



been achieved, the front bus reverts to a normal mode of operation and the display is switched accordingly. The display is under the direct control of the driver or conductor of the bus.

5 The application has two claims which read as follows:

“1. The Boarding and Exit Bus indicators are a method of operation consisting of two separate indicators, which take the practical form of visual or audible apparatus. These would provide the passenger with the necessary information as to whether the bus is in boarding or exit mode.

2. The Boarding and Exit Bus Indicators as claimed in claim 1 wherein if the exit indication is absent from the visual unit whether it takes the form of a text or symbol or both, this would denote and represent that the bus was in boarding mode.

### **The law**

6 The examiner has argued that the claimed invention is not new, does not involve an inventive step and relates to subject matter that is excluded from being patentable. The relevant sections of the Act are as follows:

*1(1) A patent may be granted only for an invention in respect of which the following conditions are satisfied, that is to say -*

- (a) the invention is new;*
- (b) the invention involves an inventive step;*
- (c) it is capable of industrial application;*
- (d) the grant of a patent for it is not excluded by subsections (2) and (3) below;*

7 Section 1(2) of the Act lists certain categories of inventions which, for the purposes of the Act, are not regarded as being patentable:

*1(2) It is hereby declared that the following (among other things) are not inventions for the purposes of the 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 of 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.*

8 The principles to be applied when considering inventions relating to an excluded field are set

out in *Fujitsu Limited's Application [1997] RPC 608*, where at page 614 Aldous LJ said:

"...it is and always has been a principle of patent law that mere discoveries or ideas are not patentable, but those discoveries and ideas which have a technical aspect or make a technical contribution are. Thus the concept that what is needed to make an excluded thing patentable is a technical contribution is not surprising. That was the basis for the decision of the Board in *Vicom*. It has been accepted by this Court and the EPO and has been applied since 1987. It is a concept at the heart of patent law."

- 9 In other words, inventions relating to an excluded field which involve a technical contribution will not be considered to relate to the excluded matter as such. The practice of the Patent Office in this regard is set out in the practice notice issued on 24 April 2002 and entitled "Patents Act 1977: interpreting section 1(2)".

### **Argument**

- 10 Four of the five prior art documents cited by the examiner (GB2231996, GB2098374, WO90/02392 & JP630255143) disclose bus displays controlled by the driver to alter the information displayed on the outside of the vehicle. The fifth document, US4067128, discloses a taxi cab display for indicating whether the driver is prepared to take on passengers or not. The examiner argues that these documents demonstrate that the display apparatus disclosed in the application is entirely conventional, and that the only differences between the prior art and the matter contained in the application is the nature of the information displayed on the outside of a bus and the method of operating a bus in an exit mode. These differences, the examiner argues, are excluded from being patentable under section 1(2).
- 11 In his letter dated 31<sup>st</sup> March 2003, the applicant appears to concede the point that the display apparatus is conventional:
- "With reference to the Boarding and Exit Bus Indicators, it should be made clear that these indicators do not seek to contribute to any technical innovations or enhancement to visual display units of any kind."
- 12 In view of the prior art cited by the examiner, I am satisfied that there is nothing new or inventive in the apparatus proposed by the applicant. I am also satisfied that the only differences between the subject matter of the application and the prior art is the nature of the information displayed on the outside of the vehicle and the method of operating a bus in exit mode. The former clearly falls within the exclusion set out in section 1(2)(d), presentation of information, the latter, however, is not so clear-cut.
- 13 The applicant argues that his invention is not a business method; it does not involve any financial transaction, nor does it involve any organizational or managerial activities normally associated with doing business. The applicant argues that the terms "managed" and "organized" could not apply to the circumstances in which buses operate because buses are just too unpredictable.

- 14 The examiner refers to the decision in *Quigley's Application* [1977] FSR 373 to support his argument that the exit mode of operation should be regarded as a method of doing business. In *Quigley*, a method of producing steel by operating two or more furnaces in a particular way was held not to be a method of manufacture because “the contribution to the art was solely a roster for more effective use of manpower”. The applicant dismisses the relevance of *Quigley*, arguing that his exit mode of operation is not an improved timetable for buses but works on scientific reasons that have nothing whatsoever to do with giving manual control to the bus driver.
- 15 I accept the applicant’s argument that the exit mode of operation is not a timetable and that there is a distinction between his method of operating buses and the contribution made by *Quigley*. However, I cannot accept that exit mode of operation is anything other than a method of doing business. The whole point of the exit mode is to allow bus drivers to regulate the scheduling of buses as necessary in order to improve the efficiency of the service. I consider that this flexible organisation of buses falls squarely within the exclusion of section 1(2)(c).
- 16 Having found that the invention falls within the categories of excluded matter mentioned in section 1(2) of the Act, I now need to decide whether it provides the technical contribution required to make an otherwise excluded invention patentable. The applicant argues that there are scientific reasons why buses group up and that the solution of how to address the phenomenon would also have to be looked at from a scientific perspective. He states that there is a scientific basis for why his invention would work and that the word science is classified under the term technical.
- 17 I am not convinced that this provides sufficient basis for me to regard the invention as making a technical contribution. It may well be the case that the applicant’s invention does in some way provide a solution to the problem of bus bunching, however the only direct contribution the applicant’s invention makes is to allow a bus driver discretion to pick up passengers and to signal the driver’s intention to those waiting to board. Whilst there might be certain advantages in doing this, these advantages are all concerned with improving the timeliness of a bus service, regulating the frequency of that service and in keeping customers informed. I do not consider that these advantages are of a technical nature. As such, I cannot see that the invention as claimed nor as described in the application makes any technical contribution.

### **Conclusion**

- 18 I have found that the invention as claimed in the application is no more than a method of doing business or the presentation of information, and that it does not make the technical contribution required to make an otherwise excluded invention patentable. I therefore refuse the application under section 18(3) on the grounds that the invention is excluded under sections 1(2)(c) and 1(2)(d).

### **Appeal**

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

**H Jones**

Deputy Director acting for the Comptroller