BESCHWERDEKAMMERN DES EUROPÄISCHEN PATENTAMTS

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) [X] To Chairmen
(D) [ ] No distribution

Datasheet for the decision of 2 July 2008

Case Number: T 1793/07 - 3.2.04

Application Number: 00110174.0

Publication Number: 1052000

IPC: A63F 13/10

Language of the proceedings: EN

Title of invention:
Video game device, guide display method for video game and readable storage medium storing guide display program

Applicant:
Konami Digital Entertainment Co., Ltd.

Opponent:
-

Headword:
-

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

Relevant legal provisions (EPC 1973):
-

Keyword:
"Mixed invention"
"Inventive step - no (all requests)"

Decisions cited:
T 0115/85, T 0641/00, T 0619/02, T 0258/03, T 0928/03, T 0049/04, T 0717/05, T 1023/06, T 0336/07

Catchword:
-

Europäisches Patentamt | European Patent Office | Office européen des brevets

Beschwerdekammern | Boards of Appeal | Chambres de recours

Case Number: T 1793/07 - 3.2.04

D E C I S I O N
of the Technical Board of Appeal 3.2.04
of 2 July 2008

Appellant: Konami Digital Entertainment Co., Ltd.
7-2, Akasaka 9-chome
Minato-ku
Tokyo 107-8324 (JP)

Representative: Dr. Schiuma, Daniele
Müller-Boré & Partner
Patentanwälte
Grafinger Strasse 2
D-81671 München (DE)

Decision under appeal: **Decision of the Examining Division of the European Patent Office posted 28 June 2007 refusing European application No. 00110174.0 pursuant to Article 97(1) EPC.**

Composition of the Board:

Chairman: M. Ceyte
Members: A. de Vries
C. Heath

Summary of Facts and Submissions

I. The Appellant (Applicant) lodged an appeal, received 23 August 2007, against the decision of the Examining Division of 28 June 2007 to refuse European Application No. 00110174.0, and simultaneously paid the appeal fee. The statement setting out the grounds was received 9 October 2007.

The Examining Division held that the application did not meet the requirements of Article 52(1) in combination with Article 56 EPC for lack of inventive step, citing the following document in particular:
D2: EP-A-0 844 580.

II. Oral proceedings before the Board were duly held on 2 July 2008.

III. The Appellant requested that the decision under appeal be set aside and a patent be granted on the basis of the claims in accordance with a main request, or, in the alternative, according to first and second auxiliary requests filed with the grounds of appeal received 9 October 2007, or according to a third auxiliary request filed with letter of 27 May 2008.

IV. The wording for claim 1 of each request is as follows.

Main request

"A video game device in which a competition is developed between a main character (Pa) and an enemy character (El) by giving instructions to move the main character (Pa) operated by an operation unit in a game

space displayed on a display screen, the video game device comprising:

a character processing means for displaying an area mark (Ci) belonging to the enemy character (El) centred around the feet thereof and having a specified size, said character processing means including an enemy character processing means (1112) that changes the display color of the area mark (Ci) when the main character (Pa) is inside the area mark (Ci); and

a main character processing means (114) for displaying an area mark (Ri) indicating the position of the main character (Pa) including an arrow mark (Sp) indicating a moving direction of the main character (Pa);

a judging means (1115) for judging whether the main character (Pa) has continued to be inside the area mark (Ci) for a predetermined time,

a game result output means (1116) for obtaining a result of the competition when the main character (Pa) continued to be inside the area mark (Ci) for the predetermined time.

Auxiliary Request I

Claim 1 is as in the main request but for the following two amendments: throughout the claim "area mark (Ci)" belonging to the enemy character is changed to "**circle** mark (Ci)" and the "area mark (Ri)" indicating the position of the main character is changed to "**ring** mark (Ri)" (emphasis added by the Board to highlight the changes)

Auxiliary Request II

Claim 1 of this request adds to claim 1 of the auxiliary request I the following further feature, immediately following the feature of the game result output means:
"and a level data setting means (1111) for selecting and setting a level data corresponding to difficulty relating to at least one of the enemy character (El) and the judgment criteria from a plurality of level data prepared in advance and corresponding to the difficulty of the competition, wherein that the level data setting means (1111) sets a size of the circle mark (Ci) corresponding to the difficulty, and wherein according to a level of the video game, a second enemy character (E2) is displayed, whereby the circle mark (Ci) is alternately switched at random intervals between the first and second enemy characters (El, E2)".

Auxiliary Request III

Claim 1 of this request adds to claim 1 of the first auxiliary request the following further features:

"said enemy character processing means (1112) displays first and second enemy characters (El, E2), and

said enemy character processing means (1112) sets the position of the second enemy character (E2) with respect to that of the first enemy character (El);" (immediately following the feature of the character processing means)

"wherein the display color of the circle mark (Ci) or of the ring mark (Ri) is changed dependent on

whether the main character (Pa) is inside the circle mark (Ci) or not; and

wherein in a two-on-one game mode, the first and second enemy characters (El, E2) are switched by alternately setting the circle mark (Ci) for them;"
(immediately following the feature of the main character processing means)

Each request also includes further independent claims to a guide display method and to a readable storage medium. In each case these claims merely reformulate the invention in terms of the operation of the video game device of the respective claim 1, respectively in terms of a program stored on the medium to enable such an operation.

V. The Appellant's arguments may be summarized as follows:

The main distinctions over D2 reside in the display of an area mark at the feet of an enemy character, and in the colour change signalling to a user that his player is within the area mark. The area mark provides information concerning movements and positional relationships of the characters on the display. It does so "at a glance", i.e. in a manner allowing the user to easily grasp a game situation. Likewise, change of colour of the area mark signals to a user a change of situation in a manner easily recognizable and comprehensible to the user.

Both features thus improve readability of the display and thereby improve operability of the video game device thus enhancing a continued man-machine interaction. This is a clearly technical objective

which is moreover addressed by technical features of the design and use of a graphic interface in the sense of **T 49/04**. As in **T 717/05** and **T 115/85** (OJ EPO 1990, 030), the area mark colour change informs the user of an internal state of the machine which again is a technical feature solving a technical problem. Finally, in assessing technicality it is important, following further **T 928/03** to distinguish between rule constraint - here the marking - and its technical implementation. This implementation concerns *how* cognitive content is presented, which represents, see **T 1023/06**, a clear technical contribution.

With regard to the ring shown in figure 6 of D2 this serves an entirely different purpose. Its size and shape are of no importance. Rather its colour allows a user to differentiate between the various characters. In the present invention the concept underlying the term "area mark" is a different one in which mark size is of the utmost importance; the term is thus closely linked to the game rule criterion regarding the positional relationship. This different meaning of the mark and its different functionality will be clear at the latest in the light of the entire disclosure.

As regards colour change the example of window autofocus cited from common general knowledge is set within the different context of an operating system graphical user interface, where it serves the different purpose of facilitating selection and activation of items from a menu of items, each representing further functions or programs. The skilled person would not consider a technique used in such a different environment for a specific purpose, in this new context

and with such a different aim. Other obvious techniques - zooming, display of a timer - which he might consider were at hand.

Moreover, the game rule does not of itself require any indication of closeness, and could easily be implemented without any mark or colour change. The fact that this is at all communicated to the user, and in such a very intuitive manner, contributes to the improved man-machine machine interaction. The specific display is therefore not part of the obvious implementation of the game rule, and does not draw from any of the other cited prior art or the common general knowledge.

In auxiliary request II varying size brings out more clearly the different concept underlying "area mark". Starting from D2 the skilled person would first have to associate its mark with a specific size, and than modify that size in dependence on game level. The further addition of random switching between two characters allows a complicated game situation to be easily perceived by a user without the use of additional marks.

Finally, as regards auxiliary request III, setting of position, which correlates the movements of the two enemy players, gives a much more realistic simulation of the conditions within a soccer game, but in a simple manner and without compromising easy recognition. In so doing it achieves the technical problem of keeping the player's interest.

Reasons for the Decision

1. The appeal is admissible but not well-founded.

2. *Inventive step : "mixed" inventions*

2.1 The present invention, see for example the summary of invention on description page 2, concerns a video game (such as video soccer) in which a competition is developed between a player controlled main character and an enemy character in a game space displayed on a display screen. Area marks are displayed centred about the feet of the main and enemy characters. During play a player by appropriate control attempts to keep the main character within the enemy character's area mark for a predetermined time. This is judged by the system which will output a corresponding game result if the player is successful in his attempts. A player can thus hone his skills in what is effectively a training scheme for "marking" or "tagging" enemy characters, that is staying close to an enemy character for as long as possible.

2.2 The condition that the player stay close to an enemy character as long as possible is undoubtedly a game rule in the sense that it is an agreed convention governing the player's conduct during the video game and meaningful to him only in that context. Game rules per se are excluded from patentability under Article 52(2)(c) EPC. However, the claims in that they are directed to the video game device itself (as well as its method of guide display and a readable storage medium including a program for such guide display) are directed at the implementation of the game rule by

technical means. They thus define subject-matter that is technical per se following the approach developed in **T 258/03** (OJ EPO 2004, 575). As they also incorporate non-technical aspects in the form of the game rules as statutorily excluded subject-matter, their subject-matter is of "mixed" character.

2.3 The approach adopted by the present Board in dealing with such "mixed" character inventions is set out in **T 336/07**, see in particular reasons 2. It is based primarily on that developed in **T 641/00** (OJ EPO 2003, 352), according to which only those features that contribute to technical character are to be taken into account when assessing inventive step (see head-note I).

Thus, see **T 336/07**, reasons 2.3, "an invention which as a whole falls outside the exclusion zone of Article 52(2) EPC (i.e. is technical in character) cannot rely on excluded subject matter *alone*, even if novel and non-obvious (in the colloquial sense of the word), for it to be considered to meet the requirement of inventive step". Furthermore, reasons 2.4, "the mere fact that excluded subject-matter is technically implemented cannot *per se* form the basis for inventive step. The Board concludes that inventive step can be based only on the *particular manner* of technical implementation. To this end it is therefore necessary to ask *how the per se excluded subject-matter (e.g. a game or business method) is implemented*."

Reasons 2.5 then specifies that "consideration of the particular manner of implementation - from the point of view of the relevant skilled person under Article 56 EPC, who may be identified on the basis of the

invention's technical character - 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. The latter are at best to be regarded as incidental to that implementation. ... [It] needs to be stressed that the "further" technical effect can not be the same one which is inherent in the excluded subject-matter itself."

3. *Main request*

3.1 It is undisputed that D2 discloses the closest prior art. Figure 6, and columns 24 and 25 in particular detail a competition type video game, namely video soccer, in which ring shaped guide marks G1, G4 are displayed by corresponding processing means about the feet of the active or main character P1 and of enemy character Q1 respectively. Furthermore, an arrow mark G2 serves to indicate the direction of movement of the main character.

3.1.1 The ring shaped guide marks serve the sole purpose of "easier recognition" of the characters (column 24, lines 42 to 48; column 25, lines 8 to 10), with different colours used to differentiate between enemy and team players. Shape is of no importance as is evident from the paragraph bridging columns 39 and 40. Nevertheless, in their particular embodiment as ring shapes these marks enclose areas, in the same manner as the circle mark Ci mentioned in description page 24, lines 27 to 29 in reference to figure 40 of the present application. It is a reasonable assumption that the ring shape marks - certainly at the level of their

generation by the graphics processor - must have a "specified size". The Board therefore concludes that the ring shaped marks of figure 6 of D2 meet the requirement of "area marks having a specified size" in the sense of the claim.

3.1.2 It is immaterial that the area marks of claim 1 ultimately serve a different cognitive purpose, which is closely linked to their "specified size", and that they may be thus *conceptually* different from the ring-shaped marks shown in figure 6 of D2. The area mark in the present invention visualizes the target area about the enemy character for practising marking or tagging. To this end it need only demarcate an area about the enemy character, which, for meaningful marking, should have well-defined, i.e. set dimensions that correspond to the desired marking criterion. The ring-shaped mark in D2 is centred about the enemy character's feet and shows an area of well-defined size and shape (for it to be generated by the graphic processor). All the necessary visual attributes of the mark as derivable from claim 1, are also present in the ring-shaped mark of D2, which can thus also be used as an area mark in the sense of claim 1. Whether or not it is so perceived by the user reflects on the mark's meaning or cognitive content, which derives from its subsequent intended use (and which may therefore be implicit in the steps defining that use). It is not however inherent in the technical, that is visual features of the mark, which are the same in D2 and the claimed invention.

3.2 With respect to the video game device of D2, the device of claim 1 differs in the following features:

- the character processing means includes an enemy character processing means that changes the display colour of the area mark when the main character is inside the area mark
- judging means for judging whether the main character has been inside the area mark for a predetermined amount of time, and
- game result output means for obtaining a game result if the judging criterion is met.

3.3 These features are concerned generally with the implementation of the marking scheme game rules on a video gaming device. In the sole embodiment this is through the provision of appropriate character processing, judging and game result output subroutines shown in figure 31 as part of a "mini-game executing means" 111 of gaming device CPU 1, figures 2 and 1. Implementation is thus on a computer, so that the skilled person can be identified accordingly as a software developer specializing in computer games. In the approach outlined above inventive step is to be assessed from the point of view of this skilled person, who is set the task of implementing the above marking scheme on a video gaming device.

3.4 Turning first to the features of the judging means and the game result output means, the Board agrees that these features, which concern processing of data by the device, are necessarily technical in nature. However, computer implementation of the central marking game rule necessarily involves automatic judging and game result output subroutines - these are functions that most certainly need to be assigned to the device when

automating game play. As defined in claim 1, these are moreover executed in straightforward manner.

3.4.1 Thus, the skilled person as a matter of obviousness will introduce some automatic evaluation of "closeness" against the set criterion, which will automatically return the result of this evaluation to the player. This evaluation or judging necessarily involves the use of some machine compatible metric to assess "closeness" and duration. For "closeness" the distance between main and enemy character immediately springs to mind, as does time for duration. The game criterion then easily translates into a maximum distance of separation not to be exceeded for a predetermined time, to be appraised in a corresponding judging subroutine and rewarded in a following game result output subroutine.

3.4.2 For the scheme to have a training effect, the display should include an appropriate target mark. This gives the player the necessary visual feedback to adjust character control and thus train his response. At this juncture the Board adds that a simpler marking game can certainly be realized without such visual aids, but its training effect would be severely compromised.

The distance criterion itself already suggests a circular shape of the target area, centred at the locus of the enemy character. As noted such a mark already exists in the D2 display, in ring G4 centred about the feet of enemy character Q1 (see figure 6). It therefore stands to reason that the skilled person when implementing the marking game scheme on the video game device will, as a matter of course, use the existing mark in D2 or a similar such mark as target area mark,

possibly scaled to the closeness criterion. Judging is then effectively carried out with reference to the target mark.

3.5 The remaining difference of area mark colour change when within the target area does not arise directly from the marking game scheme itself or its straightforward implementation on the gaming device. This feature rather serves to inform the player whether or not the device has determined that the main character is within the target area. The player may himself not always correctly perceive the situation, due primarily to poor resolution or the projection of 3-D objects on to a 2-D screen, resulting in "mismatches" between what he sees and what the device determines, in turn leading to incorrect user response. Informing him of when the device senses criterion compliance thus provides him with more accurate feedback than the target mark alone, allowing him to better adapt control and ultimately improve training.

3.5.1 This feature in first place indicates to the player an internal state of the device - namely the result of the judging subroutine - in a manner analogous to that in **T 717/05**. Moreover, in the Board's estimation, it does so in an easily readable format, which allows the user to grasp the game situation faster and more accurately, thus facilitating game play on the device, and thus resulting in an improved, continued man-machine interaction, much in the same way the format of information served this technical purpose in **T 49/04** or **T 928/03**. The Board cannot but agree that this feature, which concerns not so much the cognitive content per se as *how* it is conveyed to the user, is technical in

nature, as are its associated effects. The latter are "further effects" in the sense of section 2.3 above.

3.5.2 The problem associated with this feature may be formulated as how to provide the player with accurate information on the relative movement or positional relationship of display items, and thereby eliminate "mismatches".

3.5.3 This problem and its solution are known from common general knowledge. The skilled person will in particular be familiar with a common feature of many home computer operating systems and software applications, by which a colour change of a display field is triggered by a mouse-over event. An example is the windows "autofocus" feature already included in Windows 95, where an applications window is automatically activated and its colour changed when the mouse cursor is moved into the window. Other common examples are highlighting of menu item fields - again in a wide variety of operating systems - or colour changes used to reveal hyperlinked fields ("hotspots") - used in the design of web pages - when the cursor is moved into the respective field. This measure accurately informs the user of the sensed presence of the user controlled cursor within a field, so that he need not rely on his own perception. This is important as it is the sensed presence that gives access to an associated function of that field (selection of a menu item, running of an application, hyperlinking). Thus indicating the sensed presence allows the user to interact more efficiently with the device.

3.5.4 It should be recalled that the skilled person is a software developer specializing in video games, who, in order to design such interactive gaming software, must possess a firm knowledge of operating systems and applications and be particularly versed in graphic user interface technology and design. The Board therefore firmly believes that the above mouse-over techniques will be included in the palette of techniques available to him.

3.5.5 The skilled person, who is thus aware of the problem of mismatch from his common general knowledge of operating systems and graphic user interface design, as well as its solution, will as a matter of course adopt that solution to address the mismatch that occurs in the display of a video game device into which the marking game scheme is obviously implemented. In an analogous manner presence of the main character within the displayed target area as sensed by the device is then communicated to the user via a colour change of the target area itself. This further obvious refinement of the already obvious implementation of the marking game scheme results in the device of claim 1 without the exercise of inventive skills.

3.5.6 As noted above a much simplified device is envisageable where no such information is provided. However, such a device would also be compromised in that mismatches would still occur. Any need to provide this additional information arises exactly from the skilled person's recognition of the known deleterious effects of mismatches on man-machine interaction.

Similarly, the Board does not consider the context of the known mouse-over triggered colour changes and that of the present invention to be so dissimilar as to bar obvious adoption of the measure in the present case. Underlying these known techniques is the above mentioned recognition of mismatches between how a user perceives relative movement and positions on a display and how this is evaluated by the device. These mismatches affect all subsequent interaction, whether it be the selection and activation of functions associated with the field, or the control of a main character to stay within an area mark. The basic problem is the same, as is its solution, and this will be clear to the skilled person.

3.6 In conclusion, the Board finds that the subject-matter of claim 1 according to the main request does not involve an inventive step, and therefore does not meet the requirements of Article 52(1) in combination with Article 56 EPC 1973. The main request is therefore not allowable.

4. *Auxiliary Request I*

Claim 1 of this request adds the further difference over D2 of the enemy character mark being a circle mark. In D2, see figure 6, marks G1 and G4 are ring shaped. The Board is unconvinced that the use of a circle instead of a ring would lead to improved readability or a better perception of the game situation. As in **T 928/03**, reasons 4.1.2, it believes that the particular shape of the mark is a purely aesthetic creation, that is, non-technical subject-matter which cannot contribute to inventive step. The subject-matter

of claim 1 of this request thus lacks inventive step for the reasons set out in section 3 above.

5. *Auxiliary Requests II, III*

5.1 With respect to claim 1 of the auxiliary request I claim 1 of auxiliary request II adds the further difference over D2 of a level setting means, which allows different predefined difficulty levels to be selected by either changing the target area size, or by practising marking with respect to two enemy characters. Such a feature is not disclosed in any of the cited prior art.

5.1.1 Varying difficulty level is a common feature of games and video games in particular, where appropriate means are provided to select and set difficulty level. Adoption of a similar feature in a video marking game is per se obvious.

5.1.2 In the context of marking the options for varying difficulty level are limited. The most obvious way to make marking more difficult is that of adjusting the closeness criterion underlying the main game rule. Applied to the marking game's obvious implementation, where the criterion is expressed in the size of the target area, this corresponds to changing that size. Therefore, in order to offer different game levels, the skilled person will as a matter of obviousness in first instance consider using different target area sizes, each associated with a different level and which the user can select by the above means.

5.1.3 A further possibility draws from real life soccer marking practice, where a player may be required to mark different enemy players as the ball is being passed from one to another. This requirement refines the main marking game rule, and, as above, cannot itself therefore contribute to inventive step. The further implementation of this rule on a non-inventive video game device as above, that is, already featuring a marking game using target areas, necessarily involves generation of a further enemy character, as well as alternately displaying the target area about the feet of the different enemy characters (analogous to the ball being passed from player to player). These features thus arise in straightforward manner from the refined game rule itself when applied to the obvious implementation of the main marking rule on a video game device such as in D2. The remaining feature of *randomly* switching the target area between the enemy characters (as opposed to, say, switching at set intervals) is itself suggested by the normally random way the ball is passed between players in the real life marking scenario described above and upon which this game scenario is modelled. Neither the implementation of this advanced marking game, nor its inclusion as a user selectable higher level option thus involves an inventive step.

5.1.4 Both ways of providing different game levels can be considered separately, and there is no apparent synergetic effect in their combined application to the obvious implementation of the marking game scheme on a video game device as in D2. That application therefore also does not involve an inventive step.

5.2 The additional features of claim 1 of auxiliary request III effectively concern an advanced level marking scheme as already discussed above in section 5.1.3., with the further specification that the processing means sets the position of the second enemy character with respect to the first. The Board understands this latter feature to merely mean that the processing means calculates the position (and movement) of the second with respect to the first character. The benefit over the only alternative of calculating each player's position separately and independently of one another is not immediately apparent to the Board. The advantage cited by the Appellant of an easier to recognize, more realistic simulation of a game scenario is considered to reside in a more specific correlation between the characters' positions than can be inferred from the claim's wording, and can therefore not be taken into account in assessing inventive step. In conclusion the Board finds that this further refinement of the implementation of the advanced marking game on a video game device, which in section 5.1.3 above was already found to be obvious, is itself also of no inventive merit.

5.3 The effects cited by the Appellant, such as improved readability of a complex game situation, or, the fact that by switching more complex game situations are generated, which serve to hold the player's interest, are considered as subsidiary or bonus effects, and therefore not decisive in the assessment of inventive step.

5.3.1 In so far as improved readability is associated with the use of the area mark centred at the feet of the

enemy player, such an effect results from the marks visual qualities alone. As such a mark is already present in D2, though endowed with a different meaning, that effect is inherent in D2. Where it concerns switching of the mark between the characters, it is an inevitable result of the obvious transposition of the advanced marking scenario to the already obvious video marking game.

5.3.2 Similarly, the generation of more complex game situations will undoubtedly hold a player's interest longer. However, this effect resides in the complexity of the game rule underlying the generated game situations, and, is thus not a further technical effect of the manner of the game rule's implementation, see section 2.3 above. In any case the present Board is unconvinced that the general psychological aim of amusement, which involves drawing and holding a player's interest and which underlies all games and gaming devices, can serve as the *sole* purpose of technical features in a gaming device for their introduction to be considered inventive in the sense of Article 56 EPC. In accordance with well-established jurisprudence, see e.g. **T 619/02** (OJ EPO 2007, 63), reasons 4.2.2, "features ... that do not have a technical effect or ... result in a technical functional contribution cannot be considered to contribute to inventive step". This jurisprudence draws a distinction between the nature of a feature and that of its effect, and thus allows for "features ... of a technical nature but [which] do not have any technical function". The Board acknowledges that a technical effect associated with technical features may be instrumental in the achieving of a psychological aim,

and that adoption of these features may in fact have been motivated by that aim. Nevertheless that aim does not acquire technical nature by virtue of the use of technical features. Inventive step can reside only in a technical effect associated with the features concerned. In the present case, the only technical effects apparent to the Board in the switching of the area marks are those associated with the obvious implementation of the advanced marking scheme.

6. In conclusion the Board finds that the subject-matter of claim 1 according to any of the requests fails to meet the requirement of Article 56 EPC 1973, as it lacks inventive step. None of these requests are therefore allowable.

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar The Chairman

G. Magouliotis M. Ceyte