PATENTS ACT 1977

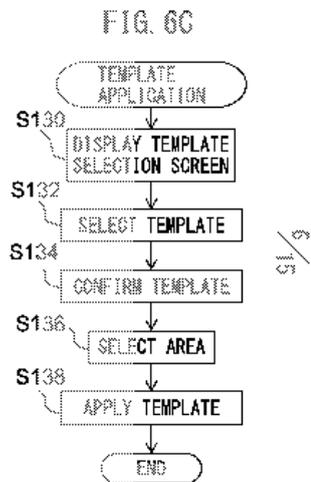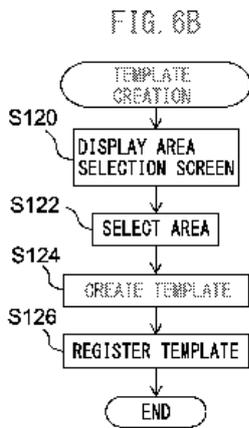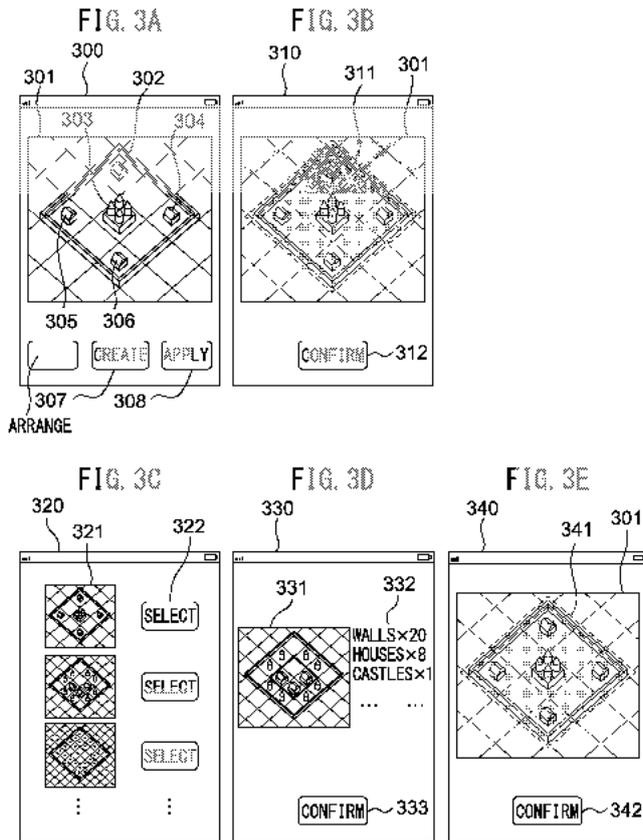|	
APPLICANT	GREE Inc
ISSUE	Whether application GB 1604478.6 complies with Section 1(1)(b) and 1(2) of the Patent Act 1977
HEARING OFFICER	Dr Stephen Brown

DECISION

Introduction

1   Patent Application GB 1604478.6 is the national phase of a PCT application published as WO 2015/046447 and claiming a priority date of 27th September 2013. It was subsequently republished as GB 2535656 on 24th August 2018. Despite several rounds of correspondence, the applicant has been unable to convince the Examiner that the application is allowable under Section 1(2) of the Act. Notwithstanding that, the applicant has also been unable to convince the Examiner that the application presents an inventive step. As a consequence, the applicant requested a hearing to resolve these matters.

2   This took place on 18th December 2020 by video. The applicant was represented by Mr Ben Lincoln of Potter Clarkson, to whom I would add my thanks for his comprehensive skeleton arguments. I was assisted by Mr Nigel Hanley. I am grateful for Mr Lincoln's cooperation in allowing Examiners Oliver Steele and Ilya Gribanov to attend as observers.

The Application

3   The application concerns a process for progressing a computer game where a first player defends or fight back an attack from a second player. In common with many games of this type, the first player can set out items within the game such as walls, castles and houses. The method of the application allows the user to save this layout as a template which they can then recall and reuse elsewhere during the game.

4   Figs 3a-3e and figures 6b & 6c of the application help illustrate this process and are reproduced below:

FIG. 3A

300
301 302

303 304

305 306

307 308

ARRANGE

CREATE APPLY

FIG. 3B

310
311 301

CONFIRM ~312

FIG. 3C

320
321 322

SELECT

SELECT

SELECT

FIG. 3D

330

331 332

WALLS×20
HOUSES×8
CASTLES×1
... ...

CONFIRM ~333

FIG. 3E

340
341 301

CONFIRM ~342

FIG. 6B

TEMPLATE
CREATION

S120
DISPLAY AREA
SELECTION SCREEN

S122
SELECT AREA

S124
CREATE TEMPLATE

S126
REGISTER TEMPLATE

END

FIG. 6C

TEMPLATE
APPLICATION

S130
DISPLAY TEMPLATE
SELECTION SCREEN

S132
SELECT TEMPLATE

S134
CONFIRM TEMPLATE

S136
SELECT AREA

S138
APPLY TEMPLATE

END

The Claims

5   In addition to filing his skeleton argument Mr Lincoln also filed two sets of revised claims, a main request and an auxiliary request. It is these claims that I will base my decision on. I would make clear that I am happy to consider the auxiliary claims in these proceedings though I would caution that this is purely as a result of the subject matter of the auxiliary claims being only a minor amendment of the main request.

This should not be read as acceptance of the practice of filing auxiliary claims in general.

6   The main request comprises 3 independent claims, claim 1 directed to a method, claim 11 to a control program for a computer and claim 12 to a Computer. This arrangement is repeated in the auxiliary claim set. For ease of reading this decision I have listed these at Annex A and B appended to this decision.

Format of the Decision

7   There are ostensibly two issues on which I need to come to a view. However, It appears to me that the most fundamental question I have to answer is whether the application is a computer program. If it is, then the question of whether or not it demonstrates an inventive step is moot. As such, I believe the most efficient way to take matters forward is to consider the computer program objection first and then, and only then, the inventive step argument should I find that the application is more than a computer program as such.

The Law – Section 1(2)

8   The section of the Act concerning inventions excluded from patentability is Section 1(2). This reads:

> "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 –
>
> ...
>
> (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 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."

9   In order to decide whether an invention relates to subject matter excluded by Section 1(2), the Court of Appeal has said that the issue must be decided by answering the question of whether the invention reveals a technical contribution to the state of the art. The Court of Appeal in *Aerotel/Macrossan*[1] set out the following four-step approach to help decide the issue:

> 1) Properly construe the claim;

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[1] Aerotel Ltd v Telco Holdings Ltd (and others) and Macrossan's Application [2006] EWCA Civ 1371

2) Identify the actual (or alleged) contribution;

3) Ask whether it falls solely within the excluded subject matter;

4) Check whether the actual or alleged contribution is actually technical in nature.

10   The operation of the approach is explained at paragraphs 40-48 of the judgment. Paragraph 43 confirms that identification of the contribution is essentially a matter of determining what it is the inventor has really added to human knowledge, and involves looking at substance, not form. Paragraph 47 adds that a contribution which consists solely of excluded matter will not count as a technical contribution.

11   The case law on computer implemented inventions has been further elaborated in *AT&T/CVON*[2] which provided five helpful signposts to apply when considering whether a computer program makes a relevant technical contribution. In *HTC v Apple*[3], Lewison LJ reconsidered the fourth of these signposts and felt that it had been expressed too restrictively. The revised signposts are:

i) whether the claimed technical effect has a technical effect on a process which is carried on outside the computer;

ii) 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;

iii) whether the claimed technical effect results in the computer being made to operate in a new way;

iv) whether the program make the computer a better computer in the sense of running more efficiently and effectively as a computer; and

v) whether the perceived problem is overcome by the claimed invention as opposed to merely being circumvented.

Application of the Aerotel Test

12   Before I fully consider the Aerotel test, I would make one observation. From the opening paragraph of the specification it is clear that the application is a program for a computer. That is beyond doubt. My purpose here, is to decide if that program provides a non-excluded technical contribution.

13   The first step of the Aerotel test requires me to construe the claims. Firstly, the claims of the main request refer to a "method of progressing a game" and a "game

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[2] AT&T Knowledge Ventures LP and CVON Innovations Limited v Comptroller General of Patents [2009] EWHC 343
[3] HTC v Apple [2013] EWCA Civ 451

space". Having reviewed the specification, it is clear to me that "progressing of the game" is intrinsically linked to the use of command buttons within the game. More specifically, as laid out in Fig 3 and the accompanying specification at paragraphs 0039 – 0054, "progressing the game" means the use of the command buttons to implement the creation (307), saving (312), display, selection (322) and placing of templates in the game (342).

14   This all happens within the "game space". Paragraph 32 of the specification describes the game space as being in a "grid form" and uses "grid coordinates". Although it does suggest other configurations can be used, I will thus take the "game space" as being the virtual terrain of the game with the user being able to access specific locations within it.

15   Finally, there is the use of the term "templates". The claims themselves make clear that a "template" is an arrangement of items within the game. Further, that these are items used to fight back or protect against an attack from a second player. In view of this, I will take the template to be a way or storing such arrangements for later re-use within the game.

16   The next step of the Aerotel test is to identify the contribution. The examiner identified the contribution as:

> "A computer program for controlling a videogame that allows the creation of templates that relate to the positions of items in a game space and the application of the templates in a game space to allow for arrangement of game items within the game space".

17   Mr Lincoln, on the other hand, stressed that I should be wary of exulting "form over substance" when considering the contribution. In particular, he asked me to consider this in the light of paragraph 43 of Aerotel which directs me to consider "the problem to be solved, how the invention works, what its advantages are". He is of the view, that seeing the equipment as conventional is wrong as this fails to recognise that what has been added is a new process for receiving user input. He argues that the problem being solved is not only the arrangement of items in a game but providing a more efficient way of recording and replicating these arrangements in the game.

18   He thus argued that the contribution was:

> "An increase in the efficiency of user input and efficient way to create a positional arrangement of items in a game despite the technical limitations associated with the provision of user input."

19   Clearly, there is no agreement here, so I must formulate my own view of the contribution. Firstly, as I have already stated, it is clear that this is a computer program. This is a matter of substance.

20   Secondly, at the core of the claim is the positional arrangement of items in a game. It is the reason for the method in the first place – so you can respond to or fightback against an attack from a second player. I consider that this too, is a matter of substance.

21   Thirdly, Mr Lincoln's view makes no mention of the commands or the templates. These are the means by which the user defines, saves and then selects the arrangement for replication. I consider that these too are matters of substance.

22   Fourthly, I turn to the question of whether the equipment forms part of the contribution. I do not believe it does. It is an entirely conventional apparatus which is running a computer game. As paragraph 6 of the specification states the application is about "improving the usability of city building games". There is nothing in the specification that leads me to believe that any of the computer equipment is anything other than entirely standard.

23   Given these points I identify the contribution to be:

> *"a computer program used to play a videogame with specific commands to record the arrangement of items used in the game as a template that can be saved and then selected for replication in the game space, resulting in an increase in the efficiency of user input with regards to using said items in the game".*

24   The next step is to decide if this lies entirely within excluded matter as no more than a program for a computer, as such.

25   Mr Lincoln argued that it does not, as it is, in his view, a "better interface". He argued that the contribution is a better way of inputting information that merely finds a particular expression in a game context.

26   While I appreciate this point of view, I am afraid that I do not consider it to be correct. It may well be a better interface, but it is an interface contained entirely within the game itself and indeed in a very specific *type* of game, at that. I can see nothing that produces an effect on a process which is outside the computer. Neither can I see anything that results in the computer itself being made to operate in a new way or that makes it run more efficiently. The contribution I have identified is contained entirely within the game and the only effects it has occur within the game. Put simply, it is a game specific routine in a computer game.

27   Normally, I would now turn to considering the AT&T signposts. However, Mr Lincoln did not believe these to be useful in this case and was of the view that I should pay more attention to the guidelines of the EPO. In that respect he drew my attention to the decision of the Board of Appeal in *Konami*[4]. This is a case where, within a computer football game environment, labels are displayed at locations around the perimeter of the screen to indicate where footballers were located within the game space when off the screen. Mr Lincoln argued that this showed that an improvement within a computer game could be patentable.

28   Whilst this is of interest, I do not see how the *Konami*[4] decision helps Mr Lincoln given they are for very different inventions and share little more than both being improvements within a computer game. Thus, I do not believe that I should follow Konami in this instance.

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[4] Konami (T928/03)

29   Thus, in line with UK practice, I will review the revised AT&T[3] signposts, although I will start with the third, since this is one Mr Lincoln addressed me on at the hearing. In this regard, he returned to the theme that this was a new interface and as such it was a new way of operating the computer. However, I see no need to re-tread ground I have already covered above. I do not consider the contribution to be a new computer interface given that the underlying computer hardware is entirely conventional and the contributions effects occur entirely within a game.

30   For completeness, I will briefly review the other signposts. As reasoned above, I can see nothing that produces an effect on a process which is outside the computer. Thus the first signpost is not met. Regarding the second signpost, it is clear to me that the contribution is entirely reliant on the data being processed given that it deals with the arrangement of items in a game. This is clearly not at the level of the architecture of the computer, so the second signpost is not met.

31   Likewise, I do not believe the fourth signpost has been met. The application may have some effect on the efficiency of the game play of the user in that it allows them to replicate arrangements more easily. However, this is an effect in the game and not with the computer itself. The computer itself is not running any more efficiently.

32   The fifth signpost has always been more difficult to apply and it is no different here. However, for it to be met you need to solve a *technical* problem. In this case, the problem solved is one of gameplay and thus the contribution fails this signpost too. I thus conclude that the contribution consists of no more than a program for a computer as such.

33   The final step of the *Aerotel* test is to check whether the contribution is technical in nature. Since I have decided that the claims do not make a technical contribution beyond those of a program running on a computer, they also fail this step. I thus decide that the claims of the main request are excluded under section 1(2) of the Act.

The Auxiliary Request

34   The claims of the auxiliary request are largely the same as those of the main request with one notable exception. Specifically, this is the definition of the computing apparatus as a portable device having a touch panel and display unit and receiving the commands through that panel. Put simply, I need to decide if this amendment changes the contribution. If it does not, then the issue of excluded matter requires no further discussion.

35   The use of portable touch panel screens on which you can play games is well known. Indeed, the applicant in their own acknowledged prior art refers to a game my assistant tells me he has played himself, "Clash of Clans". It is one example amongst many of a game played on a touch device. This demonstrates to me that a game running on a touch panel device is so well known that it cannot be considered to be part of the contribution.

36   I am reinforced in this view by the comments of Jacob J where at paragraph 44 of *Aerotel*[1] he states:

> *"If an inventor claims a computer when programmed with his new program, it will not assist him if he alleges wrongly that he has invented the computer itself, even if he specifies all the detailed elements of a computer in his claim. In the end the test must be what contribution has actually been made, not what the inventor says he has made"*

37   Touch screen portable computers are well known as is receiving commands through them to operate a program. This is not part of the actual contribution and as a result my analysis of the contribution remains the same. It follows that my earlier reasoning is also unchanged. Consequently, I find that the claims of the auxiliary request are also excluded under Section 1(2) of the Act.

Inventive Step

38   Having decided that the claims of both the main and auxiliary requests are excluded under Section 1(2) I see no need to consider the issue of inventive step.

Decision

39   I have decided that the inventions defined in the independent claims fall solely within matter excluded under Section 1(2) as programs for a computer as such. Having reviewed the application, I do not consider that any saving amendments are possible. I therefore refuse the application under section 18(3).

Appeal

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

Dr Stephen Brown

Deputy Director, acting for the Comptroller

Annex A – The Main Request

Amended Claim 1

A method for controlling a computer comprising:

progressing a game by arranging a plurality of items within a game space based on one or more first commands for progressing the game from a first player, wherein the items include an item to fight back against an attack by a second player different from the first player or to protect against the attack by the second player:

> recording a type ID and a position for the items (302–306, 422-425, 432-435, 442-443) used for the progress of the game, arranged within the game space (301, 400, 420,430,900) based on the one or more first commands from the first player, in a storage (22-32);

> based on a second command from the first player, creating and storing in the storage a template (410, 910,920,930,940,1110,1120,1130,1140) defining the type ID and the position of the items based on the items used for the progress of the game, arranged based on the one or more first commands from the first player within the game space;

> displaying the created plurality of templates based on a third command from the first player;

> selecting a template from the displayed plurality of templates based on a fourth command from the first player;

> arranging all items defined by the selected template, to the positions defined by the selected template based on a fifth command from the first player.

Amended Claim 11

A control program for a computer, the program causing the computer to execute a process, the process comprising;

progressing a game by arranging a plurality of items within a game space based on one or more first commands for progressing the game from a first player, wherein the items include an item to fight back against an attack by a second player different from the first player or to protect against the attack by the second player;

> recording a type ID and a position for the items (302-306, 422-425,432-435,442-443) used for the progress of the game, arranged within the game space (301, 400, 420, 430, 900) based on the one or more first commands from the first player, in a storage (22,32);

> based on a second command from the first player, creating and storing in the storage template (410,910,920,930,940,1110,1120,1130,1140) defining the type ID and the position of the items based on the items used for the progress

of the game, arranged based on the one or more first commands from the first player within the game space;

displaying the created plurality of templates stored in the storage based on third command from the first player:

selecting a template from the displayed plurality of templates based on a fourth command from the first player;

arranging all items defined by the selected template, to the positions defined by the selected template based on a fifth command from the first player.

Amended Claim 12

A computer comprising:

a progressing unit (251) for progressing a game by arranging a plurality of items within a game space based on one or more first commands for progressing the game from a first player, wherein the items include an item to fight back against an attack by a second player different to the first player or to protect against the attack;

a storage (22,32) for recording a type ID and a position for the items (302 – 306, 422 – 425, 432-435, 442-443) used for the progress of the game , arranged within the game space (301, 400, 420, 430, 900) based on the one or more first commands from the first player;

a template creation unit (252) for, based on a second command from the first player, creating and storing in the storage a template (410, 910, 920, 930, 940,1110, 1120,1130,1140) defining the type ID and the position of the items based on the items used for the progress of the game, arranged based on the one or more first commands from the first player within the game space;

a display (24) for displaying the created plurality of templates stored in the storage based on a third command from the first player;

a template application unit (253) for selecting a template from the displayed plurality of templates based on a fourth command from the first player and arranging all items defined by the selected template to the positions defined by the selected template based on a fifth command for the first player.

Annex B - auxiliary request

Amended Claim 1

A method for controlling a computer **comprising a portable device having a touch panel and a display unit**, comprising:

progressing a game by arranging a plurality of items within a game spaced based on **one or more** first commands for progressing the game from a first player **received via the touch panel of the device,** wherein the items include an item to fight back against an attack by a second player different from the first player or to protect against the attack by the second player;

> recording a type ID and a position for the items (302 – 306, 422-425, 432-435,442 – 443) used for the progress of the game, arranged within the game space (301,400,420,430,900) based on the one or more first commands from the first player, in a storage (22-32):

> based on a second command from the first player **received via the touch panel of the portable device**, creating and storing in the storage a template (410.910,920,930,940,1110,1120,1130,1140) defining the type ID and the position of the items based on the items used for the progress of the game, arranged based on the **one or more** first commands from the first player within the game space:

> displaying ,**by the display unit,** the created plurality of templates based on a fourth command from the first player received via the touch panel of the portable device:

> selecting a template from the displayed plurality of templates based on a fourth command from the first player **received via the touch panel of the portable device:**

> arranging all items defined by the selected template, to the positions defined by the selected template based on a fifth command from the first player **received via the touch panel of the portable device**.

Amended Claim 11

A control program for a computer **comprising a portable device having a touch panel and a display unit,** the program causing the computer to execute a progress, the progress comprising:

progressing a game by arranging a plurality of items within a game based on o**ne or more** first commands for progressing the game from a first player **received via the touch panel of the portable device,** wherein the items include an item to fight back

against an attack by a second player different from the first player or to protect against the attack by the second player;

recording a type ID and a position for the items (302 – 306, 422-425, 432-435,442-443) used for the progress of the game, arranged within the game space (301, 400, 420, 430, 900) based on the **one or more** first commands from the first player, in a storage (22,32):

based on a second command from the first ***player received via the touch panel of the portable device,*** creating and storing in the storage a template (410, 910, 920, 930, 940,1110, 1120, 1130, 1140) defining the type ID and the position of the items based on the **one or more** first commands from the first player within the game space:

displaying, by the display unit, the created plurality of templates stored in the storage based on a third command from the first player:

selecting a template from the displayed plurality of templates based on a fourth command from the first player ***received via the touch panel of the portable device:***

arranging all items defined by the selected template, to the positions defined by the selected template based on a fifth command from the first player ***received via the touch panel of the portable device.***

<u>Amended Claim 12</u>

A computer comprising;

a progressing unit (251) for progressing a game by arranging a plurality of items within a game space based on **one or more** first commands for progressing the game from a first player ***received via the touch panel of the portable device***, wherein the items include an item to fight back against an attack by a second player different to the first player or to protect against the attack;

a storage (22,32) for recording a type ID and a position for the items (302 - 306, 422 – 425, 432 – 435, 442-443) used for the progress of the game, arranged within the game space (301, 400, 420, 430, 900) based on the **one or more** first commands from the first player;

a template creation unit (252) for, based on a second command for the first player ***received via the touch panel of the portable device***, creating and storing in the storage a template (410, 910, 920, 930, 940, 1110, 1120, 1130, 1140) defining the type ID and the position of the items based on the items used for the progress of the game, arranged based on the **one or more** first commands from the first player within the game space;

a display (24) for displaying the created plurality of templates stored in the storage based on a third command from the first player **_received via the touch panel of the portable device;_**

a template application unit (253) for selecting a template from the displayed plurality of templates based on a fourth command from the first player **_received via the touch panel of the portable device_** and arranging all items defined by the selected template to the positions defined by the selected template based on a fifth command from the first player **_received via the touch panel of the portable device._**