



PATENTS ACT 1977

APPLICANT	Sunmeet Singh Jolly
ISSUE	Whether patent application GB1916844.2 is excluded under section 1(2)c of the Patents Act 1977
HEARING OFFICER	Ben Buchanan

DECISION

Background

- 1 The applicant, Sunmeet Singh Jolly, filed a GB patent application, entitled 'Mobile and computing applications, systems and methods for large group travel and event management', with the IPO on 19 November 2019. It was assigned the application number GB1916844.2. The application claims priority from a USPTO application of 21 November 2018. The GB application has subsequently been published with the number GB2580508A.
- 2 Although a request for search was made, no prior art search was carried out. Instead, the examiner reported that a 'search would serve no useful purpose' under the provision of section 17(5)(b) of the Patents Act 1977 (hereinafter 'the Act'). This is because the examiner deemed the subject of the application to be unpatentable, and therefore there to be no merit in searching for it (including among other non-patentable disclosures). They also issued an Examination Opinion to explain this course of action, in view of their assessment that the invention was excluded under section 1(2)(c) of the Act as a method for doing business and program for a computer 'as such'.
- 3 A request for examination was subsequently filed and an Abbreviated Examination Report was issued. The report essentially adopted the Examination Opinion of the search examiner, maintained a search would serve no useful purpose and deferred assessment of the application with respect to all other substantive examination matters.
- 4 The applicant subsequently responded through their then representative with reasoned argument (no amendments were offered). The examiner re-examined the application but found themselves unpersuaded and maintained an objection to excluded matter. A hearing was offered and duly accepted, with the intent that the applicant would attend and represent themselves.

- 5 The hearing was arranged for 29 November 2023. On the day, the applicant failed to attend and subsequently requested a decision on the papers instead. I will therefore issue a decision considering the application as it stands, together with the supporting arguments presented in the applicant's representative's most recent reply, no other arguments being present, and in view of the legal basis relied upon by the substantive examiner in making their objection.

The Application

- 6 The patent application concerns a method and system for managing group travel and events. It describes a custom built software application ("app") that utilises mobile smartphones (their computing power, storage, physical user interface abilities and camera) along with associated computer networking and internet cloud capability, to enable the administration of user accounts, creation of travel surveys, the carrying out of voting for group choices, organising and sharing of photos (along with external links), group expenditure management, calculation and settlement of funds, and event notification through push notification along with SMS and email. The invention enables group chats to be managed relating to a specific trip and allows easy searching, filtering and deletion of records that are stored in a database in the cloud.

The Claims

- 7 There are two independent claims (1 and 7) as follows:

1. A method of managing group travel and events using mobile smartphone and computer applications comprising: downloading a mobile app from apple app store and installing it on smartphones running on ios operating system; downloading a mobile app from google play store or another android store and installing it on smartphones running on android operating system; creating user accounts with unique identification that may include mobile phone number and email address to sign up users from around the world; administering user accounts providing admin account holders the ability to analyze, disable or delete user accounts or user data; giving users an ability to invite other users using phone numbers or email addresses so they can collaborate in private groups using different functions of the software application; facilitating data and image exchanges between users using internet by creating private invite only networks; creating and deleting virtual private networks based on user needs and functionality implemented in software; processing and storing user data and images using relational databases and cloud computing services; allowing users to create travel survey by picking from a list of questions and answers provided by the software application; allowing users to add additional answer choices and additional questions and answers to expand the scope of travel survey provided by the software application; allowing user groups to respond to travel survey requests and view survey results; allowing users to send event invitations to other users via the application; allowing users to specify a list of potluck items or shared responsibilities for other invited user members to select from; allowing users to view the event invitation and respond with their choices picking potluck items or shared tasks and view what other invited users have picked and what's still available for them to pick; allowing users to create a shared group expense report and invite other users to view expense summary and add expenses and specify the expense participants for each expense for enabling the application to

calculate dues between members; allowing users to use mobile phone camera and photo gallery to add expense receipt images to use mobile phone camera and photo gallery to add expense receipt images corresponding to an added expense; maintaining a ledger balance with photo receipts for corresponding to an added expense; maintaining a ledger balance with photo receipts for expense reports in cloud storage; allowing users to create photo albums in cloud storage cloud storage; allowing users to create photo albums in cloud storage along with hyperlink storing and photo thumbnail displaying ability in each photo album; along with hyperlink storing and photo thumbnail displaying ability in each photo album; allowing users to invite other members to upload, download and share online links to allowing users to invite other members to upload, download and share online links to photos in each gallery; allowing invited users to post comments and have discussions ach gallery; allowing invited users to post comments and have discussions within group trips and events they are planning within group trips and events they are planning.

7. A system comprising of computer hardware, software, internet web services, mobile smartphones, mobile operating systems, mobile applications, web applications, consisting integrated software modules exchanging and processing data and images between user's providing group tools to help in managing group travel and events including but not limited to expandable group travel surveys, event invitations, group expense reports and group photo sharing modules.

The Law

- 8 The examiner has raised an objection under section 1(2) of the Act that the invention is not patentable because it relates to one or more categories of excluded matter. The relevant provisions of this section of the Act are shown in bold below:

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.

- 9 The applicant and their representative have not contested that the assessment of patentability under section 1(2) is governed by the judgment of the Court of Appeal in

*Aerotel*¹, as further interpreted by the Court of Appeal in *Symbian*². These are the precedents that I shall apply here.

- 10 In *Aerotel* the court reviewed the case law on the interpretation of section 1(2) and set out a four-step test to decide whether a claimed invention is patentable:

(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.*

- 11 Subsequently, the Court of Appeal in *Symbian* made it clear that the four-step test in *Aerotel* was not intended to be a new departure in domestic law; it was confirmed that the test is consistent with the previous requirement set out in case law that the invention must provide a “technical contribution”. Paragraph 46 of *Aerotel* states that applying the fourth step of the test may not be necessary because the third step should have covered the question of whether the contribution is technical in nature. It was further confirmed in *Symbian* that the question of whether the invention makes a technical contribution can take place at step 3 or 4.

- 12 In respect of step 2, the Court in *Aerotel* helpfully elaborated upon the approach to take when asking how to assess the contribution at paragraph 43:

“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”

- 13 For the avoidance of doubt, the *AT&T/CVON*³ signposts commonly used in assessing whether or not a claimed invention is excluded a program for a computer have not been applied by the examiner in this case, nor has the applicant made reference to them. I shall therefore not rely on them as an authority here.

The Applicant’s arguments

- 14 The applicant, through their representative, submitted a number of arguments in support of why their invention is not excluded. I present them as follows.
- 15 They argued that since “*claims 1 and 7 are independent claims, they should be examined separately for grant or rejection*”. I confirm that I have assessed both individually, taking into account that one is to a method and the other to a system. I

¹ *Aerotel Ltd v Telco Holdings Ltd & Ors Rev 1* [2007] RPC 7

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

³ *AT&T Knowledge Ventures/CVON Innovations v Comptroller General of Patents* [2009] EWHC 343 (Pat)

have also found it convenient to discuss them separately where appropriate when applying the approach of *Aerotel*.

- 16 The applicant argued that the invention “described in claims 1 and 7 is not simply computer software downloaded on computer or operated via a web browser. Rather, it comprises many hardware components, software components native to each hardware, data processing algorithms, operations on smartphone hardware including but not limited to camera, GPS, antenna, touchscreen controls besides CPU, memory, I/O devices, display and battery. The application also requires Internet cloud components (both hardware and software) including cloud servers, cloud storage, cloud databases, image storage etc. Besides this, the application also uses a web browser operated admin console. It’s important to understand that mobile application software is native to each mobile hardware device and its operating system (OS)”. For ease of reference, going forward, I will call this the *many components argument*.
- 17 They go on to argue that, “traditional chat apps work in a FIFO manner (First in First out) where all messages, media files, links, docs, sheets, files are queued in a time stamped fashion delivered mixed up to chat group users. The claimed invention enhances this user experience **by utilizing smartphone hardware and software components and cloud hardware and software components** to deliver a faster and more organized user interface. For example, claim 7 clearly mentions “exchanging and processing data and images between users” which may include use of smartphone camera to capture images, data compression to reduce media file sizes for faster transmission between smartphone, cloud and other users, compression to reduce storage, and enhancements to display images better and faster, delivering a superior user experience. Therefore, the invention has improvements at user interface level. Furthermore, UK IPO has shown willingness to allow an invention at user interface level (see recent decision *Lenovo BL O/017/20*). As observed by Hearing officer in case above, “User interaction whilst controlling a computer, is a technical field of endeavor”⁴. For ease of reference, going forward, I will call this *the superior user experience argument*.
- 18 The applicant adds to their argument, “the claimed invention also accomplishes better user interaction by working with other applications on user smartphone including but not limited to Calendar, SMS, Phonebook, Photos, GPS, Maps, Ride-share apps, Web Browser and 3rd party APIs (Application Program Interfaces) including Global Currency Conversion, Worldwide SMS, Emails, Push Notifications to name a few. These require hardware and software interaction at multiple technical levels and can’t be simply labelled as “software” or “computer program” for determining “excluded subject matter”⁴. For ease of reference going forward, I will call this *the better user interaction argument*.
- 19 I will address each of the above arguments in my decision. The examiner’s objections can be viewed in the Abbreviated Examination Report of 6 June 2022, referenced again in their Examination Report of 19 June 2023. These documents are available to view on the Office’s online file inspection system IPSUM⁴.

⁴ <https://www.ipo.gov.uk/p-ipsu/Case/ApplicationNumber/GB1916844.2>

Application of the Law

Step 1: construe the claim

- 20 This step is a straightforward exercise in understanding the (proposed) monopoly of the claim. Claim 1 reads as is, is self-explanatory and is clear enough to construe and thus needs no particular further discussion. The claim sets out a method of managing group travel and events using the specified software applications, smartphones with associated hardware components, internet, databases and cloud computing services which provides the defined functionality.
- 21 Claim 7 is directed to a system. The claim contains fewer details than claim 1 and uses some different language. It is directed to a system that provides group tools to help in managing group travel and events with specific components and activities. The claim is more generalised than claim 1 but I think a system carrying out the method of claim 1 would fall within the intended monopoly of claim 7.
- 22 The applicant does not appear to disagree with the examiner over the construction of the claims.

Step 2: identify the contribution

- 23 The specification sets out a variety of problems addressed by the present invention, essentially explaining that existing chat and social media applications are not well equipped to help organise group travel and events particularly when data organisation and analytics become essential (see e.g. paragraph [0003] of the description). Chat applications and social media websites are not adequately equipped to handle group surveys, manage group expenditure and shared responsibility assignment, and organise photos (see e.g. paragraph [0004]). Photos shared via group chat can get lost “*like a needle in a haystack*” or deleted if stored locally to save local storage. It is stated that existing apps do not allow for suitable filtering of messages (see e.g. paragraph [0005]). Some online resources, such as spread sheets, are not suitable for display in a mobile phone web browser. The applicant also raises the issue of “*technology fatigue among consumers when it comes to linking too many technologies together or using too many different apps and websites*”.
- 24 The invention works by using custom apps for group travel and event management to provide the functionality set out in the claims. In the case of the invention of claim 1, at least, these are specified as native to their respective device platforms (e.g. iOS, Android), and employ computer networking, internet cloud, camera functionality, computing power, storage and graphical user interface abilities to enable users to organise group travel and events. The invention largely as claimed and certainly as fully embodied in the description works using the many components highlighted in applicant’s *many components argument*.
- 25 The examiner formulated a single contribution common to both claims 1 & 7. I believe that they were of the view that as a matter of fact the many hardware components (including but not limited to camera, GPS, antenna, touchscreen controls besides CPU, memory, I/O devices, display and battery as well as integration of applications per se between mobile platforms, the internet, databases,

and cloud services) of the applicants *many components argument* were known. They did not, however, consider the group travel and event management app or the integrated associated back-end support services as known. I do not think that the applicant disputes this in their *many components argument*. The applicant's point is well made that their invention is not simply a piece of software downloaded on to a computer.

- 26 The advantage of the applicant's invention is clear. Users are provided with a bespoke mobile app for their smartphone that enables the managing of group travel and events, including group travel surveys, event invitations, reporting expenses and group photo sharing whose functionality is integrated with back-end services. Claim 1 further details the use of apps native to smartphones using different operating systems (thus allowing for the management of travel and events between groups of users having different smartphone hardware), the creation and administration of user accounts, the use of email and phone numbers to allow collaboration in private groups, the creation of surveys, the specification of "potluck" items, the calculation of expense dues between members, the cloud storage of photos of expense receipts along with the creation and cloud storage of photo albums and shared online links.
- 27 '*What has the inventor really added to human knowledge*' is to my mind a computer implemented method for managing group travel and events having the advantages as presented above. The contribution is a computer implemented method in 'substance' irrespective of the form of the claim being directed to a method or system or to there being multiple programs running on separate devices.
- 28 Although the claims relate to the same inventive concept, they are significantly different in scope. No doubt they share a common contribution on some level, but to fully assess the claimed inventions I think it is necessary to at least start by assessing the contribution for each respective claim. In this respect I also acknowledge the applicant's request that the claims be "examined separately" as referenced above.
- 29 Because it is broader, I shall start with claim 7. In claim 7 the system enables the contribution, but I do not think that every conventional component forms a part of it. Similarly, although not explicit in the claim I have relied upon the description for the inherent operation and advantages the invention puts into effect. I would formulate the contribution as:

Enabling groups of users to share data and images via mobile devices, by providing access to tools and services through an application installed on each device; the tools and services enabling users to manage group travel and events using networked services and storage. The advantage is to save users time and effort and to optimise the mobile devices' capability to access and display information.

- 30 Claim 1 effectively builds on the more general contribution of claim 7, with the additional features defined in the claim. The contribution of claim 1 is:

*Enabling groups of users to share data and images via mobile devices, by providing access to tools and services (**including surveys, with associated functionality, allocation of tasks and responsibilities and creation and***

management of shared expenses, uploading of images and receipts, providing links to photos and albums, posting comments and discussions) through an **operating-system-specific** application installed on each device **and creating a user-specific account for each user and admin accounts with specific privileges**; the tools and services enabling users to manage group travel and events using networked services **(including “virtual private networks”⁵)** and storage. The advantage is to save users time and effort and to optimise the mobile devices’ capability to access and display information.

- 31 I have emphasised the additional features over the claim 7 contribution in bold, and bracketed those which relate to user tasks as opposed to system features per se.

Step 3: ask whether it [the identified contribution] falls solely within the excluded matter

Method for doing business

- 32 Both the contributions outlined above relate to administering travel and events, surveying users, sharing invites, recording, and managing expenses and storing and sharing photographs. They are effectively each a method for administering user management of group travel and events (albeit computer implemented and embodied as a system in claim 7). As such, I must ask whether they constitute a method for doing business, or something more. As stated by LJ Fox in *Merrill Lynch*⁶ “the prohibition in section 1(2)(c) is generic ... the section draws no distinction between the method by which the mode of doing business is achieved”. And so, a computer implemented method can be a business method as such. This remains the case when a number of programs running on a number of devices are used.
- 33 As expounded on and explained by J Birss (as was) in *Halliburton*⁷ ...

“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. That means that some apparently technical effects do not always count. So a computer programmed to be a better computer is patentable (from Symbian) but as Fox LJ pointed out in relation to the business method exclusion in Merrill Lynch, the fact that the method of doing business may be an improvement on previous methods is immaterial because the business method exclusion is generic”

⁵ It is not clear to me that this relates to a generic Virtual Private Network (VPN) but rather to a network within the claimed invention, accessible only by selected users

⁶ Merrill Lynch’s Application [1989] RPC 561

⁷ Halliburton Energy Services Inc’s Applications [2012] RPC 129

- 34 This quote, whilst speaking to the matter of law that a computer implemented method can be a business method as such, also appears germane to the *many components argument* above albeit the present invention uses a system of computers rather than a computer system.
- 35 It seems to me that each contribution falls squarely within the field of a method for doing business. Each is related solely to the administrative function of managing group travel and events. The fact that they do this better, using networked resources and enabling enhanced access to tools and services through operating-system-specific apps on mobile devices may enhance the user experience, but it does not overcome any new technical problem, or provide any technical effect per se. The technical features bely a conventional implementation and whilst I am content that they are essential to realising the contribution, they enable its implementation as opposed to adding to the technical capability of the invention. As such the contributions are each considered to be wholly a method for doing business.

Program for a computer

- 36 The contributions above are computer implemented, albeit implemented through several programs and in the case of claim 1 some application programs expressly native to their respective platform. The contributions are thus each also considered to be wholly a program for a computer as such. The only effect arising from the program(s) is a method for doing business as discussed above.

Other matters

- 37 Is there anything in either contribution that falls outside the excluded matter? I do not think so. I have considered the *many components argument*. I note the use of native apps which allows for cross platform management of group travel and events. The nature of the management system is part of the business method or program, and the programs being native to their device is a programmatic feature in and of itself. The other arguments also do not indicate any matter falling outside the exclusions. I will however directly address them below.

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

- 38 With regard to each contribution being a method for doing business, I can determine no part of the contribution that is technical in nature. As effectively explained in the quote given above, the computer implementation of a business method is not enough in itself to confer technical contribution.
- 39 With regard to each contribution being a program for a computer, it follows from the forgoing that there is no technical contribution. A program carrying out a business method, albeit in this case a collection of programs on devices including those with different native platforms, are nonetheless only collectively carrying out a business method as such. There is no new technical effect.
- 40 The applicant's *superior user experience argument* does not to my mind reveal a technical contribution. I accept that for a user who wants to manage group travel and events and associated surveys, expenses, and photos and so on, their experience

may well be enhanced using the method and system of the present invention, compared with using conventional social media and chat applications, and generic networked resources. Indeed, in this respect the applicant has argued in their letter of 24 August 2022 that *the invention has improvements at user interface level*. However, I do not consider the claimed enhancement to be technical in nature. To refer again to the foregoing quote from J. Birss, there is no better computer (system of computers per se), there is a better business method and/or program. This contrasts with my decision in *Lenovo BL O/017/20*, referenced by the applicant, which concerned an improvement to the capability of a specific device. That invention had a specific task of disambiguating user input through processing handwritten input. The contribution provided an “improved handwriting recognition engine” which improved the computer as a device and solved a technical problem. The present invention, whilst using input and output does not make an improvement to a computer as a device (or computer system) itself. Rather, it enables a device of limited capability to reformat and display content more conveniently for a user, but stops short of improving any device, or user interface, per se.

- 41 A similar argument applies to the applicant’s *better user interaction argument*. A user wishing to manage group travel and events and associated surveys, expenses, and photos and so on may well find the interaction better. It is not however better in the sense of a better computer or system of computers. It is better in the sense of a better application or applications for a particular task, a task that in itself is administrative - a business method - and is not technical. Stepping back, I can see no technical problems that have been addressed in the operation of the computer systems and resources of the present invention.
- 42 After considering the applicant’s arguments, the law and facts, I conclude that independent claims 1 and 7 are excluded under s 1(2)(c) as a method for doing business as such and program for a computer as such. I can find no saving technical contribution. The dependent claims are likewise excluded. I have reviewed the application as a whole and have found no grounds for saving amendment.

Conclusion

- 43 The application is refused under section 18(3), as relating to a method for doing business as such and a program for a computer as such for failing to meet the requirements of section 1(2)(c).

Appeal

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

Ben Buchanan

Deputy Director, acting for the Comptroller