



## PATENTS ACT 1977

APPLICANT                      NetEase (Hangzhou) Network Co., Ltd.

ISSUE                          Whether patent application GB1916294.0 complies  
with section 1(2) of the Patents Act 1977

HEARING OFFICER                      Phil Thorpe

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## DECISION

### Introduction

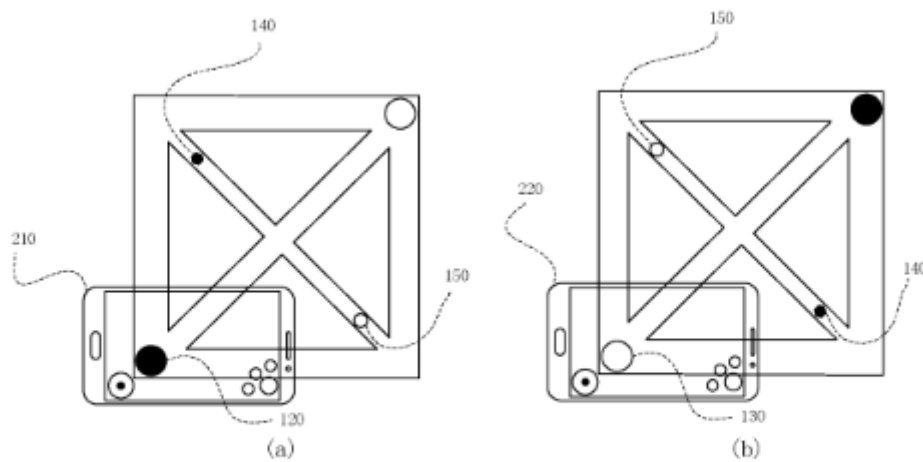
1. Patent application GB1916294.0 has an international filing date of 19<sup>th</sup> May 2017 and was published as WO 2018/209707 A1 on 22<sup>nd</sup> November 2018. After entering the national phase, the application was republished as GB 2575610 A on 15<sup>th</sup> January 2020.
2. The application was searched in the international phase, although the search has not yet been updated. Following amendment, the examiner is satisfied that the claims are novel and inventive over the teaching of identified closest prior art document JP 2014217654 A.
3. The applicant has, however, been unable to satisfy the examiner that the application has met all the requirements of the Act. In particular, the examiner remains of the opinion that the claimed invention is excluded from patentability as a scheme, rule or method for playing a game, as a program for a computer and as the presentation of information.
4. In their letter of 12<sup>th</sup> January 2022, the examiner invited the applicant to request to be heard by a Hearing Officer. The applicant's attorney responded by requesting in their letter of 9<sup>th</sup> February 2022 that a decision be made based on the papers on file.

### The Invention

5. The invention relates to online battle games played on mobile terminals, such as multiplayer online battle arena (MOBA).
6. During play of these battle games, first and second competing factions of virtual characters respectively start at first and second bases positioned at opposite ends of a game scene. The virtual characters advance (attack) towards the enemy base. The game scene includes multiple paths, often

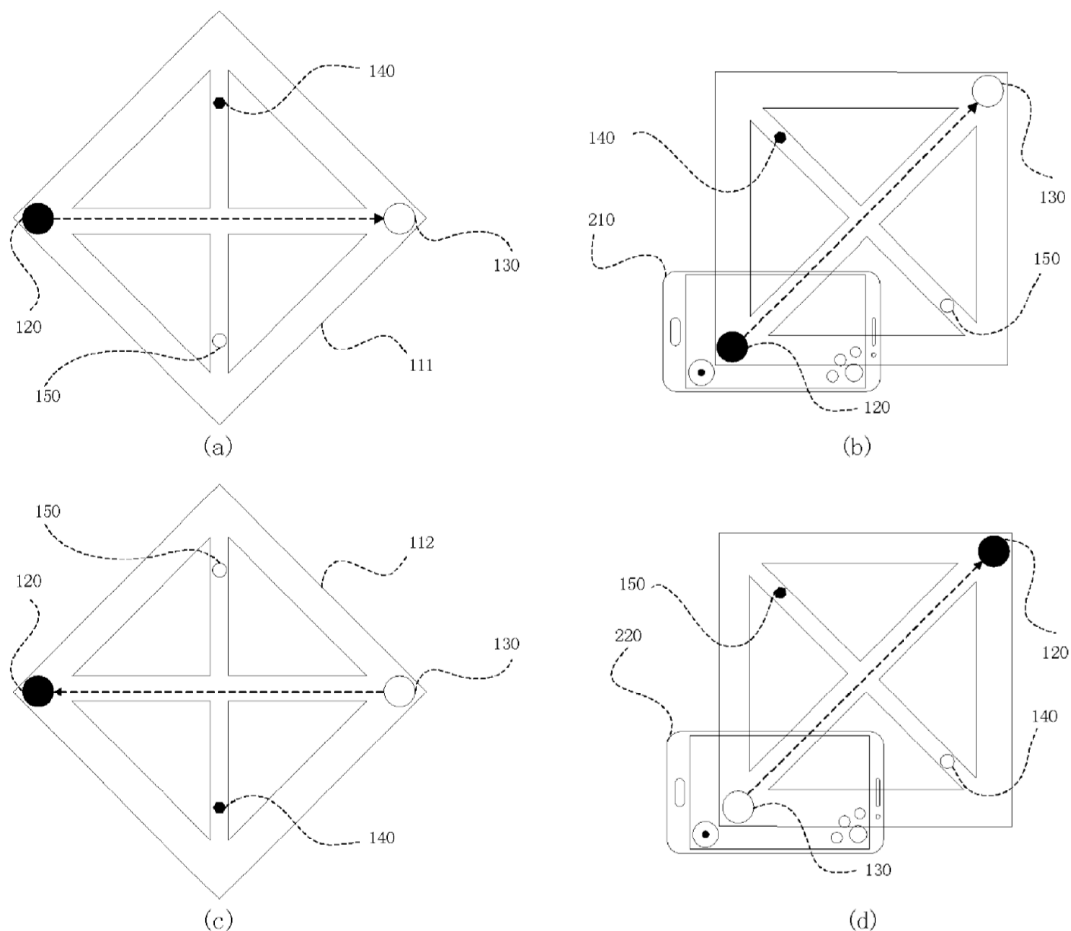
referred to by game players as "upper", "middle" and "lower" paths, along which the characters can travel. The alternative paths vary in strategic importance, due to differences in the opportunities for attaining game benefits, for example defeating a "resource" such as a monster character, possessed by each of the paths. Game players adopt a virtual character and the base to which they belong is generally displayed at the lower left section of the screen of the player's mobile terminal.

7. The patent application seeks to overcome a problem with conventional game scene displays, in which a specific resource appears in the game scene in a different relative position for players belonging to different factions. This can be seen in figure 2 below where in displaying the respective character bases 120 and 130 at the left-hand bottom corner of the respective clients 210,220 then the position of the resources 140 and 150 will appear on different paths.



**Fig. 2**

8. It is stated in the application that this affects the fairness of the game, the cultivation of strategic habits of the players and the rapport of team members. The problem is overcome by presenting a game scene to players of a second faction that is a mirror image of the game scene presented to players of a first faction. As a result, resources appearing on a particular path to players of the first faction, for example the "upper" path from their point of view, appear on the same path, i.e. the "upper" path, from the point of view of players of the second faction.
9. The invention is represented in the following figures, in which again 120 represents a first character faction base, 130 represents a second character faction base, 140 represents a first resource position and 150 represents a second resource position. (Labels 140 & 150 appear to have been inadvertently switched in figure 5(d)). Figures 5(b) and 5(d) show the game scene from the point of view of players of the first and second factions respectively.



**Fig. 5**

10. By adjusting the image in 5(d) the character 140 (shown as 150 by mistake in fig 5(d)) is to the left of the path from the two bases 120,130 in both displays.

11. The claims under consideration were filed on 21<sup>st</sup> December 2021. Claim 1 reads as follows:

*A game scene display control method of a game comprising: a first game character which is controlled by a first client of a first mobile terminal and a second game character which is controlled by a second client of a second mobile terminal, wherein the first game character belongs to a first character faction, and the second game character belongs to a second character faction, the method comprising:*

*on the first client of the first mobile terminal, displaying on a display screen of the first mobile terminal:*

*a first game content comprising a first game scene; and*

*first operation buttons in a portion of the display screen of the first mobile terminal;*

*on the second client of the second mobile terminal, displaying on a display screen of the second mobile terminal:*

*a second game content comprising a second game scene, wherein the first game scene is mirror imaging symmetrical to the second game scene based on a symmetrical mirror plane; and*

*second operation buttons in a portion of the second display screen of the second mobile terminal, wherein the portion of the first display screen of the first mobile terminal is in an equivalent position to the portion of the second display screen of the second mobile terminal;*

*wherein the symmetrical mirror plane is one of the followings:*

*a plane parallel to a ground plane of the first game scene;*

*a plane parallel to a ground plane of the second game scene;*

*a ground plane of the first game scene; and*

*a ground plane of the second game scene.*

12. There is also an independent claim to a game scene display control system. I am satisfied that this claim stands or falls with claim 1.

## **The Law**

13. The examiner has raised an objection under section 1(2) of the Patents Act 1977 that the invention is not patentable because it relates to categories of excluded matter. The relevant provisions of this section of the Act are shown with added emphasis below:

*1(2) It is hereby declared that the following (amongst other things) are not inventions for the purpose of the Act, that is to say, anything which consists of...*

**(c) ...a scheme, rule or method for...playing a game..., or a program for a computer;**

**(d) the presentation of information;**

*but the foregoing provisions shall prevent anything from being treated as an invention for the purposes of the Act only to the extent that a patent or application for a patent relates to that thing as such.*

14. As explained in the notice published by the IPO on the 8<sup>th</sup> of December 2008<sup>1</sup>, the starting point for determining whether an invention falls within the exclusions of section 1(2) is the judgment of the Court of Appeal in *Aerotel/Macrossan*<sup>2</sup>.

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<sup>1</sup> <http://www.ipo.gov.uk/pro-types/pro-patent/p-law/p-pn/p-pn-computer.htm>

<sup>2</sup> *Aerotel Ltd v Telco Holdings Ltd and Macrossan's Application* [2006] EWCA Civ 1371; [2007] RPC 7

15. The interpretation of section 1(2) has been considered by the Court of Appeal in *Symbian*<sup>3</sup>. *Symbian* arose under the computer program exclusion, but as with its previous decision in *Aerotel* the Court gave general guidance on section 1(2). Although the Court approached the question of excluded matter primarily on the basis of whether there was a technical contribution, it nevertheless (at paragraph 59) considered its conclusion in the light of the *Aerotel* approach. The Court was quite clear (see paragraphs 8-15) that the structured four-step approach to the question in *Aerotel* was never intended to be a new departure in domestic law; that it remained bound by its previous decisions, particularly *Merrill Lynch*<sup>4</sup> which rested on whether the contribution was technical; and that any differences in the two approaches should affect neither the applicable principles nor the outcome in any particular case.
16. Subject to the clarification provided by *Symbian*, it is therefore appropriate to proceed on the basis of the four-step approach explained at paragraphs 40–48 of *Aerotel* namely:
- (1) *Properly construe the claim.*
  - (2) *Identify the actual contribution.*
  - (3) *Ask whether it falls solely within the excluded matter.*
  - (4) *If the third step has not covered it, check whether the actual or alleged contribution is actually technical.*

### **Applying the Aerotel test**

#### **Step 1 – Properly construe the claim**

17. In their letter of 21<sup>st</sup> December 2021, the attorney construes claim 1 as being directed to a method *'for processing image data so that the same data may be displayed in different ways on different terminals concurrently for opposing interaction by users of the two terminals'*.
18. The examiner indicated broad agreement with this assessment in their pre-hearing report. They also noted that, although the patent application seems unclear about what is meant by the symmetrical mirror plane, this can be interpreted in view of figures 5(b) and 5(d). I am in agreement that the claim can be understood clearly.
19. I construe the claim more specifically as being directed to a method for controlling a game scene display comprising displaying on a first mobile terminal a first game scene and first operation buttons and displaying on a second mobile terminal a second game scene and second operation buttons, wherein the first and second operation buttons are displayed in an equivalent position on each of the terminals, and wherein the first game scene is a mirror image of the second game scene.

#### **Step 2 – Identify the actual contribution**

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<sup>3</sup> *Symbian Ltd v Comptroller-General of Patents*, [2009] RPC 1

<sup>4</sup> *Merrill Lynch's Appn.* [1989] RPC 561

20. Jacob LJ addressed this step in *Aerotel/Macrossan* where he noted:

*“43. The second step — identify the contribution — is said to be more problematical. How do you assess the contribution? Mr Birss submits the test is workable — it is an exercise in judgment probably involving the problem said to be solved, how the invention works, what its advantages are. What has the inventor really added to human knowledge perhaps best sums up the exercise.”*

21. The identified closest prior art document JP 2014217654 A relates to a game machine in which two players play a game face to face. Although the view presented to the second player does appear to be a mirror image of the view presented to the first player, the game is not played on a mobile terminal.

22. In their letter of 21<sup>st</sup> December 2021, the attorney identified the contribution as being:

*'the processing of the image data to display some of the data in a mirror image on the second terminal and display "operation button" content in equivalent positions on the two terminals to provide an improved equivalency of display of the same data on two different terminals when the displayed content is to be interacted with in opposing ways by users of the terminals'*

23. The examiner, in their pre-hearing report dated 21<sup>st</sup> February 2022, notes that they are broadly in agreement with the attorney and identifies the contribution as:

*'a computer implemented display method that removes any unfair advantages of resource distribution relative to a user's screen by providing a mirror imaging symmetrical game scene to a first and second player across or parallel to the ground plane of the first or second game scenes'*

24. I take aspects of both of these suggestions to arrive at a contribution of a computer implemented game scene display control method wherein the game scenes displayed to opposing players are mirror images and the operation buttons take equivalent positions on the mobile terminals of the opposing players.

Steps 3 and 4 – Ask whether it falls solely within the excluded matter and check whether the actual or alleged contribution is actually technical

25. I will consider steps 3 and 4 together.

26. The attorney states in their letter of 21<sup>st</sup> December 2021 that:

*'[the] contribution does not fall solely within excluded subject matter because it provides for image data processing for a particular purpose to improve equivalent display on different devices for opposing/complimentary interaction with the displayed content by the different device users. Image data processing is not excluded from patentability, and the data for display on different devices is processed for display in an improved complementary way on separate terminals'*

27. However, I consider that the contribution lies not in the processing of the image data to produce the required mirror image game scenes, but rather in the actual provision of mirror images of the game scene to the players.
28. The question of computerised methods for presenting information was considered in *Gemstar*<sup>5</sup>. In his judgement, Mann J. emphasised that, in order for the exclusion not to apply, there must be some technical effect beyond the information being presented. A better (or new) user interface was not considered to be a relevant technical effect.
29. The effect of presenting information to the players, i.e. the game scene, as a mirror image is for the purpose of improving fairness of the game, the cultivation of strategic habits of the players and the rapport of team members. I do not consider this to be a technical effect.
30. I will now consider the computer program exclusion.
31. Lewison J (as he then was) set out five signposts *AT&T/CVON*<sup>6</sup> that he considered to be helpful when considering whether a computer program makes a technical contribution. In *HTC*<sup>7</sup> the signposts were reformulated slightly in light of the decision in *Gemstar*. The signposts are:
1. Whether the claimed technical effect has a technical effect on a process which is carried on outside the computer.
  2. Whether the claimed technical effect operates at the level of the architecture of the computer; that is to say whether the effect is produced irrespective of the data being processed or the applications being run.
  3. Whether the claimed technical effect results in the computer being made to operate in a new way.
  4. Whether the program makes the computer a better computer in the sense of running more efficiently and effectively as a computer.
  5. Whether the perceived problem is overcome by the claimed invention as opposed to merely being circumvented.

32. The attorney asserts in their letter that:

*'Data processing and transmission of different versions of the data for display on different terminals is a technical process...this is supported in view of Symbian, at least because the second signpost is met. The technical effect is the provision of visual content to different users by way of the technical features of processing the data to allow for the same data to be displayed in different equivalent ways on different terminals. The technical effect is not merely displaying information but*

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<sup>5</sup> *Gemstar-TV Guide International Inc v Virgin Media Limited* [2009] EWHC 3068 (Pat); [2010] RPC 10

<sup>6</sup> *AT&T Knowledge Venture/CVON Innovations v Comptroller General of Patents* [2009] EWHC 343 (Pat); [2009] FSR 19

<sup>7</sup> *HTC v Apple* [2013] EWCA Civ 451

*results in different terminals being able to provide equivalent functionality to users of the different terminals with opposing uses for the displayed content'*

33. The invention here however does not operate at the level of the invention in *Symbian*. The effect produced during processing the data of the present application is specific to that data and cannot be considered to be a technical effect operating at the level of the architecture of the computer. The effect is not produced irrespective of the data being processed or the applications being run. I therefore do not agree with the attorney's assertion that the second signpost has been met.
34. The examiner considered all the signposts in their pre-hearing report. For completeness I would note that I am satisfied for the reasons provided by the examiner that signposts 1, 3, 4 and 5 are also of no assistance here.
35. I would add for completeness that on balance I do not consider the claimed invention to be excluded as a scheme, rule or method for playing a game since the contribution does not really alter the way that the game is played.
36. Taking a final step back, I cannot see anything that provides the required technical contribution.

### **Conclusion**

37. Having carefully considered the arguments, I am of the view that the contribution falls solely within the matter excluded under section 1(2) as a program for a computer and as the presentation of information. I can see nothing in the specification as a whole that could be reasonably be expected to form the basis of a valid claim. I therefore refuse this application under section 18(3).

### **Appeal**

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

**Phil Thorpe**

Deputy Director, acting for the Comptroller