



BL O/359/04

6th December
2004

PATENTS ACT 1977

APPLICANT Dean Gerrard Anthony Maroun

ISSUE Whether patent application number GB
0218619.5 is excluded under section 1(2)

HEARING OFFICER D J Jerreat

DECISION

Introduction

- 1 International patent application number PCT/ZA01/00015 entitled “Gaming apparatus and gaming method” was filed on 12th December 2001 in the name of Dean G A Maroun. The application claimed priority from South African patent application number ZA 2000/0665, filed on 11th February 2000, and was published by WIPO as WO 01/59680 on 16th August 2001.
- 2 The EPO, as International Search Authority, searched the application on 11th June 2001 and two category “X” documents were cited in the International Search Report. An International Preliminary Examination Report was issued on 5th April 2002. Although no objection was raised against the invention of apparatus claims 1-15, no opinion was established regarding the invention of method claim 16.
- 3 The application entered the national phase and was re-published as GB 2375639 on 20th November 2002.
- 4 The UK examiner issued an examination report under Section 18(3) on 13th August 2003 in which he reported that the application was excluded from patentability under Section 1(2)(c) because the claims related to a scheme, rule or method for playing a game, doing business, and to a computer program. In addition, the examiner raised novelty and inventive step objections on the basis of a document which arose as the result of third party observations on the application.
- 5 The applicant responded to the first examination report by filing observations. In a second examination report the examiner maintained the patentability, novelty and inventive step objections.
- 6 The applicant submitted amendments to the claims and further observations but these failed

to convince the examiner that the invention was patentable and a hearing was offered. The applicant requested an opportunity to be heard and submitted amended claims on 6th September. The hearing was held on 8th September 2004 in which the applicant was represented by Mr. Andrew Alton and Mr. Roger Haley of Urquhart-Dykes & Lord LLP.

The Application

- 7 The application relates to gaming apparatus and a gaming method, in particular to a computer-based horse racing game. A data processing apparatus is used to receive racing object race performance influencing (RORPI) data over a computer network from a number of owners which can individually influence racing objects of the owners. The RORPI data is stored in a memory which also stores the racing objects, each of which has inherent attributes. A computing device uses the inherent attributes of the racing objects and the RORPI data to carry out a race simulation to compute a race outcome. The RORPI data is securely and confidentially stored so that each owner can access their own RORPI data but cannot access the data of other owners.
- 8 The amended claims in their latest form include independent claims 1 and 16. The claims read as follows:
 1. A data processing apparatus for allowing a game to be played, the game including computer generated racing objects owned by respective owners who can influence the outcome of races by submitting racing object race performance influencing data which influences racing objects individually, the data processing apparatus comprising:

storage means for storing a number of the computer generated racing objects, each racing object having inherent attributes;

receiving means for receiving racing object race performance influencing data sent over a computer network from each owner before the start of a race; and

computing means for simulating a race between at least two racing objects and computing an outcome of the race using at least some of the racing object performance influencing data received and the inherent attributes of the racing objects, wherein the racing object race performance influencing data is securely and confidentially stored by the storage means such that racing object race performance influencing data of each owner is accessible to them and is not accessible to any other owners.
 16. A computer implemented method for allowing a game to be played, the game including computer generated racing objects owned by respective owners who can influence the outcome of races by submitting racing object race performance influencing data which influences racing objects individually, the method comprising the steps of data processing device:

storing a number of the computer generated racing objects, each racing object having inherent attributes;

receiving racing object race performance influencing data sent over a computer

network from each owner before the start of a race;

simulating a race between at least two racing objects; and

computing an outcome of the race using the racing object performance influencing data received and the inherent attributes of the racing objects, wherein the racing object race performance influencing data is securely and confidentially stored by the storage means such that racing object race performance influencing data of each owner is accessible to them and is not accessible to any other owners.

- 9 In the particular embodiment described in the application, the racing objects are virtual horses. Each horse has inherent attributes such as its suitability for wet and dry tracks and long and short races, racing with or without blinkers, and racing with aluminium or steel shoes. The RORPI data may include the training program, the results of a previous race, and the diet, the trainer, and the residence of a horse. Participants in the simulated racing game are classified into owners and bettors. Owners may buy, name and choose silks for their horses. They may also train, sell, breed, enter their horses into races, and bet on horses. The placing of bets is in accordance with real-life betting systems and schemes.
- 10 At predetermined times, or on request from a minimum number of participants, the computing means simulates a race between a number of competing horses. A race result is computed according to a predetermined formula which may be based upon the performance index of a horse, the RORPI data, the inherent attributes of the horse, the race conditions, and a random influence. Participants pay for entering races and for all activities and choices associated with the simulated racing game and horse industry.

The Law

- 11 The examiner has maintained that the application is excluded from patentability under Section 1(2)(c) of the Act, as relating to a scheme, rule or method for playing a game, doing business, and to a computer program as such. The relevant parts of the section read:

“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;

but the forgoing provision shall not 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.”

- 12 These provisions are designated in Section 130(7) as being so framed as to have, as nearly as practicable, the same effect as Article 52 of the European Patent Convention, to which they correspond. I must therefore also have regard to the decisions of the European Boards of Appeal that have been issued under this Article in deciding whether the invention is patentable.

Interpretation

- 13 According to the principles laid down by the Courts when considering categories excluded by s.1(2), the question of whether an invention is excluded should be approached by construing the claimed invention as a whole, without regard for its constituent features or integers, and determining whether the whole invention solves a technical problem, or makes a contribution to the art in a non-excluded field, or whether the invention is, in substance, no more than an excluded item or is merely an excluded item in disguise. Thus, to analyze an invention involving a computer program it is necessary to decide whether the invention does or does not involve a technical contribution.

- 14 In matters of patentability, it has been established both in UK and EPO practice that an invention which makes a technical contribution will be held to be patentable notwithstanding that it may fall into one of the categories in Section 1(2) of the Act. This principle follows in particular the decision of the Court of Appeal in *Fujitsu Limited's Application [1997] RPC 608* and the words of Aldous LJ at page 14, lines 40-46:

“However, 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.”

- 15 That this test should apply across all the areas covered by Section 1(2) was made clear in the Patent Office Practice Notice issued on 24 April 2002 entitled “Patents Act 1977: interpreting section 1(2)”.

- 16 It is also a well established principle in UK patent law that when assessing whether an invention relates to excluded subject matter, it is the substance of the invention that is important, not its form. For example, in *Fujitsu's Application [1997] RPC 608* Aldous LJ, having quoted Fox LJ from *Merrill Lynch's Application [1989] RPC 561*, says at page 614, lines 31-42:

“..Fox LJ was making it clear that it was not sufficient to look at the words of the claimed monopoly. The decision as to what was patentable depended upon substance not form...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.”

17 At the hearing Mr. Alton referred to the recent decision from the EPO Board of Appeal in *Hitachi*¹ which appears to represent the EPO's latest thinking regarding the distinction between patentable and unpatentable inventions. In *Hitachi* the Board stated (point 4.5):

“What matters having regard to the concept of “invention” within the meaning of Article 52(1) EPC is the presence of technical character which may be implied by the physical features of an entity or the nature of an activity, or may be conferred to a non-technical activity by the use of technical means. In particular, the Board holds that the latter cannot be considered to be a non-invention “as such” within the meaning of Article 52(2) and (3) EPC.”

18 Mr. Alton also addressed me on *Gale's Application [1991] RPC 305, page 315* pointing out that the “invention” for the purposes of Section 1 of the Act is that defined by the claims. He referred to *VICOM* as approved in *Fujitsu's Application [1997] RPC 608 page 615* which stated that the claimed invention as a whole should be considered, and to *Fujitsu's Application [1997] RPC 608 page 618, lines 9-11* which stated that the court should look at the claims as a matter of substance rather than rely on the form of the claims. He also referred to *PETTERSSON/Queuing System (decision T1002/92, paragraph 2.6)* to demonstrate that a mix of technical and non-technical elements in a claim shall not be excluded from patentability under Article 52(2) and (3) EPC.

19 I agreed with Mr. Alton at the hearing that in assessing whether an invention is excluded from being patentable the benefit of the doubt should be given to the applicant. This was confirmed by Laddie LJ when *Fujitsu Limited's Application*² was considered by the High Court. In that decision Laddie LJ said:

“Therefore the onus lies on the person contesting patentability to prove that the alleged invention falls foul of the statutory exclusion. Furthermore, at the patent office stage, the benefit of the doubt should be given to the applicant.”

Argument

20 It was established at the hearing that the amendments filed just prior to the hearing were not contrary to Section 76 and were fully supported by the application as filed. The Examiner confirmed that the previous objections that the application lacked novelty and an inventive step were no longer relevant in his opinion. However, he was still of the view that the invention related to an exclusion to patentability.

21 To my mind there is little doubt that that the invention is concerned with the simulation of a horse racing game. The fact that players of the game are involved in financial transactions associated with the horse racing and betting industries raises the issue as to whether the invention as defined in method claim 16 also relates to a method of doing business, viz. business activities associated with the horse racing industry. Therefore, I consider that the invention is potentially caught by the exclusions relating to a method of playing a game, a method of doing business and, since the invention is implemented in computer software and

¹ *Auction method/Hitachi T 0258/03*

² *Fujitsu Limited's Application [1996] RPC 511, page 533*

there are claims to computer program code and a computer readable medium bearing the code, it is potentially caught by the computer program exclusion.

- 22 Having assured myself that the invention is potentially caught by exclusions, the matter that remains to be determined is whether the invention as claimed relates wholly to excluded matter “as such” and is therefore not patentable, or whether it makes a technical contribution.
- 23 At the hearing Mr. Alton sought to impress me that the Examiner was confusing the requirements of excluded matter with those of novelty and inventive step. Although the Examiner had identified a technical field he was of the opinion that the technical problem was routinely solved by many online applications, for instance any online banking facility. Accordingly, he was unable to discern any contribution to the identified technical field.
- 24 Mr. Alton submitted that the correct approach was to consider whether the claimed subject matter could be considered to provide a technical contribution and if so then consider whether the claimed invention was novel, inventive and capable of industrial application. Although Mr. Alton was unaware of an authority which defined “technical contribution”, he maintained that the expression should be interpreted as meaning “a contribution in a technical field”. The authorities he had cited led him to the conclusion that one should analyze the claimed invention and ask “is this technical stuff? What is the advance, innovation, the bit of technical stuff that one has supposedly invented? Does that have a technical character?” If so, then one could then move on to assess any novelty and inventive step arguments. He added that the presence of excluded matter in a claim did not necessarily mean that the claim itself was bad since one could have excluded and non-excluded features in a claim.
- 25 Mr. Alton also made the point that the independent apparatus and method claims of the application were intended to be the same in substance. He added that at no time during analysis of the claimed invention would the argument be made “Oh, there is a computer being used, therefore it must be technical”. Instead, he identified the main features of the apparatus claim as data processing apparatus comprising data storage means, data receiving means, and computing means for simulating a race. Data is securely and confidentially held by the data storage means such that the RORPI data of each owner is accessible to them and not to any other owner. According to Mr. Alton, the technical field was in the field of memory management, control and processing. He submitted that the contribution was a system for processing data with a remote memory system which was configured to allow conditional access to some users but full access to the local processing device.
- 26 Mr. Alton suggested that, with hindsight, the application might have been drafted in a different way, for example as a “remote data security invention” which could be used in various other fields, not just games. He added however, that there was no way the applicant could broaden that out to being just data processing or memory management because that would add new matter. The fact that the apparatus was being used in playing a game fitted in with UK Patent Office practice which allowed claims to be granted for apparatus for use in ball games and such like.
- 27 Analyzing the amended claim 1, it was agreed that the invention consists of a data processing apparatus comprising a data storage means, a data receiving means, and a computing means,

the latter being suitable for simulating a race between two or more racing objects. Mr. Alton maintained that the claimed invention made a technical contribution in the field of data storage means configured for the remote, secure and confidential storage of different data types which were required to carry out the simulation of a game, which in the preferred embodiment of the invention happened to be a horse racing game. The characterizing feature of the computing means, in his opinion, was the requirement that the data was held securely and confidentially by the storage means so that data associated with a respective owner was only accessible by that owner.

28 However, although the claimed invention is directed to the receipt, storage and processing of data using a computer and the technical field has been identified by Mr. Alton as secure and confidential data storage, there is no detail about how the storage means is arranged or configured to provide an identifiable technical contribution. In fact, the specification as a whole is generally light on such detail. There is nothing in the apparatus claim 1 to help someone to go away and carry out the invention. In response, at the hearing Mr. Alton specifically referred to a computer scientist being able to use his routine computer programming skills to be able to come up with something that could meet the requirements of the invention. This implies that the contribution is merely a computer program and most probably a routine one at that.

29 It appears to me that the claimed invention is all about how the data processing system is meant to work in order to simulate a game, and on the basis of the apparatus claim, the way it works relies essentially on the required result which is determined by the software that is run on the computer. However, there is no detail that would indicate to me that the programming techniques were other than routine, for example, as used in similar secure and confidential systems used to carry out online banking transactions.

30 Any contribution the invention makes seems to me to result entirely from the specific function which the invention is performing, namely the playing of a game. I fail to see how that can be a technical contribution and thus how it could form the basis of a patentable invention. Moreover, I fail to see how the implementation of the invention through software could provide the required technical contribution since the programming techniques appear to be entirely standard.

Summary

31 Although I am left in no doubt about the business aspect from reading the specification as a whole, I am not wholly convinced that the invention as claimed in claim 16 relates to a method of doing business. However, I have found that the invention as claimed in this specification is a method for playing a game and/or a program for a computer and that it fails to provide a technical contribution which would prevent its exclusion from patentability.

Conclusion

32 Having read the specification thoroughly I have been unable to identify any subject matter which might form the basis of a patentable invention. Accordingly, I refuse the application

under Section 18(3) on the grounds that the claimed invention is excluded from patentability under Section 1(2)(c).

Other matters

- 33 In the Examiner's opinion, the issues of novelty and inventive step were addressed satisfactorily by the set of amended claims filed shortly before the hearing. I am content with the Examiner's assessment of the situation.

Appeal

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

D J JERREAT

Deputy Director acting for the Comptroller