

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte TAE-SIK PARK, SANG-GOOG LEE, and SUNG-CHEOL KIM

Appeal 2008-3170
Application 10/133,456
Technology Center 3700

Decided: September 19, 2008

Before ERIC GRIMES, RICHARD M. LEBOVITZ, and JEFFREY N. FREDMAN, *Administrative Patent Judges*.

LEBOVITZ, *Administrative Patent Judge*.

DECISION ON APPEAL

This is a decision on appeal from the final rejection of claims 1, 2, and 4-9. We have jurisdiction under 35 U.S.C. § 6(b). We affirm.

STATEMENT OF THE CASE

The claims are directed to an input device for computer games.

Claims 1, 2, and 4-9 are pending (App. Br. 4) and stand finally rejected as follows:

- 1) Claims 1, 2, and 4-8¹ under 35 U.S.C. § 102(b) as anticipated by Sato (U.S. Patent 5,453,758, Sept. 26, 1995) (Ans. 3, 4, & 6);
- 2) Claims 1, 2, 4-6, and 8 under 35 U.S.C. § 103(a) as obvious over Sato (Ans. 4); and
- 3) Claim 9 under 35 U.S.C. § 103(a) as obvious over Sato and Kwan (U.S. Patent 5,741,185, issued Apr. 21, 1998) (Ans. 6).

Claim 1 is representative and reads as follows:

1. An input device for computer games comprising:
 - an inertia sensor for sensing movement of the input device;
 - at least one trigger button; and
 - a signal processor for formatting signals output from the inertia sensor and the at least one trigger button and transmitting the formatted signals to a computer; and
 - a motion button provided as a discrete button on the input device, for allowing a user to control whether or not a display of the computer responds to movement of the input device;
 - wherein when said motion button is not engaged, the display of the computer does not respond to the movement of the input device, and when said motion button is engaged, the input device transmits the formatted signals to the computer.

¹ The Examiner lists claims 1, 2, 5, 6, and 8 as anticipated by Sato on page 2 of the Final Office Action and page 3 of the Answer, but, in addition, addressed claims 4 and 7 in the detailed explanation of the anticipation rejection. On page 6 of the Answer, the rejection is stated as involving claims 1, 2, and 4-8, i.e., including claims 4 and 7. Appellants included claims 4 and 7 in their statement of the anticipation rejection (App. Br. 7, 8) that thus explicitly acknowledged and understood that the anticipation rejection was over claims 1, 2, and 4-8.

ANTICIPATION BY SATO

Claims 1, 2, and 4-8 stand rejected under 35 U.S.C. § 102(b) as anticipated by Sato.

THE SATO PATENT

1. Sato describes an “input apparatus comprising one or more detectors for detecting a physical displacement of a given movement in space”, an information generating device for generating position information from the detector output, and a transmitter for transmitting the position information to equipment (Sato, Abstract).
2. Sato’s input apparatus can be used as a mouse for personal computers or as operator control for game playing and other electronic equipment (Sato, at col. 14, ll. 35-40).
3. When the input apparatus, also known as a “remote commander” (Sato, at col. 3, ll. 14-17), is held in an operator’s hand and the operator’s hand is moved, the motion is detected by the apparatus and transmitted to predetermined equipment (*id.*, at col. 2, ll. 4-8; at col. 5, ll. 1-4; at col. 6, ll. 18-67).
4. For example, the remote commander can be used to move a cursor on a CRT in response to the motion of the operator’s hand (Sato, at col. 5, ll. 5-15; at col. 2, ll. 4-8).
5. The remote commander can also have a touch sensor **11** for detecting when it is held by the operator (Sato, at col. 10, ll. 20-21).
6. “The touch sensor **11** functions as a means for turning on/off the operating power of the remote commander **10** and, at the same time functions as a means for detecting that the remote commander is in a resting state” (Sato, at col. 10, ll. 22-26).

7. “That is, the touch sensor **11** works as a power on/off switch” (Sato, at col. 10, 33-34).
8. When the touch sensor is on (“Y”), information about position is transmitted to the computer; when the touch sensor is off (“N”), no positional information is transmitted (*see* Sato, Fig. 21B; Ans. 8).
9. Although Sato does not explicitly state that the touch sensor is on the input apparatus surface, it is reasonable to infer from Sato’s disclosure that it is, because holding the apparatus turns it on and releasing the apparatus turns it off – indicating that the sensor is located on a surface of the apparatus that would contact the operator’s hand when held and which would be released from contact when put down.

Issue

The issue in this rejection involves the proper interpretation of the claimed “motion button” and whether the prior art teaches a motion button “provided as a discrete button on the input device” which “when . . . not engaged, the display of the computer does not respond to the movement of the input device” and which when engaged, “transmits” a signal to the computer as in claim 1.

The Examiner takes the position that the touch sensor 11 described in the Sato patent meets the claimed limitations of a “motion button.”

Appellants contend that Sato’s touch sensor “is not provided as a discrete, distinct button” and is not “on” the device’s surface as required by claim 1 (Reply Br. 4-5).

Analysis

During patent examination, we give the words in a claim their broadest reasonable interpretation as they would be understood by persons

of skill in the art coupled with any explanation or definitions provided by the specification. *In re Morris*, 127 F.3d 1048, 1054 (Fed. Cir. 1997). In this case, the Specification does not provide an explicit definition of what is meant by a “motion button.” Embodiments are described in which a motion button is “pressed” or “engaged” (Spec. 6: 11-15), but the Specification does not disclose the specific structure associated with it.

The motion button is characterized in the Specification as having ON and OFF states (Spec: 7: 5). When the motion button is engaged, the computer responds to the operator’s input; when not engaged, the computer does not respond to input (*id.* at 6: 14-17). “Thus, the [motion button] can be considered as a button for determining whether or not the game shown on the screen will progress” (*id.* at 6: 17-19).

We therefore interpret the motion button as an on/off control that enables the operator to determine whether the computer will respond to the operator’s input. There is no specific structure described in the Specification that is needed to achieve this purpose. Consequently, we interpret motion button broadly to include those structures which are capable of acting as an on/off control.

Having interpreted the claim language at issue in this appeal, we now turn to the prior art. Sato describes an input device which has a touch sensor (FF5-8). The touch sensor “functions as a means for turning on/off the operating power of the” input device (Sato, at col. 10, ll. 22-26; FF6). It is expressly characterized by Sato as an “on/off switch” (Sato, at col. 10, 33-34; FF7). Thus, Sato’s touch sensor serves as an on/off control as does the claimed “motion button.”

Sato's touch sensor is used to turn off the input device, disabling it from transmitting information about position to the computer (FF6-8). When the touch sensor is off – no information is transmitted to the computer; when the touch sensor is on – information is transmitted to the computer (FF 8). If the device were being used to move a cursor (FF4), when the touch sensor was engaged in the “on” position, the cursor would move in response to the motion of the operator’s hand (FF4, 8). When in the “off” position, no signals would be transmitted and the cursor would not move. Thus, Sato’s touch sensor meets the limitation of claim 1 “wherein when said motion button is not engaged, the display of the computer does not respond to the movement of the input device, and when said motion button is engaged, the input device transmits” signals to the computer.

Appellants argue that Sato’s touch sensor “is not a discrete button on the input device” (App. Br. 8; *see also id.* at 9; Reply Br. 4-5). We do not agree. Sato expressly states that its sensor can detect when the input device is held by the operator (FF5). Therefore, it must be in a discrete position that would be contacted by the hand when held by the operator. Although Sato does not explicitly state that the touch sensor is on the input device, it is reasonable to infer from Sato’s disclosure that it is, because holding the input device turns it on and releasing the device turns it off – indicating that the sensor is located at a specific position on the surface of the device which would contact the operator’s hand when held and which would be released from contact when put down (FF9). Appellants have not otherwise distinguished the claimed “discrete button” from Sato’s touch sensor or identified a structure that is necessary to meet the claimed limitation that is absent from the cited prior art.

It is stated by Appellants that Sato's touch sensor "cannot be physically operated by the operator as required by the claim" (Reply Br. 5). This argument is not persuasive. The touch sensor is clearly contacted by the operator's hand (FF9) and thus would be "engaged" by the hand to transmit information from the device to the computer as recited for the motion button in claim 1.

Appellants also contend that Sato does not meet the limitation "when the motion button is not engaged, the display of the computer does not respond to the movement of the input device, and when the motion button is engaged, the input device transmits the formatted signals to the computer." (App. Br. 9). How this limitation is met has already been addressed above. Appellants appear to argue that that the limitation is not satisfied by Sato's touch sensor because "Sato neither discloses nor teaches how a user controls whether or not a display of the computer responds to the movement of the input device by use of the motion button" (*id.*; *see also* Reply Br. 6). This argument is not persuasive. Sato teaches that a cursor on a CRT display responds to the movement of the input device (FF4). The touch sensor – which corresponds to the claimed "motion button" – disables the power of the input device (FF6) and thus would stop transmission of information about the motion of the device and correspondingly stop the cursor movement (*see* FF8). Thus, Sato clearly teaches how a user controls whether the computer display will respond to the movement of the input device – i.e., by engaging the touch sensor.

For the foregoing reasons, we affirm the rejection of claim 1 as anticipated by Sato. Claims 2, 4, 5, 6, 7, and 8 fall with claim 1 because separate reasons for their patentability were not put forth. *See* 37 CFR

§ 41.37(c)(1)(vii).

OBVIOUSNESS OVER SATO

Claims 1, 2, 4-6, and 8 stand rejected under 35 U.S.C. § 103(a) as obvious over Sato.

The Examiner rejects claims 1, 2, 4-6, and 8 as obvious over Sato under an alternative interpretation of the claimed “motion button” as a “mechanical switching means” (Ans. 4-5).

We have not construed the claims so narrowly as to require the “motion button provided as discrete button” to be a mechanical switching means. But, rather we have interpreted the claims more broadly. Therefore, it is not necessary for us to address the obviousness rejection to the extent it invokes a narrower interpretation of “motion button.”

“[A] disclosure that anticipates under Section 102 also renders the claim invalid under Section 103, for ‘anticipation is the epitome of obviousness.’” *Connell v. Sears, Roebuck & Co.*, 722 F.2d 1542, 1548 (Fed. Cir. 1983) (*citing In re Fracalossi*, 681 F.2d 792 (CCPA 1982)). Having determined that claims 1, 2, 4-6 and 8 are anticipated by Sato, we therefore also conclude that the claims are obvious over Sato.

OBVIOUSNESS OVER SATO AND KWAN

Claim 9 stands rejected under 35 U.S.C. § 103(a) as obvious over Sato and Kwan. The Examiner concludes that it “would have been obvious to one of ordinary skill in the art at the time of invention to incorporate the reload button of Kwan in the invention of Sato in order to increase shooting game detail by facing [sic, forcing?] the user to reload their weapon” (Ans. 6). Appellants do not challenge the Examiner’s reasoning, and as we find no

Appeal 2008-3170
Application 10/133,456

infirmitiy in it, we affirm the rejection of claim 9 for the reasons stated by the Examiner.

TIME PERIOD

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

AFFIRMED

Ssc:

SUGHRUE MION, PLLC
2100 PENNSYLVANIA AVENUE, N.W.
SUITE 800
WASHINGTON, DC 20037