# PATENTAMTS

# BESCHWERDEKAMMERN BOARDS OF APPEAL OF OFFICE

CHAMBRES DE RECOURS DES EUROPÄISCHEN THE EUROPEAN PATENT DE L'OFFICE EUROPEEN DES BREVETS

#### Internal distribution code:

(A) [ ] Publication in OJ

(B) [ ] To Chairmen and Members
(C) [ ] To Chairmen

(D) [X] No distribution

# Datasheet for the decision of 10 April 2013

T 0414/12 - 3.2.04 Case Number:

Application Number: 05744471.3

Publication Number: 1769290

IPC: A63F 13/00

Language of the proceedings: EN

# Title of invention:

System and method for mapping results from sporting events to game inputs

# Applicant:

CFPH, L.L.C.

#### Headword:

# Relevant legal provisions:

EPC Art. 52(2)(c), 56

# Keyword:

"Inventive step - (no) - mixture of technical and nontechnical features

#### Decisions cited:

T 0258/03, T 1543/06, T 0641/00, T 0336/07, T 0012/08, G 0003/08

#### Catchword:



#### Europäisches Patentamt

European Patent Office

Office européen des brevets

Beschwerdekammern

Boards of Appeal

Chambres de recours

Case Number: T 0414/12 - 3.2.04

DECISION
of the Technical Board of Appeal 3.2.04
of 10 April 2013

Appellant: CFPH, L.L.C.

(Applicant) 110 E. 59th Street

New York, NY 10022 (US)

Representative: Beresford, Keith Denis Lewis

Beresford & Co. 16 High Holborn

London WC1V 6BX (GB)

Decision under appeal: Decision of the Examining Division of the

European Patent Office posted 27 September 2011

refusing European patent application

No. 05744471.3 pursuant to Article 97(2) EPC.

Composition of the Board:

Chairman: A. de Vries
Members: J. Wright

T. Bokor

- 1 - T 0414/12

# Summary of Facts and Submissions

- I. On 07 December 2011, the appellant lodged an appeal against the decision of the examining division posted on 27 September 2011 refusing the European patent application No. 05744471.3 and paid the prescribed fee. The statement of grounds of appeal was received on 07 February 2012.
- II. The examination division held that the claimed subject matter of the applicant's main and two auxiliary requests did not involve an inventive step because it was obvious in the light of document WO01/50831 A2, hereinafter referred to as D1. In particular the examining division considered that the claimed subject matter was a mixture of technical and non-technical features and that all the technical features claimed were known from document D1.
- III. Oral proceedings were duly held on 10 April 2013. The proceedings were consolidated with appeal T 1331/12 in accordance with Rules of Procedure of the Boards of Appeal, Article 10(2).
- IV. The appellant requests that the decision be set aside and a patent be granted on the basis of claims according to a main request, or in the alternative according to an auxiliary request, both filed on 07 February 2012 with the grounds for appeal. He further requests that the following questions be referred to the Enlarged Board of Appeal pursuant to Article 112(1)(a) EPC.

- 2 - T 0414/12

- "1. When a claim relating to an electronic gaming apparatus defines as an integer a game rule which provides a further technical effect (which may be known) in the sense of Decision T1173/97, which technical effect is an inherent result of implementing the rule in the apparatus, should that integer be taken into account in assessing inventive step?
- 2. If the answer to Question 1 is positive, would the answer be different if there is also, as a result of the rule, a nontechnical or cognitive effect on a person playing a game on the apparatus?
- 3. If the answer to Question 2 is negative, would the answer be different if the application presents the nontechnical or cognitive effect as the, or one of the purposes of the invention?"
- V. Claim 1 of the main request reads as follows:
  - "1. Electronic gaming apparatus, comprising:
    memory means (52) operable to store a set of game rules
    for defining an electronic game which includes a
    simulated randomising device, said simulated
    randomising device being simulated dice, simulated
    playing cards, simulated slot machine reels, a
    simulated roulette wheel, a simulated money wheel or
    simulated numbered balls; and processor means (50)
    operable:
  - (i) to receive a bet relating to said game,
  - (ii) to determine at least one substantially unpredictable input value to the game, said input value being a value defined by said simulated randomising device when the game is played, and

- 3 - T 0414/12

(iii) to determine the result of the bet based at least in part on said determined input value and said game rules;

characterised in that said processor means (50) is operable:

- (a) in response to receiving the bet, to execute one or more algorithms to select, on the basis of received sporting event information, a sporting event from a plurality of sporting events,
- (b) to assign the bet to the selected sporting event,
- (c) to receive one or more event results of the selected sporting event, and
- (d) to determine said at least one input value at least in part on the basis of said received event results so that the result of the bet is based at least in part on the received event results of the selected sporting event; and

further characterised in that:

- (e) the memory means (52) is operable for storing a plurality of sets of input value determining rules for the game, and
- (f) the processor means (50) is operable for determining said one or more input values by selecting a set of input value determining rules from said plurality and utilising the selected set of rules to the [sic] determine the input values."

Claim 1 of the auxiliary request is the same as claim 1 of the main request, except that it has additional features (g) and (h) at the end of the claim. These features read as follows:

"(g) at least a first of the plurality of sets of input value determining rules are utilized for determining

input values for the game based on sporting events that have a first number of participants; and

(h) at least a second of the plurality of sets of input value determining rules are utilized for determining input values for the game based on sporting events that have a second number of participants."

VI. The appellant's arguments for both requests can be summarised as follows:

# (a) Patentability

The characterising features of claim 1 of the requests define that sporting event results information interacts with the electronic gaming apparatus to cause a simulated randomising device (a simulated dice, simulated playing cards etc.) to adopt a value which is unpredictable.

To further increase the degree of unpredictability to the value, the value is determined from the sporting event according to a selected set of rules (features e and f). These rules constitute "mapping" rules determining how the sport event result is translated into a value. The auxiliary request adds features (g and h) which add further complexity in selecting these rules.

The sporting event results information, which is non-technical as such, thus interacts with technical features which has the technical effect of determining the value of a simulated randomising device in an unpredictable way. The claimed gaming apparatus

- 5 - T 0414/12

therefore overcomes the problem of tampering associated with the notorious prior art gaming apparatus.

The characterising features of the claim do not implement a game rule but define how an unpredictable value is generated for the simulated randomising device. They perform the same role as would be performed by a random number generator in the conventional electronic gaming apparatus, which is technical, much like a mechanical card shuffler which can be used in different card games with different rules. In this regard, the "input value determining rules" of features (e) and (f) are not rules for playing games but technical features relating to the rules applied for generating the unpredictable input value for the game.

No solution to the core problem of generating an unpredictable value is provided by D1 since this discloses a game continuously determining the speed of a horse from a stream of stock price data, rather than determining a value. Nor does D1 propose any "mapping" rules for translated stock prices into horse speed. Therefore a combination of the notorious gaming apparatus and D1 would not lead the skilled person to the invention claimed in an obvious way.

# (b) Referral to the Enlarged Board of Appeal

The point of law requested for referral is of fundamental importance for the following reasons: depending on the answers to the questions posed, a situation could arise in the field of electronic gaming apparatus in which a further technical effect resulting

- 6 - T 0414/12

from the implementation of a game rule (excluded from patentability as such under Article 52(2)c,(3) EPC) in an electronic game apparatus, would not be considered when assessing inventive step.

# Reasons for the Decision

- 1. The appeal is admissible.
- 2. Background
- 2.1 The present invention concerns an electronic gaming apparatus which allows a user to play a betting game by placing a bet on the outcomes of a simulated chance game such as roulette, card games, a slot machine, or a craps game, of which the "chance" input values (i.e. the number of the roulette wheel, the cards dealt, the values of the slot reels or the dice) are derived from the results of a selected sporting event according to given mapping rules. The idea of placing a bet concerns a game rule. Thus the system of claim 1 includes aspects of schemes, rules or methods for playing games, which are per se excluded from patentability under Article 52(2)(c) EPC. However, the claimed system also includes technical aspects, in particular an apparatus is claimed having a memory means and a processor means. The claimed system therefore possesses overall technical character (following T0258/03), even if it is "mixed" (with both technical and non-technical aspects).
- 2.2 In dealing with such "mixed" inventions, the Board adopts the approach as set out in T 1543/06 (Gameaccount), reasons 2.1-2.9, which is based foremost

- 7 - T 0414/12

on T 0641/00 (OJ EPO 2003, 352). Thus, only those features that contribute to technical character are to be taken into account when assessing inventive step. That requirement cannot rely on excluded (non-technical) subject matter alone, however original it may be. The mere technical implementation of something excluded cannot therefore form the basis for inventive step. A consideration of the particular manner of implementation must focus on any further technical advantages or effects associated with the specific features of implementation over and above the effects and advantages inherent in the excluded subject-matter. In the present case it is necessary to consider what aspects claimed are non-technical, how they have been technically implemented, and whether such implementation is inventive over the prior art.

2.3 "Game rules" form part of "the regulatory framework agreed between [or with] players concerning conduct, conventions and conditions that are meaningful only in a gaming context. It is important to note that it is normally so perceived by the players involved, and as serving the explicit purpose of playing a game. "As such an agreed framework it is a purely abstract, mental construct, though the means for carrying out the game play in accordance with such a set may well be technical in nature". See T 0336/07, reasons 3.3.1. As noted further in T 0012/08, reasons 4.6, game rules thus "form the abstract formal structure of a game describing the interplay between player actions and the choices offered within the game." A set of game rules thus determines inter alia how game-play evolves from beginning to end in response to player actions and

decisions and the goals to be achieved to conclude game-play.

- 3. Inventive step
- 3.1 It is undisputed that a notorious electronic gaming apparatus comprising a memory means and a processor means operable to play a betting game using a random number generator as a "simulated randomising device", generating the game's "chance" input values can be considered as the closest prior art. For the skilled person, a game system developer with software engineering skills, such a notorious apparatus represents a good starting point for assessing inventive step.

With respect to such a notorious prior art system, the system of claim 1 of both requests differs only in the way in which the value for the simulated randomising device is determined. In the main request this is defined in the characterising features of the claim, features (a) to (f). Thus, the processor selects one sporting event from a plurality of such events to which it assigns the bet, and uses the results of the selected event to determine the input value or values of the game that will produce a game outcome against which the player has placed his bet - features (a) to (d). The results of the sporting event are converted into input values of the simulated game using a set of rules that are selected from a plurality of sets of rules stored in a memory - features (e) and (f).

In the auxiliary request there are additionally different sets of "mapping" rules for sporting events

with different numbers of participants - features (g) and (h).

3.2 One of the main objectives of the invention, as explained on page 3, lines 4 to 7 of the published application, is increasing player interest and appeal of the game by providing a new playing experience. This is achieved foremost by mapping the results of future sporting events onto the input values of a chance game - the values on a roulette wheel, cards dealt - against which a player is betting. By way of example, the player thus bets on a certain number on the roulette wheel or a certain card or dealt hand of cards; the actual game numbers or card values are then determined on the basis of the results of, say, a horse race. The player is aware of the source of these game input values, cf. page 7, last paragraph, of the published application and indeed must input additional information regarding the sporting invent when placing his bet. This may extend to selecting the sporting event, a particular participant or his placing, page 8, 2nd paragraph. This allows the player to "influence the result of the game by exercising skill and judgement" in their selection, page 8, lines 9 to 10. In addition he sees "that the game result is not fixed and [that he has] a real chance of winning the game", page 7, lines 27 to 28. The player is thus not simply betting on a chance game, but rather on the results of the sports event, via the intermediary of what on the face of it is a chance game. Importantly, he does so knowingly. This leads the Board to conclude that the underlying core idea of the claimed invention is in fact a new hybrid betting scheme that combines betting on sporting - 10 - T 0414/12

events with chance games, bringing together the betting parlour and the game casino so to speak.

The basic scheme which allows for betting on sporting events via the interface of a chance game is further refined in that the player can choose the particular chance game - craps, roulette, blackjack, say, see page 14, lines 3 to 12. This choice, which also serves the purpose of increasing game appeal and player interest, also lies within the domain of game rules.

The rules of this betting scheme can now be formulated as follows:

- select a game from a plurality of chance games
- place a bet including information regarding a sporting event on which the chance game is to be based
- determine the results of the sporting event
- convert the results of the sporting event into chance game input values using mapping rules and display them
- determine the outcome of the bet based on these mapped game input values.

This formulation is neutral to the particular nature of the mapping rules. It will be clear that the particular way sporting event results map onto chance game inputs is a matter of abstract choice on the part of the games designer. Therefore the mapping rules, whatever form they may take, are also part of the overall set of rules and conventions that define the particular betting scheme based thereon. Their formulation is firmly within the game designer's responsibility.

3.3 The obvious way for the software engineer, asked to implement these rules on a notorious gaming apparatus with processor and memory, is to configure these existing components such that game play can proceed according to these rules. In the notorious gaming apparatus the processor and memory are foreseen for this very role, the processor ensuring game play according to rules that are stored in memory. In the present case that obvious implementation means that the processor is configured to receive the player's game selection and subsequent bet with relevant sporting event information, and then receive the relevant sporting event results and convert them into chance game input values using mapping rules. This corresponds to features (c) and (d) which are thus a straightforward obvious implementation of the basic betting scheme above.

In implementing the scheme the skilled person will naturally store the mapping rules used for the conversion in the memory of the notorious electronic gaming apparatus. As the scheme offers different chance games that have different input types and values — different ranges of numbers for a die game and roulette, cards in a blackjack game — different sets of mapping rules are required to map the sporting event results onto these different types and values of input and the games designer will have drawn up and provided these sets to the skilled person. It goes without saying that the skilled person will store these also in the apparatus' memory. Equally obviously he will configure the processor to select the appropriate set for determining the input values once the player has

- 12 - T 0414/12

chosen which game to play. Features (e) and (f) thus also implement the betting scheme in an obvious way.

3.4 Turning to the remaining features (a) and (b) these pertain to the processor selecting from a plurality of sporting events on the basis of the bet and sporting events information, and then assigning the bet to the selected event.

Their purpose can be inferred from page 30, lines 7 to 19: the system receives information for various events (page 30, lines 7 to 12) but not all of these can be mapped onto game input values and therefore an appropriate selection must be made. In the example given in the application, the system maps from the numbers of horses that finish in positions indicated in the bet on to the game input values (paragraph bridging pages 14 and 15, figures 4 to 6). A race must therefore have enough positions or participants to be able to be mapped, see page 30, lines 16 to 19, which also mentions the other important and typical requirement for bets that the sporting event, in this case the race, lie in the future. Not all sporting events thus qualify for mapping onto input values. Which ones do, depend on the particulars of the mapping rules themselves and other factors such as time of the event. This will be apparent to the software engineer when he is tasked by the games designer to implement the betting scheme and he is given the various sets of specific mapping rules. He will need to make some provision in the system so that it uses only events that qualify. Having the system receive various events and then select one future one that complies with the criteria for mapping onto a chosen game would be one

- 13 - T 0414/12

obvious option. But even if, as another obvious alternative, he were to limit the events for mapping to say races at a specific racetrack, even then the system must use only races that take place after the bet, i.e. that are time compliant. In either case, the processor will need to be configured to carry out some form of selection algorithm that uses event information if only the time of the race - to select and assign it to the bet. For this reason the Board holds that features (a) and (b) also implement the betting scheme in an obvious manner.

- 3.5 The groups of differing features (a) and (b), (c) and (d), and (e) and (f) of claim 1 of the main request are each obvious implementations of different aspects of the betting scheme, and all will follow in an obvious manner when the skilled person implements the entire scheme on a notorious electronic gaming apparatus. The subject-matter of claim 1 of the main request thus lacks inventive step, Articles 52(1) and 56 EPC.
- 3.6 The auxiliary request adds to claim 1 further features (g) and (h) specifying two different sets of mapping rules for different numbers of participants. As stated above the mapping rules per se reside firmly in the domain of gaming and game rules. Here the decision to map from say horse races with ten horses using one set of rules, and to map from horse races with seven horses using another set of rules is purely a gaming decision made by the games designer when he decided to base his mapping scheme on numbers of participants. The use of these different mapping rules cannot contribute to inventive step, so that the subject-matter of claim 1 of the auxiliary request also lacks inventive step.

- 14 - T 0414/12

3.7 The fact that this new betting system may be less susceptible to tampering than an electronic gaming apparatus using a random number generator to generate the value for a simulated randomising device is immaterial. This effect can neither form the basis for formulating the objective technical problem addressed by the invention, nor does it represent a further technical effect in the sense of T 1543/06, reasons 2.8.

In particular, the claimed system is less susceptible to tampering because it changes the betting scheme so that bets are not placed against randomly generated numbers but against the outcome of a sporting event. This is not a technical effect that results from the particular way in which the game rule is implemented, it is rather a direct consequence of the betting game having been changed. The rules are changed and the random number generator can be dispensed with. The claimed invention therefore does not address the problem of tampering in random number generators in an inherently technical way - for example by modifying its mechanism to be less susceptible to tampering. Rather, it offers a non-technical gaming solution which effectively circumvents the problem by changing the rules, thereby obviating the need for the random number generator, similar to T 258/03, reasons 5.7. However ingenious this gaming idea may be, it cannot contribute to inventive step in the sense of Article 56 EPC. That requirement is a technical requirement to be assessed from the point of view of the skilled person in the relevant technical field. Here that is the software engineer or designer specialising in gaming software who is tasked by the games designer with implementing

- 15 - T 0414/12

the new game. From his point of view the way the game rules are implemented in claim 1 of either request, namely by having the processor means and memory means carry out the tasks of the betting authority in such a betting scheme, is obvious.

For the same reasons the Board does not consider the claimed invention to offer an alternative "simulated randomizing device" to the random number generators commonly used in an electronic gaming apparatus. This argument might have held if the betting scheme operated by the system remained the same, i.e. the player placed the same bet as before, this is not the case, as the bet parameters above indicate. It is thus the betting scheme which has changed, necessitating a different operation of the processor means and memory means.

4. Request for referral of questions to the Enlarged Board of Appeal

Article 112 EPC provides for the possibility of referring questions of law to the Enlarged Board "in order to ensure uniform application of the law or if a point of law of fundamental importance arises" (paragraph (1)).

In the present case the Appellant has asked for referral of questions concerning the particular approach to be adopted by the Boards in considering how to assess inventive step in regard of electronic gaming apparatus that implements a game rule providing a further technical effect.

- 16 - T 0414/12

The approach adopted by the present Board has been outlined above in section 2.2. It builds upon existing case law regarding implementation of game rules, which in turn is based upon various decisions of the Boards concerning the assessment of inventive step for "mixed" inventions involving computer programmes which are per se excluded from patentability under the same provision as rules and methods for playing games, Article 52(2)(c) EPC. The decisions and their underlying approaches have become well-established case law and are consistently and uniformly followed by the Boards. Most recently the Enlarged Board in G 03/08 (OJ EPO 2011, 10) held these decisions to constitute a "legitimate development of case law" and that there was no divergence between them (headnote 7). Nor has the Appellant provided any compelling evidence that this might not be so.

Moreover, the particular questions raised by the Appellant are specific to a very limited field of subject-matter and - in contrast to, say, the questions addressed in G 03/08 relating to computer implemented inventions - are of small relevance outside that field. In the Board's estimation the questions posed are therefore also not of fundamental importance.

Finally, the differing results arrived at by the appellant and the Board in assessing inventive step of the claimed invention appear not to be the result of differing views as to whether further technical effects inherent in the implementation of a game rule should be taken into account when assessing inventive step (to which the questions pertain), but rather lie in differing assessments as to what aspects of the claim

- 17 - T 0414/12

are technical and what aspects are non-technical game rules as such. The questions posed have in essence been answered by the Board, thus an answer from the Enlarged Board of Appeal is not necessary for reaching a decision on the appeal in hand (Article 112(1)a EPC, first sentence).

In the light of the above, the Board concludes that there is no justification for referring the questions posed to the Enlarged Board of Appeal.

# Order

# For these reasons it is decided that:

- 1. The request for referral of questions to the Enlarged Board of Appeal is refused.
- 2. The appeal is dismissed.

The Registrar

The Chairman

G. Magouliotis

A. de Vries