that while claim 5 is phrased in terms of a system implemented, at least partially, in hardware, I can find no technical features of the system or hardware itself in the claim, nor can I find any suggestion in the description that a new system has been invented. Thus, the system of claim 5 has been construed in the same manner as the method of claim 1.

Step (2): Identify the actual contribution.

33 Given that no search has been performed on this case, the analysis of step 2 concerns the alleged contribution.

34 The examiner characterises the contribution of the invention as follows:

> The problem solved by the invention is how to identify marketing content, or creators of marketing content having desirable characteristics in order to create new content for a marketing activity. The invention works by receiving desirable characteristics, including reference examples of the type of content having desirable characteristics and locating items of content having metadata corresponding to these desirable characteristics including characteristics of a device used to create the content and outputting an identifier associated with a creator of the content found so that the creator can be contacted to make an offer to create content for the marketing activity in question. This has the advantage that content creators can be discovered who are able to generate content for the marketing activity based on the type of content identified as desirable or successful.

35 The applicant submits that the contribution lies in an implementation which is capable, from provided reference examples which exhibit desired characteristics, to autonomously identify a set of representative metadata of device characteristics used in creating the content which generated the desired characteristics and providing a means of creating content based on said desired characteristics.

36 There is no basis for the applicant's proposed contribution in the claim as construed in step 1. There is no reference in the claim to autonomously identifying metadata of device characteristics. The claim refers to the found content as having metadata which describes characteristics of a device used in creating the content, but there is no indication that this metadata is autonomously identified by the invention and no disclosure as to how this might be achieved. Further, the method does not include the creation of content or provision of a means of creating content, but rather causes an offer to create content to be sent to a content creator. I cannot agree with the applicant's assessment of the contribution.

37 I consider that the approach outlined by the examiner is the right one, though the claim does not require the metadata describing the device used to create the content to be part of the metadata corresponding to the desired characteristics of the content. It is simply necessary for the found content to have metadata corresponding to the desired characteristics and also to have metadata describing the characteristics of a device used in creating the content.

38 I consider therefore that the contribution achieved by this invention is the identification of content creators to generate content for a marketing activity by finding content having metadata matching user specified desirable characteristics of the marketing activity, the found content also having metadata describing a device used in creating the content, and providing the identity of the creator(s) of that content to the user.

Step (3): Ask whether the contribution falls solely within the excluded matter;

39 The examiner argues that the invention is no more than a business method and a computer program as such. They consider the problem to be one of specifying and searching for appropriate content for a marketing campaign.

40 Referring to paragraph 35 of *Halliburton*[6] (see above also), the examiner notes that computer systems which implement a better method of doing business are not patentable.

41 Turning to the computer program exclusion, the examiner analysed the *AT&T*[7] signposts. The examiner said that the first signpost does not apply as the effect outside the computer is limited to the identification of a content creator who creates content having specified desirable characteristics and making them an offer to create material for a marketing activity. This is not a technical effect, according to the examiner. The second, third and fourth signpost are also said not to apply as the computing apparatus being used is entirely standard; there is nothing to suggest an effect occurs at architectural level, the system is not operating in a new way and the computer is not a better computer; rather the alleged contribution is a better software tool for the particular purpose of searching for content based on metadata associated with that content. Finally, the examiner concludes that the fifth signpost is not relevant as the problem is not technical in nature.

42 The applicant disagrees, they say that the contribution is the autonomous identification of a set of representative metadata of device characteristics and assert that this contribution addresses the "technical problem" of how to provide a "technical implementation" which allows for identification of device characteristics used in creating content, and providing an offer to create content based on the desirable characteristics.

43 They go on to note that the *AT&T*[7] signposts are only examples of subject-matter that might provide a technical contribution, not prescriptive conditions nor an exhaustive list of the only subject matter which may be considered an invention. They submit that, in any event, the claimed invention falls within at least the fifth signpost. They assert that consequently, the claimed invention is far more than a mere program for a computer and conclude that, in their opinion, the claimed invention does not fall solely within the excluded subject matter.

44 As discussed above the applicant also suggests that their submissions meet the standard referred to in the *Landmark* decision and that "*where an applicant makes a reasonable case that their invention is patentable then [the Examiner] is bound to find in their favour*".

45 As I have noted above, the invention lies in the identification of content creators to generate content for a marketing activity by finding content having metadata matching user specified desirable characteristics of the marketing activity, the found content also having metadata describing a device used in creating the content and identifying creators of that content.

46 This contribution does not involve any way of identifying metadata of device characteristics, such metadata is simply present for the found content. The contribution relates to the application of metadata search techniques to finding appropriate content with specified similarities to a reference example. Such techniques are already known; metadata is used to describe characteristics of content to make it searchable by a computer. The contribution is the use of this known technique to automate the selection of content creators for a marketing campaign, this is nothing more than a business process and not technical in nature. I find the alleged contribution is a method of doing business as such.

47 As noted in paragraph 35 of *Halliburton*[6] (see above), the business method exclusion is generic and, if implemented with a computer program, any improvement over previous programs is immaterial. However, as the invention claimed would in practice be implemented by computer programs, I will consider the *AT&T*[7] signposts for completeness.

48 The applicant has not made a case that any of the first four signposts apply but asserts that as the claimed invention solves a technical problem, rather than merely circumventing it, the contribution falls under the fifth signpost.

49 The first signpost does not assist the applicant as there is no technical effect on a process outside the computer system; all processes are within the computer system to search and identify content. The only effect outside the computer is to identify a content creator and make them an offer to create content, this is a business process and not technical in nature.

50 There is no suggestion of any effect at the level of the architecture of the computers in the system, of any computer being made to operate in a new way or any computer being a better computer; the computers involved are standard and it is the program for locating content which is new and better than programs which have gone before; the second, third and fourth signposts do not help the applicant.

51 The applicant provides little basis for their assertions that the claimed invention is not excluded, addresses a "technical problem", provides a "technical implementation" and meets the fifth signpost. The problems solved by the application concern specifying and searching for appropriate content for a marketing campaign, specifically how to identify creators of marketing content having desirable characteristics in order to create new content for a marketing activity. These are problems relating solely to how to conduct business, no technical problems are overcome, and so the fifth signpost does not apply.

52 The applicant's case that their invention is patentable is based on an assessment of the contribution which I cannot accept, and numerous assertions that the invention involves a "technical implementation" to solve a "technical problem" without any basis for such statements. I conclude that the applicant has not made a reasonable case that their invention is patentable.

Step (4) Check whether the contribution is actually technical in nature

53 Given my answer under Step 3 above, I do not need to go on and consider separately this fourth step of the *Aerotel* test.

Added matter – section 76(2)

54 For completeness, I will now consider the issue of added matter.

55 Section 76 of the Act, requires that no amendment can disclose matter not already present when the application was first filed. It states:

> *"No amendment of an application for a patent shall be allowed under section 15A(6), 18(3) or 19(1) if it results in the application disclosing matter extending beyond that disclosed in the application as filed."*

Any such matter must be removed before the application may proceed.

56 In their official report dated, 25 March 2019, setting out the matters to be dealt with by the Hearing Officer, the examiner considered that claims 1 and 5 as amended may add matter beyond that originally disclosed. As already discussed above, the claims 1 and 5 as amended include the elements "*output of an identifier of the found one or more items of content*" which is *"user selectable to cause communication of an offer to the content creator"*, whereas the application as filed envisages "*Identifiers are output of the found one or more content creators*" so that "*the marketer may make offers to these content creators*", (para [00131]).

57 There is no antecedent for "*the content creator*" and it is not clear from the description as filed how the identifier is user selectable. It is also not clear how it causes a communication of an offer. This would appear to be added matter.

58 In the original description the identifier would appear to relate to a profile of a content creator rather than to the content itself as suggested by the wording of the claim. Using this the system can automatically suggest content creators by outputting to the marketer the identifier of the creator of the items providing a match. This does not appear to amount to automatically communicating an offer, but rather it states that based on these identifiers which are "output automatically and without user intervention… the marketer may make offers to these content creators" (Paragraph [00131]).

59 I can find no support for the feature "*output of an identifier of the found one or more items of conten*t" which is "*user selectable to cause communication of an offer to the content creator*", in the application as filed, and no disclosure of how this might be achieved. Therefore, the claims as presently amended on 24 January 2019, do add matter.

Conclusion

60 Taking account of all the above, I find that this application is excluded under Section 1(2) of the Act because it relates to a method for doing business and to a program for a computer as such.

61 This conclusion apples irrespective of whether the invention as claimed in this application is construed to include the feature that the output identifier is user selectable to cause communication of an offer to a content creator, or merely allows a marketer to make offers to content creators, and whether the identifier relates to the creator or to the content.

62 I therefore refuse this application under Section 18(3) of the Act for failure to comply with the requirements of the Act and Rules.

63 I find that the claims as amended on 24 January 2019 do add matter.

Appeal

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

Dr L CULLEN
Deputy Director, acting for the Comptroller