

PATENTS ACT 1977

APPLICANT Apple Inc.

ISSUE Whether patent application GB2213917.4 is excluded under section 1(2)(c)

HEARING OFFICER H Jones

DECISION

Background

- 1 Patent application GB2213917.4 relates to the creation of payment accounts on mobile electronic devices for use in the payment of goods and services. It was filed as a divisional application of GB2107446.3 (“the parent application”) on 23 September 2022 and was subsequently accorded the filing date of the parent application (25 May 2021). The parent application has since been withdrawn.
- 2 The examiner has maintained throughout examination of both the parent application and this divisional application that the claimed invention is excluded from patentability under section 1(2)(c) of the Act as being a program for a computer and/or a method for doing business. In his examination report of 1 June 2023, the examiner stated that any further amendment of the claims was unlikely to overcome the objection under section 1(2) and so invited the applicant to request a hearing to decide the matter. Even though the applicant declined to take up this offer, the application has been forwarded to me for a decision off the papers in accordance with the practice of the Office as set out at paragraph 18.80 of the Manual of Patent Practice.

The invention

- 3 The invention relates to a method of converting a restricted payment account on a portable electronic device (e.g. a smartphone) of a first user to a new primary account. The restricted payment account is a sub-account of a primary account of a second user, for example a parent of the first user. When the first user’s portable electronic device determines that the age of the first user reaches a particular threshold, the first user is presented with a conversion option to enable conversion of the restricted account to a new primary account. If the conversion option is selected, the user device communicates with a payment service to verify the identity of the first user and receives a message indicating successful creation of the new payment account. Conversion to the new payment account effectively breaks the ties with the parent’s primary payment account and the parent can no longer place restrictions on the child’s account: information such as transaction history is no longer shared with the parent.

- 4 In short, the invention is concerned with two different account situations; one based on a trusted relationship (child and parent) and one having two independent adults, with a process of converting from the trusted relationship to an independent relationship based on the age of the child. The invention is described as providing several advantages that improve the security of establishing payment accounts and that protect user privacy.
- 5 The amended claims filed on 2 October 2023 include three independent claims (1, 4 and 7) directed to a user device, a computer-implemented method and to one or more computer-readable media. Claims 1 and 7 include a processor for executing broadly the same method steps as set out in claim 4, so all three claims will stand or fall together. Claim 4 reads as follows:

4. A computer-implemented method, comprising:

performing contactless transactions;

detecting that an age of a user of a first user device account meets or exceeds an age threshold, the first user device account associated with a restricted mobile payment account that is a subaccount of a primary mobile payment account of a second user device account, wherein the first user device account is associated with a user device;

presenting a conversion option at a user interface of the user device based at least in part on detecting that the age of the user of the first user device account meets or exceeds the age threshold, the conversion option enabling conversion of the restricted mobile payment account to a new primary mobile payment account of the first user device account;

responsive to a selection of the conversion option at the user interface, communicating with a payment service to verify an identity of the user of the first user device account, wherein communicating comprises providing device metadata to the payment service to verify the age and, responsive to a request from the payment service, providing user account information to the payment service to verify additional user account details; and

receiving a communication indicating successful creation of the new primary mobile payment account,

wherein the method further comprises, prior to presenting the conversion option, sharing information about transactions initiated at the user device with a different user device associated with the second user device account, and

wherein the method further comprises, after receiving the communication indicating successful creation of the new primary mobile payment account, refraining from sharing information about transactions initiated at the user device with a different user device associated with the second user device account;

wherein the method further comprises, prior to presenting the conversion option, establishing the restricted mobile payment account by at least:

presenting at confirmation user interface that includes a confirmation option; and

responsive to a selection of the confirmation option, presenting an authentication user interface to verify the identity of the user.

The Law

- 6 The relevant legal provision is section 1(2) of the Patents Act 1977, which says that certain things cannot be protected by a patent.

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.

- 7 There is well-established case-law providing guidance on determining whether an invention falls within this exclusion. *In Aerotel Ltd v Telco Holdings Ltd & Ors*¹ the Court of Appeal set out the following four-step test for determining whether a proposed invention is excluded under section 1(2):

- 1) properly construe the claims;
- 2) identify the actual or alleged 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.

- 8 Paragraph 43 of *Aerotel* provides some guidance regarding the second step:

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.

- 9 The examiner has also made reference to *Merrill Lynch's Application*², which discusses the scope of the business method exclusion, and *Halliburton Energy Services Inc's Applications*³, which discusses the relationship between the computer program and business method exclusions.

- 10 At page 569 of *Merrill Lynch*, Fox LJ explained that a method of doing business is excluded even though it may be an improvement on previous methods:

'The fact that the method of doing business may be an improvement on previous methods of doing business does not seem to me to be material. The prohibition in section 1(2)(c) is generic; qualitative considerations do not enter into the matter. The section draws no distinction between the method by which the mode of doing business is achieved. If what

¹ [2006] EWCA Civ 1371

² [1989] RPC 561

³ [2012] RPC 129

is produced in the end is itself an item excluded from patentability by section 1(2), the matter can go no further.¹

- 11 In *Halliburton*, HHJ Birss (as he then was) set out at paragraph 35 that implementing a business method on a computer does not in itself make any technical contribution:

'The business method cases can be tricky to analyse by just asking whether the invention has a technical effect or makes a technical contribution. The reason is that computers are self evidently technical in nature. Thus when a business method is implemented on a computer, the patentee has a rich vein of arguments to deploy in seeking to contend that his invention gives rise to a technical effect or makes a technical contribution. For example the computer is said to be a faster, more efficient computerized book keeper than before and surely, says the patentee, that is a technical effect or technical advance. And so it is, in a way, but the law has resolutely sought to hold the line at excluding such things from patents.'

- 12 The examiner has also considered the guidance as to what constitutes a technical contribution with regard to computer programs found in *AT&T/CVON*⁴ (and reconsidered in *HTC/Apple*⁵), set out as the five signposts below:

- i) whether the claimed technical effect has a technical effect on a process which is carried on outside the computer;
- ii) whether the claimed technical effect operates at the level of the architecture of the computer; that is to say whether the effect is produced irrespective of the data being processed or the applications being run;
- iii) whether the claimed technical effect results in the computer being made to operate in a new way;
- iv) whether the program makes the computer a better computer in the sense of running more efficiently and effectively as a computer;
- v) whether the perceived problem is overcome by the claimed invention as opposed to merely being circumvented.

Arguments and analysis

- 13 I will assess whether the invention is excluded under section 1(2)(c) in accordance with the guidance from *Aerotel*.
- 14 The examiner considers that the claims are clear and can be readily construed, and I agree.
- 15 The examiner has assessed the contribution to lie in converting an existing restricted payment account accessed via a personal electronic device into a new unrestricted account, using personal information stored or used by the electronic device when setting up the original restricted account.
- 16 The applicant says that the contribution lies in four particular aspects: first, the configuration of accounts on child and parent devices and the conversion of accounts that is done in a secure and efficient manner for a human user; secondly, having the child account configured to share information about transactions initiated on the child's device with the parent device, as opposed to being sent directly to the

⁴ AT&T Knowledge Ventures/Cvon Innovations v Comptroller General of Patents [2009] EWHC 343 (Pat)

⁵ HTC Europe Co Ltd v Apple Inc [2013] RPC 30

payment device; thirdly, to refrain from sharing information about transactions initiated on the child device with a parent device when the unrestricted account is established on the child device; finally, converting from a restricted account to an unrestricted one based on information stored locally as opposed to data stored remotely, outside the user's control. The applicant says that the claimed user device controls what information is shared and therefore can control stopping such sharing directly. Additionally, age verification is done by use of device metadata following inputs from a user at the device, rather than by a system which is remote from the device, thus making personal data more secure.

- 17 For the purpose of my own assessment, I do not think there is much distinction between the examiner's view of the contribution and that of the applicant, although the applicant's assessment does set out the purported advantages of the invention, namely the conversion of accounts from restricted to unrestricted in a secure and efficient manner, more explicitly. I will adopt the examiner's assessment of the contribution for present purposes but keep in mind the advantages identified by the applicant, as the guidance in *Aerotel* suggests.
- 18 The next step is to consider whether the contribution falls solely with excluded subject-matter. The examiner considers that the contribution lies in the business administration method of converting a payment account into a new primary account on a personal electronic device. He suggests that the problem addressed by the invention is a business administration problem and that the solution is no more than software code running on known computing equipment. He relies upon the above-referenced guidance from *Halliburton* in concluding that mere use of a computer to implement a business method does not make a computer-implemented business method technical.
- 19 I agree with the examiner that the process of converting a restricted payment account to an unrestricted account based on the age of a user is a business method. As is clear from *Halliburton*, the fact that the conversion process takes place on an electronic device based on metadata stored on the device does not make the business method technical. While the security of personal information is an important consideration in any business, I do not consider that the invention provides a technical solution to a problem concerning security of personal data: rather, it seems that the computer-implemented business method is adapted to avoid the sharing of personal data based on information already held within the electronic device. None of the signposts to technical contribution appear relevant in this case. In the case of signpost 5, which addresses the technical character of an invention by means of the problem addressed (i.e. the invention directly solves a technical problem, not simply circumvents it), I consider that the problem of sharing personal data is circumvented through a non-technical modification of the authorisation requirements of the business process, i.e. a reconfiguration of software code on the electronic device, which *Halliburton* suggests is not sufficient to bestow technical character.

Conclusion

- 20 The application is refused under section 18(3) because the application relates to subject-matter excluded from patentability under section 1(2)(c), namely a method for doing business and a program for a computer.

Appeal

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

Huw Jones

Deputy Director, acting for the Comptroller