



25 September 2009

PATENTS ACT 1977

APPLICANT Matthew Emmerson Allen

ISSUE Whether patent application number
GB 0610608.2 complies with section
1(1)(b)

HEARING OFFICER Stephen Brown

DECISION

- 1 This application was filed on 30th May 2006 and was published under serial no. GB 2443654A on 14 May 2008.
- 2 Despite amendment of the claims during the substantive examination, the applicant has been unable to persuade the examiner that the application complies with Section 1(1)(b) of the Patents Act 1977 (the Act). The matter came before me at a hearing on 27th July 2009 which was attended by the applicant, Mr Matthew Emmerson Allen, and the examiner, Mr Nigel Hanley.
- 3 The examiner issued an examination report on 6 February 2009 setting out fully the objections on the grounds of inventive step. The report also made clear that there are a number of issues relating to clarity of the application which will need to be resolved if I find in the applicant's favour.

The invention

- 4 The current set of claims was filed on 8 December 2008 and contains one independent claim. This claim reads as follows:

Claim 1

A vehicle occupant testing assembly for testing an occupant of a road vehicle on or adjacent a road, whilst the vehicle occupant is inside or outside the vehicle in the vicinity of the vehicle, the vehicle occupant testing assembly also comprising a vehicle control assembly for controlling a road vehicle on a road, the vehicle control assembly comprising a sensor which

senses pre-determined vehicle occupant behavior or vehicle occupant characteristic, and a communication means which is operable to communicate to a specific vehicle or specific vehicle occupant, when the sensor sense the pre-determined vehicle or vehicle occupant behavior or vehicle occupant characteristic, to communicate to the vehicle occupant to take a test at the vehicle occupant testing assembly.

- 5 At the hearing Mr Allen agreed that ‘control’ in this claim was meant in the broad sense that traffic lights ‘control’ vehicle movement, or a speed camera ‘controls’ traffic speed, i.e. by making drivers adjust their behavior whilst driving. It does not mean actually taking control of the vehicle and forcing a particular movement. In the context of this application I believe that this is the correct interpretation.
- 6 At the hearing Mr Allen also provided a video demonstration of his invention. This was useful background and I am grateful to Mr Allen for doing this. However, my decision must be based solely on what is within his patent application.

The relevant law

- 7 At the hearing there was only one issue to consider; that of inventive step. However, there was also the related issue of whether the claims related to a collocation rather than a single invention. The relevant law here is as follows:

An invention shall be taken to involve an inventive step as required by section 1(1)(b) if, in accordance with section 3,

“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)”.

- 8 I do not think I need to quote sections 2(2) and 2(3), but it follows from these that the state of the art comprises all matter which has at any time before the priority date of the invention been made available to the public, whether in the UK or elsewhere.

Argument and analysis

Collocation

- 9 In the final examination report the examiner informed the applicant that the invention may be considered to be a collocation. This issue was discussed at the hearing so I will cover it here. However, I do not think that the issue of collocation is central to the decision of inventiveness of the current claims.
- 10 The current law relating to collocation is set out in *SABAF Spa v MFI Furniture Centres Ltd [2005] RPC 10* (‘SABAF’). Here, in paragraph 24, Lord Hoffman held that:

But before you can apply section 3 and ask whether the invention involves an inventive step, you first have to decide what the invention is. In particular, you have to decide whether you are dealing with one invention or two or more inventions. Two inventions do not become one invention because they are included in the same hardware. A compact motor car may contain many inventions, each operating independently of each other but all designed to contribute to the overall goal of having a compact car. That does not make the car a single invention.

11 In paragraph 26 he went on to add:

The EPO guidelines say that "the invention claimed must normally be considered as a whole". But equally, one must not try to consider as a whole what are in fact two separate inventions. What the Guidelines do is to state the principle upon which you decide whether you are dealing with a single invention or not. If the two integers interact upon each other, if there is synergy between them, they constitute a single invention having a combined effect and one applies section 3 to the idea of combining them. If each integer "performs its own proper function independently of any of the others", then each is for the purposes of section 3 a separate invention and it has to be applied to each one separately. That, in my opinion, is what Laddie J meant by the law of collocation.

12 There are two distinct elements to the invention described in Mr Allen's application. These are:

i) A vehicle selection system (referred to in the claims as a 'control' assembly) which automatically selects vehicles according to certain criteria and directs the occupant to take a test; and:

ii) A vehicle occupant testing system that automatically tests vehicle occupants.

13 At the hearing Mr. Allen argued that the selection system made the testing system more efficient because only those that were selected were tested rather than everyone or a random sample of people. Thus these two elements acted in synergy and the invention was not a collocation. Further there was the overall benefit that no human intervention was needed.

14 I am afraid that I do not agree with Mr Allen's view on this point. The described systems do not actually interact in any way, rather they are simply used one after the other. There is one system for automatically identifying which vehicles should be tested and one system for testing vehicles and their drivers. Each system has the advantage of not requiring human intervention at that stage but the benefit of each system could be obtained without the use of the other system. If an automated system directed cars to an area where testing was carried out manually by police officers then the benefits of the first system would be realized. Similarly, if a police officer manually identified cars to test and directed them to an automated testing area then the benefits of the second system would be realized. Combining the two systems achieves no more than the sum of the two benefits. There is no causal link, or synergy, between the selection process and the testing process.

- 15 The test of obviousness must therefore be applied separately to the elements of the selection system and the testing system. However, the current claims relate almost entirely to the selection system, with negligible details relating to the testing system. Thus the decision before me is primarily that of obviousness in regard to the selection system of the current claims.

Inventive step

- 16 The test for inventive step is the four-step *Windsurfing* test as reformulated by the Court of Appeal in *Pozzoli Spa v BDMO SA & Anor [2007] EWCA Civ 588* ('Pozzoli'). In paragraph 23 of this decision the test was laid out as:

(1) (a) Identify the notional "person skilled in the art"

(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?

I will now take each step in turn:

The notional 'person skilled in the art' and their relevant common general knowledge

- 17 The examiner has identified the person skilled in the art as being a team comprising a law enforcement officer and a traffic engineer. At the hearing Mr Allen did not agree with this definition and argued that the skilled person would be the law enforcement officer alone.
- 18 Again I am afraid that I do not agree. The field in which the application lies is that of road control systems. That is systems which are designed to assist law enforcement and road safety by sensing certain activities on the road and either limiting or preventing them or in some way enforcing the laws relating to them. This field requires technical input from those skilled in building such devices. Therefore, it is reasonable to assume that the notional skilled person in this case would be a team including someone skilled in the field of designing and making devices for assisting traffic law enforcement. Thus I consider the correct notional person skilled in the art to be a combination of the law enforcement officer and the traffic engineer.
- 19 Having identified the skilled person it is necessary to identify their common general knowledge. In this area, it is common general knowledge that the police

will stop a vehicle they sense is behaving in a certain manner, and that they have a variety of devices to allow them to detect such behavior. Furthermore once they have stopped a vehicle there are a number of tests they may apply to the driver to assess their suitability to drive. It is also part of the common general knowledge that devices exist for sensing activities such driving above the speed limit or passing through red traffic lights. The skilled person would also be familiar with tools for number plate recognition, detecting levels of alcohol using a breathalyzer and other legal tests such as eyesight level testing that can be administered at the road side.

- 20 While the law enforcement officer would not necessarily understand the technical workings of these devices they would be familiar with their existence and operation. The traffic engineer would be familiar with the workings of these devices and would understand the principles of sensing motion or speed of a vehicle.

Identify the inventive concept of the claim

- 21 The claim is relatively straightforward. It requires a system (referred to as an assembly) that senses a particular characteristic of a vehicle being driven, or a characteristic of an occupant of the vehicle, and a means for communicating to that vehicle, or its occupant, that they must take a test at a testing system. There is also the vehicle occupant testing system itself but beyond its mere existence there are no details within the claim.

- 22 Thus the two inventive concepts of this claim are:

i) The identification of a particular driving behavior or characteristic of a vehicle occupant and the signaling to that vehicle that it is required to take a test;

ii) The existence of some sort of vehicle occupant testing system.

- 23 Considering the broader disclosure of the document and Mr Allen's comments at the hearing, it appears that the intention is to claim a three step system of automatically identifying, signaling and testing drivers with no human intervention. However, this is not what is currently claimed. Further, as reasoned above I must apply the *Windsurfing* test separately to the selection (i.e. indentifying/signaling) system and the testing system.

What differences exist between the state of the art and the inventive concept of the claim?

- 24 Although a number of documents have been cited during the processing of this application the most relevant to the current claims are:

US 2004/0257245 (JO);

US 6163277 (LUCENT); &

DE 4429064 (DAIMLER-BENZ).

- 25 Both JO and LUCENT establish that it is known to identify vehicles that are

travelling above a certain speed and to communicate directly with the drivers of the vehicles. LUCENT also describes a two way communication system between a police vehicle and a civilian vehicle, allowing the police to communicate directly with the civilian vehicle informing them that they are speeding, issuing them with a penalty via the postal system or inviting them to stop at a certain point. The LUCENT document also describes the use of information relating to driver profiles, which can be updated when a driver swipes his driver's license before entering the vehicle.

- 26 The DAIMLER-BENZ document describes a system for controlling traffic flow which senses a particular characteristic or behavior of a vehicle being driven on the road. The system then provides a sign over the road informing the driver of a vehicle which is behaving in a pre-determined manner to pull over into a police control area. At the hearing Mr Allen agreed that this was the closest prior art.
- 27 The prior art therefore shows that it is known to provide systems for automatically sensing the behavior of a vehicle on the road and, if a pre-determined characteristic is observed, to inform the driver of that vehicle that they must pull over into a defined area. The difference between the cited prior art and the two inventive concepts is the requirement that in the defined area some form of test is administered.

Do those differences constitute steps which would have been obvious to persons skilled in the art or do they require any degree of invention?

- 28 As already stated it is common general knowledge that the police will, once they have stopped a suspiciously behaving vehicle administer some sort of test, the most common being either a breathalyzer test or a sight test.
- 29 Therefore I conclude that the skilled person, when faced with the cited prior art, would consider it obvious that a system for automatically sensing a predetermined behavior in a driven vehicle and directing this vehicle to stop at a police control area would also include a step for carrying out some form of test on either the vehicle or its occupant. Thus the selection system, identified above, lacks an inventive step.
- 30 As stated above, it is also common general knowledge for the Police to use some sort of testing system, or assembly, to administer roadside tests – breathalyzer equipment being the most well known. Thus the testing system, identified above, also lacks an inventive step and possibly novelty too. Overall, claim 1 is therefore obvious.
- 31 Even if I had decided that the claim was not a collocation of two separate elements it would still in my opinion be obvious. To extend the argument in paragraph 27 just above, the skilled person would consider it obvious that a system for sensing a predetermined behavior in a vehicle and directing it to a police control area would also include the step of using some sort of testing assembly (e.g. a breathalyzer) for testing the vehicle occupant.
- 32 At the hearing Mr. Allen also argued that the skilled person, in particular the law enforcement officer, would not consider automating processes which he was

currently employed to do manually. Mr. Allen's view was that the law enforcement officer would have no motivation to automate the process as this would result in him no longer having a job.

- 33 I do not believe that this is a valid argument. The test is whether the invention would appear obvious to the person skilled in the art. Whether or not they would have an economic motive to personally support the invention is not a relevant factor.

Dependent claims & description

- 34 I will now consider each of the remaining claims. Claims 2, 3 and 4 require that the predetermined behavior being measured in selecting vehicles for testing be, respectively, the speed of the vehicle, the vehicle passing inappropriately through a traffic light (i.e. through a red light) and the vehicle swerving across lane boundaries. It is part of the common general knowledge that law enforcement officers will routinely stop vehicles which are exceeding the speed limit, passing through red lights or swerving across lane boundaries. The skilled person would view these as obvious selection criteria.
- 35 Claims 5 and 6 relate to a random selection process, choosing vehicles at predetermined intervals, either by number of cars or by time that has elapsed. Again these are well known traffic monitoring techniques and do not demonstrate an inventive step.
- 36 Claim 7 merely makes explicit that the selection system operates on vehicles in use, i.e. ones that are moving. Arguably this constitutes no further limitations over any of the preceding claims. More importantly, this detail is present in the prior art (including DAIMLER-BENZ). Thus claim 7 also does not demonstrate an inventive step.
- 37 Claim 8 requires the criteria used by the selection system to be personal data relating to the vehicle occupant. Specifically, the date they last passed a driving test, an eyesight test or were tested by the testing assembly. The claim also requires that this data be passed by the occupant to the selection system in some way. Now the prior art (particularly in LUCENT) makes it clear that it is known for vehicles to be monitored whilst in motion and for automated systems to use personal data, such as driver history or information obtained from driving licences, as part of their selection criteria. It is also common general knowledge for law enforcement officers to consider such data when testing drivers at the roadside.
- 38 Thus the difference between the state of the art and the inventive concept of claim 8 is merely the choice of which personal data is used by the selection system. Given that the use of driving licence data is known the skilled person would consider the criteria of driving test pass date to be obvious. Thus claim 8 as currently written is obvious since it comprises any *one*, or more, of the three criteria mentioned above.

- 39 For the record, I am less clear whether or not automatic selection based on the date of last eyesight test or the date of the last automated 'roadside test' is inventive. These criteria have not been searched for by the examiner leaving me unable to make a definitive decision on these details. At first sight, the choice of which personal data to use for automated selection could be no more than a mental act, or a method of doing business, and thus excluded under section 1(2) of the Act. However, this point was not addressed at the hearing so I will not consider it here.
- 40 Furthermore, the specification contains many details in relation to the automated testing system. These details have not been fully searched nor were they considered at the hearing. Thus it *may* be possible to amend the claims such that they comply with the Act. For the above reasons I will remit the application back to the examiner if Mr. Allen files a new set of claims. However, I note that many features of the testing system are claimed in GB0426171.5 another of Mr. Allen's applications which has been granted as GB 2 420 631 B.

Conclusion

- 41 I have found that claims 1-8 lack an inventive step contrary to section 1(1)(b) of the Patents Act. For the reasons given above, I hereby give Mr. Allen 2 months from the date of this decision to file an amended set of claims. If he does so the application will be remitted to the examiner for further processing. If not the application will be refused under section 18(3).

Appeal

- 42 Under the Practice Direction to Part 52 of the Civil Procedure Rules, any appeal must be lodged within 28 days of the date of this decision.

S. BROWN

Deputy Director acting for the Comptroller