

24 November 2010

PATENTS ACT 1977

APPLICANT ePLUS Capital, Inc.

ISSUE Whether patent application
GB0625808.1 complies with section 1(2)

HEARING OFFICER Rebecca Willis

Introduction

- 1 Patent application PCT/US2005/022652 titled 'Method for a server-less office architecture' was filed in the name of ePLUS Capital, Inc. on 28 June 2005. This application claims priority from US application 60/582802 dated 28 June 2004 and was published as WO 2006/004624 on 12 January 2006. An application for national processing of this international application was filed on 22 December 2006 and this application was given the application number GB 0625808.1 ("the application"). The application was subsequently published as GB 2431024 on 11 April 2007.
- 2 The applicant has been unable to convince the examiner that the application is patentable under section 1(2) of the Act and the matter came before me at a hearing conducted by telephone on 24 September 2010. The hearing was attended by Mr Simon Davies of D Young and Co. as patent attorney representing the applicant and was also attended by the examiner Mr Peter Mason.
- 3 The sole issue before me is whether the application complies with section 1(2) of the Act or is excluded from patentability as a business method.

The application

- 4 The application comprises a single independent method claim and is concerned with the provision of a server-less office architecture in which computing services are performed at a centralized hosting facility rather than at a user level. For a specified business function at least one business objective and at least one business constraint that must be satisfied by the server-less architecture are defined. These objectives and constraints are then mapped to candidate IT component selection and performance criteria and the candidate IT components are ranked according to how they match the selection criteria. A set of the best ranked candidate IT components satisfying the performance criteria are then used to validate a server-less office architecture.

5 Independent claim 1 reads as follows:

1. A method for providing a server-less office architecture in which computing services are performed at a centralized hosting facility within a company and not at a user level, said method comprising the steps of:

specifying at least one business function to be accomplished at least in part by a centralized hosting facility of the server-less office architecture in communication with a user via a network;
for each specified at least one business function, defining at least one business objective and at least one business constraint that the server-less office architecture and the centralized hosting facility must satisfy;
mapping the at least one business objective and business constraint to at least one candidate IT component selection criteria and at least one candidate IT component performance criteria associated with a plurality of candidate IT components of a predetermined server-less office architecture thereby to create a set of criteria comprising mapped-to selection criteria and mapped-to performance criteria stored in a database;
ranking each of the plurality of candidate IT components in terms of satisfaction of the mapped-to selection criteria based on IT component scores; and
validating a server-less office architecture comprising a set of the best ranked candidate IT components that satisfy the mapped –to performance criteria by testing said server-less office architecture;
wherein processing of said at least one business objective and said at least one business constraint are performed at a centralized hosting facility within a company and not at a user level, and wherein data management is eliminated at the user level.

The law

6 The relevant parts of section 1(2) read as follows:

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.

7 Mr Davies discussed in some depth article 52 of the European Patent Convention (EPC) which states:

(1) *European patents shall be granted for any inventions, in all fields of technology, provided that they are new, involve an inventive step and are susceptible of industrial application.*

(2) *The following in particular shall not be regarded as inventions within the meaning of*

paragraph 1:

(a) ...;

(b) ...;

(c) schemes, rules and methods for performing mental acts, playing games or doing business, and programs for computers;

(d)

(3) Paragraph 2 shall exclude the patentability of the subject-matter or activities referred to therein only to the extent to which a European patent application or European patent relates to such subject-matter or activities as such.

- 8 While he did not refer me directly to article 27(1) of the Agreement on Trade-Related Aspects of Intellectual Property Rights 1994 (TRIPS), Mr Davies did refer to the TRIPS wording in relation to the availability of patents for inventions in all fields of technology. Article 27(1) TRIPS reads as follows:

Subject to the provisions of paragraphs 2 and 3, patents shall be available for any inventions, whether products or processes, in all fields of technology, provided that they are new, involve an inventive step and are capable of industrial application. Subject to paragraph 4 of Article 65, paragraph 8 of Article 70 and paragraph 3 of this Article, patents shall be available and patent rights enjoyable without discrimination as to the place of invention, the field of technology and whether products are imported or locally produced.

- 9 Mr Davies also made submissions in respect of three previous cases, including the Court of Appeal's decisions in *Aerotel/Macrossan*¹ and *Symbian*² and the High Court's decision in *AT&T/CVON*³. I discuss these submissions in my analysis below.

Arguments and Analysis

Introduction

- 10 Mr Davies put forward two main arguments. Firstly that the invention of the application falls within a field of technology and therefore necessarily should not be excluded from patentability. Secondly he submitted that even if the invention is considered to fall within the business method exclusion it makes a technical contribution and is therefore patentable.
- 11 Before presenting his first argument Mr Davies made a legal point about whether my decision would be made under article 52 EPC or under section 1(2) of the Act. He referred me to *Aerotel/Macrossan* and *AT&T/CVON*, both of which refer to the relationship between article 52 EPC and section 1(2) of the Act. Mr Davies also drew my attention to paragraphs 4 -6 of *Symbian* wherein Neuberger LJ discusses section 1 of the Act and article 52 EPC. Mr Davies argued that the provisions of article 52 EPC are to be regarded as the law in the UK.

¹ *Aerotel Ltd v Telco Holdings Ltd and Macrossan's Application* [2006] EWCA Civ 1371

² *Symbian Ltd and Comptroller General of Patents* [2008] EWCA Civ 1066

³ *AT&T Knowledge Ventures LP's application and CVON Innovations Limited's application* [2009] EWHC 343 (Pat)

12 Referring to sub-sections 1(1) and 1(2) Neuberger LJ said at paragraph 5 of *Symbian* that:

“These two sub-sections are among the statutory provisions that are specifically mentioned in s. 130(7) of the 1977 Act as having been “so framed as to have, as nearly as practicable, the same effects in the United Kingdom as the corresponding provisions of the European Patent Convention...have in the territories to which [that] Convention...appl[ies]”. The relevant provision of the European Patent Convention (“EPC”) for present purposes is article 52”

13 He went on to say at paragraph 6 that:

*“It is clear that, when deciding whether a computer program is patentable or not, precisely the same principles must apply under section 1(2) of the 1977 Act as apply under art 52 of the EPC. Quite apart from what is said in section 130(7) of the 1977 Act, and the “absurdity” (to quote Nicholls LJ in *Gale’s Application* [1991] RPC 305, 323) of a different approach in the United Kingdom Intellectual Property Office (“UKIPO”) from that in the EPO, the distinction between “a program for a computer” as against “programs for computers” is insignificant, and both provisions contain the “as such” limitation.”*

14 It is clear that my decision must be made under section 1(2) of the Act as it the Act which is the law governing the matter in the UK. However, in making my decision I must apply exactly the same principles under this section as under article 52 EPC and interpret the provisions of section 1(2) as having the same effects as the provisions of article 52 EPC.

‘A patent shall be granted for inventions in all fields of technology’

15 Mr Davies referred me to article 52(1) EPC and the provision that European patents shall be granted for any inventions, **in all fields of technology** (my emphasis added). He argued that this wording of article 52(1) was a positive introduction in the revision of the EPC (EPC 2000), which came into effect on 13 December 2007, to reflect the wording of article 27 of TRIPS.

16 Mr Davies was of the view that if a country or state were to define things that weren’t inventions this would defeat the meaning or intention of the TRIPS provision that patents shall be available in all fields of technology. He considered that it was not right to exclude as inventions things that fall under the exclusions of article 52(2) because that was not what the rest of the world had in mind when it signed up to TRIPS. He was consequently of the view that once an invention falls within a field of technology it is therefore entitled to be patentable and must necessarily fall outside the exclusions of article 52(2).

17 Mr Davies went on to argue that the invention of the application is a computer architecture and that the result of the invention is one of the endpoints demonstrated in figures 4, 5 or 6 of the application. He argued that anyone would recognize these as complicated computer configurations of machines linked in a complicated network. He was of the view that the invention provides a system operating at a much lower level of the computer than, for example, a computer

implementation of a 'business thing such as online gambling or online sales'. He added that the person developing or producing the invention is clearly a person who has a detailed knowledge of computer systems and communications. This person, he said, has skills in technology and the invention must therefore fall into a field of technology. On the basis of his interpretation of the relationship between article 27 TRIPS and article 52 EPC he concluded that the invention was therefore not excluded from patentability.

- 18 The court considered article 27(1) TRIPS and the exclusions of article 52 EPC in *Aerotel/Macrossan*. Jacob LJ said at paragraph 21 that

"In our opinion, therefore, the court must approach the categories without bias in favour of or against exclusion. All that is clear is that there was a positive intention and policy to exclude the categories concerned from being regarded as patentable inventions."

- 19 I do not agree with Mr Davies that once an invention falls within a field of technology it must necessarily fall outside the exclusions. To follow Mr Davies' interpretation would be to give no effect to these exclusions which cannot be right given the positive intention to exclude as inventions the categories included in article 52(2) EPC to which Jacob LJ has referred. Therefore, Mr Davies' first argument does not succeed.

Is the invention patentable because it makes a technical contribution?

- 20 The proper test for deciding whether an invention is patentable is the structured approach set out by the Court of Appeal in its judgment in *Aerotel/Macrossan*. 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.

Step 1 – properly construe the claim

- 21 There has been no disagreement between Mr Davies and the examiner on the construction of the claim. The claimed invention is a method for providing a server-less office architecture in which computing services are performed at a centralized hosting facility rather than at the user level and wherein candidate IT components are selected to satisfy particular business functions. For each business function at least one business objective and at least one business constraint are determined which are mapped to selection and performance criteria respectively for the candidate IT components which are ranked in terms of satisfaction of the selection criteria. The best ranked candidates are selected on the basis of the performance criteria and the server-less office architecture is validated by testing.

Step 2 – identify the actual contribution

- 22 Mr Davies referred me to figures 4 – 6 of the specification which he says demonstrate complicated computer configurations which he put forward as representing the contribution that the invention provides, i.e. particular computer architecture. However, while this may be the outcome of putting the invention into practice, identifying the contribution involves more than identifying what is the outcome of the invention. In my view, the contribution the invention provides, that is what has been added to the stock of human knowledge, is a method of providing a particular server-less office architecture wherein components of that architecture are selected based on their satisfaction of particular business objectives and constraints that the server-less office must satisfy.

Steps 3 and 4 – ask whether it falls solely within the excluded matter; and is it actually technical in nature?

- 23 The contribution as I have assessed it lies within the business method exclusion. It is a method of providing a server-less computer architecture that best meets defined business requirements.
- 24 Mr Davies referred me to the signposts set out in *AT&T/CVON*, arguing that even if the invention was considered to fall within the business method exclusion (which he did not consider to be the case for the reasoning I have discussed above) the present invention makes a technical contribution. If the contribution is in fact technical then the invention will not be excluded. I will therefore consider the signposts to determine whether the invention is technical in nature.
- 25 The signposts to consider are as follows:
- i) Whether the claimed technical effect has a technical effect on a process which is carried on outside the computer;
 - ii) Whether the claimed technical effect operates at the level of the architecture of the computer, that is to say whether the effect is produced irrespective of the data being processed or the applications being run;
 - iii) Whether the claimed technical effect results in the computer being made to operate in a new way;
 - iv) Whether there is an increase in the speed or reliability of the computer;
 - v) Whether the perceived problem is overcome by the claimed invention as opposed to merely being circumvented.
- 26 I do not disagree with Mr Davies' view that the computer architecture resulting from the invention represents 'the computer' in this application. However, there is no effect on any process outside the computer due to the application of the invention and the claimed technical effect does not result in the computer operating in any new way. Consequently, neither signpost i or iii assists Mr Davies' case.

- 27 Mr Davies argued that the server-less architectures described in the application make no reference to them being used for particular types of data processing and that any application may be run upon them since they are generic. In his opinion the technical effect of the invention therefore operates at the fundamental level of the computer such that an effect is produced irrespective of the data being processed or applications being run, (signpost ii). He also argued that the resulting server-less architecture is secure and highly available (i.e. reliable) and there is an increase in the reliability of the computer (signpost iv). He further argued that there are 'technical considerations' involved in identifying the IT component candidates selected for the server-less architecture. These technical considerations include security considerations and provision of redundancies to avoid failures, for example.
- 28 However, I find that the computer does not operate at the level of the architecture of the computer to produce an effect regardless of the data being processed, rather any effect is produced dependant on the business objectives and constraints to be met. Furthermore the 'technical considerations' to which Mr Davies referred are mere business rules for determining which IT candidate components should be selected to produce a server-less architecture that satisfies the required business objectives and/or constraints. The effect does not make the server-less architecture more reliable in itself, the improvement is only achieved by selecting IT candidate components to meet defined business objectives and constraints. Therefore signposts ii and iv do not assist Mr Davies' case.
- 29 The overall server-less architecture may indeed be more reliable, but this is not due to a technical effect of the invention but merely due to the business decision to select particular IT candidate components. This does not solve any technical problems within the system; the perceived problems of security or reliability are circumvented by selecting particular IT candidate components. Therefore signpost v does not help Mr Davies' case.
- 30 Therefore, I find that that the contribution made lies within the excluded fields and, as it is not in fact 'technical' is excluded.

Conclusion

- 31 I find that the application is excluded under section 1(2) as relating to a business method. I also find that there are no possible amendments to allow the application to progress to grant and therefore refuse it.

Appeal

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

Rebecca Villis

Deputy Director acting for the Comptroller