



PATENTS ACT 1977

APPLICANT Jayvinder Singh A/L Surjit Singh

ISSUE Whether application GB1912805.7 complies with
Section 1(2) of the Patent Act 1977.

HEARING OFFICER Dr Stephen Brown

DECISION

Introduction

- 1 Patent Application GB1912805.7 has a filing date of 5th September 2019. It claims a priority date of 19th September 2018 from Malaysian application PI2018703348. The application was published as GB2577399 on 25th March 2020. On 31 December 2019, the Examiner issued a Search report under Section 17(5)(b) stating that the “search would serve no useful purpose”. The search report was accompanied by an Examination Opinion setting out an objection under Section 1(2)(c). The applicant was unable to satisfy the examiner that the application met the requirements of Section 1(2)(c) and a hearing was subsequently requested to resolve this matter.
- 2 This took place on 7th October 2022 by video. The applicant was represented by Dr Howard Sands of Boulton Wade Tennant LLP, to whom I would add my thanks for his skeleton arguments. My assistant, Dr John Cullen, was also present at the hearing.

The Application

- 3 The application concerns a system which matches providers of security services, or chauffeur services, with users requesting such services.
- 4 The system includes a server; a user module, which is downloaded onto the computing devices of users who wish to request security or chauffeuring services; a personal security candidate module, which is downloaded onto the computing devices of candidates offering those services; and an admin module, which runs on another computing device. The three modules communicate with each other over a communications network. The user module and candidate module may be smartphone apps. The providers of security/chauffeuring services use the candidate module to register their details with the system. The users register their details and request and order services through the user module. The admin module tracks such orders.

- 5 The user module allows a user to specify a booking type. That is, the user module allows a user to specify whether a request for security/chauffeur services should be fulfilled immediately (i.e. in “real-time”) or is to be booked for a future time specified by the user. This latter option is referred to as a “scheduled” booking. The user module also allows a user to select a category of service (e.g. bodyguard, chauffeur, or security guard for premises) and a uniform to be worn. The user module presents a list of suitable candidates and invites a user to select a candidate. The user module transmits its location and updates the location until the selected candidate reaches the user.
- 6 The claims were amended on 13 May 2022. There are two independent claims: Claim 1, a method claim, and claim 5, an apparatus claim. The Examiner’s pre-hearing report, of 3 August 2022, argued that amended claim 5 was broader than amended claim 1. That report therefore concentrated on claim 5 when assessing Section 1(2). At the hearing, Dr Sands indicated he was content to also focus on claim 5. I will therefore initially decide whether the invention of claim 5 meets the requirements of Section 1(2) and will return to claim 1 later. Amended claim 5, as filed on 13 May 2022, is reproduced below:

5. *A system for providing a real-time personalized security services by a personnel administration to a user, said system comprising:*

- a user module in a server of the system by providing the user to download as a software application in a user’s computing device and register the details of the user into the system for allowing the user to place an order for requesting personalized security services using the user’s computing device wherein the user is allowed to select personalized security services based on booking type and type of services, selection service category of personalized security services, selection of uniform of the selected personal security candidate, wherein if the selected option for the booking type is a schedule booking for the personalized security services, providing a list of personal security candidates available in the database of the server as per scheduled time and date requested by the user for selection;*
- a personal security candidate module in the server of the system by providing a personal security candidate to download as a software application in a computing device and register in the system as personal security candidate wherein the registered personal security candidate is ready to be selected by the user in the user’s computing device to provide the personalized security services in real-time and scheduled time and date; and*
- an admin module in the server of the system by providing a personnel administration to download as a software application in a computing device to manage each order and request placed by the user in a software application in the computing device by tracking each order and request placed by the user and monitor status of each order and request from the user for the personalized security services in real-time and scheduled time and date, wherein*

- the system is linked together through a communications network, characterized in that*
- the user module, the personal security candidate module and the server are configured to encrypt the data being transmitted along with a*

username, password, time, location, biometrics, public or private cryptographic key, other security identifiers, or other information, and to verify the user transmitting the data, and to verify the time and location from where the data was transmitted, wherein the user module is further configured to update a location data until the user and the selected personal security candidate are collocated.

The Law – Section 1(2)

- 7 The section of the Act concerning inventions excluded from patentability is Section 1(2). This reads:

“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 –

...

(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 In order to decide whether an invention relates to subject matter excluded by Section 1(2), the Court of Appeal has said that the issue must be decided by answering the question of whether the invention reveals a technical contribution to the state of the art. The Court of Appeal in *Aerotel/Macrossan*¹ set out the following four-step approach to help decide the issue:

- 1) Properly construe the claim;
- 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.

¹ *Aerotel Ltd v Telco Holdings Ltd (and others) and Macrossan’s Application* [2006] EWCA Civ 1371

Application of the Aerotel Test

Step 1 - Properly construe the claim

- 9 The first line of claim 5 refers to “*providing a real-time personalized security services*”. The next part of claim 5, which sets out the features of the user module, requires the user to be allowed to select a booking type but the only booking type explicitly referred to is a scheduled booking. The description makes clear² that an essential feature of the invention is the ability of a user to select between two different booking types: real-time (i.e. immediate) booking or scheduled booking. I therefore construe claim 5 to provide a system which allows a user to select between a real-time booking and a scheduled booking of services, the latter requiring a service to be delivered at a later, user selected, time. Because claim 5 refers to selection of a booking type and to providing real-time services, I believe that the claim cannot reasonably be construed as being limited to scheduled bookings.
- 10 I note that the term “personalized security services” does not appear to cover all the different categories of services listed in dependent claim 6, and at lines 7-17 of page 13 of the description. For example, to my mind, “chauffer services” falls outside the scope of “personalized security services”. However, this clarity point is not crucial to the assessment of Section 1(2) and I will construe ‘security services’ to include chauffeuring in this instance.
- 11 The next 3 parts of claim 5 are easier to construe. These parts set out the claimed features of the user module, the candidate module and the admin module. The claimed features of these modules are largely self-explanatory, when considered in the light of paragraphs 9 and 10 above. Dr Sands confirmed that the modules are software applications. I understand from claim 5 that the user, candidate and admin modules are software applications suitable for downloading onto respective computing devices, such as smartphones. Once downloaded, the modules communicate through a communications network.
- 12 Claim 5 goes on to claim that data transmitted by the modules is encrypted. The penultimate part of claim 1 refers to the modules being configured “*to verify the user transmitting the data, and to verify the time and location from where the data was transmitted*”. Dr Sands suggested this would prevent a malicious actor from pretending to be security personnel. However, in the earlier parts of claim 5, the term “user” refers to a user of a user module and “personal security candidate” refers to a user of the candidate module. Furthermore, I can see nothing in the description³ which unambiguously discloses that personal security candidates’ identities are verified or that the location and timing of their transmissions are verified. It seems to me that the verification features of claim 5 need apply only to data from the user module. The description does not expand on what is meant by “verify the time and location” and so I conclude that, here, “verify” means nothing more than ‘determine and transmit’. I therefore construe the penultimate part of claim 5 as claiming: (1) that the system verifies (i.e. authenticates) the identity of the user operating the user module and (2) when the user module transmits data it also provides the module’s

² For example, at line 26 of page 12 to line 5 of page 13, as originally filed.

³ See for example lines 11-24 of page 17

location and the time of the data transmission. The final part of claim 5 (updating location data) is self-explanatory.

Step 2 - Identify the contribution

- 13 Dr Sands considered the contribution to lie in the features discussed in the immediately preceding paragraph. If I understood him correctly, Dr Sands argues that the contribution is a system for assigning a personal security job to a user, the system including a user software application, a personal security candidate application and an admin software application. Furthermore, the applications exchange encrypted data over a communications network and the system verifies (the identify of) a user of the user software application. The user software application provides time and location information when it transmits data and updates the location data until a personal security candidate reaches the user.
- 14 I am sceptical this alleged contribution accurately reflects the actual contribution. There are several key features of the user module of claim 5 which have been omitted from the above contribution, including selecting between real-time and schedule bookings, for example. However as these omitted features are clearly non-technical in nature, I am satisfied that their omission will not disadvantage the applicants.
- 15 Furthermore, at least some of the features of Dr Sands' contribution appear, *prima facie*, to have been well-known at the priority date. For example, UBER^{RTM} provided rider location tracking prior to a driver arriving⁴ to pick up the rider. This seems very similar to the location updating step of the present invention. However, for the sake of argument, I shall proceed based on Dr Sands' contribution for now.

Step 3 – Ask whether the contribution falls solely within excluded subject matter

i. Method of doing business

- 16 Dr Sands observed that the invention did not relate to a single program running on a single computer, but to three different software applications running on three different computers, linked by a communications network. This, he argued, provided a technical contribution. However, I note that in paragraph 30 of Lantana⁵, which the Examiner referred to in their pre-hearing report, Birss J stated:

"I start by noting that this invention consists entirely of software running on a conventional computing arrangement. I use the term "computing arrangement" rather than computer because the applicant is at pains to point out that this system requires two computers connected by a "telecommunications network". So it does but at the relevant date (2008) two

⁴ Bruce Brown, "Uber's surveillance feature tracks your location before and after your ride", 3rd December, 2016; digitaltrends; <https://www.digitaltrends.com/mobile/uber-rider-location-tracking/>.

⁵ *Lantana v Comptroller-General of Patents* [2013] EWHC 2673 (Pat)

computers connected across the internet was an entirely conventional computing arrangement. The fact that two computers and the internet are required is not what makes a software invention patentable”.

- 17 It follows from Birss J’s analysis that, an invention which would be excluded under Section 1(2), if implemented on a single computer, is not saved from exclusion merely by implementing the invention across multiple networked computers. I therefore do not accept Dr Sands’ argument.
- 18 I do not agree either with Dr Sands suggestion that encrypting data transmissions provides a technical contribution. At the priority date, it was well known for software applications to encrypt data before transmitting it over a network. I accept that new methods of encryption can make a technical contribution but the mere use of a known or unspecified method of encryption does not provide the necessary technical contribution. Similarly, verifying the identity of a user is an entirely conventional feature of software applications and therefore does not make a technical contribution.
- 19 Dr Sands also argued that providing and updating location data provided a technical contribution, but again, this appears to have been well known, as was providing data transmissions with timestamps.
- 20 It is helpful to step back from the individual features, and consider the invention as a whole. In essence, the invention is a set of software applications for matching and assigning security personnel to a user, and for updating the location of the user, presumably to direct the assigned security personnel to them. This is, in my view, a purely administrative activity. I thus decide that the invention of claim 5 is excluded under section 1(2)(c) as a method of doing business as such.
- 21 While not discussed at the hearing, I am reassured that my decision is consistent with Office Decision O/800/18, in which the Hearing Officer decided that the provision of directions to enable a fugitive to be captured was a method of doing business⁶.

ii. Program for a computer

- 22 The Examiner also considered the invention to be excluded as a program for a computer as such. The AT&T signposts (as revised by Lewison LJ in *HTC v Apple*⁷) are often used as guidance when assessing whether a computer program makes a relevant technical contribution. However, at the hearing Dr Sands indicated he did not consider the signposts to be relevant here. I agree that it is not necessary to consider the signposts in detail. I note only that the software applications of the present invention clearly operate at the application level rather than the architectural level; they do not make the computers operate in a new way and nor do they make the computers better computers. Furthermore, I have identified that the external process enacted by the invention is a business method, thus the software

⁶ Motorola Solutions, Inc BL O/800/18

⁷ *HTC v Apple* [2013] EWCA Civ 451 at [148]-[151]

applications do not provide an effect on a *technical* process carried on outside of the computer(s). Overall, the invention of claim 5 is clearly nothing more than application-level computer programs running on conventional computing arrangements. I thus consider the invention of claim 5 to also be excluded under Section 1(2)(c) as a computer program as such.

Claim 1

- 23 Claim 1 was amended on 13 May 2022 to include the limitation that “the selected option for the booking type is a scheduled booking”. The Examiner therefore construed claim 1 to be limited to scheduled bookings and he also considered the amendment to add matter. Dr Sands agreed with the Examiner’s interpretation of the claim but disagreed that the amendment added matter.
- 24 The scheduled booking limitation aside, method claim 1 is directed to almost identical subject matter to claim 5. Furthermore, Dr Sand’s alleged contribution is silent with respect to booking type and in any case the booking type could not possibly provide the required technical contribution. I therefore consider claim 1 to be excluded as a business method and a program for a computer as such, for the same reasons as claim 5. It is thus not necessary for me to consider whether the amendments to claim 1 add matter.

Step 4 – Ask whether the contribution is actually technical

- 25 The final step of the *Aerotel*¹ test is to check whether the contribution is technical in nature. Since I have decided that it does not have a technical effect beyond that of programs running on computers, it also fails this step of the test. I thus decide that the invention is excluded under section 1(2).

Decision

- 26 I have decided that the invention defined in the claims falls solely within matter excluded under Section 1(2) as a method for doing business and a program for a computer as such. Having reviewed the application, I do not consider that any saving amendment is possible. I therefore refuse this application under Section 18(3).

Appeal

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

Dr Stephen Brown

Deputy Director, acting for the Comptroller