UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte JASON C. GILMORE and BRADLEY A. ROSE

Appeal 2008-3145
Application 10/202,644
Technology Center 3700

Decided: November 25, 2008

Before: WILLIAM F. PATE, III, JENNIFER D. BAHR, and LINDA E. HORNER, *Administrative Patent Judges*.

BAHR, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Jason C. Gilmore and Bradley A. Rose (Appellants) appeal under 35 U.S.C. § 134 from the Examiner's decision rejecting claims 1-13, 15-22, and 24-26, which are the only claims pending in the application. We have

jurisdiction over this appeal under 35 U.S.C. § 6 (2002). Appellants' representative presented oral argument in this appeal on November 20, 2008.

The Invention

Appellants' claimed invention is directed to a gaming machine including interacting video and mechanical displays and a method of conducting a wagering game using such a gaming machine (Specification 2:3-6).

Claims 1 and 13, reproduced below, are representative of the claimed invention.

> 1. A gaming machine for conducting a wagering game, comprising:
>
> a video display for displaying a video element;
>
> a mechanical display for displaying a movable physical element, the mechanical display being located adjacent to the video display such that a player views two distinguishable displays; and
>
> a control system for operating, in response to receiving a wager from a player, the video display and the mechanical display such that the video element and the physical element appear to visually interact with each other, the video element being indicative of at least a portion of the physical element.
>
> 13. A gaming machine for conducting a wagering game, comprising:
>
> a video display;
>
> a mechanical display positioned adjacent to the video display; and

> a control system for operating, in response to receiving a wager from a player, the video display and the mechanical display such that an object appears to move between the video display and the mechanical display, the player being able to separately view movement of the object on the video display and on the mechanical display, the object indicating a randomly selected outcome of the wagering game.

The Rejection

The Examiner relies upon the following as evidence of unpatentability:

Shoemaker	US 6,139,429	Oct. 31, 2000
Jaffe	US 6,254,481 B1	Jul. 3, 2001

Appellants seek review of the Examiner's rejection of claims 1-13, 15-22, and 24-26 under 35 U.S.C. § 103(a) as unpatentable over Shoemaker and Jaffe.

ISSUES

The issues raised in this appeal are: (1) whether it would have been obvious to combine in a gaming machine the interactive relationship between a mechanical display and a video display as taught by Shoemaker with the type of interactive relationship between two displays taught by Jaffe; and (2) whether the combination of Shoemaker and Jaffe renders obvious all elements of claims 1 and 13, including, in particular, the limitation "the video element being indicative of at least a portion of the physical element" in claim 1 and the limitation that "an object appears to move between the video display and the mechanical display, the player

being able to separately view movement of the object on the video display and on the mechanical display" in claim 13.

FACTS PERTINENT TO THE ISSUES

FF1 Shoemaker describes a video crane game comprising a video screen 36 and a selection or "crane" device 38 (Shoemaker, col. 4, ll. 51-52), a coin slot for accepting a wager in the form of coins, game tokens, or bills to start the game (Shoemaker, col. 3, ll. 57-62), and a dispenser for providing prizes, tickets, vouchers, or other awards to the player based on a game score or other game event or result (Shoemaker, col. 3, ll. 62-67).

FF2 Shoemaker's selection device 38 is a mechanical device that includes a head 66 suspended from a carriage 64. The head 66 may be raised or lowered along a z-axis toward the video screen 36 and moved along x- and y-axes by motors controlled by a joystick or other control operated by the player. (Shoemaker, col. 5, ll. 49-51, col. 6, ll. 43-44.)

FF3 The player controls, selection device 38, video screen 36, and other functions of Shoemaker's game apparatus are controlled by a control system (Shoemaker, col. 4, ll. 59-62).

FF4 In one embodiment, Shoemaker's video screen 36 displays a target area 130 resembling a conventional dart board divided up into segments 132, and the head 66 is made to look like a dart (Shoemaker, col. 10, ll. 34-45). Once a single dart is thrown, by movement of the head 66, a dart image 146 is displayed on the video screen 36 (Shoemaker, col. 10, l. 64 to col. 11, l. 1; fig. 5).

FF5 In Shoemaker's dart board embodiment (FF4), the dart image (a video element) and the head 66 (the physical element) appear to visually interact with one another, in the sense that the movement of the head 66, shaped like a dart, is followed by the appearance of the dart image 146 on the video screen, thus giving the impression that the dart-simulating head was thrown and landed on the dart board.

FF6 The Examiner cites an on-line dictionary-derived definition of "'indicative'" as "'serving as a sign or indication'" (Answer 11). Appellants do not dispute this definition or proffer evidence of a different definition in their Appeal Brief. We thus accept the Examiner's definition of "indicative."

FF7 Shoemaker's dart image 146 serves as a sign or representation of the dart-simulating head 66, and, thus, also serves as a sign or representation of at least a portion of the head 66.

FF8 Shoemaker does not appear to show movement of the head 66 on the video screen.

FF9 The mechanical-video concept of Shoemaker provides a dynamic and interesting alternative to traditional mechanical crane pickup games, allows more flexible game play by allowing the game operator to vary and maintain prize selections more easily than in the conventional mechanical crane pick-up game, and offers players a unique, yet familiar, way to use skill in selecting targets that was not used in traditional video games (Shoemaker, col. 3, ll. 1-9).

FF10 Jaffe describes a gaming machine in which a lower video display 14 and an upper video display 16 work together to present a unified image (Jaffe, col. 6, ll. 20-21).

FF11 Jaffe teaches moving an object in the image that was shown in the first display to the second display (Jaffe, col. 2, ll. 50-52).

FF12 In the illustrated embodiment of Jaffe, bait 86 is displayed being lowered down beneath a player-selected fisherman in upper display 16 and appears in the lower display 14, where some displayed fish dart for the bait (Jaffe, col. 6, ll. 61-66; figs. 4 and 5). Accordingly, an object, the bait, appears to move between the upper display 16 and the lower display 14.

FF13 Jaffe's CPU 20 uses a random number generator to select a bonus game outcome, namely, the fish that the player-selected fisherman will reel out of the water (Jaffe, col. 7, ll. 1-4).

FF14 The fish 84 that will be reeled out of the water by the selected fisherman is displayed moving from the lower display 14 to the upper display 16 (Jaffe, figs. 5 and 6). Jaffe thus clearly describes another object, the fish, moving between the lower display 14 and the upper display 16.

FF15 A player would be able to separately view movement of either moving object, namely, the bait or the fish (FF12, FF14) on the lower display 14 and on the upper display 16, since these objects are displayed first on one of the displays, and then on the other, as they move up or down.

FF16 The interaction between Jaffe's upper display 16 and lower display 14 to create a unified image is intended to contribute to the objective of attracting players by enhancing the entertainment value and excitement associated with the game (Jaffe, col. 1, ll. 26-30).

PRINCIPLES OF LAW

When construing claim terminology in the United States Patent and Trademark Office, claims are to be given their broadest reasonable interpretation consistent with the specification, reading claim language in light of the specification as it would be interpreted by one of ordinary skill in the art. *In re Am. Acad. of Sci. Tech. Ctr.*, 367 F.3d 1359, 1364 (Fed. Cir. 2004).

> Section 103 forbids issuance of a patent when "the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains."

KSR Int'l Co. v. Teleflex Inc., 127 S. Ct. 1727, 1734 (2007). The question of obviousness is resolved on the basis of underlying factual determinations including (1) the scope and content of the prior art, (2) any differences between the claimed subject matter and the prior art, (3) the level of ordinary skill in the art, and (4) where in evidence, so-called secondary considerations. *Graham v. John Deere Co.*, 383 U.S. 1, 17-18 (1966). *See also KSR*, 127 S. Ct. at 1734 ("While the sequence of these questions might be reordered in any particular case, the [*Graham*] factors continue to define the inquiry that controls.")

"The combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results." *KSR*, 127 S. Ct. at 1739.

> When there is a design need or market pressure to solve a problem and there are a finite number of identified, predictable solutions, a person of

> ordinary skill has good reason to pursue the known options within his or her technical grasp. If this leads to the anticipated success, it is likely the product not of innovation but of ordinary skill and common sense.

Id. at 1742.

ANALYSIS

Appellants argue in favor of claims 1 and 15 together as a group and present a separate argument in favor of independent claim 13. Appellants do not argue any of the dependent claims separately from the independent claims. Therefore, in accordance with 37 C.F.R. § 41.37(c)(1)(vii), we select claim 1 as the representative claim to decide the appeal of the rejection of claims 1 and 15, and their dependent claims. Claims 2-12, 15-22, and 24-26 stand or fall with claim 1. We address independent claim 13 separately.

Claims 1-12, 15-22, and 24-26

Shoemaker describes a gaming machine for conducting a wagering game comprising a video display (video screen 36) (FF1) for displaying a video element (dart image 146) (FF5), a mechanical display (selection device 38) adjacent to the video screen 36 for displaying a movable physical element (head 66) (FF2), and a control system for controlling the player controls, selection device 38, video screen 36, and other functions of Shoemaker's game apparatus (FF3) in response to receiving a wager to start the game (FF1). In Shoemaker's dart board embodiment (FF4), the dart image (a video element) and the head 66 (the physical element) appear to visually interact with one another, in the sense that the movement of the head 66, shaped like a dart, is followed by the appearance of the dart image

on the video screen, thus giving the impression that the dart-simulating head was thrown and landed on the dart board (FF5). Therefore, the dart image 146 (the video element) and head 66 (the physical element) appear to visually interact with each other, as called for in claim 1. Further, Shoemaker's dart image 146 serves as a sign or representation of the dart-simulating head 66, and, thus, also serves as a sign or representation of at least a portion of the head 66 (FF7). Therefore, Shoemaker's dart game embodiment satisfies the limitation at issue in claim 1, namely, "the video element being indicative of at least a portion of the physical element."

In light of the above, we find that Shoemaker teaches all elements of claim 1. Moreover, Jaffe describes the use of two displays that interact with one another to present a unified image, with one or more objects being displayed moving from one of the displays to the other display (FF11 through FF14). The interaction between Jaffe's upper display 16 and lower display 14 to create a unified image is intended to contribute to the objective of attracting players by enhancing the entertainment value and excitement associated with the game (FF16). The mechanical-video concept of Shoemaker provides a dynamic and interesting alternative to traditional mechanical crane pickup games, allows more flexible game play by allowing the game operator to vary and maintain prize selections more easily than in the conventional mechanical crane pick-up game, and offers players a unique, yet familiar, way to use skill in selecting targets that was not used in traditional video games (FF9). A person of ordinary skill in the art would have been prompted to combine the mechanical-video display concept of Shoemaker with the inter-display interaction and object movement concept of Jaffe in a single gaming machine to achieve the recognized advantages of

each. This is nothing more than the combination of familiar elements according to known methods yielding predictable results. Accordingly, we agree with the Examiner that it would have been obvious to combine the teachings of Shoemaker and Jaffe to provide a gaming machine having a video display for displaying a video element and a mechanical display for displaying a movable physical element, wherein the video element and physical element appear to interact with each other by appearing to move between the two displays. Thus, even assuming *arguendo* the "appear to visually interact" language of claim 1 were construed as requiring that the physical element be shown "as if to completely transition the physical element into the video display" as speculated by the Examiner to be Appellants' intent (Answer 9-10), the combination of Shoemaker and Jaffe render obvious a gaming machine having such a feature.

For the above reasons, Appellants fail to persuade us the Examiner erred in rejecting claim 1, and claims 2-12, 15-22, and 24-26, which stand or fall with claim 1, as unpatentable over Shoemaker and Jaffe.

Claim 13

Claim 13 requires that the object appear to move between the video display and the mechanical display, with the player being able to separately view movement of the object on the video display and on the mechanical display, and with the object indicating a randomly selected outcome of the wagering game. Jaffe describes movement of objects viewable separately on the upper and lower displays (FF15). For the reasons noted above in our discussion of claim 1, it would have been obvious to combine Shoemaker and Jaffe to provide a gaming machine having a video display for displaying a video element and a mechanical display for displaying a movable physical

element, wherein the video element and physical element appear to interact with each other by appearing to move between the two displays.

As for whether player selection or random selection determines outcome of the game, Shoemaker (FF3) and Jaffe (FF13) together illustrate that both approaches are well known in the art in this context. Accordingly, the use of either means of determining game outcome would have been well within the technical grasp of one of ordinary skill in the art, with the consequences thereof being not the product of innovation, but of ordinary skill and common sense.

For the above reasons, Appellants fail to demonstrate the Examiner erred in rejecting claim 13 as unpatentable over Shoemaker and Jaffe.

CONCLUSIONS OF LAW

1. It would have been obvious to combine in a gaming machine the interactive relationship between a mechanical display and a video display as taught by Shoemaker with the type of interactive relationship between two displays taught by Jaffe.
2. The combination of Shoemaker and Jaffe renders obvious all elements of claims 1 and 13, including, in particular, the limitation "the video element being indicative of at least a portion of the physical element" in claim 1 and the limitation that "an object appears to move between the video display and the mechanical display, the player being able to separately view movement of the object on the video display and on the mechanical display" in claim 13.

DECISION

The Examiner's decision is affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a). *See* 37 C.F.R. § 1.136(a)(1)(iv) (2007).

AFFIRMED

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