

## **PATENTS ACT 1977**

APPLICANT                      Everest Software Inc

ISSUE                              Whether patent application number  
   GB 0603755.0 complies with  
   sections 1(2)

HEARING OFFICER              P Thorpe

---

## **DECISION**

### **Introduction**

- 1     The application was filed on 27 August 2004, claiming an earliest priority of 29 August 2003. It was published as GB 2419992 A on 10 May 2006.
- 2     Despite amendment of the claims during substantive examination, the applicant has been unable to persuade the examiner that this is a patentable invention within the meaning of section 1(2) of the Act. The matter has been referred to me for a decision on the basis of the papers filed including submissions filed by the applicant dated 23 October 2007.

### **The invention**

- 3     The application relates to an apparatus and a method for processing payments between a business software system and a payment processor. More specifically it allows for the processing of payments through different payment methods such as credit cards and debits cards.
- 4     When it is desired to update a typical business software system to allow payment through additional payment processors having a different data structure and format, then it is usually necessary to change the base code in the business system software. This it is claimed is not ideal. Hence the invention provides an intermediate payment processor that interfaces between the business system software and the payment processors and permits a business software system to be upgraded to support additional payment processors without the need to change the business software itself.

5 The latest claims comprise independent claims 1, 4, 7 and 8 to, respectively, an intermediate payment processor (claims 1 and 4); a payment processor implemented on a computer (claim 7) and an intermediate payment processing method (claim 8). These read as follows:

1. An intermediate payment processor for processing payments between a business software system and a payment processor, the system comprising: a database containing one or more definitions wherein each definition is a definition for communication protocols including one of a specified port and folder, transaction requests from the business system in the formats understood by each payment processor, and the formats for the data format supported by a payment server of the payment processor; and a payment processing module further comprising a means for monitoring the specified ports or folders for a transaction request in a format published by the payment processor, means for translating the transaction request into a format published by the payment server based on the definition for the payment server in the database and a means for translating a response from the payment server into a format of the payment processing module so as to enable the business software system from which the request has originated to decipher the response and carry out further actions based on the type of response.

4. An intermediate payment processor for processing payments between a business software system and a payment processor, the system comprising: a database containing one or more definitions wherein each definition is a definition for communication protocols including one of a specified port and folder, transaction requests from the business system in the formats understood by each payment processor, and the formats for the data format supported by a payment server of the payment processor; and a payment processing module on a computer coupled to the database, the payment processing module comprising a computer program executed by the computer wherein the computer program further comprises instructions that monitor the specified ports or folders for a transaction request in a format published by the payment processor, instructions that translate the transaction request into a format published by the payment server based on the definition for the payment server in the database and instructions that translate a response from the payment server into a format of the payment processing module so as to enable the business software system from which the request has originated to decipher the response and carry out further actions based on the type of response.

7. A payment processor implemented on a computer comprising: a computer; a piece of software wherein the software further comprises one or more sets of instructions executed by the computer; wherein a first set of instructions further comprise instructions to format transaction data based on a type of payment processing software, instructions to set up a merchant account information for each merchant account with a corresponding payment server, instructions to identify an output mode of each transactions request for the merchant account as one of a request

file and through a port, instructions to identify a folder in which the request file is to be placed or the port to which the request is to be sent, instructions to specify a maximum number of transactions that the intermediary is allowed to process concurrently and instructions to update a database; and wherein a second set of instructions further comprises instructions to process a payment request further comprising instructions to identify a source of the request and a format in which the request has been sent, instructions to identify a payment processor to which the request should be directed, instructions to assign the request to a processor object and a thread, instructions that process the request when a free processor object and thread are available by translating the request from a current format to a format in which the payment processor requires the requests to be transmitted and instructions to transmit the request after due validation, instructions to redirect the response from the processor to the format recognized by the source of the request, or in case the processor object and the thread are not free send it to the queue.

8. An intermediate payment processing method for processing payments between a business software system and a payment processor, the method comprising: providing a database containing one or more definitions wherein each definition is a definition for communication protocols including one of a specified port and folder, transaction requests from the business software system in the formats understood by each payment processor, and the formats for the data format supported by a payment server of the payment processor; monitoring the specified ports or folders for a transaction request in a format published by the payment processor; translating the transaction request into a format published by the payment server based on the definition for the payment server in the database; and translating a response from the payment server into a format of the payment processing module so as to enable the business software system from which the request has originated to decipher the response and carry out further actions based on the type of response.

## **The law and its interpretation**

6 Section 1(2) reads:

“It is hereby declared that the following (among other things) are not inventions for the purpose 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.”

7 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/Macrossan*"). In this case the court reviewed the case law on the interpretation of section 1(2) and approved a new 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.

8 However, as stated in paragraphs 45 – 47 of the judgment, 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.

### **Argument and analysis**

9 I will now apply the four-step test to the case in hand.

#### The first and second steps

10 There is common ground on the first step: - the construction of the claims causes no difficulty.

11 For the second step, it is necessary to identify the contribution made by the invention. Paragraph 43 of *Aerotel/Macrossan* explains that this is to be determined by asking what it is, as a matter of substance not form, that the invention has really added to human knowledge. In the same paragraph the court did not appear to disagree with the submission of Mr Birss (Comptroller's Counsel) that identifying the contribution probably involves the problem to be solved, how the invention works and what its advantages are.

12 I will first look at what the applicant and the examiner contend the contribution to be. The examiner considers the actual contribution to be an intermediate payment processor for processing payments between a business software system and a payment processor. The system is provided with a database containing definitions of communication protocols, transaction requests from the business software system and formats for the data supported by the payment server of the payment processor. This system is able to translate requests between the payment processor and the business software system.

13 The applicant in its latest submission contends that the contribution made by the

invention is to provide an intermediate payment processor as a separate entity to a business system and different payment processors (my emphasis) so as to act as a translator interface to support communications between the business system and payment processors. This it is argued creates a unique configuration of hardware and software performing a specific function. Further the applicant argues that, in contrast to the invention of Mr Macrossan in *Aerotel/Macrossan*, it has in fact invented a new kind of hardware in proposing the intermediate payment processor and that this processor is a free standing device. It adds that the newness of the hardware stems not just from the software but also from the nature and function of the intermediate processor itself.

- 14 Having considered these arguments very carefully and having read the specification a number of times, I do not find myself persuaded that the contribution extends as far as the applicant suggests to any new kind or configuration of hardware. I accept that the overall system may be a unique configuration of hardware and software performing a specific function however that is only to the extent that it relates to a new computer program loaded onto what seems clearly to be entirely conventional hardware. What has been added to human knowledge is the new computer program. To hold otherwise would result in any new computer program implemented on a conventional computer, or carried on a known carrier being considered patentable.
- 15 Therefore in my opinion the contribution is, as the applicant initially alludes to, the separation from the business system software of the means for interfacing with payment processors. The means in this case being the software that provides the interface between the business system software and the payment processors. This separation enables easier integration of new payment processors without having to change the base code of the business system software. In addition it will only be necessary to update the intermediate payment processor rather than each of the business software systems that might be required to work in the overall business process.

#### The third step

- 16 I now need to consider whether the contribution that I have outlined relates solely to excluded matter. From the nature of the invention and the arguments put forward, I need only consider whether the contribution relates solely to a computer program or a method of doing business.

#### *Computer Program*

- 17 Whilst I am mindful that as paragraph 22 of *Aerotel/Macrossan* makes clear, an invention is not to be excluded simply because it uses a computer program, I cannot see how the contribution of the invention here could be implemented other than as a computer program. As I have identified above, the contribution in this case is the separation out from the business system software of the software necessary to provide an interface with payment processors. In other words the contribution is a computer program, albeit a better one than in the prior art. Consequently I consider the contribution to relate solely to a computer program.

### *Business method*

- 18 The applicant argues that the contribution does not relate solely to a business method as such, because the translational processes which are supported by the intermediate payment processor, form part of an overall business process whereby payments are processed between a business software system and different payment processors. The examiner however maintains that the contribution is excluded as a method for doing business because the invention is solely for use in payment transactions, which is a method of doing business.
- 19 In *Aerotel/Macrossan* at paragraphs 67-71, the Court of Appeal held that there was no reason to limit the business method exclusion to abstract matters or to completed transactions, and that the fact that an invention provided a new tool did not necessarily dispose of the objection. However in this case the contribution would seem to me to be just a tool, albeit one provided by a computer program that is for use in a method of doing business. The contribution is not the method of business itself. Consequently the invention is not excluded under this category.

### The Fourth step

- 20 Having found the contribution to lie solely in excluded areas, I do not need to go on and consider whether it is technical in nature.

### **Conclusion**

- 21 In the light of my findings above, I conclude that the invention is excluded under section 1(2) because it relates to a computer program as such. Having read the specification I do not think that any saving amendment is possible. I therefore refuse the application under section 18(3).

### **Appeal**

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

P Thorpe  
Deputy Director acting for the Comptroller