



BL O/004/07

8th January 2007

PATENTS ACT 1977

APPLICANT Consolidated Global Fun Unlimited, LLC

ISSUE Whether patent application number GB
 0424732.6 complies with section 1

HEARING OFFICER B Westerman

DECISION

Introduction

- 1 Application GB0424732.4 was filed on 9 November 2004, being the national phase application based upon an International application published as WO 03/095050, and republished by the UK Patent Office as GB2405010.
- 2 As the priority date declared is 13 May 2002, the period prescribed by Rule 34 within which the application must comply with the Act and Rules if it were to be granted expired on 13 November 2006. At that point, the examiner was not satisfied that the application did so comply. The applicant did not agree and asked that a written decision be made and issued, based upon the papers in the file and the submissions made during the prosecution, as to whether the application did indeed comply with the Act or Rules as of 13 November 2006.
- 3 The latest full examination report (dated 18 October 2006) from the Office set out objections that the invention claimed was not, in the view of the examiner, novel and/or inventive in the light of four documents; expressed his view that the claims at least embraced matter which is excluded from patentability by section 1(2); and made other objections to do with clarity and consistency.
- 4 Shortly after this, the Court of Appeal had delivered its judgment in the matters of *Aerotel Ltd v Telco Holdings Ltd* and *Macrossan's Application* [2006] EWCA Civ 1371 (hereinafter "*Aerotel/Macrossan*"), in which it reviewed the case law on the interpretation of section 1(2) and proposed a new four-step test (explained below) for the assessment of patentability. In a notice¹ published on 2 November 2006, the Patent Office stated that this test would be applied by examiners with immediate effect. It did not expect that this would

¹ <http://www.patent.gov.uk/patent/p-decisionmaking/p-law/p-law-notice/p-law-noticesubjectmatter.htm>

fundamentally change the boundary between what was and was not patentable in the UK, except possibly for the odd borderline case. This was discussed in a telephone conversation between the examiner and the Agent Mr Ian Loveless (of the firm Reddie & Grose), recorded on the file by a report of the telephone conversation dated 9 November 2006.

- 5 The applicant then responded, in his agent's letter dated 17 November 2006, maintaining his assertion that the invention is patentable. This response does not include any comment at all upon the new citations, not even to deny their relevance. Finally, on 23 November 2006, the examiner spoke by telephone to confirm the applicant's intention, and the report of this conversation on file confirmed that I should consider all outstanding matters, and that the applicant did not wish to make further submissions.

The application

- 6 The application is entitled "Method and system for interacting with simulated phenomena", and the opening paragraph of the specification explains that the invention is to do with "incorporating computer-controlled representations into a real-world environment, and, in particular, to methods and systems for using a mobile device to interact with simulated phenomena". This is of use in games, training activities or other simulation experiences.

- 7 The statement of claim before me extended to 166 claims, containing six independent claims numbered 1, 61, 73, 138, 157 and 165. I quote claim 1 below:

1 A method in a computing device for interacting with a computer-controlled simulated phenomenon according to a narrative having data and event logic, comprising:

receiving an indication from a mobile device to interact with the simulated phenomenon;

receiving an indication of a value of a real world physical attribute associated with the mobile device that is sensed from an environment associated with and external to the mobile device;

performing the indicated interaction as a function of an attribute of the simulated phenomenon, the received real world attribute value associated with the mobile device, and the narrative data and event logic, wherein a behavior of the simulated phenomenon invoked responsive to performing the indicated interaction is based upon the narrative, the received value of the real world attribute, and at least one imaginary attribute.

- 8 In the interests of economy, I do not quote the other independent claims in full here. Claim 73 is to "A simulation environment ..." having a sensor for the real world physical attribute; a narrative engine; and a simulation engine all defined so as to fulfill the method of claim 1. Claim 138 is to "A mobile device ..." having the sensor and input and output modules which are configured to

operate with the method of claim 1. Claim 157 is to “A method in a mobile device” which defines the process steps interacting with the method of claim 1. Finally, claims 61 and 165 are to “A computer-readable memory medium containing instructions that, when executed, control a computer processor” and then go on, respectively, to refer back to the method of claim 1 and dependent claims; or the simulation engine of claim 157 to 164.

The law and its interpretation

- 9 The requirements for grant of a patent for present purposes are set out in sections 1(1) and 1(2).
- 10 Section 1(1) states
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) it 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;
and references in this Act to a patentable invention shall be construed accordingly.
- 11 In considering novelty and inventive step, the well-known provisions of section 2 and 5 are relevant, and for present purposes say that an invention is new if it does not form part of the state of the art, which is defined in section 2(3), in the case of applications for other patents, to include matter published after the priority date (as determined by section 5) of the application in suit, but before the filing date.
- 12 Section 1(2) states
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.
- 13 In *Aerotel/Macrossan* the Court of Appeal approved a new four-step test for assessment of patentability under section 1(2), namely:
1) Properly construe the claim
2) Identify the actual contribution
3) Ask whether it falls solely within the excluded matter
4) Check whether the contribution is actually technical in nature.

- 14 It is of course necessary also to construe the claim or claims in determining novelty and inventiveness under section 1(1). The standard principle of claim construction is set out in *Kirin-Amgen and others v Hoechst Marion Roussel Limited and others [2005] RPC 9*. I must put a purposive construction on the claims; interpret them in the light of the description and drawings as instructed by section 125(1) and take account of the Protocol to Article 69 of the EPC. In simpler language I must decide what a person skilled in the art would have understood the patentee to have used the language of the claim to mean.

Argument – Section 1(1)

- 15 The examination report dated 18 October 2006 objects on the basis of four prior documents, namely

WO 03/15057 A1 (INFORMATION DECISION TECHNOLOGIES)

US 2002/024675 A1 (FOXLIN)

US 2002/010734 A1 (EBERSOLE ET AL)

WO 01/88679 A2 (MATHENGINE)

- 16 The report lists the many claims said to be objectionable in the light of the disclosure of these documents.
- 17 WO 03/15057 A1 had been previously cited in the proceedings and the examiner, in the report, responded to submission previously made by the applicant. The other three documents were citations made for the first time at this stage, and the examiner gave his analysis of what they disclosed and how he feels they are relevant to the claims. Subsequent to this report, the discussion recorded in the proceedings focused on whether or not the claims were to be excluded matter under section 1(2), and the applicant made no comment as to the relevance or otherwise of these other documents.
- 18 With regard to WO 03/15057 A1, however, the applicant rightly points out that the document was published after the priority date of the current application, but before its filing date. Thus, it is his submission that, in accordance with the requirements of section 2(3), at most it contributes to forming the state of the art for novelty purposes only. It is also submitted that the current invention differs from the disclosure of the prior document in that it does not sense the value of an attribute of the real world outside the device.

Assessment – Section 1(1)

- 19 A check of the EPO Register confirms that WO 03/15057 has indeed entered the regional phase, and thus is available for consideration under novelty as provided by section 2(3). A perusal of the priority document for the current application persuades me that the claims currently under consideration are supported by matter disclosed in the priority document, and thus this document is not available for consideration as regards inventive step. The other documents on the other hand were all published before the declared priority

date of the current application.

- 20 As I said above, of the four documents identified above, the applicant has only made submissions in detail about WO 03/15057 A1. The applicant submits, in his letter dated 25 September 2006, that this does not disclose the sensing of a real-world phenomenon and affecting the behaviour of a simulated phenomenon by reference to this sensing and also a narrative.
- 21 In construing the claim for the purposes of determining novelty and inventive step, I consider that the skilled man would have little difficulty with discerning that the invention is computer-implemented; senses a physical attribute “associated with” a mobile device from the real world outside the device; and uses the so-derived value of the real world attribute to interact with “a narrative having data and event logic” and an “imaginary” attribute to influence the behaviour of the simulated phenomenon. This is consistent with the advance which the Agent’s letter dated 25 September (first paragraph, third page) submits as being that of the application, albeit that this is presented in the context of the patentability issue. The three passages and words which I have enclosed in quotes areas where I feel need some thought.
- 22 For “associated with”, given for example the listing of the many sorts of sensed values in for example claims 57 and 58, it is clear to me that the term “associated with” would be interpreted by the skilled man broadly as being any information about the device or the environment in which the device is found.
- 23 For “narrative”, the applicant points to pages 7 and 9 of the description as defining what is meant. To quote page 7 a narrative is “a sequence of events (a story, typically with a plot) which unfold over time”. This seems to me to be clear reinforcement of what the words in the claim would naturally mean to the reader.
- 24 I am less sure what falls within the term “imaginary attribute”, but after a considered reading of the application as a whole am satisfied that the skilled man would discern that this is information built in to the simulation of the phenomenon which determines some aspect of its behaviour.
- 25 Turning now to the disclosure of WO 03/15057 A1, this is clearly computer-implemented; involves the use of mobile devices (in this case a fire-fighting nozzle and a display device for the user); detects attributes of the real world (the position and operating attributes of the nozzle; the position of the user’s head and eyes; the position of real-world people or objects using a camera); and generates a sequence of events depending upon the actions of the user, making a composite image of real-world and simulated phenomena. The applicant submits that the detection of the real-world attributes of the position of the nozzle does not fall within the scope of the present claim in that it uses inertial detectors within the mobile device itself. The examiner counters that the detection would of necessity detect the position of the user’s hand, however the detail of the detection is done. I am inclined to agree with the examiner on this point. Be that as it may, there is also disclosure of the detection of the user’s eye position (foot of page 11). I am therefore satisfied that this document clearly discloses an arrangement falling within the inventive

concept common to the independent claims.

- 26 As for the other cited documents, the examiner argues that US 2002/024675 discloses a system uses for training purposes (e.g. for surgical procedures and games such as tennis) which tracks user's movements and uses this to determine the behaviour of simulated objects such as a virtual tennis ball. He argues that since this may be used for training it would perforce involve a narrative. In US2002/010734 he says there is disclosed an "augmented reality" system for use in training or games which include scenarios, which he says correspond to the narrative of the present invention. In WO 01/88679, he says there is a system in which the location of a browser is tracked by GPS, and the location of virtual objects is altered in accordance with the location of the browser. He particularly points to embodiments to do with virtual guides and games applications. He says that subject-matter falling within very many of the claims of the current application is disclosed.
- 27 I have carefully considered the content of these four documents and am satisfied that the teaching of these does indeed include matter falling within the scope of the independent claims. All of them, in my view, disclose computing devices and methods including computer-controlled simulated phenomena; involve the use of something which could be characterized as a narrative; all detect something about the real world, and use this to affect the behaviour of simulated (virtual) phenomena within the narrative structure.
- 28 The examiner has said that he considers they disclose claims 1-12, 9-50, 52-54, 57-131, and 133-65. He has not, however, elaborated on the detail of why this is so, and, in response, the applicant has not made any submission concerning each and every of these claims other than the comments I have noted above concerning WO 03/15057 A1. As I am being asked to determine whether or not this application was in an acceptable form as of 13 November 2006, and I have found as above that this was clearly not so in the case of the independent claims, I do not feel that I am in position to finally determine with absolute precision whether the examiner's view of each and every claim of those he quotes is correct, but have to say that, on a perusal of the statement of claim, many of the appendent claims are clearly so disclosed. It seems to me that in the light of the submission before me it would not be appropriate to spend time in coming to a precise conclusion.

Argument and assessment – Section 1(2)

- 29 The examiner took the view that, as the invention could be used in playing a game, it could fall foul of the "method of playing a game" limb of the exclusion; and that it could also be excluded as a program for a computer.
- 30 In response, the applicant, through his agent's letter dated 25 September 2006, has submitted argument based upon the test operative at that time. He submits that the invention can not be to the playing of a game as such, as it clearly can extend to areas outside this (e.g. training to respond to different scenarios). He also submits that the substance of the invention relates to methods and devices for interacting with a computer based simulation engine that implements a simulated phenomenon. He correctly states that it is the

substance of the invention which needs to be considered, and states that, in his view, the advance of the invention is in the field of the interaction between simulated phenomenon, attributes of a device and a narrative to produce a desired simulated phenomenon. He goes on to say that the advance is usable in the fields of training, playing games and potentially even assisting people with physical impairments to respond to an environment. He says the advance is by no means confined to playing a game or a programme for a computer. He says that the invention is not trying to protect either a method of playing a game or a computer program as such; and that the invention should not be deemed unpatentable merely because it could be used in playing a game, and merely because one way it could be implemented is by a computer programme.

- 31 The examiner responded to these submissions with his view that if the claim covers something that is unpatentable within it, then the claim as a whole is bad. In the telephone discussion of 9 November 2006, the effect of *Aerotel/Macrossan* was discussed, the examiner disagreed with the views I reported in the last sentence of my previous paragraph. He said that “We then agreed that really it is necessary to identify an actual contribution before we can fully consider the patentability issue.” He also drew specific attention to those parts of the *Aerotel/Macrossan* decision which changed Office practice as to those claims that cover computer programs in isolation, as in claim 165 of the application.
- 32 The applicant’s response, filed in his agent’s letter dated 16 November, does not address the new test, nor comment upon the status of claim 165. It merely re-states the applicant’s assertion that the application is not to either of the excluded areas in question as such.
- 33 As I have said above, the test to be applied to determine this is the four-step one laid down in *Aerotel/Macrossan*. I have construed the claim in my consideration of novelty above, and, given my decision there, where I have found the invention to lack novelty, I can not perceive what the contribution as required by the second test might be consistent with my finding of lack of novelty. I also do not have before me submissions or objections relevant in detail to the application of the new test or other effects of the *Aerotel/Macrossan* decision to the application. On the matter before me I therefore feel unable to come to a conclusion as to whether or not the invention in any claim is or is not excluded by section 1(2).

Assessment of other objections

- 34 The Examination report with the Office letter dated 18 October 2006 also raised two issues to do with consistency of the disclosure with the current claims; a requirement that some metric values be inserted for non-metric units mentioned; and the need to acknowledge some registered trademarks. The applicant has not responded or commented about these further issues. I find that they are valid objections.

Summary

- 35 I have found that the invention at least so far as claimed in the independent claims, is not novel having regard to the disclosures of the four documents cited by the examiner and identified above. I have also found that the other issues mentioned in paragraph 35 above are also valid objections. I therefore find that the application was not in order as of the last day of the Rule 34 period, namely 13 November 2006, and so refuse the application. I have not come to a final decision as to the complete list of the appendent claims which might also lack novelty, for the reasons given above. I also make no finding as to whether or not the invention is excluded by section 1(2). Although the period prescribed by Rule 34 has expired, the applicant has the right to extend this period up until 13 January 2007, and therefore, if this course is taken (by filing of the appropriate Form and fee), it is open to them to propose amendment to meet this decision within that extended period.

Appeal

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

B Westerman

Deputy Director acting for the Comptroller