Intellectual Property Office

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PATENTS ACT 1977

APPLICANT	Fariborz Entezami
ISSUE	Whether patent application GB1116407.6 complies with sections 1(1)(b) and section 76(2) of the Patents Act 1977
HEARING OFFICER	Mr B Micklewright

DECISION

Introduction

1 UK patent application GB1116407.6 was filed on 22 September 2011 in the name of Fariborz Entezami. Mr Entezami is an unrepresented applicant. The application claims priority from earlier application GB1113404.6 and was published as GB2491660 A on 12 December 2012.

2 Despite several rounds of correspondence which have prompted a number of amendments to the application the examiner is of the opinion that the application cannot be granted because the invention lacks an inventive step and the application contains added subject matter.

3 Mr Entezami accepted the examiner's invitation to be heard, and the matter came before me at a telephone hearing on 21 November 2018. Also present were my assistant Stephen Jennings, and an observer Steven Scott.

4 The normal period for putting the application in order expired on 3 July 2018. Despite being made aware of the possibility of extending this period (in the covering letters accompanying the examination reports of 19 June 2018 and 5 July 2018) Mr Entezami has not requested such an extension, and unfortunately the opportunity to do so is no longer open to him. Accordingly there is no possibility for Mr Entezami to submit any further amendments to his application. The purpose of this decision is therefore to determine whether or not the application complied with the requirements of the Patents Act on 3 July 2018. I made this clear to Mr Entezami at the hearing.

The invention

5 The invention relates to a 'digital blue badge'. A blue badge is a parking permit which allows disabled drivers and passengers to park closer to where they are going. A conventional paper blue badge is susceptible to misuse and forgery. In contrast,

the invention is an electronic device which includes a number of features intended to ensure that it can only be used by the registered user.

6 The most recent set of claims, filed on 19 June 2018, includes 13 claims. Only claim 1 is independent. It reads as follows:

> *A Digital Disable Parking Permit Device, comprising:*
>
> a. *Finger print scanner module (17) to scan finger print of holder permit to save it into the memory of device in initialling time and to obtain the finger print of the holder permit in activation time to compare it with the saved finger print data of genuine permit holder by device's processor.*
>
> b. *Digital display module (16) to show the current time (15) digital timer (14) and battery status (13).*
>
> c. *Coloured LED (12), comprising green (9) amber (10) and red (11) LEDs to show the status of the device.*
>
> d. *Turn ON/OFF (7) button to turning ON and OFF the device.*
>
> e. *USB interface (8) to charge the internal battery.*
>
> f. *Memory unit to keep the data and device program.*
>
> g. *Processing unit to process the device activities.*
>
> h. *GPS unit to find global position.*

7 I should note that the reference numbers provided in the claims (e.g. (17) for the finger print scanner module) have no correspondence with the drawings; they have had no influence on my understanding of the claims.

8 I am grateful to Mr Entezami for providing some skeleton arguments in his letter of 7 November 2018, and for a very helpful explanation of his invention at the hearing. He considers the key elements of the invention to be a) recognising the holder of the permit by validating their fingerprint, b) determining the location where the validating takes place using GPS, and c) showing an officer how long the car has been parked using a timer display on the device.

9 I asked Mr Entezami to describe the function of the red/amber/green status LED mentioned in part c. of claim 1. He explained that green meant that a fingerprint had been validated and that a first timer had not elapsed, amber meant the first timer had elapsed and as such the limit of how long the car could be parked in that particular place was approaching, and red meant that a fingerprint had not been validated or that a second timer had elapsed signifying that the car had been parked in that place longer than the allowed limit.

10 Mr Entezami also clarified my understanding of the purpose of the GPS unit, mentioned at part h. of claim 1. The GPS unit is used to detect if the device moves more than 500 metres from the location where the permit holder's fingerprint is validated, and if so the device is deactivated. The idea behind this feature is that the

device cannot be validated by the permit holder at their house and then given to someone else who can drive to another location and misuse the permit to park.

11 Unfortunately some of what Mr Entezami described to me is not set out in claim 1. In particular, claim 1 merely says that there is a coloured LED which uses red/amber/green to indicate device status. Claim 1 does not define what is meant by "status". Likewise claim 1 merely says that there is a GPS unit to find global position. It does not say anything about determining a movement of more than 500m from the location at which the fingerprint was validated, nor does it say that such a determination deactivates the device.

12 I have considered the extent to which some of the functionality Mr Entezami described might be implicit in claim 1, but I do not consider it reasonable to interpret claim 1 in that way. Rather, giving the words of claim 1 their ordinary meaning I am of the view that the claimed device has red/amber/green LEDs for showing any status of the device, and further that the device includes a GPS unit for finding position for any purpose.

13 Mr Entezami quite rightly pointed out to me that the details of the red/amber/green LED and the GPS unit are, at least in part, set out in claims 7 and 13. These are dependent claims. It became clear to me during the discussion at the hearing that Mr Entezami had not appreciated the importance of claim 1. He was somewhat surprised by the idea that he could have amended claim 1 to include more features of his invention and thus distinguish his invention from the prior art. But, as I have mentioned above, it is no longer possible for him to do this, and I must consider whether the claims as they stood at the compliance date meet the requirements of the Patents Act 1977. Claim 1 sets out in the broadest terms the monopoly for which Mr Entezami seeks patent protection, so if claim 1 fails to meet those requirements then I will have no choice but to refuse the application.

Inventive step

14 Section 1(1) of the Patents Act 1977 states:

> *1(1) A patent may be granted only for an invention in respect of which the following conditions are satisfied, that is to say –*
>
> …
>
> (b) it involves an inventive step;

15 Section 3 goes on to explain what is meant by an inventive step:

> *3 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.*

16 And section 2(2) explains what is meant by the state of the art for the purposes of inventive step:

> *2(2) The state of the art in the case of an invention shall be taken to comprise all matter (whether a product, a process, information about either, or anything else) which*

has at any time before the priority date of that invention been made available to the public (whether in the United Kingdom or elsewhere) by written or oral description, by use or in any other way.

17 What this means is that a patent cannot be granted if the person skilled in the art considers the invention as defined in any of the claims, including claim 1, to be obvious in the light of any document which has been made available to be public prior to the priority date of the invention.

18 There is a well-established test set out by the Court of Appeal[1] for deciding whether an invention is obvious. In simple terms the test involves asking whether the difference between a claimed invention and a cited earlier document would be considered obvious by a skilled but uninventive person working in the relevant technical area in light of his general knowledge. I have followed this test in reaching my decision.

19 The examiner has maintained that the invention is obvious to the person skilled in the art in the light of a number of documents mentioned in his examination report. Mr Entezami accepted that by far the most relevant of these documents is WO 2010/052719 (LIDROR). It was the only document considered at length at the hearing, and the only one I need to discuss here.

20 LIDROR relates to a portable digital parking permit for disabled persons. It uses a fingerprint sensor 22 for comparing a user's fingerprint against the pre-loaded fingerprint of the authorised permit holder to allow the permit to be activated. It has an array of LEDs 16 in different colours which may be used to indicate the state of the parking permit unit and to illustrate the initialisation process when activated (see page 6 lines 6-13). It has a processor 24 and associated memory 23, a USB interface 19, and a rechargeable battery 26. The device also includes a GPS unit (see page 6 lines 20-22).

21 The examiner has identified a number of differences between LIDROR and the invention defined in claim 1. Mr Entezami did not disagree that some differences exist.

22 There are four very minor differences which can be dealt with quickly. LIDROR does not have a battery status display, a display of current time or an on/off switch, and it does not mention that its battery can be recharged using the USB interface. These are trivial features present on many battery powered portable consumer electronic devices (mobile telephones, for example), and as such the skilled person would undoubtedly consider them obvious to include in the LIDROR device.

23 Another difference identified by the examiner is the manner in which the authorised permit holder's fingerprint is initially stored in the parking permit. Part a. of claim 1 says that the fingerprint sensor on Mr Entezami's device is capable of being used to do this, at an initialising time. On this subject LIDROR says that "data is initially stored in said parking permit unit 10 using either the communication means or directly in service stations operated by the authorities" (page 9 lines 23-25, emphasis added). Having carefully read this portion of LIDROR I am not so sure that there is

[1] See *Windsurfing International Inc. v Tabur Marine (Great Britain) Ltd* [1985] RPC 59, and *Pozzoli SpA v BDMO SA* [2007] EWCA Civ 588, [2007] FSR 37

actually any difference here. I am of the view that the skilled reader would understand this portion of LIDROR to teach that in order to pre-load the device with the authorised user's data (including fingerprint) the user would have to attend a service station operated by the authorities. There, the data would either be loaded onto the device via the USB interface 19 or the WI-FI module 25, or could be entered directly using the device itself i.e. using the fingerprint sensor on the device. But even if my understanding of this portion of LIDROR is wrong the skilled person would readily appreciate that the fingerprint sensor on the device could easily be used to store the authorised permit holder's fingerprint in an initialising process. This is commonly what happens when someone purchases a new mobile phone with a fingerprint sensor. If there is a difference here, and I am not at all sure that there is, then that difference is one which would be obvious to the person skilled in the art.

24 LIDROR mentions that an array of different coloured LEDs may be provided to indicate the state of the parking permit unit but it does not specify any particular colours. The skilled person would understand from this that any suitable colours could be used, and would know that red, amber and green LEDs are commonly used in portable consumer electronics. Choosing LEDs having particular colours does not involve an inventive step over LIDROR; it is just a matter of design choice. Mr Entezami pointed out to me at the hearing that the LEDs in LIDROR are located under a wheelchair symbol and that the symbol is not said to be transparent. I presume by this that he thinks that the LEDs would therefore not be visible, and that this therefore is different to his device. However the LEDs in LIDROR are clearly visible to the user (see page 8 lines 13-17).

25 LIDROR does not have a digital display showing a digital timer. This is a rather more significant difference and requires a little more consideration. Conventional paper based blue badge parking permits in the UK are supplied with a paper parking clock which must be displayed alongside the permit to show the time of arrival when parking on yellow lines, or in other places where there is a time restriction. I have no doubt that the skilled person would be well aware of this. The LIDROR device, as it is described, would have to be displayed alongside such a paper parking clock. The skilled person would realise that this is not an ideal arrangement and would therefore readily consider incorporating an electronic version of a parking clock into the device so as to obviate the need of the paper parking clock. This would be a routine modification for the skilled person having a background in portable consumer electronic devices. Indeed LIDROR already includes a display unit 17 which can display messages, and has the ability to measure a period of time (see page 10 lines 22-30) albeit for a different purpose. Displaying a timer which counts down rather than simply displaying the time of arrival at the parking space would be obvious improvement over the paper parking clock as it would clearly make the job of the parking official a little easier. I am therefore of the opinion that there is no inventive step in providing the device of LIDROR with a facility, in digital form, that already exists for conventional paper based disabled parking permits.

26 Though there are a number of differences between claim 1 and LIDROR I have found that those differences would be obvious to the skilled person. I therefore conclude that claim 1 does not involve any inventive step.

Added matter

27 Section 76 of the Patents Act states:

> *76(2) No amendment of an application for a patent shall be allowed under section 15A(6), 18(3) or 19(1) if it results in the application disclosing matter extending beyond that disclosed in the application as filed.*

28 This means that an amendment made to a patent application, whether of the applicant's own volition or in response to an examiner's objection, must not include any technical information about the invention which was not present in the originally filed application.

29 The examiner has noted that the description, as amended, contains a reference to the USB interface being used both to charge the battery and for transferring data whereas the originally filed description referred only to charging the battery. I must say that Mr Entezami's submission to me on this point at the hearing has some merit. He argued that the skilled reader would realise from the application as originally filed that certain data (e.g. settings for the timer) need to be transferred to the device from a management tool. This is certainly clear from the application as filed. He also noted that USB is known as a communication protocol. Putting these two facts together he contended that the skilled reader would readily understand that the described USB interface is clearly needed for data transfer, and not just battery charging. This strikes me as a compelling argument that no matter has been added here.

30 However at the hearing I pointed out a couple of other references in the claims which are open to the objection that they added matter. These are the flash memory/memory card of claim 6, and the use of a red LED to signify a deactivated status, neither of which are present in the original application. These are clear instances of added matter.

Conclusion

31 For the reasons set out above I find that the invention defined in claim 1 lacks an inventive step and that the application contains added matter. The application must therefore be refused under section 18(3).

32 Given that it is no longer possible for Mr Entezami to make amendments to his application there is nothing to be gained in me determining whether there might have been something in his application which could have formed the basis of a valid claim.

Appeal

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

Mr B Micklewright

Deputy Director, acting for the Comptroller