



PATENTS ACT 1977

APPLICANT	Visa USA Inc
ISSUE	Whether patent application number GB1011864.4 complies with Section 1(2)
HEARING OFFICER	Peter Slater

DECISION

- 1 Patent application GB1011864.4 entitled "*System and method for data completion including push identifier*" is derived from the corresponding PCT application filed by Visa USA Inc on the 13 January 2009 and published as WO2009/091722. The application claims an earliest priority date of 15 January 2008, and was republished on 22 September 2010 with the serial number GB2468817.
- 2 The examiner maintains that the invention as claimed is excluded from patentability as a computer program and/or a business method under section 1(2) of the Patents Act 1977. The applicant has not been able to overcome this objection, despite amendments to the application.
- 3 The matter therefore came before me at a hearing on 8 February 2013 where the applicant was represented by Paul Derry of Venner Shipley LLP.
- 4 Mr Derry filed some additional submissions on 11 February 2013.

The Invention

- 5 The invention relates to a method and/or apparatus for conducting financial transactions or the making of electronic payments wherein so called "push" transactions i.e. transactions initiated by the purchaser are completed without having to establish a direct connection with the seller ("or payee"). In order for the payment to be made, the purchaser sends a payment instruction message e.g. in the form of an e-mail, including payee information which is used to identify the person to whom the payment should be made, to a central server. In the prior art, the payee information included a "merchant identifier" which was used to uniquely identify the payee. However, in the present application there is no merchant identifier as such, and payments are made on the basis of

payee information contained within the payment instruction message. The invention specifically deals with the case where the payment instruction message includes only partial payee information which is insufficient to uniquely identify the payee, for example, where the partial payee information includes an incomplete payee name or a wrong address. In this case, software running on the server can be used to determine the complete payee name and correct address and to “substantially” complete the payee information to a degree of accuracy required to make the payment. A payment authorisation is then sent to the purchaser’s bank or credit card company to complete the payment. There are various embodiments described wherein searching of third party databases, fuzzy logic and neural network models are used to complete the payee information.

- 6 The most recent set of claims which was filed on 28 December 2012 includes two independent claims to a computer implemented method for conducting a transaction (claim 1) and a corresponding apparatus for conducting push transactions (claim 16) respectively. The wording of the claims is as follows:

1. A computer implemented method for conducting a transaction, comprising: receiving a payment instruction message at a server computer, wherein the payment instruction message comprises information for use in making a payment to a payee using an account associated with an issuer, wherein the payment instruction message contains partial payee information that could not identify the payee to 100% accuracy and further wherein the payment instruction message is originated by an entity different from the payee; reviewing at the server computer the payment instruction message; identifying the transaction as a push transaction and providing a push identifier; determining at the server computer substantially complete payee information based on the received partial payee information; and in response to determining substantially complete payee information, sending by the server computer an authorisation request message to the issuer after reviewing the payment instruction message, wherein the authorisation request includes the push identifier.

16. Apparatus for conducting push transactions, comprising: means for receiving a payment instruction message comprising information for use in making a payment using an account associated with an issuer, wherein the payment instruction contains partial payee information that could not identify the payee to 100% accuracy and further wherein the payment instruction message is originated by an entity different from the payee; means for reviewing the payment instruction message, means for identifying a transaction as a push transaction; means for generating a push identifier based on the identification of the push transaction; means for determining substantially complete payee information; and means for sending an authorisation request to the issuer, wherein the authorisation request includes the push identifier.

The Law

- 7 The examiner has raised an objection under section 1(2)(c) of the Patents Act 1977 that the invention is not patentable because it relates to a program for a

computer or a method of doing business as such; the relevant provisions of this section of the Act are shown in bold below:

1(2) It is hereby declared that the following (amongst other things) are not inventions for the purpose of the 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 provisions shall prevent anything from being treated as an invention for the purposes of the Act only to the extent that a patent or application for a patent relates to that thing as such.

- 8 As explained in the notice published by the UK Intellectual Property Office on 8 December 2008¹, the starting point for determining whether an invention falls within the exclusions of section 1(2) is the judgment of the Court of Appeal in *Aerotel/Macrossan*².
- 9 The interpretation of section 1(2) has been considered by the Court of Appeal in *Symbian Ltd's Application*³. *Symbian* arose under the computer program exclusion, but as with its previous decision in *Aerotel*, the Court gave general guidance on section 1(2). Although the Court approached the question of excluded matter primarily on the basis of whether there was a technical contribution, it nevertheless (at paragraph 59) considered its conclusion in the light of the *Aerotel* approach. The Court was quite clear (see paragraphs 8-15) that the structured four-step approach to the question in *Aerotel* was never intended to be a new departure in domestic law; that it remained bound by its previous decisions, particularly *Merrill Lynch*⁴ which rested on whether the contribution was technical; and that any differences in the two approaches should affect neither the applicable principles nor the outcome in any particular case. But the *Symbian* judgment does make it clear, that in deciding whether an invention is excluded, one must ask does it make a technical contribution? If it does then it is not excluded.
- 10 Subject to the clarification provided by *Symbian*, it is therefore still appropriate for me, to proceed on the basis of the four-step approach explained at paragraphs 40-48 of *Aerotel/Macrossan* namely:
 - 1) Properly construe the claim

¹ <http://www.ipo.gov.uk/pro-types/pro-patent/p-law/p-pn/p-pn-computer.htm>

² *Aerotel Ltd v Telco Holdings Ltd and Macrossan's Application* [2006] EWCA Civ 1371; [2007] RPC 7

³ *Symbian Ltd v Comptroller-General of Patents*, [2009] RPC 1

⁴ *Merrill Lynch's Application* [1989] RPC 561

- 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, which (see paragraph 45) is merely an expression of the “as such” qualification of section 1(2).
 - 4) If the third step has not covered it, check whether the actual or alleged contribution is actually technical.
- 11 The operation of this test is explained at paragraphs 40-48 of the decision. Paragraph 43 confirms 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. Paragraph 46 explains that the fourth step of checking whether the contribution is technical may not be necessary because the third step should have covered the point.
- 12 Mr Derry accepted that this was the right approach to take.

Construing the claims

- 13 The first step of the test is to construe the claims. I do not think this presents any real problems since both the applicant and the examiner appear to agree as to the meaning of the claims.

Identify the actual contribution

- 14 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 having regard to the problem to be solved, how the invention works and what its advantages are.
- 15 Again, I think this presents us with no real problems as the applicant and examiner appear to agree that the contribution resides in a new arrangement for enabling electronic payments to be made in the absence of information, such as a merchant identifier, capable of uniquely identifying the payee, and that this requires substantially complete payee information to be determined using the partial payee information contained in the payment instruction message.

Does the contribution fall solely within excluded subject matter? Is the contribution technical in nature?

- 16 The examiner’s arguments are clearly set-out in his letter dated 7 January 2013, and I do not intend to repeat them here in full. However, in summary, the examiner considers the contribution to be a computer implemented method for making electronic payments wherein a computer application is used to disambiguate or resolve incomplete payee information with the result that payments can be made using different or less accurate information instead of an unambiguous merchant identifier. He concludes that this is no more than a different way of making a payment, or making a payment with different

information, and as such is not technical in nature and falls solely within the computer program and business method exclusions.

- 17 Mr Derry disagrees with the examiner's conclusions. He argues that electronic payments per se are technical in nature and should not be excluded. At the hearing, Mr Derry was keen to draw an analogy between the current application and that which was considered in *Aerotel*, where the addition of a "special exchange" resulted in a new overall combination of physical hardware which was considered to be more than merely a business method and as such was not excluded. He argues that the current application is very similar, in that the apparatus as claimed includes a new arrangement of hardware including an additional server separated from the traditional payment network, and as such should not be excluded as a computer program or a business method.
- 18 Mr Derry also drew my attention specifically to paragraph 88 of the *Aerotel* judgment where the Court of Appeal made reference to the EPO Board of Appeal's decision in *IBM Corp/Data Processor network*⁵ as follows:

88 The third case is *IBM Corp/Data processor network* (1988) T6/83 [1990] O.J. E.P.O. 5; [1990] E.P.O.R. 91 . The Board of Appeal said: ***145**

"6. The Board holds the view that an invention relating to the coordination and control of the internal communication between programs and data files held at different processors in a data processing system having a plurality of interconnected data processors in a telecommunication network, and the features of which are not concerned with the nature of the data and the way in which a particular application program operates on them, is to be regarded as solving a problem which is essentially technical."

In short the "technical feature" was the removal of limitations of prior art systems with the result that the data processing system was more flexible and had: "improved communication facilities between programs and files held at different processors within the known network".

- 19 He argues therefore, that if the contribution can be seen to remove limitations associated with prior art systems, and that the resulting system is a more flexible data processing system with improved communications then this is a clear indication that the contribution is a technical one. In his opinion, this is clearly the case here. The apparatus as claimed enables payments to be made which previously could not have been completed due to the absence of sufficient information to uniquely identify the payee hence removing a limitation of the prior art. Mr Derry therefore considers the system not only to be a more flexible data processing system, but to be capable of completing payments in more situations than would otherwise previously have been possible.
- 20 Furthermore, I note that in some of the earlier correspondence, it has been argued that the contribution does not relate solely to excluded matter as it provides a "more reliable computer system".

⁵ *IBM Corp/Data processor network* (1988) T6/83 [1990] O.J. E.P.O. 5; [1990] E.P.O.R. 91

Business method

- 21 One thing that is clear to me is that the contribution relates to the processing of financial transactions in the form of electronic payments. Mr Derry argues that electronic payments are technical, and filed a number of EPO decisions on 11 February 2013 intended to illustrate this. However, I disagree with Mr Derry's assertion that electronic payments by their very nature are technical. Indeed, I would not consider the mere automation of payments using known hardware to convey sufficient technical contribution to avoid exclusion, what is required is something more.
- 22 The processing of electronic payments to my mind constitutes a step in a business process, and not a technical one. It has been established that the apparatus as claimed solves the problem inherent in the prior art, that in the absence of a merchant identifier or other information sufficient to uniquely identify the payee, payments could not be made. However, this is not to my mind a technical problem. Indeed, one of the solutions envisaged to solve this problem is to use third party databases associated with the server to merely look up additional or correct payee information which in itself does not seem to be a technical solution. What the applicant has done is to create a new method of processing payments where additional or corrected information identifying the payee is derived from that presented by the purchaser in a payment instruction message. However, in my opinion, a new method of processing payments is not technical in nature and falls solely within the business method exclusion. Essentially, the applicant has taken a business decision to fulfil transactions on the basis of less accurate information indentifying the payee, and has designed a clever piece of software to achieve this. Again, this would seem to involve no technical contribution to the art and fall squarely within the business method exclusion.

Computer program

- 23 There is no doubt in my mind that the contribution requires a computer program for its implementation. However, the mere fact that the invention is effected in software does not mean that it should be immediately excluded as a computer program as such. What matters is whether or not the program provides a technical contribution.
- 24 First of all, I do not think the contribution extends as far as to include a new arrangement of physical hardware as was the case in *Aerotel*. It is well known in the art to use conventional computers or servers to process payments in financial systems, and there is nothing to suggest that the hardware being used here is anything other than conventional. However, where the contribution differs from the prior art is in what the hardware is programmed to do i.e. the functions which the server carries out in order to process the payments. The fact that computers are used to facilitate this process does not convey the necessary technical contribution.
- 25 Secondly, whilst the invention as claimed does enable payments to be completed which previously could not have been, and the system is thus arguably a more flexible data processing system as a result, I do not think the

improvements are of a technical nature nor do I think that there is any improvement in the speed or reliability of the computers, servers or network as a whole which can be considered to provide the technical contribution necessary to avoid exclusion.

- 26 What the applicant has done is to create a new computer program, albeit a very clever one, which is capable of processing electronic payments where the information provided by a purchaser is insufficient to uniquely identify the payee. The contribution lies in the functions which the system has been programmed to carry out. In essence, the applicant has created a new business process implemented in software using conventional hardware which does not provide a relevant technical contribution and as such would seem to fall squarely within the business method and computer program exemptions of section 1(2)(c).

Conclusion

- 27 In the light of my findings above, I conclude that the invention as claimed is excluded under section 1(2) because it relates to a business method and 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

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

PETER SLATER

Deputy Director, acting for the Comptroller