



PATENTS ACT 1977

APPLICANT Mr James Anthony Powell

ISSUE Whether patent application GB1405589.1 complies
 with sections 1(2), 3 and 14(3) of the Patents Act
 1977

HEARING OFFICER Dr C L Davies

DECISION

Introduction

- 1 This decision concerns patent application GB1405589.1 entitled "Fraud proof utility credit-debit I.D card" which was filed on 28 March 2014 by Mr James Anthony Powell, an unrepresented applicant, and published as GB2524575 on 30 September 2015.
- 2 Having reached an impasse following multiple rounds of correspondence, in a letter dated 15 September 2017 the examiner set out the issues to be decided either at a hearing or based upon the papers, should Mr. Powell not request to be heard on the matters. Mr Powell made no such request and so the matters have come before me to decide based upon the papers.

The invention

- 3 The application as filed consists of one page of description with two claims and concerns a payment card, either debit card or credit card to be used only to pay utility bills and having a code made up of numbers, which code is derived from the house number and postcode of a householder.

The claims

- 4 Although two claims were originally filed, a single claim was filed with a letter dated 21 August 2017. My decision will be based upon this claim, which is as follows:

A fraud proof debit card said card including a pan-card number – the card number is belated (sic) to the card holders post code and house number, and can only be used to pay a utility bill for the said property that the debit card number is allocated to by ones bank card services, the said debit card cannot be used to make any other payments not associated with the utility bills of the card holder, the said utility debit card is 100% fraud proof

- 5 Whilst the description has been amended since the application was filed, I note that no amendments to the description have been made that correspond to the claim as currently amended.

The issues to be decided

- 6 The issues for me to decide are (i) patentability i.e. whether the invention falls into one or more of the categories set of in section 1(2) of the Patents Act 1977, (ii) inventive step, i.e. whether the application complies with section 3 of the Patents Act 1977 and (iii) sufficiency, i.e. whether the specification discloses the invention clearly and completely enough to be performed by a person skilled in the art, as required by section 14(3) of the Patents Act 1977. I shall deal with each of these in turn.

Patentability, section 1(2)

- 7 The relevant parts of section 1(2) state:

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;

...

(c) a scheme, rule or method for performing a mental act, playing a game or doing business, or a program for a computer;

...

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.

- 8 Current practice in this area derives from the judgement in *Aerotel Ltd v Telco Holdings Ltd & Ors Rev 1* [2006] EWCA Civ 1371, [2007] RPC 7 (*Aerotel/Macrossan*) which sets out the following test to decide the issue of excluded matter:

- (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.

Step 1: Properly construe the claim

- 9 The current claim is directed to a debit card, presumably a card associated with some source of funds such as a bank account which can be used to make payments from those funds. It is not clear from the application as filed quite how Mr Powell intends that payments can be made using the card e.g. by contactless payment means, by providing certain information over the telephone or using a personal identification number. However, whilst the claim is specifically directed to a debit card, it seems to me that the invention claimed amounts to somewhat more than a card *per se*. Whilst the characterising features of pan card number and restriction of

use discussed below are necessarily embodied in the debit card, those features are in fact features of a larger card-based payments system involving a source of funds and controlling authority assigning the card number and authorising payments.

- 10 A pan card number is required by the claim, which number is said to be belated, which I take to mean related, to the card holder's post code and house number. In what way the pan card number is related to the house number and post code is not described in any detail, except that it consists of just numbers and is said to be a translation of the post code and house number. It seems that almost any relationship would fall within the scope of the claim, although I feel that the inventor has in mind a direct relationship. By this I mean one in which the pan card number directly derives from the characters of the house number and postcode rather than for example simply being associated with an account holder and their address, as is the case with a typical debit or credit card.
- 11 The use of the card is explicitly limited to paying a utility bill by the claim. The utility bill must be "for the said property", which I take to mean the property bearing the card holder's post code and house number. Utility bills are described in the application as being "*gas electric water rates TV licence telephone landline*". It is not made clear how the use of the card is limited in this way. The claim also specifies that the card is fraud proof and repeats this as 100% fraud proof. Quite how this is delivered is also not clear, but in the absence of further information I suppose that Mr Powell intends that either the pan card number or the limitation to paying a utility bill or a combination of the two necessarily prevents fraud. The description talks of a post code and house number consisting of letters and numbers. Whilst post codes in the United Kingdom do include letters, this is not necessarily the case elsewhere and I think a skilled reader would not understand the claim to be restricted to a pan card number derived from a post code and house number in which the post code includes letters.
- 12 Therefore I construe the claim as follows: a card-based payments system comprising a debit card carrying a pan card number directly derived from the characters of the house number and postcode of the card holder, use of the card being restricted to utility bill payments.

Step 2: identify the actual contribution

- 13 The step of identifying the contribution was summed up in *Aerotel/Macrossan* as "*What has the inventor really added to human knowledge*"? In this case there seem to be two aspects to the claimed invention: the pan card number, i.e. a number directly derived from a house number and a post code, and the restriction as to use of the card. Although there is a separate question as to whether these aspects are inventive, it seems that the contribution must lie in a combination of these aspects.

Step 3: ask whether it falls solely within the excluded subject matter

- 14 Deriving a number from a series of letters and numbers does not strike me as the stuff of invention. In general I would take a mathematical method as one which is carried out on numbers and provides a result in numerical form. In this case the method may be carried out on letters and numbers to provide a result in numerical form. However, I do not see that in this case this makes any difference and at heart

deriving the pan card number is a mathematical method and as such excluded from patentability.

- 15 The examiner was of the view that restricting the use of a payment means to utility bill payments is a method of doing business. I can see no reason to disagree with this view. It is clear from *Aerotel/Macrossan* that an excluded business method need not relate to an entire business, but may be a more specific activity. In this case I take the restriction to amount to authorising certain specific classes of transaction and refusing others within the larger business of managing a card-based payments system.
- 16 I do not see that combining these two aspects of pan card number and restriction of use results in a contribution that is not excluded from patentability.

Step 4: check whether the actual or alleged contribution is actually technical in nature

- 17 The final step in the *Aerotel/Macrossan* test is to check whether the actual or alleged contribution is actually technical in nature. It follows from what I have said above that in this case I do not believe that the contribution is actually technical in nature.

Inventive step, section 3

- 18 Section 3 provides that:

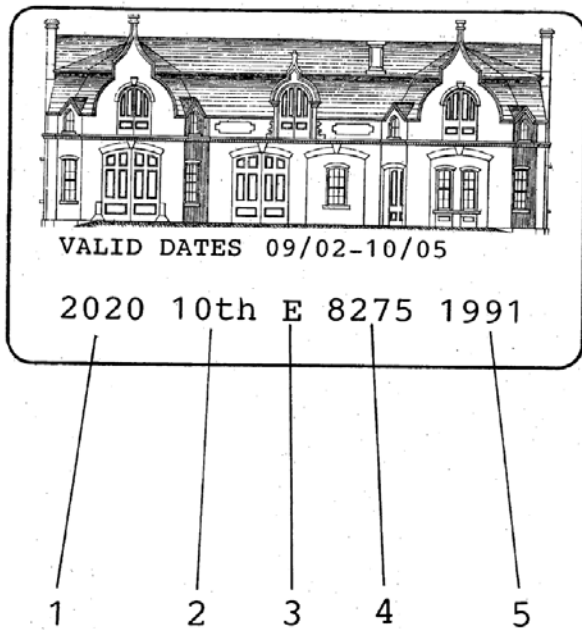
An invention shall be taken to involve an inventive step if it is not obvious to a person skilled in the art, having regard to any matter which forms part of the state of the art by virtue only of section 2(2) above (and disregarding section 2(3) above).

- 19 The standard approach to considering questions of inventive step was set out in *Pozzoli SPA v BDMO SA* [2007] EWCA Civ 588, the steps in the reformulated *Windsurfing/Pozzoli* approach being:

- (1)(a) Identify the notional “person skilled in the art”
- (1)(b) Identify the relevant common general knowledge of that person;
- (2) Identify the inventive concept of the claim in question or if that cannot readily be done, construe it;
- (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 the claim as construed;
- (4) Viewed without any knowledge of the alleged invention as claimed, do those differences constitute steps which would have been obvious to the person skilled in the art or do they require any degree of invention?

- 20 Here the person skilled in the art would be an individual, or a team, knowledgeable regarding both credit and debit card-based payments systems and fraud avoidance in such systems. I also believe that such a person or team would be aware of cards with restrictions as to their use as part of their common general knowledge.
- 21 I have already construed the claim above as relating to a card-based payments system comprising a debit card carrying a pan card number directly derived from the characters of the house number and postcode of the card holder, use of the card being restricted to utility bill payments.

- 22 The examiner has cited two prior art documents from the same applicant that are each, separately said to demonstrate that the invention is obvious. US2003/0137146 and US2005/0015337 were both published well before the priority date of Mr. Powell's application. US2003/0137146 describes briefly a credit card that "uses a person's telephone number and address as its numbers". US2005/0015337 describes a billing system and shows a credit card carrying personalised information as shown in the following figure:



- 23 The references are described as follows: "1 Shows a person's address, this number twenty twenty will be matched up with a person's shipping address by the merchant. The second number tenth 2 will also be matched for the person's street address. If a person lives in a apartment building the merchant will translate this letter 3 into a number. In this case the E is translated into the number 5 for the fifth letter of the alphabet. 4 Is the last four digits of a person's telephone number. The merchant will use caller ID and match the digits for non-tangible services. 5 Is a value customer date, showing the merchant how long a person has done business with the bank".
- 24 Both documents refer to "internet services" as an example of a non-tangible purchase. The examiner takes this to be a utility. Neither document provides any further information regarding "internet services" and I cannot agree that they clearly disclose a utility bill payment, still less a restriction to such a payment.
- 25 The differences between the cited documents and the present invention are that the prior art discloses a credit card rather than a debit card and makes no mention of any restriction on the type of payments for which the card may be used.
- 26 In my view the distinction between a credit card and a debit card would be obvious to a skilled person as I have identified them. Equally a restriction as to the use of the card would not require any inventive activity on the part of the skilled person, with such a restriction on intended use being part of their common general knowledge.

Sufficiency, section 14(3)

27 According to section 14(3):

The specification of an application shall disclose the invention in a manner which is clear enough and complete enough for the invention to be performed by a person skilled in the art.

28 As I noted above when construing the claim, the application provides very limited guidance as to how the invention claimed could be realised in practice. That said, it follows from what I have said regarding inventive step that some aspects of the invention claimed would require little further information for them to be performed by a skilled person. For example I believe a skilled person would require little or no assistance to realise the restriction as to use of the card. However, the specification leaves a gap in understanding how one might arrive at a pan card number from a house number and post code. As drafted the claim could encompass any and every relationship between a pan card number and a house number and post code and even with the restriction to a direct relationship that I imposed above, I do not feel that it is reasonable to say that such breadth is enabled without a single illustrative example of the how the numbers and postcode could be related.

Conclusion

29 I conclude that the invention claimed in patent application GB1405589.1 does not comply with section 1(2) of the Patents Act 1977 because it consists of a mathematical method and a method of doing business. I further conclude that the invention is obvious in light of the cited prior art and common general knowledge in the art. Finally I conclude that the specification of the application does not disclose the invention in a manner which is clear enough and complete enough for the invention to be performed by a person skilled in the art. I therefore refuse the application.

Appeal

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

Dr C L Davies

Deputy Director, acting for the Comptroller