

EXHIBIT 3

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent No: 6,906,700

Currently in Litigation Styled:

Anascape, Ltd. v. Microsoft Corporation and Nintendo of America, Inc.,

No: 9:06-CV-06-00158-RC (E.D. Tex.)

Issued: June 14, 2005

Filed: November 16, 2000

Applicant: Brad A. Armstrong

Title: 3D Controller With Vibration

Request for *Inter Partes* Reexamination of Patent

MAIL STOP *INTER PARTES* REEXAMINATION
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Sir:

Reexamination under 35 U.S.C. §§ 311-316 and 37 C.F.R. § 1.902 *et seq.* is requested of claims 1 through 33 of United States Patent No. 6,906,700 (“the ‘700 Patent” or “the Patent” attached as Exhibit 1.) The ‘700 Patent issued on May 13, 2003, to Brad A Armstrong. The Requester is Microsoft Corporation (“Requester”). This is a new reexamination request (“Request”). The ‘700 Patent has not been previously reexamined.

In accordance with 37 C.F.R. § 1.985, Requester hereby provides notice that the ‘700 Patent is asserted against Microsoft in litigation styled *Anascape, Ltd. v. Microsoft Corporation, and Nintendo of America, Inc., 06-CV-00158-RC*, in the United States District Court for the Eastern District of Texas (the “Litigation”).

member.”) None of Claims 1-33 of the ‘700 Patent has the limitation of a single input member to provide six degrees of freedom.⁹

To the contrary, Applicant contends that the claims of the ‘700 Patent refer to *multiple structures* in a 3-D graphics controller to activate various sensors to purportedly provide up to six degrees of freedom. See, e.g., claim 1:

1. A 3-D graphics controller used with a television based game, comprising:
 - a game, said game at least in part controlled by circuitry, said circuitry located on at least one sheet, said at least one sheet comprising:
 - a circuit board sheet connected to a flexible membrane sheet;
 - a first element structured** to activate four unidirectional sensors, said four unidirectional sensors at least in part connected to said at least one sheet, said four unidirectional sensors useful to control said game,
 - a second element with structure to activate** a first two rotary potentiometers, said first two rotary potentiometers at least in part connected to said at least one sheet, said first two rotary potentiometers useful to control said game;
 - a third element with structure to activate** a second two rotary potentiometers, said second two rotary potentiometers at least in part connected to said at least one sheet, said second two rotary potentiometers useful to control said game . . .

Exhibit 1, ‘700 Patent, Col. 30, lines 8-30.

⁹ Indeed, Applicant states that the ‘700 Patent does not require six degrees of freedom, but rather provides “up to” six degrees of freedom, another departure from the scope of the 1996 Application: “The controllers in preferred embodiments, **while not restricted or required to be full six degrees of freedom (6DOF)**, provide structuring for converting full six degrees of freedom physical input provided by a human hand on a band operable input member(s) into representative outputs or signals useful either directly or indirectly for controlling assisting in controlling graphic image displays.” (‘700 Patent, Col. 2, lines 18-24.)

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structures are anticipated as being highly useful as proportional sensors and desirable in 3D controllers of the types herein disclosed.” (‘700 Patent, Col. 4, lines 22-34.)

Applicant’s representations to the contrary, numerous published references disclosed exactly the elements claimed in the ‘700 Patent, either explicitly or inherently. Not only does the Chang reference include multiple input members on a single sheet (by Applicant’s own admission), but numerous other prior art references teach sheet-connected sensors of exactly the type described in the ‘700 Patent, and Cyberman, Applicant admits, disclosed combining these multiple sensors with a flexible sheet and circuit board on two planes in a controller, the use of multiple independent buttons, the use of metallic dome caps for tactile feedback, and the use of a motor and offset weight for active tactile feedback.

Additionally, many key references were not cited to the Patent Office during prosecution of the ‘700 Patent, while others were buried within Applicant’s voluminous stack of 525 separate prior art references. In light of this fact, substantial new questions of patentability exist for all of the claims (1-33) of the ‘700 Patent.

B. The Prior Art Described Exactly The Same Solution Which Applicant Claimed Was Novel In Prosecuting The ‘700 Patent

1. The Goto (“Sony”) Prior Art¹⁵

European Patent Application No. EP 0 835 676 A1, entitled “Operating Device for Game Machines” was filed by Teiyu Goto *et al.* et al. on April 11, 1997, and was published on September 30, 1998. Referring to Figure 2, below, Goto discloses virtually all of the elements contained in the ‘700 Patent, including the use of unidirectional sensors for

¹⁵ Also enclosed though not included in the detailed claim charts is another prior art reference disclosing elements similar to those disclosed in Goto. European Patent Application No. EP 0 941 162 A1, entitled “Game Machine, Operating Unit for Game Machine, and Two Way Communication Method for Game Machine,” was filed by Satoshi

directional control (8a, 8b, 8c, 8d), the use of pairs of bi-directional proportional rotational sensors to impart additional direction to a game (displayed as thumb joysticks 14a and 14b), and the use of multiple independent on/off buttons to impart additional game control (22, 23, 24, 11a, 11b, 11c, 11d, 17 and 18).

a) Goto Discloses 3D Game Control

Goto teaches the combination of these multiple input elements to provide three-dimensional control and complex character movements for a video game. (Exhibit 9, Goto, Col. 16, lines 4-10.) Specifically, Goto states that “This invention relates to an operating device used in a game machine employing a display device for, for example, a television receiver. More particularly, it relates to an operating device controlling the operation of rotating a display character displayed on a display screen, continuously changing its speed of movement or deforming the display character.” (Goto, Col.1, lines 5-11.)

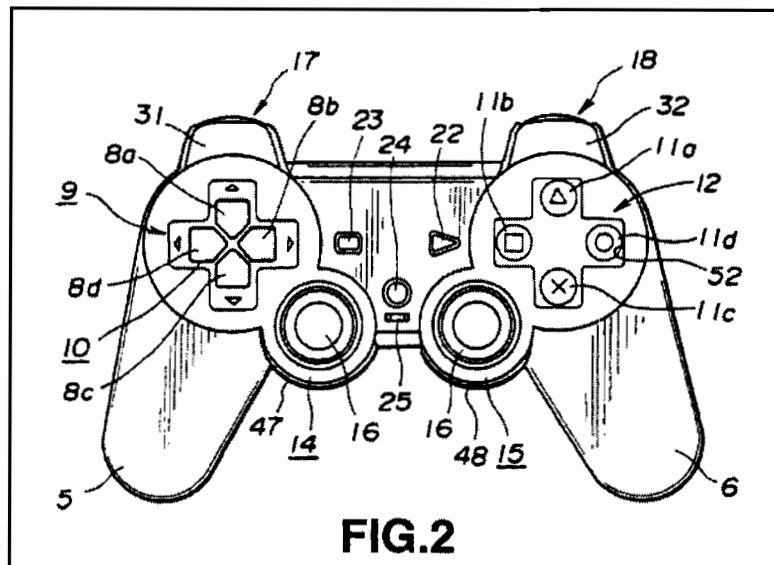


Fig. 2 – Goto’s Game Controller With Analog Joysticks, Multiple Independent Buttons

Shinohara *et al.* on August 24, 1998, and published on September 8, 1999. (Enclosed as Exhibit 13.)

Goto further states that: “by properly actuating the first to sixth operating units 9, 12, 14, 15, 17 or 18, not only can the display character be moved horizontally, but also the display character can be rotated or moved with accelerated movements in meeting with the game with the three-dimensional spatial picture.” (Goto, Col. 15, line 54 – Col. 16, line 1.)

b) Goto Discloses a Circuit Board and Flexible Sheet Connected to Unidirectional Sensors Used for Character Movement

Goto describes connecting a circuit board sheet to a flexible membrane sheet. Specifically, Goto describes mounting an elastic member to a circuit board with moveable contacts. (Goto, Col. 8, line 57 – Col. 9, line 8.) Goto further describes that: “The elastic member 35 is sandwiched between the circuit board 38 and the rotation actuating member 10 and includes four movable rubber contacts 34 in association with the first to fourth thrusting operators 8a to 8d.” (Goto, Col. 9, lines 32-35.)

Goto describes using unidirectional sensors for game control:

On one end side of the main body portion 4 is mounted a first operating unit 9 having first to fourth thrusting operators 8a, 8b, 8c and 8d protruding from the upper surface of the main body portion 4 at right angles to each other, as shown in FIGS. 1 and 2. **The first to fourth thrusting operators 8a, 8b, 8c and 8d making up the first operating unit 9 are unified to a rotation actuating member 10 having its center portion supported for rotation and are arrayed at right angles to one another about the center of rotation of the rotation actuating member 10.** That is, the first to fourth thrusting operators 8a, 8b, 8c and 8d making up the first operating unit 9 are connected as one to one another. The first operator 9 is provided with switch devices, as signal input devices, in association with the first to fourth thrusting operators 8a, 8b, 8c and 8d. The first operator 9 operates as a direction command controller controlling the movement of the display character, such that, by selectively actuating the first to fourth thrusting operators 8a, 8b, 8c and 8d and by selectively turning on/off the switch devices associated with the thrusting operators, the display character is moved in the arraying direction of the thrust operators 8a, 8b, 8c or 8d.

Goto, Col. 5, line 37 – Col. 6, line 1.

c) **Goto Discloses Use of Bi-Directional Rotational Sensors for Increased Axes of Movement**

Goto also describes using bi-directional sensors mounted in joysticks to provide additional directional control for the 3D game. These sensors can be used to impart two additional axes of control each, allowing the controller to provide 3D control, when used in conjunction with the other sensors in the controller. (Goto, Col. 15, line 54 – Col. 16, line 1.). The structure for the joysticks involves the use of two rotational sensors each, and the joysticks are arranged so that they can be operated by the thumbs of the user (*see* Fig. 2, above):

The third operating unit 14 has a multi-directional input device as shown in FIG. 14. This multi-directional input device has a box-shaped upper frame 50 and an arched first interlock member 51, as shown in FIG. 14. This interlock member 51 has its warped end 52 engaged by a rotational shaft 54 of a first variable resistor **53a constituting a rotary detector** secured to a lateral side 50a of the upper frame 50. The interlock member 51 has on its opposite warped end 52 a boss 55 loosely fitted in an opening 56 formed in a lateral side 50b facing the lateral side 50a of the frame 50 for rotatably supporting the first interlock member 51 on the upper frame 50. An operating shaft 57 is mounted at the center of the upper frame 50. This operating shaft 57 has a saucer-shaped operating member 58 and a disk 59 at its mid portion. This disk 59 has an orifice 60 and a rotation member 16 is mounted on the upper end of the operating shaft 57. Within the upper frame 50 is arranged a second interlock member 62 extending at right angles to the operating shaft 57. The second interlock member 62 has a center ball 63 from which are transversely extended a pair of arms 64a, 64b. An elongated slot 65 extends from the upper surface to the lower surface of the ball 63. The operating shaft 57 and the disk 59 are inserted into the elongated slot 65. After registration of the orifice 60 in the disk 59 relative to a lateral side opening 66 in the ball 63, a pin 67 is inserted into the opening 66 and the orifice 60. The operating shaft 57 is thus mounted on the second interlock member 62 for rotation in the elongated slot

65 with the pin 67 as the center of rotation. The end of the arm 64a of the second interlock member 62 is engaged with the **rotary shaft 54 of the second variable resistor 53b** secured to a lateral side 50c of the upper frame 50, while the end of the opposite side arm 64b is fitted in an elongated opening 70 formed in the lateral side 50d of the upper frame 50 so as to protrude outwardly from the lateral side 50d of the upper frame 50. The operating shaft 57 is passed through the elongated slot 71 in the first interlock member 51 so as to protrude outwards via an opening 72 in the upper surface of the upper frame 50.

Goto, Col. 12, lines 7-50.

d) Goto Discloses Use of Multiple Additional Independent Buttons For Selecting and Performing Game Functions

Goto also describes using additional on/off buttons to start a game and to select difficulty of the game: “Between the first operating unit 9 and the second operating unit 12 on the upper surface of the main body portion 4 are mounted, side-by-side, a start switch 22 for commanding start of a game and a selection switch 23 for selecting, at the time of starting the game, the degree of ease or difficulty with which the game is played.” (Goto, Col. 6, line 55 – Col. 7, line 3.) Goto further discloses additional independent buttons on the right side of the controller for character control or to set other game functions. (Goto, Col. 6, lines 3-18.)

e) Goto Discloses Use of a Motor and Offset Weight to Provide Active Tactile Feedback to a User’s Hand

Finally, Goto describes the use of tactile feedback vibration within the handles of the controller to increase the reality of game play, though the use of a motor and offset weight: (See Fig. 3, below.)

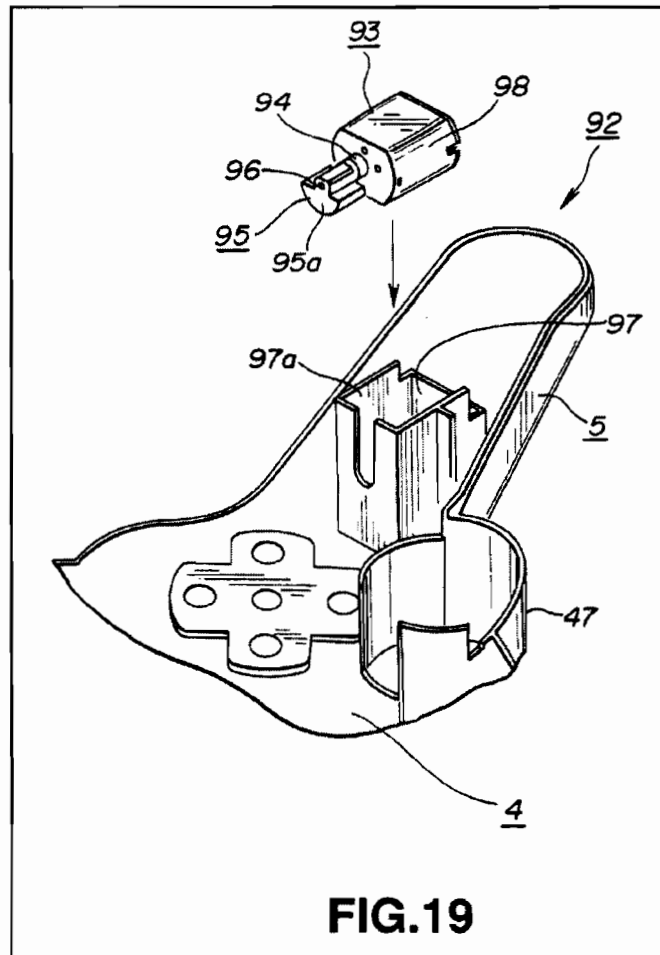


Fig. 3 – Goto’s Motor and Offset Weight For Providing Vibration Tactile Feedback

Goto explains the use of this active tactile feedback as comprising a motor and offset weight mounted in the housing of the handle of the game controller:

The operating device 1 of the present invention is provided with a **vibration imparting mechanism 92** for imparting vibrations to the user so that the game will be played with a higher simulated reality feeling. This vibration imparting mechanism 92 is provided on the proximal end of the first grip portion 5 held by the left hand when the user grips the operating device 1. This vibration imparting mechanism 92 is made up of a driving motor 93 driven by a driving command signal supplied from the main body portion of the game machine and an **offset member 95 mounted on a driving shaft 94 of the driving motor 93**. The offset member 95 is formed by a metallic member of a large weight mass to

constitute a semi-circular weight 95a offset with respect to a fitting hole 96 into which is fitted the driving shaft 94 and which operates as a center of rotation.

Goto, Col. 14, line 43 – Col. 15, line 12.

Thus, over two years before the '700 Patent application was filed, Goto had disclosed the vast majority of functions and/or elements that Applicant claimed were novel in the '700 Patent. Those few elements not disclosed were obvious in view of prior art controllers available at the time, as partially reflected in the remaining references.

2. The Sony PlayStation® Analog Controller

The use of multiple analog and on/off controls in a controller with a printed circuit board was well-known two years before Applicant filed the '700 Patent application. The Sony Analog Controller ("Analog Controller") was commercially available and publicly disclosed in a written publication no later than 1998.

The Analog Controller was a peripheral for the Sony PlayStation®, and described in PlayStation® Instruction Manual SCPH-7000, SONY Publication No. 3-861-343-05(1) ("PlayStation® Manual"), which bears a copyright date of 1998. This controller mirrors the controller disclosed by Goto in his published patent application (detailed above), which named Sony Computer Entertainment Inc. and Sony Corporation as Applicants. (Exhibit 9, Goto, Applicants, pg. 1.)

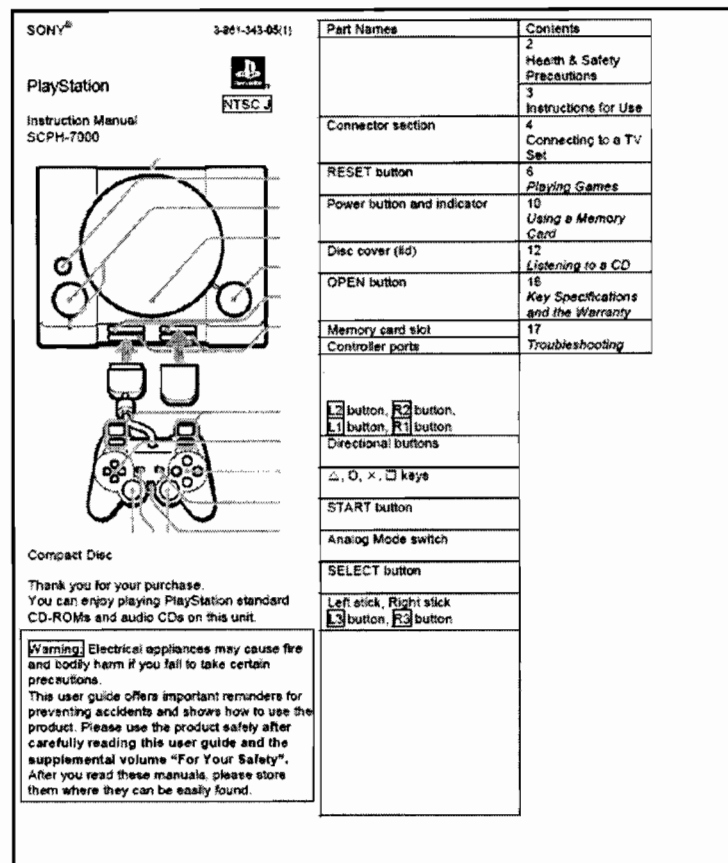
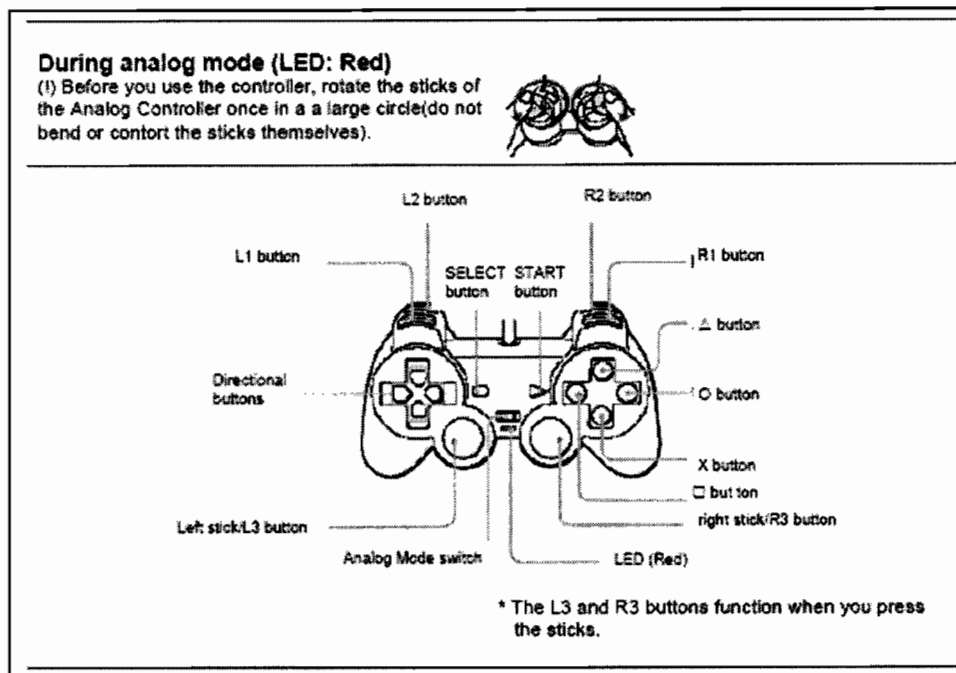


Fig. 4 – Sony PlayStation® Manual Showing Analog Controller

The PlayStation® Manual (see Fig. 4, above) includes not only a diagram of a controller very similar to the one disclosed in Goto (see Fig. 2, above), but it describes the various elements disclosed in Goto and their functions during PlayStation® game play. (Exhibit 11, PlayStation® Manual, pgs. 8-9.) The Analog Controller includes the four directional buttons on the left side of the controller, four additional independent function buttons on the right side of the controller, two additional game control buttons in the center of the controller, two analog joysticks and four shoulder buttons on the top of the controller (see Fig. 5, below).



**Fig. 5 – Sony Analog Controller with Four Directional Buttons.
 Analog Joysticks and Multiple Independent Game Control Buttons**

The PlayStation® Manual also shows that the pivotal left and right thumb sticks may also function as depressible buttons L3 and R3. (See Fig. 5, above.) Further, the PlayStation® Manual describes the existence of an active tactile feedback vibration feature, stating:

About the Vibration Feature

The accompanying Analog Controller is a sensory controller that has a vibration feature. Turning the vibration feature on or off can be manipulated on a screen in the software.

PlayStation® Manual, p. 9. (Emphasis in original.)

Thus, no less than two years before Applicant filed his application for the '700 Patent, Sony not only had published its patent application claiming a controller containing most of the features claimed as “novel” in the '700 Patent, but it had made its controller publicly available, and explained many of its features and functions in a written publication.

3. The Himoto ("Sega") Prior Art¹⁶

European Patent Application No. EP 0 835 676 A1, entitled "Multidirectional Operating Switch and Multidirectional Operating Apparatus Using the Same," was filed by Atsunori Himoto et al. on February 21, 1997 and was published on April 15, 1998. Himoto discloses the use of multiple buttons, triggers and an analog joystick to provide increased functionality for a game controller.

Himoto also discloses the use of an analog joystick to control movement of a game character, as well as the use of a four way rocker pad and multiple individual buttons to add further control. (See Fig. 6, below.)

Himoto further discloses the use of proportional pivotal trigger buttons mounted on the back of the controller to provide variable output to a television video game. (See Fig. 7, below.) Himoto states:

The command levers 22l, 22r are pulled toward the operator to input continuously changing command signals. **The command levers 22l, 22r, which are disposed on the operation sides 10c, 10d on the left and right sides of the back side are operated by pulling them toward the operator with the fingers of both hands** except the thumbs, e.g. with the index fingers and the middle fingers when the operator holds the controller with both hands.

The command levers 22l, 22r respectively include operation levers (not shown). **The command levers 22l, 22r are operated to thereby swing the operation levers and can output continuously changing command signals corresponding to swing angles** of the operation levers.

Exhibit 10, Himoto, Col. 10, lines 38-52.

¹⁶ Also enclosed though not included in the detailed claim charts is a design patent associated with the controller disclosed in Himoto, U.S. Design Patent No. 401,974, entitled "Controller for Video Game Machine," filed by Akitoshi Oikawa on October 22, 1996, and issued on December 1, 1998. (Enclosed as Exhibit 14.)

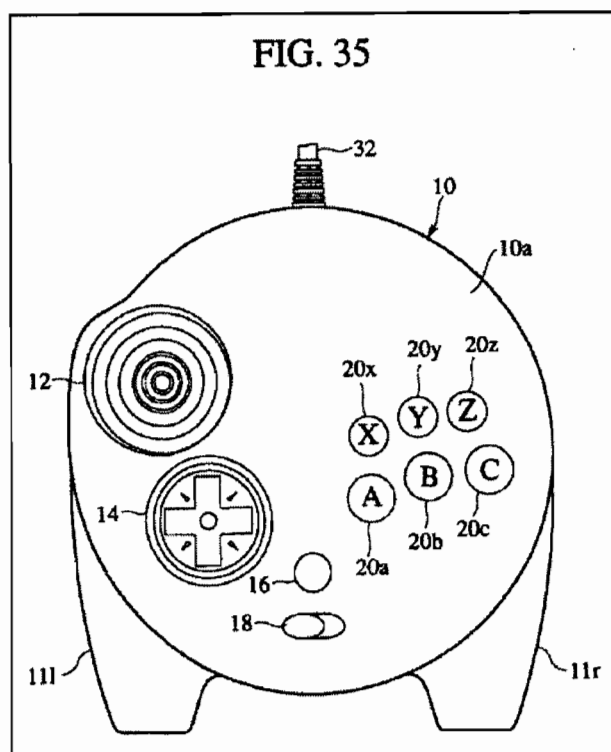


Fig. 6 – Himoto’s Game Controller With Analog Joystick, Multiple Independent Buttons

Himoto also discloses providing vibration feedback to the user of a video game through the video game controller, in order to provide a more realistic gaming experience.

Himoto states that:

[a]n expansion unit 70 shown in FIGs 12 and 15 adds the function of giving vibrations to the controller body 10. The expansion unit 70 which adds the vibration function includes a connector 71 to be connected to the expansion connector 26 of the controller body 10 just as the standard expansion unit 30 is, and a connector 73 to be connected to a connector 202 of the game apparatus body 200 is provided on the end of a connection cable 72. An electric power source 76 for giving vibrations is disposed in the connection cable 72. The expansion unit 70, includes a control computer 74 for the general control, and the control computer 74 includes a vibration unit 75 for giving vibrations.

The vibration unit 75 is actuated in response to a command signal from the game apparatus body 200 or the controller body 10 and gives vibrations to the controller body 10.

Vibrations are thus given to the controller body 10 from the vibration unit 75, whereby vibrations are given upon shooting, and realistic games can be enjoyed.

Himoto, Figs. 12 and 15, Col. 16, lines 38-58.

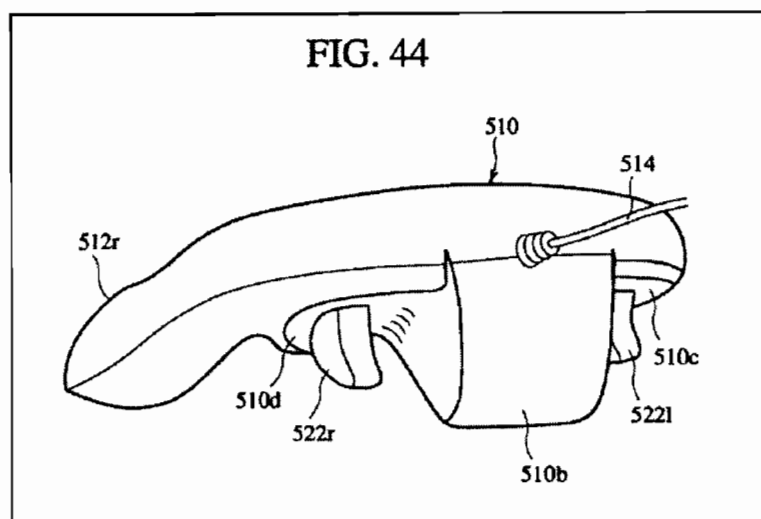


Fig. 7 – Himoto’s Proportional Pivotal Buttons and Vibration Feedback

Thus, Himoto disclosed both tactile feedback vibration and the use of pivotal buttons to provide continuously updating output proportional to the pressure applied by a user’s fingers in a video game controller over two years before Applicant filed the application for the ‘700 Patent.

4. The Sega Saturn™ 3D Control Pad

Numerous elements claimed as “novel” in the ‘700 Patent were both described in printed publications and commercially available years before Applicant filed his application. The Sega Saturn™ 3D Control Pad (“3D Control Pad”) was commercially available no later than 1996 as an optional peripheral for the Sega Saturn™, and described in the Sega Saturn™ 3D Control Pad instruction manual 670-8776A (“Sega 3D Control Pad Manual”), a publicly available written publication bearing a copyright date of 1996 to Sega Enterprises, Ltd.

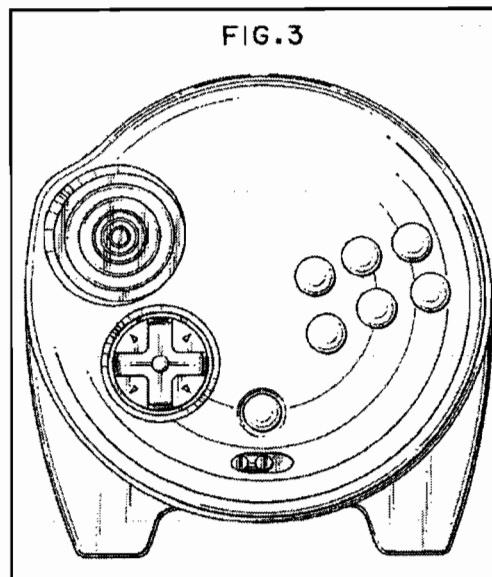
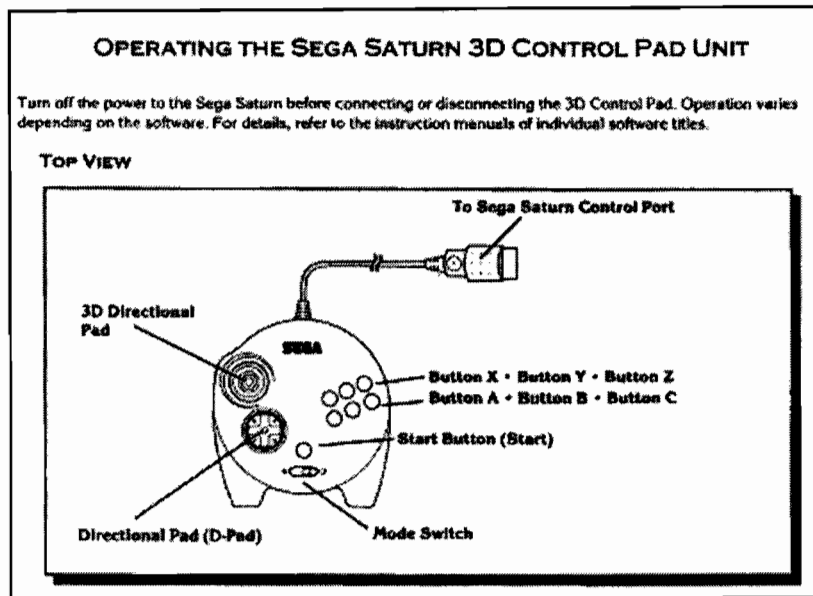


Fig. 9 – Oikawa's U.S. Design Patent No. Des. 401,974

This controller is substantially similar to the controller disclosed by Atsunori Himoto in his published patent application (detailed above), which also named Sega Enterprises, Ltd. as Applicant. (Himoto, Applicant, pg. 1.) The 3D Control Pad further tracks the design

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disclosed in U.S. Design Patent No. Des. 401,974, which issued to Akitoshi Oikawa on December 1, 1998, also assigned to Sega Enterprises, Ltd. (Compare Figs. 8 and 9, above.)

The Sega 3D Control Pad Manual not only shows a controller almost identical to the one disclosed in Himoto and Oikawa, but it describes the various elements disclosed in Himoto and how to access them during Sega Saturn™ 3D game play.

Specifically, the Sega 3D Control Pad Manual states that:

- When the Mode Switch is set to the 3D Control Pad Mode, the following buttons can be used: 3D Directional Pad, D-Pad, Start, Button A, Button B, Button C, Button X, Button Y, Button Z, Trigger L, and Trigger R
- If the software you're using doesn't support the 3D Control Pad function, please set the switch to the Standard Control Pad mode.

Exhibit 8, Sega 3D Control Pad Manual, "Mode Switch Use".

Additionally, the Sega 3D Control Pad Manual describes analog triggers virtually identical to the ones disclosed in Himoto. (Compare Fig. 10, below with Fig. 7, above.)

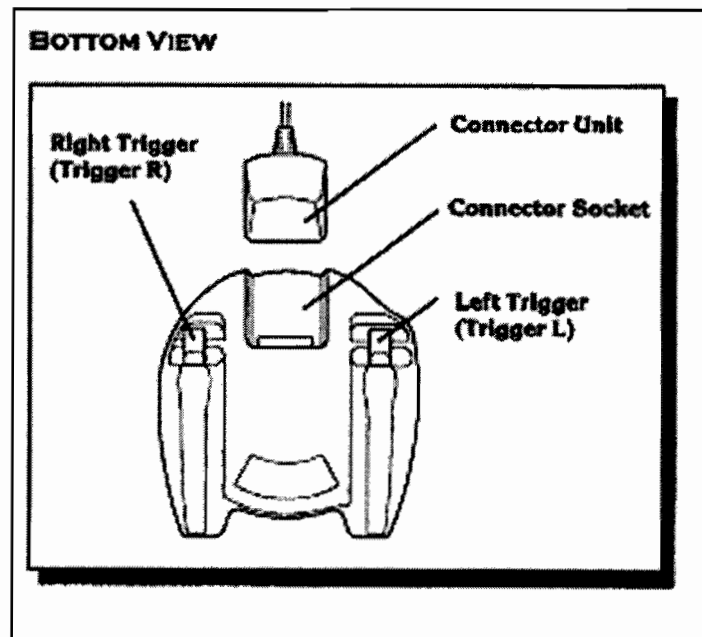


Fig. 10 – Sega Saturn™ 3D Control Pad Analog / On/Off Pivotal Trigger Buttons

These pivotal trigger buttons may be used as either simple on/off buttons (during “Standard Control Pad Mode”) or as analog buttons (in “3d Control Pad Mode”) responding to variable pressure applied by a user’s fingers:

When the Mode Switch is set to the Standard Control Pad Mode . . . **Trigger L and Trigger R are not analog.**

Sega 3D Control Pad Manual, “Mode Switch Use”

Setting the Mode Switch to the 3D Control Pad Mode (the O Mode) **allows you to use the 3D Directional Pad, Trigger L and Trigger R in analog mode.** With the Use of these functions, you gain a new level of control over gameplay.

Sega 3D Control Pad Manual, “About The 3D Pad Mode”

Thus, four years before Applicant filed his application for the ‘700 Patent, Sega had already marketed a controller - described in a publicly available written publication – containing many if not all of the elements Applicant disclosed as “novel” in the ‘700 Patent, including at least the use of analog joysticks, pressure-sensitive pivotal buttons offering both analog and on/off functionality as desired by the user, and additional multiple independent buttons.

5. The Chandler Prior Art¹⁷

Use of a flexible sheet to support the associated sensors of a single-input multiple axes controller and depressible buttons was discussed in U.S. Pat. No. 4,246,452 to David Chandler, issued on January 20, 1981, approximately 19 years before the ‘700 Patent application was filed.

¹⁷ Also enclosed though not included in the detailed claim charts is another patent involving use of pressure-sensitive sensors on a flexible sheeting directly affixed to a rigid circuit board, U.S. Patent No. 4,527,021, entitled “Keyboard Switch Assembly,” filed by Yoshitungu Morikawa on February 3, 1984, and issued on July 2, 1985. (Enclosed as Exhibit 15.)

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Indeed, Chandler states that the use of a flexible sheet with a circuit board was not novel even in 1981:

Printed circuit board switches utilizing flexible materials such as flexible insulating layers are shown and described in U.S. Pat. Nos. 3,911,234; 4,017,697; 4,029,915; 4,045,636; 4,060,703; and 4,081,898. The devices of these patents are representative of the state of technology of switch assemblies for keyboards and the like utilizing printed circuit boards or printed circuits on flexible carriers. Of this group of patents, U.S. Pat. No. 4,029,915 discloses a miniaturized calculator keyboard switch assembly having a universally pivoted key actuator wherein the key actuator is adapted to be tilted in any one of four directions by the fingertip of the user to input a selected one of our different information signals from the key to a calculator circuit located within the body thereof. U.S. Pat. No. 3,911,234 discloses a keyboard type switch assembly formed from a flexible printed circuit folded about an aperture spacer so that contacts on the circuit face may be depressed through the aperture for engagement with a spaced conductive surface by flexure of the circuit.

Exhibit 2, Chandler, Col. 1, lines 27-47.

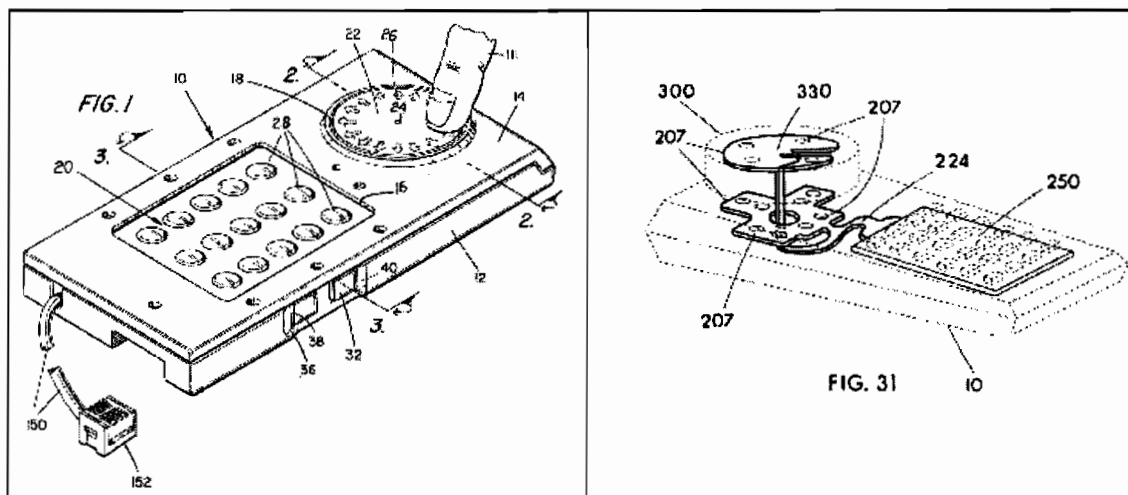


Fig. 11 – Comparison of the Apparatus of Chandler and the ‘700 Patent

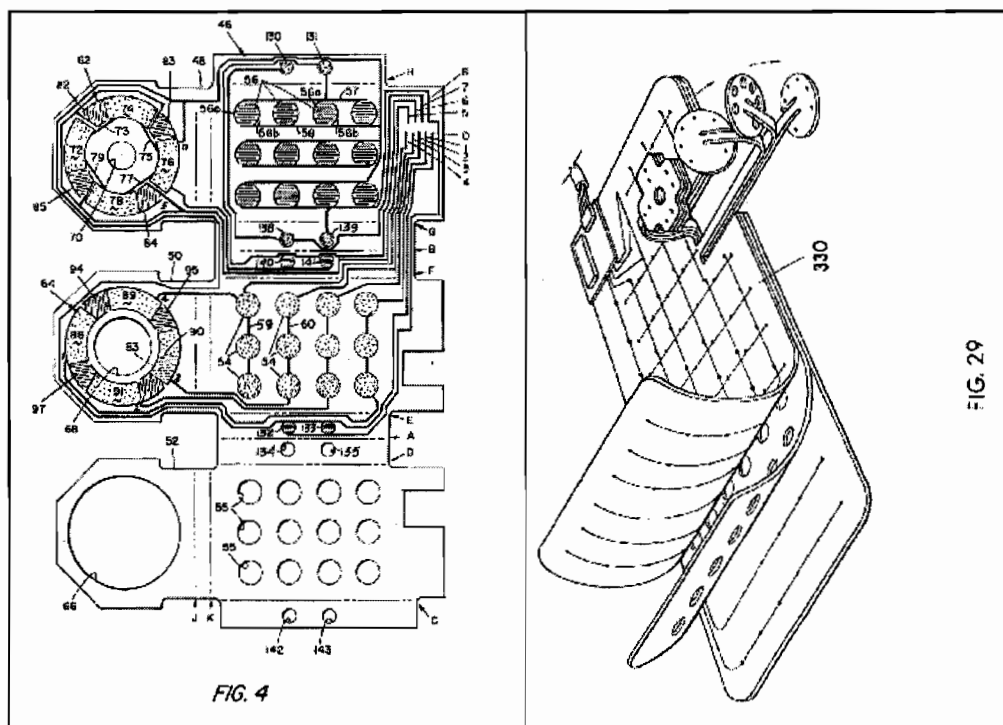


Fig. 12 – Comparison of the Flexible Sheets of Chandler and the ‘700 Patent

Chandler discloses folding a flexible sheet such that its multiple layers, including the circuit board layer and the flexible membrane layer, may all be formed from one single sheet of material. (Chandler, Col. 2, lines 14-19.) Additionally, Chandler discloses attaching a number of sensors to the circuit board apparatus to control not only function variables, but also to control movement of a character in a video game. Chandler also discloses providing auxiliary switches for functions such as firing weapons. (Chandler, Col. 4, lines 8–28.)

The similarity between Chandler and the ‘700 Patent is underscored by review of the patent figures for each. (See Fig. 11, above.) The only noticeable difference is that the ‘700 Patent replaces the tiltable disc of Chandler with a joystick control. However, even Chandler recognized that controllers do use joysticks. (Chandler, Col. 12, lines 1-5.)

Additionally, a review of the flexible sheet array and the sensor structure for the input device and depressible buttons presented by Chandler reveals that it bears a striking

resemblance to the flexible sheet structure claimed as novel in the '700 Patent. Again the only noticeable difference between the two is that the '700 Patent employs sensors for a low-profile joystick in place of the sensors for a disc disclosed in Chandler. (*See* Fig. 12, above.) Indeed, the low profile disc in Chandler is much like the low profile joystick shown in the '700 Patent.

Thus, almost twenty years before Applicant submitted his application for the '700 Patent, and more than a decade before his earliest claimed priority date (which the '700 Patent is not entitled to), Chandler had proposed utilizing a flexible sheet circuit board, as well as numerous different sensor types, for controlling a video game on a display.

Again, the Examiner allowed the claims on the faulty premise that what was shown in Chandler did not exist in the prior art. Chandler shows that premise was incorrect, and as such the claims of the '700 Patent are invalid.

6. The Kramer Prior Art

Use of pressure-sensitive variable-conductance material to generate variable analog output from a button on an "Input Keyboard for an Electronic Appliance in Entertainment Electronics" in response to variable pressure applied to the button was disclosed in U.S. Pat. No. 5,164,697 to Richard Kramer, issued on November 17, 1992.

The Kramer invention, as the patent title suggests, was directed generally to an input keyboard for an electronic appliance in entertainment electronics. (Exhibit 3, Kramer, Col. 1, lines 8-10). Kramer also describes providing tactile feedback for the user, referring to prior art devices with pushbuttons for on-off switches having rubber domes, to produce a snap effect. (*Id.* at Col. 1, lines 10-43.)

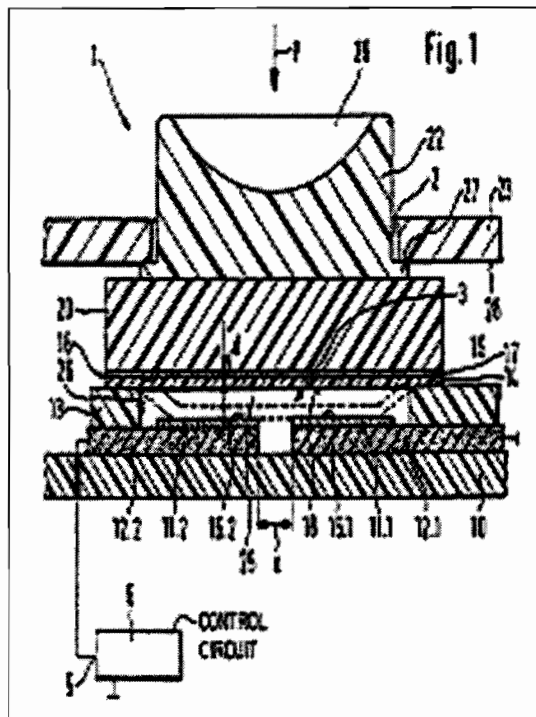


Fig. 13 – Pressure-Sensitive Variable-Conductance Switch Disclosed by Kramer

The Kramer invention improved on the prior art by disclosing “pushbutton switching devices in an input keyboard that can be used to produce not only a switching process but also an adjustment process and will not appreciably complicate the manufacturing process of such an input keyboard.” (*Id.* at Col. 1, lines 45-51.) The Kramer invention generates a variable output by utilizing a thin carbonized plastic foil with an electrical resistance that varies with the pressure applied to the button. (*Id.* at Col. 1, line 51 through Col. 2, line 41.)

Figure 1 of Kramer shows a cross-section of the pressure-sensitive variable-conductance pushbutton (*see* Fig. 13, above) which depicts a pushbutton 22, a carbonized plastic foil 14, and conductors 12.1 and 12.2. (*Id.* at Col. 3, line 39 through Col. 5, line 35.) Depressing the pushbutton causes the carbonized plastic foil 14 to come into contact with the contact linings 11.1 and 11.2 (shown by the dotted line in the figure) creating a bridging resistance between conductors 12.1 and 12.2 through the carbonized plastic foil 14. (*Id.*)

The resistance of the carbonized plastic foil 14 diminishes linearly as the pressure on the pushbutton increases. (*Id.*)

Kramer further disclosed a tactile click to be felt by the user upon actuation of the adjustment process, said feedback to be felt by the finger of the user:

At the positions corresponding to the various pushbuttons of the remote control transmitter, rubber domes are formed in the contact mat to act as spring elements. These rubber domes produce a snap effect upon depression of the pushbutton.

Kramer, Col. 1, lines 28-33.

Kramer goes on to state that this snap effect takes place immediately prior to the time that the pressure-dependent adjustment function takes place:

the rubber dome bears against the printed circuit board and upon depression of the appropriate pushbutton 22, will first actuate a switching process with a snap effect and subsequently permit pressure-dependent adjustment of a function variable.

Id. at Col. 5, lines 43-48.

Kramer further disclosed attaching a flexible sheet to a circuit board (*Id.*, Abstract) to provide contacts for multiple proportional or simple on/off sensors:

In another advantageous embodiment of such an input keyboard that is not illustrated in the drawing attached hereto, the spring element 20 is attached to the ceiling surface of a **rubber dome of a contact mat** that is arranged between the bottom 27 of a pushbutton 22 and the said spring element 20. Like the thin insulating plate in the previous embodiment, the **rubber dome bears against the printed circuit board 10** and, upon the depression of the appropriate pushbutton 22, will first actuate a switching process with a snap effect and subsequently permit pressure-dependent adjustment of a function variable. In this way it becomes **possible to combine switching devices with and without an additional pressure-dependent adjustment function in one and the same contact mat.**

Id. at Col. 5, lines 35-51.)

Even Kramer's primary embodiment includes a flexible sheet (referred to as a carbonized plastic foil 14 and a thin conducting layer 17) connected to a circuit board:

The carbonized plastic foil 14 and the conducting layer 17 on its upper side jointly constitute the countercontact 16 of the switching device 3 operated by means of the pushbutton 22. The contacts of the switching device 3 that are to be connected by means of the countercontact 16 are applied as contact linings 11.1 and 11.2 to the conductor strips 12.1 and 12.2 of a printed circuit board 10 of the input keyboard, the said conductor strips being widened into appropriate surfaces in the area of the contact linings.

Kramer, Fig. 4 (Fig. 13, above); Col. 3, line 64 – Col. 4, line 7.

Kramer, thus, in 1992 disclosed a controller with a pushbutton having both a variable output that is proportional to the pressure applied to the pushbutton, and simple-on/off output, with a dome cap providing an active break-over threshold tactile feedback to the user, utilizing either a flexible carbonized plastic foil and thin insulating plate or a flexible rubber mat connected to a circuit board to allow for the use of both proportional and simple on/off sensors on a single sheet.

7. The Furukawa '760 Prior Art¹⁸

Specific application of known pressure-sensitive variable-conductance materials in a controller for controlling video game imagery on a display was disclosed by Hitoshi Furukawa in his Japanese patent application, entitled "Pressure-Sensing Switch," that was published as Publication No. 5-87760 on November 26, 1993. Furukawa '760 discloses a video game controller configured to be held in two hands with depressible buttons on the left

¹⁸ Also enclosed though not included in the detailed claim charts is another patent involving use of pressure-sensitive variable conductance sensors in a video game controller for controlling imagery, Japanese Patent Application Laid-Open Disclosure No. H05-326217, published December 10, 1993 (hereinafter, "Furukawa '217") to Hitoshi Furukawa. (Enclosed as Exhibit 16, including a certified English translation in accordance with 37 C.F.R. § 1.510(b)(3).

In re Patent No. 6,906,700

Certificate of Service in Compliance With 37 C.F.R. § 1.915(b)(6)

The undersigned hereby certifies that true and correct copies of the following:

- (1) Request for *Inter Partes* Reexamination of Patent Transmittal Form; and
- (2) Request for *Inter Partes* Reexamination, including Exhibits 1-28 and Appendices A-B,

were served (via first-class mail) on the purported owner of the patent at the last address of record:

Anascape, Ltd.
15487 Joseph Road
Tyler, Texas 75707

and on counsel for Anascape, Ltd. in the litigation (via first-class mail):

Luke Fleming McLeroy
Theodore Stevenson, III
McKool Smith - Dallas
300 Crescent Court, Suite 1500
Dallas, TX 75201

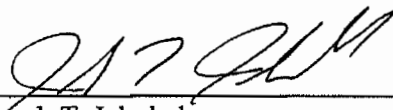
In accordance with 37 C.F.R. § 1.915(b)(6), on the 31st day of January, 2007.

Respectfully submitted,

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