

- 5 Promotional vouchers can come in many different forms ranging from the conventional printed vouchers in newspapers to those which are printed on the side of a drinks can, or those that take the form of an image, email or webpage on the screen of a smart phone. It is common place for retail outlets to retain vouchers following redemption for reconciliation of sales at the close of business. Vouchers are therefore commonly stored in the drawer of the POS device at the checkout. However, this presents a problem, when the vouchers are in a non-standard e.g. printed on the side of a drinks can and cannot be placed in the POS drawer as they will not fit. Furthermore, where the voucher is displayed on the screen of a smart phone, the customer may be reluctant to hand it over for security reasons. The invention solves this problem by scanning and replacing any non-standardised voucher with a standardised voucher of a size which fits within the drawer of an associated POS device.
- 6 The most recent set of claims for each application were filed on 5 May 2015, and each contains (aside from the omnibus claims) only one independent claim - claim 1. Each claim reads as follows:

GB1212403.8 (Parent)

*1. A voucher terminal system comprising a voucher terminal and a POS device, the voucher terminal comprising a scanner for reading data provided on any one or more types of a number of data-bearing surfaces, a processor adapted to interpret the read data and to generate an electronic version of the read data in the form of a standardised voucher containing the read data displayed in a standardised format, a printer for reproducing the standardised voucher in a printed form **having a pre-set layout, size and format and one that can be stored easily in a drawer of the POS device**, and an interface adapted to transmit the electronic version of the read data to a remote data server, and the POS terminal comprising means for reading the data on the said voucher and redeeming the voucher by executing an action based on the data read; wherein the voucher terminal and POS terminal are each operatively connected to the data server, the data server being adapted to record and collate data about the outputted data-bearing vouchers and the redemption of the vouchers by the POS terminal, and wherein the POS terminal is configured to print till receipts comprising standardised voucher portions that are readable by the scanner of the voucher terminal.*

GB1418078.0 (Divisional)

1. A voucher terminal system comprising a voucher terminal and a POS device, the voucher terminal comprising a scanner for reading data provided on any one or more of a number of data-bearing surfaces, a processor adapted to interpret the read data and to generate an electronic version of the read data in the form of a standardised voucher containing the read data displayed in a standardised format, a printer for reproducing the standardised voucher in a printed form, and an interface adapted to transmit the electronic version of the read data to a remote data server, and the POS terminal comprising means for reading the data on the said voucher and redeeming the voucher by executing an action based on the data read; wherein the voucher terminal and POS terminal are each operatively connected to the

data server, the data server being adapted to record and collate data about the outputted data-bearing vouchers and the redemption of the vouchers by the POS terminal and wherein the data server comprises a web-based user interface that users, or potential users, of the system can access via individual user login details.

- 7 A further auxiliary set of claims was filed on the parent on 5 May 2015, the proposed amendment to claim 1 is shown in bold above.

The Law

- 8 The examiner has raised objections under section 1(2)(c) of the Patents Act 1977 that the inventions are not patentable because they relate to both a method of doing business and a program for a computer 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.

- 9 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*¹.
- 10 The interpretation of section 1(2) has been considered by the Court of Appeal in *Symbian Ltd's Application*². *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*³ 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

¹ *Aerotel Ltd v Telco Holdings Ltd and Macrossan's Application* [2006] EWCA Civ 1371; [2007] RPC 7

² *Symbian Ltd v Comptroller-General of Patents*, [2009] RPC 1

³ *Merrill Lynch's Application* [1989] RPC 561

whether an invention is excluded, one must ask does it make a technical contribution? If it does then it is not excluded.

- 11 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.
 - 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.
- 12 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.
- 13 Mr Hutchinson agreed that this was the correct approach to take.

Argument and analysis

Properly construe the claims

- 14 This does not present any real problems as the meaning of the claims is quite clear. However, I note that the claims in each of the applications use both the terms “POS device” and “POS terminal”, but it is clear from the application as a whole, that these terms relate to the same thing, and I will refer to it as a POS device herein (except where directly quoting from the claims) for consistency and to further distinguish it from the voucher terminal.
- 15 The only other real issue encountered in construing the claims is what is meant by the term “a standardised voucher”. In this respect a proposed amendment, in the form of an auxiliary claim set, has been provided by Mr Hutchinson, in which the standardised voucher is defined as “having a pre-set layout, size and format and one that can be stored easily in a drawer of the POS device”. I will therefore adopt this interpretation when construing the claims.

Identify the actual contribution

- 16 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.

- 17 For the parent application, the examiner considers the contribution to be a voucher system utilising a voucher terminal, remote from a POS terminal, to read vouchers and print in a standardised form a new voucher for use at a POS terminal which can print till receipts including a voucher readable by the voucher terminal.
- 18 For the divisional application, the examiner considers the contribution to be a voucher system utilising a voucher terminal, remote from a POS terminal, to read vouchers and print in a standardised form a new voucher for use at a POS terminal, where the voucher terminal and the POS terminal are in communication with a data server which has a web based user interface accessible through user login details.
- 19 At the hearing (as in the skeleton arguments), Mr Hutchinson outlined a number of problems which the invention of each application is intended to solve.
- 20 Storage of non-standardised vouchers. As previously mentioned, a promotional voucher may take one of many different forms. It may be a cutting from a newspaper or a cereal packet, it may be printed on the side of a drinks can, it may be a flyer, it may be an A4 sheet printed by a customer from an email or website, or it may even exist only electronically - e.g. as an email or webpage on a customer's smart phone or other electronic device. This presents a problem in storing in a POS device drawer multiple vouchers in different formats, and that some vouchers may wish to be retained by the customer - e.g. a smart phone or a full drinks can. The invention solves this problem by replacing any non-standardised voucher with a standardised voucher having a pre-set layout, size and format and one that can be stored easily in the drawer of an associated POS device, for example, at a supermarket checkout.
- 21 Security, fraud, duplicated use of vouchers, queue times and erroneous manual data entry were other problems said to be solved by the invention, although it was made clear that the storage of non-standardised vouchers is the most important problem to be solved.
- 22 However, in assessing the actual contribution provided by the invention, it is necessary to examine the relevant prior art provided by the examiner. In this case, the relevant prior art is published US patent application US2003/0167203. It is noted that, whilst the system of US2003/0167203 is intended to allow a plurality of coupons to be compiled into a single shopping list, the examiner and Mr Hutchinson have previously agreed that it would also operate to convert a single coupon presented to it into a printed shopping list of only that single coupon. In this way it is analogous to the system of the present invention.
- 23 With particular reference to figure 3, US2003/0167203 discloses a coupon processing station (voucher terminal) 10 which scans coupons presented to it, and data identifying the coupons scanned is sent to an establishment computer 520 via a list insertion hub 160. At the same time, the coupon processing station prints out a shopping list (see figure 8) which includes a list of the coupons scanned, and a bar code which acts as a unique identifier of the shopping list. When the printed shopping list is presented at the check-stand (POS terminal), contact is made with the establishment computer to retrieve the data identifying the relevant coupons and to make the necessary deductions from the customer's bill. This differs from the operation of the system defined in the claims of the applications. Claim 1 of each application defines "a processor adapted to interpret the read data and to generate

an electronic version of the read data in the form of a standardised voucher containing the read data in a standardised format, a printer for reproducing the standardised voucher in a printed form”, and “the POS terminal comprising means for reading the data on the said voucher and redeeming the voucher by executing an action based on the data read”. It is therefore clear that the data relating to the voucher is contained within the scannable portion (e.g. barcode) of the printed standardised voucher, and that the POS terminal does not need to refer to an establishment computer or data server in order to make the necessary deductions from the customer’s bill.

24 Now, turning to the printing of a standardised voucher. It has been previously agreed that the claims can be limited to the printed voucher having a preset size which allows it to be stored in a drawer of the POS terminal. In US2003/0167203 it is disclosed that the shopping list (printed voucher) will come from a till roll, and will therefore have a preset width. However, the shopping list will have printed on it a list of all of the coupons scanned by the user, and so its length will be dictated by the number of coupons scanned. Therefore, whilst the width of the shopping list may be such that it can be accommodated by drawer of the check-stand (till rolls are commonly not wider than the length of a bank note), its length is variable, and so the shopping list cannot be regarded as having a preset size that can be stored in a drawer of the check-stand.

25 In the hearing, Mr Hutchinson asserted that the contribution extends to a new arrangement of hardware due to the arrangement claimed differing from that disclosed in US2003/0167203. Mr Hutchinson alleged that the arrangement in US2003/0167203 requires a direct data link between the coupon processing station and the check-stand, whereas in the claimed invention there is no such data link between the voucher terminal and POS terminal. In US2003/0167203 there is a data link 524 between the list insertion hub (which is effectively part of the coupon processing station) and the arrangement 521 of an establishment computer 520 and a plurality of check-stands 500. There appears to be no positive indication that the data link 524 is to the establishment computer 520, and not the check-stands 500, but this would appear to be the most likely method of operation given that the establishment computer needs to receive data from the list insertion hub, and the check-stands communicate with the establishment computer to retrieve said data. A skilled person would therefore understand that, whilst there could be a direct data link between the list insertion hub and the check-stands, such a data link is not necessary for the operation of the system. Further, although it is understood that the claimed invention similarly does not need a direct data link between the voucher terminal and POS terminal, this is not explicitly defined in the claims, and in fact page 8 lines 17-18 of the description of the invention actually contemplates such a data link between the voucher terminal and POS terminal. Therefore, I see no contribution in the arrangement of hardware. The arrangement of the invention includes a voucher terminal and a POS terminal each operatively connected to a data server, whereas US2003/0167203 discloses a coupon processing station and a check-stand each operatively connected to an establishment computer. The difference, and a possible contribution, is how data relating to the vouchers is transferred from the voucher terminal to the POS terminal, as previously identified.

- 26 Whilst the arguments presented by Mr Hutchinson addressed issues relating to the standard size of the printed voucher, the arrangements of hardware, and how the data is transferred between the pieces of hardware, it is noted that claim 1 of each application, whilst identical for their most part, contain differing characterising features in their final lines.
- 28 Claim 1 of GB1212403.8 defines “and wherein the POS terminal is configured to print till receipts comprising standardised portions that are readable by the scanner of the voucher terminal”. This is not disclosed in US2003/0167203. However, it is well known for vouchers to be printed (e.g. on the reverse) of receipts, and for these vouchers to include scannable data (e.g. a barcode). Therefore, the provision of a voucher on a till receipt which can be read by the voucher terminal is not considered to be a contribution - i.e. nothing has been added to the stock of human knowledge.
- 29 Claim 1 of GB1418078.0 defines “the data server being adapted to record and collate data about the outputted data-bearing vouchers and the redemption of the vouchers by the POS terminal and wherein the data server comprises a web-based user interface that users, or potential users, of the system can access via user login details”. The recording and collating of data is disclosed in US2003/0167203, the establishment computer necessarily doing this in processing data from the coupon processing station and check-stand to allow redemption of the shopping list of coupons. Further, US2003/0167203 discloses, with particular reference to paragraph 0028, that the controller (110, figure 3) can act as an internet server so that users can assemble a shopping list online, and then either print this out themselves, or present identification (e.g. a credit card) at an in-store coupon processing station where the shopping list is printed for them. It is obvious (if not implicit) that, for printing an online assembled shopping list in-store, some sort of user login details would be required. The controller 110 and establishment computer 520 in combination can be considered to be parts of an overall data server, and so the identified feature does not form a contribution over US2003/0167203.
- 30 So what is the contribution? In my opinion, as a matter of substance, the contribution in both cases resides in a new arrangement for redeeming vouchers in a retail setting in which a non-standard voucher, which potentially cannot fit within the drawer of a POS device because of its size or shape, or cannot otherwise be retained because it resides on the screen of a customer’s smart phone, is scanned to produce a standardised voucher having a pre-set layout, size and format which will fit within the drawer.
- 31 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 known in the art to use a network of conventional computers or servers, interconnected with a POS terminal, and a separate scanner or voucher terminal to print vouchers for redemption at the POS terminal e.g. at the supermarket checkout (US2003/0167203 provides a good example of this), and there is nothing to suggest that the arrangement of hardware being used here is anything other than conventional. Furthermore, I do not consider the fact that the standardised voucher carries machine readable data necessary for redemption of the voucher at the POS terminal to be a part of the contribution as this would seem a necessary requirement.

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

- 32 The examiner argues that voucher redemption is a business process, and that the fact that the contribution relates to a specific voucher redemption process is immaterial. The examiner agrees that there is a process existing outside of the computer, this being a process for voucher redemption. However, he is unable to find a technical problem which has been solved by the invention, and so considers that the contribution falls within the “method of doing business” and “computer program” exclusions.
- 33 Mr Hutchinson’s arguments are most recently set-out in his letter of 5 May 2015 and I do not intend to repeat them here in their entirety.
- 34 In his arguments, Mr Hutchinson referred to a previous decision *BL O/312/08* in which it was decided that an improved electronic point of sale (EPOS) apparatus was not excluded from patentability as a business method or a computer program. However, this was on the basis that a contribution made by the invention was a new arrangement of physical hardware, whereas in each of the present inventions it has been concluded that there is no contribution in the physical arrangement of the hardware, and therefore the relevance of *BL O/312/08* is limited at best.
- 35 I will first consider whether the contribution relates to a business method as such, and then only look at the computer program exclusion if necessary. In doing so, it is noted that Mr Hutchinson’s comments relating to the signposts outlined in paragraph 40 of *AT&T*⁴ relate to the computer program exclusion and cannot be readily applied to the test for an alleged business method.
- 36 In previous correspondence, the examiner and Mr Hutchinson have discussed the technical nature of the main problem solved by the invention - the storing of non-standardised vouchers in a POS terminal drawer. This was again discussed in the hearing. The examiner’s view is that this is a business problem, not a technical problem. However, Mr Hutchinson would have me believe that replacing a non-standard voucher, with a standardised one having a pre-set layout, size and format which will fit within the drawer of a POS device is an inherently technical problem, and that printing and sizing of the voucher to fit in the drawer is a technical solution to that problem.
- 37 Furthermore, he argues that invention provides added security in that where the original non-standard voucher resides on the screen of a smart phone, there is no requirement for customers to present their phone at the checkout where it could be used to authorise contactless payments or the like without the customer’s knowledge. Improved security measures such as encryption he argues are inherently technical in nature.
- 38 Whilst I have some sympathy with Mr Hutchinson’s arguments, I cannot escape the fact that the invention(s) relate solely to a business process, and that the redemption and storage of vouchers for later reconciliation is part of that process, and that in his own words the contribution has “*at its core the replacement of one type of voucher*

⁴ AT&T Knowledge Ventures LP [2009] EWHC 343

with another", one which having a pre-set size will fit in the drawer of the POS device. There is no doubt in my mind, that the mere replacement of a voucher with one of a different size constitutes nothing more than an improvement to that process, and does not provide a technical contribution sufficient to save the invention from exclusion. Whilst I agree that encryption techniques are inherently technical in nature, I think the added security benefits to be had here are all associated with the printing of a standardised voucher which is not technical in that sense. Having found no technical contribution, I consider the invention(s) to fall solely within subject matter excluded from patentability as a business method.

Computer program

- 39 Having found the invention(s) to be excluded as a business method, I have no need to consider whether they would also be excluded as a computer program.

Conclusion

- 40 In the light of my findings above, I conclude that the invention as claimed in both GB1212403.8 & GB1418078.0 excluded under section 1(2) because it relates to a business method as such. Having read the specifications in each case, I do not think that any saving amendment is possible. I therefore refuse both applications under section 18(3).

Appeal

- 41 Any appeal must be lodged within 28 days after the date of this decision.

PETER SLATER

Deputy Director, acting for the Comptroller