

30 April 2008

PATENTS ACT 1977

APPLICANT Adobe Systems Incorporated

ISSUE Whether patent application number
GB 0518994.9 complies with section 1(2)

HEARING OFFICER R C Kennell

DECISION

- 1 This application was filed on 16 September 2005, claiming a priority of 17 September 2004 from an earlier US application. It was published under serial no. GB 2 418 275 A on 22 March 2006.
- 2 Despite amendment of the claims during substantive examination, the applicant has been unable to persuade the examiner that the invention is patentable within the meaning of section 1(2) of the Act. A hearing has been offered, but the applicant is content for the matter to be decided on the basis of the papers on file.
- 3 I should add that I have allowed the applicant opportunities to make submissions in respect of the judgments in *Autonomy Corp. Ltd.* [2008] EWHC 146 (Pat) and *Symbian Ltd.* [2008] EWHC 518 (Pat). Submissions were received in respect of the former case only.

The invention

- 4 The invention is intended to help graphic designers to retrieve and use stock content items such as (but not limited to) photographs. Typically the designer searches websites for stock photographs that satisfy particular search criteria and downloads a first version of each selected image, which is then incorporated into a preliminary page layout for approval by a customer. Once the customer is satisfied, the designer re-searches the website(s) to identify a second version of each image which is suitable for reproduction. The re-search is usually carried out using the file name of the first version image or by repeating the original keyword search.
- 5 The invention however adds metadata, including content and source identifiers, to the first version so that the metadata can be used for subsequent retrieval of

the second version. According to the specification this has the advantage that it is not necessary to know or keep track of information such as the server-assigned file name of the first version or the stock content hosting server from which it was downloaded. Instead the metadata can be relied on to search for or obtain further copies of a second version or to obtain information about an image. The designer's system may also embed the metadata into a derivative image obtained by editing the first version so that the metadata can still be used for subsequent purchases of the original image.

- 6 The claims in their latest form were filed on 5 November 2007 and comprise a single main claim, claim 1:

“A method comprising:

retrieving a first version copy, the first version copy being a copy of a first version of a first item of stock content, from a first content hosting server storing a plurality of items of stock content, each item of stock content having one or more stock content versions, each item of stock content having a content identifier that uniquely identifies the item of stock content at the first content hosting server;

adding identifier metadata to the retrieved first version copy, the identifier metadata including the content identifier of the first item of stock content and a source identifier identifying the first content hosting server, and storing the retrieved first version copy with the added metadata as a first designer copy in a designer storage for later use in a designer system; and

in connection with a user interaction with the designer system involving the first designer copy, using the identifier metadata from the first designer copy to retrieve a second version copy of the first item of stock content from the first content hosting server, the second version copy being a copy of a different second version of the first item of stock content.”

The law and its interpretation

- 7 Section 1(2) reads:

“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.”

- 8 It is not disputed that the assessment of patentability under section 1(2) is now

governed by the judgment of the Court of Appeal in *Aerotel Ltd v Telco Holdings Ltd* and *Macrossan's Application* [2006] EWCA Civ 1371, [2007] RPC 7 (hereinafter "*Aerotel*"). In this case the court reviewed the case law on the interpretation of section 1(2) and (see paragraphs 40-48) approved a four-step test for the assessment of patentability, namely:

- 1) Properly construe the claim
- 2) Identify the actual contribution (although at the application stage this might have to be the alleged contribution)
- 3) Ask whether it falls solely within the excluded matter
- 4) Check whether the actual or alleged contribution is actually technical in nature.

Argument and analysis

- 9 The current positions of the examiner and the applicant are set forth in the examiner's report of 30 November 2007 on the amended claims referred to above and the response of 25 January 2008 from the applicant's patent attorney, Mr Geoffrey Dallimore of Boulton Wade Tennant. The examiner has maintained that the invention is excluded as a program for a computer and possibly also as a method for doing business, but Mr Dallimore contends that this stems from an incorrect application of the *Aerotel* test, to which I now turn. The first step – the construction of the claims – is not in dispute and does not to my mind present any difficulties.

The contribution of the invention

- 10 The argument as to what the contribution is has shifted to some extent over the course of the prosecution of the application. In his letter of 20 November 2006, Mr Dallimore regarded the contribution as the provision of a designer storage for storing the first version copy together with identifier metadata. He regarded this as the provision of a new system, even though it could be implemented using known components. Therefore, he argued that, since the claims related to the use of a new apparatus, they were not excluded from patentability in the light of the reasoning at paragraph 54 of *Aerotel*.
- 11 However, the more recent exchanges of correspondence have focused on the fact that the metadata is added to the content item after it has been retrieved. Noting from paragraph 43 of *Aerotel* that identification of the contribution is essentially a matter of determining what it is the inventor has really added to human knowledge, and involves looking at substance not form, Mr Dallimore states in his letter of 25 January 2008:

“What has been added is the realisation that identifier metadata can be added to a content item after it has been retrieved from a hosting server and therefore need not be added to content items that are stored on the hosting server. As previously submitted, this could save significant

storage space on a hosting server and removes the onus from the hosting server of having advanced knowledge of the form of identification metadata that a user might require.

Accordingly, when the substance of the claim as a whole is considered, the overall contribution is to reduce burden on a hosting server by added identifier metadata to a content item on the user side after the content item has been retrieved.”

12 Although Mr Dallimore thought that the examiner’s analysis had fallen into the trap of reciting the wording of the claim rather than identifying the addition to human knowledge, I note that the examiner does highlight the addition of the metadata after the content has been retrieved.

13 I agree that this is a more fruitful approach to the identification of the contribution than the earlier analogy with the “new system” of *Aerotel*, and I do not think that I need to consider that earlier argument any further. However, removing the need to add metadata before an item of stock content is retrieved is not explicitly alleged in the specification to be amongst the benefits of the invention, and I do not think that is actually what the invention is doing.

14 Thus, in the absence of any more precise definition, I do not think that metadata is in the last resort anything more than “data about data”. Accordingly, the content identifier of the first version at the server is itself a form of metadata, as indeed are the indexing attributes which are described at page 7 lines 5-12 of the specification:

“Each database 106a, 108a, 110a includes, for each stored content file, indexing information by which each content file can be identified and selectively retrieved from the database. The content files can be indexed by a background, venue, organization, institution or product depicted by the stock content item in a content file. Additional examples of content index attributes include a time or time period to which the content file relates or was captured, a setting or subject depicted in the content file, the individuals or subject matter depicted in or captured by the content file, to name a few.”;

although this is the description merely of a preferred embodiment, I cannot conceive how the stock content files could be organized for search purposes without information of this nature.

15 It therefore seems to me that the invention is not deferring the addition of any metadata until the first version of the content has been retrieved, but rather it is adding further metadata after retrieval. As explained in the specification (see page 3 line 26 – page 4 line 27), the alleged benefit of this seems to be the ability to retrieve different versions of the content without needing to keep track of the server assigned file name of the first version, the server from which it was downloaded, or the initial search parameters.

16 Accordingly, having regard to the invention as now claimed and in the light of the

prior art which has been cited by the examiner to show lack of inventive step, I consider the contribution to be the addition to a first version of an item of stock content, after its retrieval from a hosting server, of identifier metadata which includes both the content identifier of the item at the server and the particular server, in order to facilitate the retrieval of further versions of the content.

Does the contribution relate solely to excluded matter?

- 17 Mr Dallimore states in his letter of 25 January 2008 that although the contribution arises from steps that will typically be performed by a computer or computer program, this is irrelevant to the question of whether or not the contribution is excluded as a matter of substance. Reflecting his assessment of the contribution (which I have quoted above), he believes its entire substance to be the realisation, quite separate from any programming decision, that it would be advantageous to add metadata after retrieval of a content item rather than whilst it is stored on a hosting server. He sees nothing to suggest that this would have been a desired result for which all that was necessary was to design a suitable program as in those aspects of the contribution which were held to be excluded in *Raytheon Co* [2007] EWHC 1230 (Pat). However, as I have explained above, I do not think the contribution does in fact depend on any such realisation.
- 18 Mr Dallimore further says in the letter that the contribution will “typically” or “in practice” be carried out by making use of a computer program. That is of course not sufficient of itself to exclude the invention as a computer program as such, as is made clear in the comment in *Aerotel* at paragraph 22 concerning the view expressed by Pumfrey J in *Research in Motion v Inpro Licensing* [2006] EWHC 70 (Pat). That said, I cannot see that the contribution I have identified, which at bottom is concerned with the retrieval of items from a server having access to a database and the addition of metadata to facilitate further search of the database, can be implemented by any means other than a suitably programmed computer.
- 19 Paragraph 29 of the recent judgment of Lewison J in *Autonomy Corp. Ltd.* [2008] EWHC 146 (Pat) contains a summary of the authorities concerning the computer program exclusion. Although Mr Dallimore rightly cautions me that use of such a summary runs the risk that conclusions may be taken out of the context of the facts of the particular case and that each case must be judged on its own merits, I think the *Autonomy* summary has the merit of highlighting and contrasting what kinds of contribution might and might not be excluded as relating solely to computer programs. Thus the contribution is likely to be excluded if it does not go beyond merely manipulating data stored on a computer or if it is an effect caused merely by running the program. On the other hand, a contribution is unlikely to relate solely to a computer program if it solves some technical problem in the operation of the computer or embodies a technical process which lies outside the computer.
- 20 Having discounted as a fallacy Mr Dallimore’s view that the contribution rests on a reduction in the burden on the hosting server by adding metadata at the user side rather than at the server, it seems to me that the contribution is, as a matter of substance, nothing more than a better program for searching databases. I do not think that it results in any improvement in the computer hardware, or indeed

produces any technical effect over and above what is to be expected from the loading of a program on to a computer. Mr Dallimore drew an analogy with *RiM v Inpro*, where (as Pumfrey J explained in paragraph 14 of his later judgment in *Cappellini and Bloomberg LP* [2007] EWHC 476 (Pat)) the whole purpose of the server-side treatment of the data was to reduce its information content to ensure more rapid transmission over reduced bandwidth channels. I also note that in the subsequent *Symbian* judgment, Patten J did not consider that a computer program should be excluded where it solved a software problem affecting the functioning and reliability of the computer's operating system. However I do not think the addition of metadata at the user side of the system in the present invention solves any comparable physical problem to that in *RiM v Inpro* or any problem in the operating system of a computer.

- 21 The examiner referred to the contribution as a programming "preference" in his report of 30 November 2007. Mr Dallimore was uncertain whether the examiner was disputing whether the contribution was inventive or whether it was merely an element of program design as in *Raytheon*. I agree with Mr Dallimore that the third *Aerotel* step is not the place to consider inventive step, but I do not think the examiner was doing that. Indeed he went on to explain his point, namely that he did not think the advantages of the invention gave rise to any technical advance.
- 22 As I have mentioned above, Mr Dallimore thought that there was, unlike *Raytheon*, a realisation that metadata could be added after retrieval of a content item which was quite separate from any programming design decision. However, it seems to me that such a realisation is not a separable technical advance upon which the programming design rests, but is part and parcel of designing a better program for searching databases. As in *Raytheon* (see paragraphs 37-38) it merely reflects how the programmer has chosen to go about this task.
- 23 I therefore find that the contribution, as a matter of substance, relates solely to a program for a computer.
- 24 The examiner has also objected, although without developing the argument, that the invention is excluded as a business method because the contribution is an enhancement in the field of graphic design. However, whilst I accept that the contribution is described in the context of a commercial graphic design operation in which the designer searches the websites of stock photography merchants for items to be included in a page layout for a customer, I do not think that it is itself a method for doing business.

Is the contribution technical in nature?

- 25 Paragraphs 46-47 of *Aerotel* explain that the fourth step of checking whether the contribution is technical may not be necessary because the third step should have covered the point, and that a contribution which consists solely of excluded matter will not count as a technical contribution. Whether the fourth step needs to be undertaken if, as I have found in the present case, the invention fails the third step has been considered in a number of court judgments since *Aerotel*.
- 26 For example, in *Oneida Indian Nation* [2007] EWHC 954 (Pat), Deputy Judge (as

he then was) Christopher Floyd was clear (paragraphs 10-11) that the identification of a technical advance did not bring back into contention inventions which had been excluded at the third step, and the fourth step was intended merely to make sure that inventions which had passed the third step were technical in nature: an invention would not pass the third step on the strength of technical advances which fell within one of the excluded categories. This view appears to be supported by the subsequent judgments in *Astron Clinica* [2008] EWHC 85 (Pat) (paragraph 45) and *Autonomy Corporation* [2008] EWHC 146 (Pat) (paragraph 34).

27 However, in *Symbian Patten J* (see paragraphs 42 and 58) held that the question of whether a claim fell within excluded matter could not be answered in isolation from the issue of whether it embodied a relevant technical contribution, and that the third and fourth steps were as a matter of law alternatives. He thought it clear from the authorities that the question whether the invention made a relevant technical contribution had to be asked because it was the determinant of whether EPC Art 52(3) (equivalent to section 1(2)) had any application, and that whether it was asked as part of the second, third or fourth *Aerotel* step mattered much less than whether it was asked at all.

28 I find these judgments difficult to reconcile, but, irrespective of whether I need to consider the point, for the reasons explained above I do not think that the contribution is technical in nature.

Conclusion

29 The invention of claim 1 is therefore excluded because it relates to a program for a computer as such. I do not think, having read the specification, that any saving amendment is possible.

30 Accordingly, it is not necessary for me to consider an objection to lack of inventive step which the examiner had deferred until the section 1(2) objection was resolved. I therefore refuse the application under section 18(3).

Appeal

31 Under the Practice Direction to Part 52 of the Civil Procedure Rules, any appeal must be lodged within 28 days.

R C KENNEL

Deputy Director acting for the Comptroller