BL O/361/10

21st October 2010

PATENTS ACT 1977

APPLICANT The Honey Pot Trust

ISSUE Whether patent application GB0710637.0 complies with sections 1(1)(b) and 1(2) of the Patents Act

HEARING OFFICER H Jones

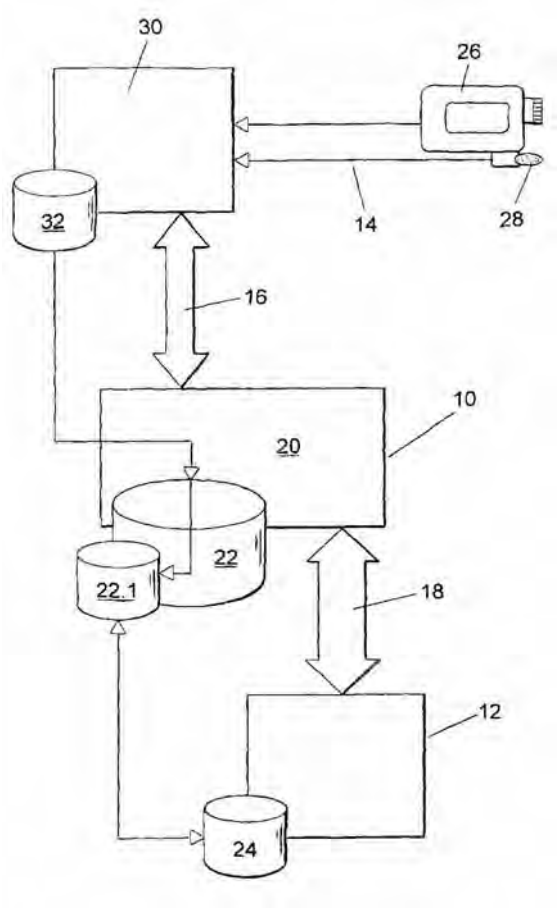
Introduction

1 International patent application PCT/IB2004/003820 was filed in the name of The Honey Pot Trust on 23rd November 2004 and afterwards entered the UK national phase as application number GB0710637.0. The application relates to a system and method for allowing the verification of transactions.

2 In the light of prior art documents identified by the International Search Authority and also during the course of examination in the national phase, the examiner argues that the claimed invention lacks an inventive step and is excluded from patentability both as a computer program and as a method for doing business. The applicant disagrees, and requested a hearing to decide the matter. This decision takes into account submissions made on behalf of the applicant by Mr Matthew Cassie of Dehns at a hearing held on 21st September 2010.

The invention

3 The invention is described in the application as a means by which the occurrence of a transaction and the events forming part of the transaction can be verified. It is described by reference to a single diagram, reproduced below, which illustrates an audio and/or visual transaction system comprising a central data store 10, a data processing system 12 and an audio and/or visual recorder 14. The application explains that the system may comprise more than one data processing system 12 or recorder 14. The operation of the verification system is set out in general terms at pages 5-6 of the application, which I shall repeat here for ease of reference:



“The audio and/or visual recorder is constituted by a combination of a video camera 26, a microphone 28 and a laptop PC 30. The laptop PC 30 contains a data store 32. The recorder assembly 14 is adapted to convert the images and sounds recorded by means of the video camera 26 and the microphone 28 into digital data that is stored on the hard disk 32 of the PC 30.

The operation of the transaction verification system of the invention can be illustrated with reference to a simple example of a normal, everyday commercial transaction such as the delivery of goods. In such an example, the delivery of the goods and the documentation and data processing steps associated therewith will be undertaken in the normal course in the customer system 12 in addition to simply delivering the goods, however, the delivery person will be required to record the delivery and certain activities pertaining to the delivery by means of the recorder 14.

So, for instance, the delivery person might be instructed, in addition to undertaking the normal activities associated with delivery of goods, such as delivering the goods and having a delivery note signed, to make an audio and/or visual recording of certain aspects of the transaction. For instance, the person making the delivery can, using the video camera and microphone 26, 28 record video clips of the actual delivery of the goods, the signature, by the person taking delivery, of the delivery note and possibly even vocal confirmation of the fact that the person taking delivery is who he or she purports to be, that they have inspected the goods and that the delivery appears to be in order. The video clip or clips together with sound, can then be recorded as digital data on the PC and the hard disk 32 thereof in particular for immediate or later transmission to the ISP 10 by way of the Internet link 16.

The audiovisual recorder 14 is associated, by appropriate identification within the system, with the customer system 12. On making the Internet connection 16, therefore, the operator of the audiovisual system 14 keys in the appropriate identification codes and passwords to allow access to the system and to the data stores 22 of the ISP 10. Within the data stores 22 of the ISP 10, a subsidiary data store 22.1 has been created for the sole use of the customer system 12. When, therefore, the operator of the audiovisual system 14 connects successfully to the ISP 10, the transaction data recorded on the PC 30 will be directed for storage in the subsidiary data store 22.1 associated with the customer system 12.

From time to time the customer operating the customer system 12 will connect to the ISP 10 by way of the Internet link 18, using the appropriate access codes and passwords. It will be appreciated that these access codes and passwords can be differentiated to allow different degrees of access, thereby allowing differentiation within the customer system 12 whereby certain operators in the customer system 12 have access to more or less data contained in the subsidiary data system 22.1, depending on the access privileges concerned.

In connecting successfully to the ISP 10, the customer system 12 will gain access only to the subsidiary data store 22.1 associated with the customer system 12. Once connected, the customer system 12 can be used to download transaction data contained in the subsidiary data system 22.1 to the data stores 24 of the customer system 12."

4 The application has two independent claims, claims 1 and 5, directed to a system and method for verifying a transaction. These claims are reproduced below. At the hearing, Mr Cassie accepted the examiner's argument that, in order to reflect more accurately the described invention, the claims should be amended to define a system and method for allowing transactions to be verified. Mr Cassie agreed to attend to this matter if the decision on inventive step and exclusion from patentability was found in the applicant's favour.

1. A transaction verification system comprising a central data processing system, a plurality of satellite data processing systems discreet from the central data processing system, a plurality of audio and/or visual recorders that are discreet from the central data processing system and adapted to record sounds and/or images and to convert recorded sounds and/or images into digital data and communication means by means of which recorded digital data is transferred from the audio and/or visual records to the central data processing system and by means of which the satellite data processing systems communicate with the central data processing system, each audio and/or visual recorder being associated with one or more satellite data processing system, and the central data processing system including a data store within which digital data received from the audio and/or visual recorders is stored, the data store being divided into subsidiary data stores, each associated with one or more satellite data processing system for sole use thereby, and the central data processing system being programmed to store digital data from audio and/or visual recorders associated with a particular satellite data processing system in a subsidiary data store associated with that satellite data processing system and to communicate data stored in a subsidiary data store only to a satellite data processing system associated with that subsidiary data store to thereby allow verification of a transaction by use of the satellite data processing system.

5. A method of verifying a transaction, the method comprising:

recording sounds and/or images using one of a plurality of audio and/or video recorders for later verification of a transaction, each audio and/or video recorder being associated with one or more of a plurality of satellite data processing systems, and wherein the audio and/or video recorders and plurality of satellite data processing systems are discrete from a central data processing system, the central data processing system having a data store divided into subsidiary data stores each being associated with one or more satellite data processing systems for sole use thereby;

converting the recorded sounds and/or images to digital data and transferring the recorded data from the audio and/or video recorders to the central data processing system by communication means, the plurality of satellite data processing systems communicating with the central data processing system by the communication means;

receiving recorded digital data at the central data processing system, the recorded digital data including data which verifies the transaction;

storing the recorded digital data received from an audio and/or video recorder associated with a particular satellite data processing system in a subsidiary data store associated with that satellite data processing system;

linking the audio and/or visual data to data detailing the transaction which is to be verified; and

communicate data stored in a subsidiary data store only to a satellite data processing system associated with that subsidiary data store to thereby securely allow verification of a transaction by use of the satellite data processing system.

The law

5 The relevant provisions in relation to inventive step and excluded inventions are sections 1(1)(b), section 1(2) and section 3, which read:

1-(1) A patent may be granted only for an invention in respect of which the following conditions are satisfied, that is to say -

(a) …

(b) it involves an inventive step;

1-(2) 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.

3. An invention shall be taken to involve an inventive step if it is not obvious to a person skilled in the art, having regard to any matter which forms part of the state of the art by virtue only of section 2(2) above (and disregarding section 2(3) above).

6 The examiner argues that the invention is a program for a computer and a method for doing business as such, and is therefore excluded under section 1(2)(c). The test for deciding whether a computer-implemented invention is patentable was considered by the Court of Appeal in the case of *Symbian*[1], where at paragraph 48 of its judgment the Court says that the issue has to be resolved by answering the question of whether the invention reveals a technical contribution to the state of the art. The Court of Appeal proceeded to answer this question with the aid of the four-step test set out in its earlier judgment in *Aerotel*[2], which it says is intended to be in substance the same test as that relied on in prior UK case law, namely the "technical contribution" test.

Arguments and analysis

7 In line with guidance set out in the UK Intellectual Property Office's Practice Notice issued 8th December 2008[3], the examiner has applied the structured approach set out in *Aerotel* to address the question of whether the invention relates to excluded subject matter. In applying this structured approach, the examiner concludes that, a) the individual hardware components and the particular combination of these components are well known, b) the only difference between the invention and the prior art is the computer software that ties the hardware components together and makes the system operate in a different manner to the prior art, and finally c) the computer software does not provide a technically better system. This, I admit, is an extremely generalised summary of the examiner's actual analysis of the invention.

8 Mr Cassie has followed the technical contribution approach set out in *Symbian* to assess whether the invention is excluded from patentability, and eventually arrives at a different conclusion to that of the examiner. The Court of Appeal has said that this approach should produce the same result as that set out in *Aerotel*, which suggests that the difference in opinion between Mr Cassie and the examiner can only be as a result of the way in which the tests have been applied rather than which one of the two approaches is followed. In other words, it should not matter whether I decide to follow the approach set out in *Aerotel* or that in *Symbian*, the end result should be the same. For the purpose of this decision I shall follow the technical contribution approach adopted by Mr Cassie, and will also take into account the examiner's own assessment of the contribution made by the invention

9 At the hearing, Mr Cassie argued that the examiner had taken too narrow a view of the contribution made by the invention by focussing only on those aspects of the claims that were regarded as novel and inventive. In his last examination report, the examiner appears to have relied on Mr Cassie's own assessment of the contribution in deciding whether the invention is patentable, namely that it lies

[1] Symbian Ltd. V Comptroller-General of Patents [2008] EWCA Civ 1066
[2] Aerotel Ltd v Telco Holdings Ltd and Macrossan's Application [2006] EWCA Civ 1371
[3] http://www.ipo.gov.uk/pro-types/pro-patent/p-law/p-pn/p-pn-computer.htm

in a new configuration of hardware and in how this combination of hardware is operated by the software. The examiner goes on to argue that since prior art documents show that the hardware combination is not new, then what remains as a contribution is how the combination of hardware is operated by the software. He identifies the key features of the software as being the secure access of data via communication means and ensuring that users' transaction data are kept separate and accessible only to them. He goes on to conclude that these features do not result in a technically better computer and that the contribution, therefore, cannot be technical.

10 It seems to me that this assessment of the contribution takes no account whatsoever of the nature of the problem involved or of why the inventor sought to tie the hardware components together to allow transactions to be verified in the manner disclosed (cf para. 43 of *Aerotel*). I agree with the examiner that all of the prior art documents he refers to do disclose a combination of the necessary hardware components, i.e. the audiovisual recorders, the storage devices, the communication networks and the processing systems, but only one of these, US2004/0024709A1, actually discloses all of these hardware components in a system for allowing transactions to be verified. However, not even US2004/0024709A1 specifically discloses a system having a storage device separated into subsidiary data stores for exclusive use of separate processing systems as required by the present claims; the question of whether this involves an inventive step will be considered later. It seems to me that the contribution made by the invention lies in drawing all of these hardware components together in a particular manner for a particular purpose, and, in my view, makes a technical contribution to the state of the art. I do not get any sense from the prior art that what the inventor has contributed is simply a set of instructions allowing a computer to operate in a different way. I am led to the conclusion that the invention does not relate to a program for a computer as such.

11 The above logic can be applied equally to the question of whether the invention is excluded as a method for doing business. The invention may well provide a better system for verifying business transactions, but ultimately what the inventor has contributed is a different technical system for verifying transactions and not merely a different business method. I am led to the conclusion that the invention does not relate to a business method as such.

12 I turn next to the question of whether the invention involves an inventive step. The Court of Appeal formulated a four-step approach for assessing whether an invention is obvious to a person skilled in the art in *Windsurfing*[4]. This approach was restated and elaborated upon by the Court of Appeal in *Pozzoli*[5], where Jacob LJ reformulated the *Windsurfing* approach as follows:

> *(1)(a) Identify the notional "person skilled in the art".*
>
> *(1)(b) Identify the common general knowledge of that person.*
>
> *(2) Identify the inventive concept of the claim in question or if that cannot be readily done, construe it.*

[4] Windsurfing International Inc. v Tabur Marine (Great Britain) Ltd, [1985] RPC 49

[5] Pozzoli SPA v BDMO SA [2007] EWCA Civ 588

(3) Identify what, if any, differences exist between the matter cited as forming part of the "state of the art" and the inventive concept of the claim or claim as construed.

(4) Viewed without any knowledge of the alleged invention as claimed, do those differences constitute steps that would have been obvious to the person skilled in the art or do they require any degree of invention?

13 I will therefore use this *Windsurfing/Pozzoli* approach in assessing whether the invention of the present application involves an inventive step.

14 The examiner has identified the person skilled in the art as a designer of transaction systems, and suggests that this person would have knowledge of computer hardware, software techniques for accessing, communicating and storing data, and would also be aware of the business/administration processes performed in commercial transactions. This person would be well aware of the need to verify transactions, to ensure that transactions are actually performed and are valid. The examiner also suggests that the person skilled in the art would consider it as standard that when processing transaction information, each user's information would need to be kept separate in order to be secure, e.g. such that individuals could not access each other's transaction information. Mr Cassie does not dispute this.

15 The inventive concept is a system by which audio/visual data relating to transactions is recorded and then stored in a subsidiary data store of a central processing system. Each of the subsidiary data stores is designed for sole use by an associated satellite system, such that transaction verification data stored in a subsidiary data store is communicated only to the associated satellite system.

16 In assessing the difference between the inventive concept and the prior art, it was agreed at the hearing that the main document for consideration was the one already referred to above, namely US2004/0024709A1, and referred to as D1 hereafter, which discloses a system for determining the identity of a party associated with a cash withdrawal at an ATM (automated teller machine) or a credit card sale at a retail POS (point of sale) terminal. In the background section of this document, it states that there is a need for a system that can reliably determine the identity of the party who conducts or has conducted an electronic transaction. The system allows for two possible options: it can determine the identity of the transaction party and allows a check to be performed in real time as to whether that party has authority to conduct the transaction, or, alternatively, can store an image of the transaction party and allows the image to be compared after the transaction has been concluded in order to resolve a dispute related to the transaction.

17 The examiner argues that the difference between this disclosure and the inventive concept is the storing of data in a subsidiary data store (i.e. a central data store divided into secure subsidiary stores) and ensuring, for the purpose of verification, that data stored in a subsidiary data store is only accessible to a specific associated satellite system (or customer system). This difference is described in detail at page 6 of the application:

"From time to time, the customer operating the customer system 12 will

connect to the ISP10 by way of the Internet link 18, using the appropriate access codes and passwords. It will be appreciated that these access codes and passwords can be differentiated to allow different degrees of access, thereby allowing differentiation within the customer system 12 whereby certain operators in the customer system 12 have access to more or less data contained in the subsidiary data system 22.1, depending on the access privileges.

In connecting successfully to the ISP 10, the customer system 12 will gain access to the subsidiary data store 22.1 associated with the customer system 12. Once connected, the customer system 12 can be used to download the transaction data contained in the subsidiary data system 22.1 to the data stores 24 of the customer system 12."

18 D1 addresses the issue of access to an image data store in one of two ways. In relation to the embodiment shown in fig. 8, which relates to the verification of card transaction in an ATM, it is said that the transaction bank and the issuing bank have an agreement in place to share access to a transaction image store. The way that this works in practice is that the issuing bank is given access to the image store of the transaction bank when needing to verify a transaction. As an alternative, it is said that the transaction images are stored in a centralised image store accessible to all. Nowhere in this document is it suggested that the image memory should be arranged in such a way to allow a particular customer sole access to a subsidiary area of the data store.

19 The examiner contends that the storing of images within subsidiary data stores would be obvious to the person skilled in the art. He argues that the person skilled in the art would readily appreciate that users' transaction information in these systems would need to be kept separate and secure, and suggests that a transaction verification system would be of no use if everyone could access each other's transaction information. He goes on to suggest that the skilled person would know how to provide these features of separation and security of data, and points to a number of other published patent applications which disclose partitioning of data stores for sole use by a particular user.

20 What appears to be lacking in this argument is the motivation necessary to lead the person skilled in the art from the teachings of D1 and the common general knowledge of data partitioning solutions towards the verification system set out in the application. In other words, what the examiner does not say, nor can I find any hint of it in the text of D1 or elsewhere, is that there is a problem with the data storage arrangement of D1 that requires a solution. This is the point made by Mr Cassie in correspondence, where he says "None of the prior art documents referred to in item 24 suggests that datastore partitioning could be used to provide increased security in a transaction verification system. Indeed, there is nothing in these citations, or in the citations referred to in item 23 of the Examination Report, to teach the skilled person how these features could be incorporate in a transaction verification system." I agree with the examiner's response to this to some extent; the person skilled in the art would, I believe, be expected to know how data partitioning systems could be incorporated into the verification system of D1, but absent the motivation to do so, i.e. that image data security needs to be improved or that data store partitioning is known to increase

security, I am not convinced that the skilled person would regard the difference between the inventive concept and the prior art as obvious.

Conclusion

21 I have concluded that the invention as set out above does not relate to a program for a computer or a business method as such, and that it does involve an inventive step. The application will be referred back to the examiner to attend to the construction point discussed in para. 4 above.

H Jones
Deputy Director acting for the Comptroller