

24 February 2012

PATENTS ACT 1977

APPLICANT NET1 UEPS TECHNOLOGIES INC

ISSUE Whether application number GB0910305.2 is
excluded from patentability under section 1(2)

HEARING OFFICER Ben Micklewright

DECISION**Introduction**

- 1 International patent application PCT/IB2007/054678 was filed on 16 November 2007 with a declared priority date of 16 November 2006 in the name of NET1 UEPS TECHNOLOGIES, INC. It was published as WO 2008/059465 and then entered the GB national phase as patent application GB 0910305.2, republished as GB2457204 A.
- 2 The examiner argued that the invention lay entirely in the excluded fields of a program for a computer as such and a method of doing business as such and thus was excluded from patentability. The applicant disagreed and despite several rounds of correspondence between the applicant and the examiner the matter could not be resolved. The applicant therefore requested a hearing and the matter therefore came before me at a hearing on 29 November 2011 at which the applicant was represented by their chartered patent attorney Mr Peter Thorniley of the firm Gill Jennings & Every LLP.

The invention

- 3 The invention relates to electronic financial transactions. A transactor who wishes to obtain goods or services from a merchant requests a simulated primary account number (PAN) and a financial transaction number generator then generates a unique transaction number which simulates a conventional credit or debit card account number. A primary account number of the transactor is incorporated into the simulated PAN which may be extracted by a designated financial institution processing facility. The merchant's bank sends the simulated PAN to the issuing bank which then decrypts then simulated PAN to decide whether or not to approve the transaction. In this way the merchant is at no time supplied with the actual PAN for the transactor. A transaction amount and a simulated expiry date may also be incorporated into the generated transaction number.

4 The latest version of the claims was filed on 8 August 2011 and includes two independent claims, claims 1 and 15, which read as follows:

1. A financial transaction number generator for generating a unique transaction number including an electronic processing device, a memory unit, an input device operable by a transactor for inputting a request for a simulated primary account number and a display for displaying the simulated primary account number, wherein the financial transaction number generator is arranged such that, in use, a unique transaction number is generated that simulates a conventional credit or debit card primary account number and that incorporates an account number of the transactor which is extractable by a designated financial institution processing facility.

15. A financial institution processing facility for processing a financial transaction number that simulates a conventional credit or debit card primary account number and which has incorporated therein an account number of a transactor, which financial institution processing facility includes an extractor for extracting from the simulated primary account number the account number.

The law

5 Section 1(1)(d) of the Patents Act 1977 (“the Act”) states that a patent may be granted only for an invention in respect of which the grant of a patent for it is not excluded by subsections (2) and (3) or section 4A. Section 1(2)(c) states that things which consist of “a scheme, rule or method for performing a mental act, playing a game or doing business, or a program for a computer” are not inventions for the purposes of the Act, but only to the extent that a patent or application for a patent relates to that thing as such.

6 There is a large amount of case law in relation to these provisions. The most significant recent judgments of the Court of Appeal on the matter are *Aerotel Ltd v Telco Holdings Ltd Ors Rev 1* [2007] RPC 7 and *Symbian Ltd’s Application* [2009] RPC 1. In *Aerotel* the Court of Appeal reviewed all the previous case law and specified the following four-step test as a methodology of determining whether an invention was excluded from patentability under section 1(1)(d):

(1) Properly construe the claim;

(2) identify the actual contribution;

(3) ask whether it falls solely within the excluded subject matter;

(4) check whether the actual or alleged contribution is actually technical in nature.

7 In *Symbian* the Court of Appeal confirmed that the above test is intended to be equivalent to the prior case law test of “technical contribution”. In the present case I will therefore use the *Aerotel* test and ensure in my consideration of steps (3) and (4) that I determine whether the invention makes a technical contribution.

Assessment

(1) Properly construe the claim

8 This step presents no difficulties in the present case.

(2) Identify the actual contribution

9 At the hearing Mr Thorniley emphasised that when identifying the contribution consideration should be given not only to the features of the claims but also to the advantages the invention offers over the prior art. It is indeed the case that the advantages of the invention are relevant when determining the contribution. In *Aerotel* the Court of Appeal said in paragraph 43:

43. The second step – identify the contribution - is said to be more problematical. How do you assess the contribution? Mr Birss submits the test is workable – it is an exercise in judgment probably involving the problem said to be solved, how the invention works, what its advantages are. What has the inventor really added to human knowledge perhaps best sums up the exercise. The formulation involves looking at substance not form – which is surely what the legislator intended.

10 In determining the contribution I therefore have to consider the advantages of the invention. I must however identify the claimed features of the invention from which the advantages stem, in order to determine in substance what the inventor has really added to human knowledge. In the present case Mr Thorniley argues that one of the advantages is a reduction in the required load on the communications systems used in a financial transaction because the transactor does not have to separately provide information to both the merchant and the issuing bank. This advantage arises over the system disclosed in WO 03/038719 which discloses a similar type of system with a one-time-number to be used for the transaction. In that case however the transactor has to send the one-time-number both to the merchant and to the issuer, whereas in the present case they only need send it to the merchant. Moreover the issuer has to hold the one-time number until it receives details of the transaction whereas in the present case it receives the simulated number at the time that processing is required. These advantages arise because in the present case the transactor's actual account number is encoded in the simulated account number. I therefore consider this feature to be a part of the contribution.

11 Another advantage highlighted by Mr Thorniley is the security advantage of not needing to transmit actual account numbers combined with the convenience of using standard financial transaction systems. This arises from the use of a simulated account number which takes the format of a conventional account number and so can be used by standard financial transaction systems geared up for receiving account numbers. Taking all this into account, the contribution, namely what the inventor has really added to human knowledge, is, in my view, the following:

An electronic financial transaction number generator whereby a unique financial transaction number is generated that simulates a conventional credit or debit card primary account number and that incorporates an account

number of the transactor which is extractable by a designated financial institution processing facility.

- 12 This contribution results in the advantages highlighted above in relation to network load and security.

(3) Ask whether it falls solely within the excluded subject matter; (4) Check whether the actual of alleged contribution is actually technical in nature

- 13 Mr Thorniley argued that the contribution provides significant technical advantages, in particular in reducing the load on communication components and increasing the reliability between components. He compared this with a new network router which, for example, provided greater efficiency and speed. This comparison is not a helpful one. An improved router would provide its advantages to the network whatever system was making use of that network to transmit data. It is independent of any application making use of that network. In the present case the advantage only arises when a particular application is being run on the network, namely the specific method of processing financial transactions using simulated account numbers. There is no improvement to the network in general. It seems to me that the advantage does not arise out of the way the communication system operates but rather out of the way the financial transaction system operates. Thus this advantage does not itself take the contribution outside of the excluded matter.
- 14 Another advantage is that of increased security. Mr Thorniley argued that this advantage arises from the technical implementation of the financial transaction process. In my view however this increased security arises from a new way of carrying out financial transactions by using simulated account numbers in which real account numbers are encoded, not in any technical improvements to security systems. Mr Thorniley argued that the invention is not a new business process but rather a new technical implementation of an existing business process, with the business process appearing as unchanged to the user. I do not agree with this. The considerations in the present invention as to what numbers to use to identify financial transactions and how the user, merchant and issuing authority make use of these numbers, and the use of simulated account numbers in which are encoded real account numbers, are essentially business considerations and are not technical considerations.
- 15 Taking all these factors into consideration, I conclude that the contribution is a method of doing business implemented as a program for a computer. It does not make a computer or a communications network run faster or more reliably in a general sense, and so is distinguished from the circumstances of *Symbian*. Nor is there any technical effect outside of the computer system or network or at the architecture level of the computer system or network. The invention makes no technical contribution and lies wholly in the excluded fields and is therefore excluded from patentability.

Conclusion

- 16 I have found that the invention lies solely in the excluded fields of a program for a computer as such and a method of doing business as such. I have examined the

application and cannot identify any amendment which would result in a patentable claim. I therefore refuse the application.

Appeal

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

BEN MICKLEWRIGHT

Deputy Director, acting for the Comptroller