BOARDS OF APPEAL OF
THE EUROPEAN PATENT OFFICE

CHAMBRES DE RECOURS
DE L'OFFICE EUROPEEN DES BREVETS

Internal distribution code:
(A) [ ] Publication in OJ
(B) [ ] To Chairmen and Members
(C) $[\mathrm{X}]$ To Chairmen
(D) [ ] No distribution

## Datasheet for the decision of 6 February 2009

Case Number:
Application Number:
Publication Number:
IPC:
Language of the proceedings: EN
Title of invention:
Game machine and storage medium therefor
Applicant:
Nintendo Co., Ltd., et al
Opponent:

Headword:

Relevant legal provisions:
EPC Art. 52(1), 52(2)(c), 56
Relevant legal provisions (EPC 1973):

## Keyword:

"Inventive step (yes)"
"Rules for playing games"
Decisions cited:
T 1173/97, T 0641/00, T 0258/03, T 1543/06, T 0336/07

## Catchword:

| Europäisches | European | Office européen |
| :---: | :---: | :---: |
| Patentamt | Patent Offi | des breve |

DECISION
of the Technical Board of Appeal 3.2.04 of 6 February 2009

```
Appellant:
Representative:
    Wegner, Hans
    Patent- und Rechtsanwälte
    Bardehle - Pagenberg - Dost
    Altenburg - Geissler
    Postfach 86 06 20
    D-81633 München (DE)
Decision under appeal: Decision of the Examining Division of the
    European Patent Office posted 14 August 2007
    refusing European application No. 00116115.7
    pursuant to Article 97(1) EPC.
```

Composition of the Board:

```
Chairman: M. Ceyte
Members: A. de Vries
    T. Bokor
```


## Summary of Facts and Submissions

I. The Appellant lodged an appeal, received at the EPO on 24 October 2007, against the decision of the Examining Division posted 14 August 2007, refusing the European patent application No. 00116 115.7, and simultaneously paid the appeal fee. The statement of grounds was received 4 December 2007.

The Examining Division held that the application did not meet the requirements of Articles 52(1) and 56 EPC, as the claimed invention concerned the obvious implementation of subject-matter excluded under Article 52(2)(c) EPC and thus lacked inventive step. The following documents were cited among others:

D2: US-A-5 267734
D3: EP-A-0 781580
D4: US-A-7 735741
II. In a communication dated 16 July 2008 and a telephone conversation of 15 September 2008 the Board drew the appellant's attention to an apparent lack of clarity in the wording of the independent claims and a consequential lack of novelty of these claims' subjectmatter. It added that if duly clarified the subjectmatter of these claims appeared both novel and inventive.
III. In response the Appellant filed a new main request with accordingly amended claims and description pages received at the EPO on 16 October 2008. He requests that the decision under appeal be set aside and a patent be granted based on claims and description in
accordance with this request. The appellant also requests oral proceedings, should the Board not intend to grant a patent.
IV. The wording of the independent claims of the main request is as follows:
"1. A game machine (GBP) of a type that a player object is moved on a map to encounter a character (R), comprising:
program storage means (11) for storing a game program; clock means (14) for clocking at least a time;
operation means (22) actuated by a player for operating the player object; and
processing means $(23,26)$ for executing said program to vary a displayed image based on the operation of said operation means (22),
characterized in that
the game program storage means (11) stores a program for varying a probability (A, B1-B7) for a character (PN1-PN7) whether to appear on the game map based on time information (H) of said clock means, wherein the probability (A, B1-B7) for the character (PN1-PN7) whether to appear on the game map depends on whether the time measured by the clock means (]4) is at a time or within a time zone determined by said program.."
"15. A medium (100) on which a game program for controlling a game machine (GBP) of a type that a player object is moved on a map to encounter with a character (R) is stored, said game program for making said game machine to execute the operation comprising: a step (S7) of clocking a time;
a step (S1) of detecting an operation of the player object by a player;
a step (S3) of varying a display image based on said detected operation of the player object;
characterized in that the method further comprises:
a step (S7-S19) of varying a probability (A,B1-B7) for a character (PN1-PN7) whether to appear on the game map based on said clocked time, wherein the probability (A, B1-B7) for the character (PN1-PN7) whether to appear on the game map depends on whether the time measured by the clock means (14) is at a time or within a time zone determined by said program."

## Reasons for the Decision

1. The appeal is admissible.
2. Allowability of amendments under Article 123(2) EPC

Claims 1 combines as filed claims 1 and 2 while rewording its final lines to clarify that appearance probability depends on time as indicated on originally filed description page 18, lines 11 to 22. Similar amendments are made to claim 4 based on original claim 7 which rephrases the invention in terms of a medium and the game program stored thereon.

The Board concludes that the amendments in particular to claims 1 and 4 do not infringe Article 123(2) EPC.
3.

Background

The invention concerns a gaming machine of the type wherein a player object is moved on a map and encounters game characters. In the main example, see page 2, 1st paragraph, the video game Pokémon® the idea is to capture and collect the various characters with different attributes, and to train them to compete against other such characters. Encounters are governed by chance, in that characters appear according to an "appearance probability" (which varies from character to character). To further increase this element of unpredictability of the game, and thereby hold a player's interest longer, the invention as defined in the final, characterizing features of independent claims 1 and 4 in essence proposes varying this appearance probability, i.e. the chance of an encounter with time. This is realized by a program (in the game program storage) which varies the appearance probability of a character in response to measured time, such that it depends on whether that time is at a time or within a time zone set in the program.
4. Novelty and Inventive Step
4.1 The above idea of varying an appearance probability with time as realized above is not known from any of the cited prior art, as also acknowledged in the decision under appeal (page 4, third paragraph). The claimed gaming machine and game program storage medium are thus indisputably novel.
4.2 The above features are also the sole distinctive features over the manifestly known, standard Pokémon® game console, which the Board considers as the nearest prior art for assessing inventive step. That such a gaming console includes as standard features a processor with internal clock for executing the game program and controlling the game display, program storage and player controls, behoves no comment.
4.3 These differences, by which the appearance probability is made time dependent, have the effect of reducing the predictability of the machine generated chance encounters, see as filed description page 5, line 23, to page 6, line 22. This effect is over and above the general (non-technical) aim of chance encounters per se, which within the gaming context serves to hold a player's interest and increase it's amusement value. The problem addressed by the differing features can be formulated accordingly, as how to modify the gaming device or game program such that it generates encounters in a less predictable manner.
4.4 The Board adds that both the solution and the problem it solves have clear technical character. The solution is essentially in the form of a software program interacting with a clock, and effectively constitutes a form of time dependent (pseudo)random event (or number) generator. Following the approach adopted in T 1173/97 (OJ EPO 1999, 609) the software produces the further technical effect of generating a random event and is thus not excluded from patentability as it is technical. Moreover, and following further T 258/03 (OJ EPO 2004, 575) the interaction with a clock as technical means also bestows technical character. On both counts the
claimed (computer) program implemented (pseudo)random event generator can be regarded as technical.

Similarly, the problem of reducing predictability in a random event generator, itself of technical character, for this reason soundly resides in the technical domain.
4.5 Time variability is well-known and documented in gaming devices such as video game consoles. It appears in many aspects, not least in the way attributes of objects, characters or scenery are made to vary with time, such as in the example, cited in the decision, of the ghosts in PacMan® that start to blink after a certain amount of time , or (more sophisticated) the growing healing powers of a magic plant in D3. It is also used to modulate player interaction, see D2, where play is only possible during a schedule of time slots.

The citations concerning random event generation on the other hand lack a time dependency in the event generation, see D4 where the evasive movement of tanks or artillery batteries is determined by a random number, or the arcade game Frogger (cited in the decision) where a lady frog or fly appear randomly during game play.

None of these examples thus show or suggest use of time as variable in generating random events, in particular by making the appearance probability time dependent as claimed. Nor does the Board have reason to believe it is generally known to reduce predictability of an event (generated by a machine or otherwise) by making the likelihood of its occurrence time dependent. It therefore concludes that the claimed time dependency of
the appearance probability as encoded in the stored game program involves an inventive step.
4.6 The Board does not subscribe to the view put forward in the decision that the idea of making chance encounters depend on time is a game rule, which is itself excluded from patentability and has been implemented in straightforward manner. "Game rule" is interpreted by the Board in its generally accepted, more classical sense - as this would have been understood by the framers of the EPC at the time of framing - as forming part of "the regulatory framework agreed between [or with] players concerning conduct, conventions and conditions that are meaningful only in a gaming context [and which, as such] is a purely mental, abstract construct", see T 336/07, reasons 3.3.1. In other words, they form the abstract formal structure of a game describing the interplay between player actions and the choices offered within the game. In the present case the underlying condition that chance encounters occur within the game is a game rule in the classical sense.
4.6.1 The claimed solution, however, is not so much concerned with this rule per se, as with the particular manner in which it is realized, namely the way in which the events are generated. This is not intended to be known, much less explicitly agreed to by a player, as this would in fact defeat the stated purpose of making encounters less predictable. For this reason alone the claimed features cannot be representative of a game rule in the classical sense.
4.6.2 Nor does the Board consider the way in which the time dependent chance encounters are generated to derive from a game rule in some wider sense, that is as a condition or regulation that governs the internal as well as the external, explicit workings of the game. Modern computer implemented (or digital) gaming systems are characterized by a high degree of complexity and interactivity, they have strong narrative elements that are fluid and adaptive with characters and game scenarios evolving continuously during game play. Many of these aspects - such as narrative - are essentially conceptual in nature, relating to abstract and thus inherently non-technical schemes, which in their own right fall short of the basic prerequisite of technicality to be patentable. Such aspects and their straightforward implementation by computer would, the Board agrees, fail patentability requirements in the same manner as subject-matter excluded in
Article 52(2)(c) EPC, (see e.g. T 641/00 (OJ EPO 2003, 352) or T 1543/06, reasons 2).
4.6.3 The Board is however unable to identify such a game rule pertaining, say, to the inner logic of the game that might underlie the claimed time dependency of the appearance probability. That a similar dependency could have been achieved with dice, a watch and a probability table linking times to dice outcomes, as argued in the decision under appeal, merely demonstrates an alternative technical way of realizing the time dependent chance encounters (though by no means equivalent, as it would be visible to the player). It does not prove that the introduction of a time dependency is per se the expression of a game rule. By analogy, rolling dice is not of itself a game rule, but
rather a technical (if well-known) method and means (the dice) of generating numbers randomly; moving pieces on a board by the number rolled with dice in a game of snakes and ladders clearly is the corresponding game rule.
4.6.4 For the same reasons, varying the probability by which a character is made to appear in a game depending on time is innately technical. It relates to the purely technical problem of realizing - or rather simulating in the physical world, the key game concept of chance, and cannot be seen severed from the real world.
5. The description having been adapted to the new claims, the application as amended now meets all the requirements of the EPC.

## Order

## For these reasons it is decided that:

1. The decision under appeal is set aside.
2. The case is remitted to the department of first instance with order to grant a patent in the following version:

Description: Pages 1 - 5, 10 - 33 as originally filed Pages 6 - 9, 34 as filed with letter of 16 October 2008

Claims: No. 1 - 4 filed with letter of 16 October 2008

Figures: $\quad$ Sheets $1 / 13-13 / 13$ as originally filed

