Jury Trial, Volume 2

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1	UNITED STATES DISTRICT COURT EASTERN DISTRICT OF TEXAS				
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3	ANASCAPE, LTD.	DOCKET 9: 06CV158			
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6	MICROSOFT CORP., ET AL	LUFKIN, TEXAS			
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8	VOLUME 2 OF, PAGES 199 THROUGH 494				
9	REPORTER'S TRANSCRIPT OF JURY TRIAL				
11	BEFORE THE HON. RON CLARK				
12	· ·				
13					
14	APPEARANCES:				
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(REPORTER'S NOTES ANASCAPE VS. MICROSOFT,
1
   JURY TRIAL VOLUME 2, 8:43 A.M., TUESDAY, 05/06/2008,
   LUFKIN, TEXAS, HON. RON CLARK PRESIDING)
              (OPEN COURT, ALL PARTIES PRESENT, JURY NOT
4
5
   PRESENT)
              THE COURT: All right. I understand we have
6
   an issue about a couple of demonstratives which I
   understand are going to be used during Dr. Howe's
   testimony?
10
              MR. GUNTHER: Yes, your Honor.
                                              Mr. Blank is
11
   going to address that issue.
12
              THE COURT:
                          Okay. And -- well, I guess the
   easy question is, based on the objection, at the
13
   pretrial I discussed Dr. Howe's supplemental report. In
14
15
   looking through all these reports, was that really the
   second supplemental? Because I found there is a short
16
17
   one-page supplemental that corrected some typographical
18
   errors.
19
              MR. GARZA:
                          Yes.
                                There's three reports from
20
   Dr. Howe in this case -- I'm sorry. There are four
   reports served from Dr. Howe. The fourth one was
21
22
   struck, and we still have the other three.
23
              THE COURT:
                          Right. The other one was just
241
   some typos or some corrections. Okay. I guess the easy
25
   way to deal with this one is can you show me in one of
```

```
the three reports that were not struck where this was
1
   di scussed?
3
              MR. GARZA:
                          Sure.
                                 If you'll look at
   Mr. Howe's rebuttal -- or Dr. Howe's rebuttal report.
5
              THE COURT:
                          Okay.
6
              MR. GARZA:
                          Beginning on page 62, there is a
   section that's entitled "Other Purported Bases For
   Invalidity." And underneath that begins his analysis on
8
   written description. That runs for about 12 pages.
10
              Paragraph 148 on page 63, Dr. Howe does lay
11
   out his opinion and it is: It is my opinion that the
   claims of the '700 are supported by the originally filed
121
   '525 patent application and the specification of the
13
   '700 patent.
14
15
              Now, through there, in the next few
   paragraphs, he does cover various ways why that is; so,
16
   addressing different terms in different ways.
17
   instance, on paragraph 155 that begins on page 65,
18
19
   Dr. Howe discusses the fact that the '525 application
   does not limit the invention to controllers that have a
20
   single input member.
21
22
              On paragraph 158 Dr. Howe --
23
              THE COURT:
                          Slow down. Hold on. Let me take
   a look at it.
24
25
              MR. GARZA:
                          Sorry.
```

THE COURT: Well, can you direct me to some discussion in one of Dr. Howe's reports where he talks about, or even hints at support for the '525 patent specification in relation to claim 19, which seems to be the objection, or verbal references that these figures might then apply to?

MR. GAR7A: Sure.

THE COURT: Let's get specific. I can see generally just a general opinion but --

MR. GARZA: Well, you have to look at this in context, claim 16 and claim 19.

Claim 16 is also asserted in this lawsuit, and it is another embodiment of how --

So, claim 16 is very similar to claim 19 in this lawsuit; but it is more detailed. Claim 16 is an embodiment of this patent that talks about multiple sheets but like claim 19 still requires tactile feedback, still requires bi-directional sensors, still requires unidirectional sensors, and still requires buttons.

In paragraph 162 of Dr. Howe's report, on page 70, he discusses in great detail how claim 16 is supported by various figures and elements that are present in the '525 application. For instance, he discusses how Figure 22 -- and this is in the middle of

page 71 -- in light of figures 45 and 46 discloses four unidirectional sensors associated with 346 and 344 activated by first element 322. He goes through in detail how these claim terms are met by this claim.

Now, it was an exemplary embodiment of claim 16; but the analysis there is certainly relevant to claim 19 and the fact that he did give his opinion that all of these claims were supported by the '525 application. In light of this disclosure in here, it's proper that he be able to talk about claim 19, especially to the extent that claim 19 and claim 16 have similar claim limitations.

THE COURT: Well, without going into a complete recitation of the rules and purpose for the rules governing expert reports and disclosure requirements -- and I'll refer to and adopt some of the prior opinions that I've entered on that subject -- in great detail, the whole purpose of an expert report, as said, I believe, in the commentary to the rules -- never mind our Local Rules; we're talking about the Federal Rules here -- was to allow a party to prepare for cross-examination of a witness perhaps without even taking a deposition.

Now, with experts in a field like this, that doesn't often happen; but -- and maybe I'm dating

```
myself; but I know I frequently used to just go ahead
   and not take a deposition of an expert, just take them
   on live at trial because I had his report.
                                                That's
   something that can be done and --
5
              MR. GARZA:
                          Your Honor, could we --
                          What I'm looking for, just -- I
6
              THE COURT:
   mean, this is going to be the next witness; so, you have
  a few minutes to look -- is -- I've listened to you and
   I heard nothing that said, "Here's where Dr. Howe
   discussed claim 19 and here's why this is a fair
11
   explanation of what he said in his report or,
   alternatively, in his deposition." I mean, that's been
121
   the rule in this district for, well, as long as I
13
   practiced here. I never got it by any judge in this
14
15
   district, and I don't think I've ever allowed someone
  just to come in and come up with something new.
                                                     So --
16
17
              Are they here yet?
              COURT SECURITY OFFICER:
                                      They're here, your
18
19
   Honor.
20
              THE COURT:
                          Okay.
                                 This isn't going to come
   up until Dr. Howe, right?
21
22
              MR. BLANK:
                          Correct.
23
                          Take a few minutes.
              THE COURT:
                                               Take some
   time and let's focus specifically on Dr. Howe, claim 19,
24
25
   and anything to do with these figures and let me take a
```

```
208
   look at it.
1
2
              MR. GARZA: I would like to tell you that I
3
   do plan on showing you how claim 19 is very similar to
   claim 16.
4
5
              THE COURT:
                           Okay. I'm not making a ruling
   right now.
6
7
              MR. GARZA:
                           Okay.
8
              THE COURT:
                          Let's bring in the jury, and
   you've got a chance now to get me focused in on exactly
10
   what you want.
11
              MR. GARZA:
                           Appreciate it.
                                           Thank you.
12
              (The jury enters the courtroom, 8:53 a.m.)
13
              THE COURT: Good morning, ladies and
   gentlemen. Glad to see you back, and we'll continue on
14
   now with the direct examination of Mr. Armstrong.
15
              Counsel?
16
17
              MR. CAWLEY: Thank you, your Honor.
        CONTINUED DIRECT EXAMINATION OF BRAD ARMSTRONG
18
19
               CALLED ON BEHALF OF THE PLAINTIFF
   BY MR. CAWLEY:
20
21
   0.
        Good morning, Mr. Armstrong.
22
        Good morning.
   Α.
23
   Q.
        I think that when we stopped for the day yesterday,
```

So, let me

I had just asked you about the partnership that you

described that owns your '700 patent now.

24

- ask you a few more questions about that. We've heard that the name of your partnership is Anascape. Where did you get that name?
- A. Yes, sir. That name is a made-up word, and it came from -- we -- my partner, Kelly Tyler, was thinking of names and I was trying to think of names and he came up with the best one and he said, "Look, we're describing the analog landscape of the future." And, so, he took the "Ana" from analog and the "scape" from landscape -- so, analog landscape -- put them together and got
- 12 Q. And how much of Anascape do you own? What's your 13 interest?

"Anascape" and that's how that word came to be.

- 14 A. I'm the majority owner.
- 15 Q. And who owns the rest?
- 16 A. Kelly Tyler owns most of the rest.
- 17 Q. And are there a few other people who own small
- 18 amounts?

- 19 A. Yes, sir.
- 20 Q. How many people?
- 21 A. Two others.
- 22 Q. Two others?
- 23 A. Yes, sir.
- 24 Q. And who are they?
- 25 A. Steven Bowman and Brian Carlson. They're also

- 1 friends of mine, people that just helped me along the 2 way with inventing.
- 3 Q. And what is the business of this partnership
- 4 Anascape?
- 5 A. Anascape owns the patents that I have invented, and 6 Anascape endeavors to license the technology.
- 7 Q. Have you personally -- and let me back up, 8 actually.
- 9 When you applied for the patent, you did that 10 personally in your own name; is that right?
- 11 A. Yes, sir.
- 12 Q. And then when you got the patent issued, it was 13 issued with you as the inventor; is that right?
- 14 A. Right.
- 15 Q. And had you assigned the rights to that patent to 16 your partnership, Anascape?
- 17 A. Yes. I mean, there's different patents over time;
- 18 but now they're all assigned to Anascape, yes.
- 19 Q. All of your game controller patents?
- 20 A. Yes, sir.
- 21 Q. Let me ask you to turn to the exhibit binder that's
- 22 in front of you, and I want to look at a couple of the
- 23 exhibits that have to do with that assignment.
- 24 MR. CAWLEY: First, let's see Plaintiff's
- 25 Exhibit 265.

- 1 A. Yes, sir.
- 2 BY MR. CAWLEY:
- 3 Q. What is that?
- 4 A. It's an assignment for a recording of a patent 5 application.
- 6 Q. Not a very good copy of it, is it?
- 7 A. It could be better.
- 8 Q. Does that document record with the Patent Office9 your assignment of your interests in various patents,
- 10 including what was to become the '700 patent to
- 11 Anascape?
- 12 A. Yes, sir, it does. It just took me a moment there
- 13 to read it; but, yes, it does.
- 14 Q. And let's look at another exhibit. That would be
- 15 311.
- 16 A. Yes, sir.
- 17 Q. Tell us what this is.
- 18 A. This is a Patent Assignment Agreement. I signed
- 19 it. And it assigns all of my patents and I believe all
- 20 of my patent applications to Anascape.
- 21 Q. So, is this -- is this basically a document that
- 22 you signed and entered into -- you, Brad Armstrong
- 23 personally -- where you assigned the right to, among
- 24 other things, this '700 patent in this lawsuit to your
- 25 partnership, Anascape?

- 1 A. Yes, sir.
- 2 Q. And is that why Anascape is actually the plaintiff
- 3| in this lawsuit today instead of you personally?
- 4 A. Yes, sir.
- 5 Q. Now, have you and Anascape licensed and attempted
- 6 to license your controller patents?
- 7 A. Yes, sir.
- 8 Q. Who have you been able to license your game
- 9 controller patents to?
- 10 A. To Sony. Sony is our most significant licensee.
- 11 Q. Anybody else?
- 12 A. Yes, sir. You know, before Anascape existed, I
- 13 licensed patents to Mad Catz and before that --
- 14 Q. Mad Catz?
- 15 A. Yes, sir.
- 16 Q. Okay. Before we get too much into the discussion
- 17 of licensing, let's talk about that word for a minute.
- 18 In this context of patents and having patents and owning
- 19 patents and licensing patents, what does it mean to
- 20 license the patent?
- 21 A. A license is actually a simple thing. It's
- 22 basically where I just grant the rights to make my
- 23 inventions in exchange for a royalty.
- 24 Q. So, is it -- compare it to some other kind of
- 25 license that we're familiar with.

- A. I'm drawing a blank.
- 2 Q. Well, is it like a license to drive a car?
 3 MR. GUNTHER: Objection, leading.
- 4 A. Oh. Oh, sure. Yeah.
- 5 THE COURT: Overruled.
- A. Yeah. A license to -- you know, the State gives us
 a license to drive a car. We pay them a fee for the
 license and to help them with all that, and that's a
 wonderful regulatory thing that makes our society work.
- 10 BY MR. CAWLEY:
- 11 Q. Okay. But -- so, the State -- when the State gives
- 12 us a license, they give us permission to do something
- 13 like --

- 14 A. Yes.
- 15 Q. -- drive a car or --
- 16 A. That's correct.
- 17 Q. And when you give someone a license to your patent,
- 18 are you giving them permission to do something?
- 19 A. Yes, sir.
- 20 Q. And what are you giving them permission to do?
- 21 A. I'm giving them permission to make, use, and sell
- 22 my invention.
- 23 Q. All right. And is there -- are there licensing
- 24 agreements that you're familiar with that are entered
- 25 into from time to time by various people and companies

- in the game controller business?
- 2 A. Yes, sir.
- 3 Q. And what's generally the standard rate for
- 4 licensing in that business?
- 5 A. Five percent --
- 6 MR. GUNTHER: Objection, your Honor. No
- 7| foundation.
- 8 THE COURT: I'll sustain that. You need to
- 9 leave a little more basis than that.
- 10 BY MR. CAWLEY:
- 11 Q. How have you become familiar with licenses in that
- 12 industry?
- 13 A. Well, I've made several; and I've talked to a lot
- 14 of people that are in the industry. I'm familiar with
- 15 licenses that other companies have made.
- 16 Q. Have you gone to trade shows in this industry?
- 17 A. Yes, sir.
- 18 Q. For how long?
- 19 A. Oh, I think the first trade shows I went to for
- 20 this kind of technology were in 1992 and 1993.
- 21 Q. And back then did you talk to people about
- 22 licensing activity?
- 23 A. Oh, surely, yes.
- 24 Q. And did you discuss with them what kind of licenses
- 25 were being entered into in the industry?

- 1 A. Yes, sir.
- 2 Q. And what kind of rates people were getting?
- 3 A. Yes, sir.
- 4 Q. And have you been doing that consistently from then
- 5 until pretty much now?
- 6 A. Yes, sir.
- 7 Q. So, are you familiar with what's generally a
- 8 standard licensing rate in the industry?
- 9 A. Yes, sir.
- 10 Q. And what rate is that?
- MR. GUNTHER: Objection, your Honor.
- 12 THE COURT: What is it?
- 13 MR. GUNTHER: Okay. It's still lack of
- 14 foundation. It's been generalized, "I went to trade
- 15 shows," "I know this," "I know that," no specifics, no
- 16 one that he met with, no companies, A. And, B, your
- 17 Honor, it's expert testimony --
- 18 THE COURT: Sustained.
- 19 BY MR. CAWLEY:
- 20 Q. Now, you mentioned that Sony was one of the
- 21 companies that you licensed from. Tell us: Who is
- 22 Sony.
- 23 A. Sony is the company that makes all of those
- 24 televisions and radios and Walkmans and all that kind of
- 25 stuff that we all use.

- 1 Q. And are they in the video game business, as well?
- 2 A. Yes, sir, they surely are.
- 3 Q. Do they make controllers?
- 4 A. Yes, sir, they do.
- 5 Q. You mentioned that your company, Anascape, has
- 6 entered into a license agreement with Sony. How did
- 7 that license come about?
- 8 A. Well, we negotiated with them for a number of
- 9 years; and they just decided to step up to the plate and
- 10 be responsible and make a license for using my
- 11 technology.
- 12 Q. When did you first contact Sony?
- 13 A. The year 2000.
- 14 Q. And what happened next?
- 15 A. Well, we had a representative that had been high in
- 16 Sony PlayStation 1, I believe; and he took patents of
- 17 mine to people at high levels in Sony and that didn't
- 18 pan out. And, so, my partner, Kelly Tyler, and I just
- 19 started negotiating with them in person; and eventually
- 20 they took a license.
- 21 Q. And how long did you negotiate with them?
- 22 A. I think it was nearly four years.
- 23 Q. Was it hard?
- 24 A. Yes.
- 25 Q. Were there times when you got frustrated with the

process?

- A. Surely.
- Q. What kind of deal did Anascape finally make with Sony?
- A. It was a license agreement, and it had a few different components to it. The real important thing was that -- well, the real important thing to me was that they paid me money. But there was a cross-license, also, which was where -- a cross-license is where I granted them the right to make my inventions and they granted Anascape the right to make inventions covered under their patents. And, so, that was very valuable, I thought.

And then there was the money that you mentioned, which was \$10 million. That was valuable to me for several reasons. My partner, Kelly Tyler, had over a million -- I think about a million and a half dollars invested; and for an individual, that's a lot of money. And I wanted him to get paid back. You know, he was really out -- he was putting himself at risk for me; and I wanted him to get paid back.

But another really important thing for us was that, you know, Sony was showing that it was responsible; and that would set a standard, we hoped, for other --

```
MR. GUNTHER: Your Honor, I object --
1
2
         -- big companies --
3
              MR. GUNTHER: -- and move to strike --
         -- in the --
4
   Α.
5
              THE COURT:
                          Wait, wait, wait, wait.
6
              MR. GUNTHER: I object and move to strike.
   The question was what were the terms of the Sony
   license, and now we're getting a lesson on corporate
   responsibility.
              THE COURT:
10
                          Okay. All right. Just state the
11
   objection.
12
              MR. GUNTHER:
                            Yes, sir.
13
              THE COURT:
                          Perhaps another question would be
14
   in order to stop --
15
              MR. CAWLEY:
                          Yes, your Honor.
              THE COURT:
16
                           -- the narrative.
17
              MR. CAWLEY:
                           Sure.
   BY MR. CAWLEY:
18
19
        So, Mr. Armstrong, let me go back to the question
20
   that I asked you. And I think you were most of the way
21
   through it; so, let me rephrase the question a little
22
   bit.
23
              You've told us that Sony paid $10 million for
   an exclusive license to a patent, correct?
24
25
   Α.
        Yes, sir.
```

- 1 Q. And you told us that Sony got the right to use all 2 your other patents, correct?
- 3 A. Yes, sir.
- 4 Q. And you got the right to use some Sony patents,
- 5 correct?
- 6 A. Yes, sir.
- 7 Q. Okay. When did this happen?
- 8 A. It was signed in 2004.
- 9 Q. In 2004, what was the status of the '700 patent?
- 10 A. It was under what they call "Notice of Allowance,"
- 11 which is a very advanced stage. It means that it's
- 12 ready to issue as a patent, that the Patent Office has
- 13 done all of their assessing and that they are going --
- 14 that they have already agreed that this will be a
- 15 patent.
- 16 Q. Okay. So, let me make sure we understand that.
- 17 When the patent that's involved in this lawsuit, the
- 18 '700 patent -- at the time you did your deal with Sony,
- 19 you had applied for that patent at the Patent Office in
- 20 the year 2000, correct?
- 21 A. Yes, sir.
- 22 Q. And at this time of the Sony deal, in 2004, the
- 23 Patent Office had told you that it was going to -- it
- 24 intended to give you a patent; is that right?
- 25 A. Yes, sir.

- 1 Q. But you didn't get that patent actually from the
- 2 Patent Office until the following year, 2005; is that
- 3 correct?
- 4 A. Yes, sir, that's correct.
- 5 Q. Now, did you agree in the Sony deal that Sony would
- 6 have the rights to what became your '700 patent?
- 7 A. Yes, sir.
- 8 Q. Let's take a look at Plaintiff's Exhibit 54.
- 9 A. Yes, sir.
- 10 Q. Just a minute and we'll bring it up on the screen.
- 11 But what is this?
- 12 A. This is a copy of my license with Sony.
- 13 Q. When you say your license, you mean Anascape's
- 14 license?
- 15 A. Anascape's license, yes, sir.
- 16 Q. And is this the deal that you just described?
- 17 A. Yes, sir.
- 18 Q. You said that the way that the deal was structured,
- 19 the \$10 million was for an exclusive license to a
- 20 patent. Why did you do the deal that way?
- 21 A. It was explained to me that that was the best way
- 22 to do it for taxes.
- 23 MR. GUNTHER: Objection, hearsay.
- 24 A. I --
- THE COURT: Wait. Let me --

MR. CAWLEY: It's not being offered for the truth of the matter, your Honor.

THE COURT: Overruled.

MR. CAWLEY: Okay. So, since we had a little interchange there, could I ask him to repeat that answer, your Honor? I'm afraid it just got confused.

THE COURT: Yes.

8 BY MR. CAWLEY:

1

3

4

7

9 Q. Do you remember the question?

THE COURT: Why don't you go ahead and ask the question again?

- MR. CAWLEY: Okay. That would be the easiest way to do it.
- 14 BY MR. CAWLEY:
- 15 Q. Why did you do the deal that way, where you got the 16 \$10 million in exchange for an exclusive license to one
- 17 of your patents?
- A. My understanding was that that was the best way to structure that license for -- to get favorable tax rate
- 20 from the government.
- 21 Q. Okay. But was the overall effect of this agreement
- 22 that we see with Sony in Plaintiff's Exhibit 54 -- was
- 23 it that Sony got the right to use all of your game
- 24 controller inventions and technology?
- 25 A. Yes, sir.

- 1 Q. Do you think that giving that to Sony for \$10
- 2 million was a good deal?
- 3 A. Yes, it was a good deal. It's a very good deal for 4 them.
- 5 Q. Why do you say that?
- 6 A. Because it was a very, very low amount of money 7 compared to what they were selling.
- 8 Q. Well, then, why did you agree to give them all of 9 your technology for no more than \$10 million?
- 10 A. Well, we thought that it showed responsibility on
- 11 their part and that we could parlay that, that that
- 12 would start negotiating with other large companies
- 13 that -- you know, Sony was the industry leader. We
- 14 thought it showed an example of taking responsibility
- 15 for using my inventions.
- 16 Q. Did you think you'd be able to use that example to
- 17 help you in negotiating with others later on?
- 18 A. Yes, sir. We sure hoped so.
- 19 Q. Did you ever have discussions with Nintendo about
- 20 the possibility of Nintendo licensing your game
- 21 controller technology?
- 22 A. I don't know if "discussions" would be the right
- 23 word. We -- yes, we tried.
- 24 Q. Okay.
- 25 A. We sent letters. We had a couple of meetings --

- 1 Q. Let me ask you -- let me ask you some more specific
- 2 questions about it. And we're talking about things now
- 3 before the lawsuit -- this lawsuit was filed, correct?
- 4 A. Yes, sir.
- 5 Q. Did you ever meet with Nintendo or a representative
- 6 of Nintendo?
- 7 A. Yes, sir.
- 8 Q. When was that?
- 9 A. I met with Howard Cheng in 1997.
- 10 Q. Okay. And that's -- the court reporter discovered,
- 11 to her shock yesterday, that there seemed to be two
- 12 Chengs in the lawsuit. So, that's Mr. Howard Cheng with
- 13 an E. He spells his name with an E; is that right?
- 14 A. I think so, yes.
- 15 Q. C-H-E-N-G. Where did you meet with Mr. Cheng?
- 16 A. In Silicon Valley.
- 17 Q. In California?
- 18 A. Yes, sir.
- 19 Q. And did you suggest to him that Nintendo might want
- 20 to take a license to your patents?
- 21 A. Yes, sir.
- 22 Q. But did it ever happen?
- 23 A. No, sir.
- 24 Q. When did you first learn that Nintendo was using
- 25 the invention that's protected by your '700 patent?

- A. I think that would be in the year -- well, the
 exact year I don't know. When they would come out with
 products, I would look at them and open them up and -and if it made my invention, then that was -- for
- 5 example, when the GameCube controller came out, that was 6 an example of my invention.
- 7 Q. Right. And do you remember when that was?
- 8 A. I think that was 2001, right in that time frame. I9 don't know exactly, sir.
- 10 Q. All right. Now --
- 11 A. Maybe 2000.
- 12 Q. And by your invention, are you -- are you referring 13 to the things that you disclosed to the Patent Office in 14 that warehouse application back in 2006?
- 15 A. 1996, yes, sir.
- 16 Q. Sorry. 1996. My mistake.
- Now, Mr. Armstrong, do you intend to show the
- 18 jury this morning a point-by-point comparison of
- 19 Nintendo's controllers compared to your '700 patent?
- 20 A. No, sir.
- 21 Q. And why are you not going to do that?
- 22 A. There's a professor from Harvard University who's
- 23 prepared a study of that.
- 24 Q. And will he be here to testify later today?
- 25 A. Yes, sir, he will.

- 1 Q. Is that Professor Howe?
- 2 A. Yes, sir.
- 3 Q. Now, I want to ask you about some things we heard 4 yesterday, some accusations against you.
- Did you ever claim that you invented an accelerometer?
- 7 A. No, sir.
- 8 Q. Have accelerometers been around a long time, to 9 your knowledge?
- 10 A. I think so, yes, sir.
- 11 Q. I want to show you a slide. This is a slide that
- 12 Nintendo's lawyer showed to the jury yesterday during
- 13 opening statement. Do you recognize that?
- 14 A. Yes, sir. I saw that yesterday.
- 15 Q. And you remember that Nintendo's lawyer, using this
- 16 slide, said this is a part of the abstract of the
- 17 disclosure. Remember that?
- 18 A. Yes, sir.
- 19 Q. And that that's the very first words of the '700
- 20 patent. Do you remember that?
- 21 A. Yes, sir.
- 22 MR. GUNTHER: Objection, your Honor. I
- 23 didn't say that.
- 24 A. Well --
- THE COURT: Overruled.

Ladies and gentlemen, remember, of course, that what the lawyers say or don't say is not evidence; and it will be up to you to remember what was said and what the testimony was.

Go ahead, counsel.

MR. CAWLEY: Thank you, your Honor.

BY MR. CAWLEY:

1

5

- 8 Q. And do you remember that he highlighted this
 9 Language: A sensor connecting sheet material 10 multiple-axes -- he highlighted this Language
- 11 "controllers comprised of a single input member operable
- 12 in 6 DOF." Do you remember that?
- 13 A. Yes, sir.
- 14 Q. And do you remember that he told the jury that the
- 15 only thing you had actually invented was a controller
- 16 with a single input member? Do you remember that?
- 17 A. Yes, sir.
- 18 Q. Well, let me show you this next slide, which is the
- 19 next couple of sentences of that same abstract that --
- 20 A. Right.
- 21 Q. -- Nintendo's lawyer didn't show you yesterday.
- 22 A. Yes.
- 23 Q. What do we see here in the highlighted language?
- 24 A. This "in an alternative embodiment," and then skip
- 25 down to the most relevant part is "reach a widely-spread

- 1 3-D constellation of 6 DOF and/or other sensor
- 2 mountings. " The "other sensor mountings" is the
- 3 critical language here because it was described that all
- 4 I had was just a single input member, and here's --
- 5 we're talking about other sensor mountings, and there
- 6 are other inputs in this specification in the patent.
- 7 Q. And is the "alternative embodiment," up at the top
- 8 there -- does that mean that, right after what
- 9 Nintendo's lawyer showed the jury yesterday, you said to
- 10 the Patent Office there is another way of doing this?
- 11 A. Yes, sir. I think it's even the same paragraph.
- 12 Q. And did you tell them there is a way of doing it
- 13 with other sensor mountings?
- 14 A. Yes, sir.
- 15 Q. Well, let's not stop there because we still heard a
- 16 lot yesterday from Nintendo about their telling the jury
- 17 that the invention you showed in your 1996 patent
- 18 application was limited just to a single input member.
- 19 Was that true, Mr. Armstrong?
- 20 A. No, sir, that's not true.
- 21 Q. Let me ask you to look at this next piece of your
- 22 1996 application.
- 23 A. Yes, sir.
- 24 Q. On the top there is a drawing from your
- 25 application; is that right?

- 1 A. Yes, sir. That is. It's Figure 6.
- 2 Q. On the bottom there is some text or language from
- 3 your application, correct?
- 4 A. Yes, sir.
- 5 Q. Tell us what is shown in that drawing, Figure 6,
- 6 from your 1996 application.
- 7 A. Right. There is a -- you can see the yellow area
- 8 and then inside of the yellow area is a round ball and
- 9 it has a Number 12 to it. And that ball is a
- 10 6-degree-of-freedom input member or a 3-D input member
- 11 and that is what -- it appeared to me he was saying
- 12 that's the only thing this patent has, that it doesn't
- 13 have any other input members.
- 14 Q. Don't worry about --
- 15 A. So --
- 16 Q. -- that for now, Mr. Armstrong.
- 17 A. The --
- 18 Q. Just show me --
- 19 A. The yellow part --
- 20 THE COURT: Wait.
- 21 THE WITNESS: Excuse me.
- 22 BY MR. CAWLEY:
- 23 Q. Sorry. Sorry.
- 24 THE COURT: Let me explain. The court
- 25 reporter can only take one person at a time. When your

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lawyer is talking, you've got to stop. He knows that
   when you're talking, he's got to stop; but you've got to
   remember to stop when he's trying to say something.
   Otherwise, it comes out as a really jumbled mess on the
5
   record.
            0kay?
6
              THE WITNESS:
                            Okay, your Honor.
7
              THE COURT:
                          Now, I know you're not used to
   this, but --
8
9
              THE WITNESS:
                            All right.
10
              THE COURT: -- just remember she's trying to
11
   take everything down.
                          0kay?
12
              THE WITNESS:
                            Thank you. I'll try to be
13
   better.
   BY MR. CAWLEY:
14
15
      I apologize for my interrupting you, Mr. Armstrong.
   I didn't mean to be rude, but I want to make sure that
16
   this moves along promptly and that we really focus our
17
          So, let me ask you some more specific questions.
18
   time.
19
              Is the white ball that we see there that's
20
   got a Number 12 pointing to it -- is that an input
   member?
21
22
        Yes, sir, it is.
   Α.
23
        Is the yellow thing that looks kind of like a very
   Q.
```

deep saucer surrounding the ball -- is that a different

25

input member?

A. Yes, sir, it is.

- Q. Does this drawing, back in your 1996 application,3 show two different input members?
- 4 A. Yes, sir. There are two separate input members in 5 this drawing.
- 6 Q. And now let's read the text that is describing
 7 this. And I'll just read it out loud: Further, the
 8 trackball 12 input member may be interpretable on all
 9 six axes as previously described, and the rotatable
 10 collet can serve as an additional secondary input
 11 member.
- 12 Did I read that accurately?
- 13 A. No, sir. That's exactly what it says.
- 14 Q. Okay. I think -- I think -- that's good enough.
- 15 That's good enough for me.
- What, though -- just so we're not confused,
- 17 what's a collet? I see that the third line down says
- 18 "rotatable collet." What's a collet?
- 19 A. Well, that's the part that's yellow in the drawing.
- 20 It's the Number 16. And it is a second part that you
- 21 can manipulate or control with your hand.
- 22 Q. Okay.
- 23 A. It's a second input member. Yes, sir.
- 24 Q. So, the yellow thing that fits around the ball is
- 25 called a "collet"?

- 1 A. Yes, sir.
- 2 Q. And just so we understand how this works, the ball
- 3 is movable; is that right?
- 4 A. Yes, sir.
- 5 Q. And you can control things on the screen with the
- 6 ball?
- 7 A. Yes, sir.
- 8 Q. And the yellow collet is separately movable,
- 9 correct?
- 10 A. Yes, sir.
- 11 Q. And you can separately control things on the
- 12 computer screen with the collet. Accurate?
- 13 A. Yes, sir.
- 14 Q. And does this specifically describe that collet as
- 15 a secondary input member?
- 16 A. Yes, sir. It's quoted "an additional secondary
- 17 input member."
- 18 Q. Is it true, then, Mr. Armstrong, as Anascape's
- 19 lawyer told the jury yesterday, that all your 1996
- 20 application disclosed was a way to do controllers with a
- 21 single input member?
- 22 A. That would not be true.
- 23 Q. Let's look at another drawing from your 1996
- 24 application. Is this another way you disclosed to the
- 25 Patent Office that your invention might be done?

- 1 A. Yes, sir.
- 2 Q. Describe, if you would, briefly what picture we're 3 looking at there.
- 4 A. This also has Ball 12, which is a first input
- 5 member. It has a collet in a different shape, 16, which
- 6 is a second input member. And it has individual buttons
- 7 136, which are another -- even an additional different
- 8 kind of input members.
- 9 Q. Okay. Just so we understand, the thing that looks
- 10 like a ball is a ball like we saw before; is that right?
- 11 A. Yes, sir.
- 12 Q. And it can be used to control things on the screen?
- 13 A. Yes, sir.
- 14 Q. And then the thing around the ball that has -- I
- 15 see the numbers both 14 --
- 16 A. Yeah.
- 17 Q. -- and 16 and -- 14 and 16 pointing to it.
- 18 A. Right.
- 19 Q. That thing around the ball, is that separately
- 20 movable from the ball?
- 21 A. Yes, sir, it is.
- 22 Q. And is that a separate and second input member?
- 23 A. Yes, sir. That's a second input member.
- 24 Q. And then we see the buttons.
- 25 A. Yes, sir.

- 1 Q. Are those different input members?
- 2 A. Yes, sir. They are different input members.
- 3 They're additional input members.
- 4 Q. Well, let's look at another example that we saw
- 5 from Nintendo's lawyer yesterday in the opening
- 6 statement.
- 7 On the left there, is that a reproduction --
- 8 that exploded thing with the yellow handle on top of
- 9 it -- is that a reproduction of a figure from your 1996
- 10 warehouse patent application?
- 11 A. Yes, with the exception that I believe that
- 12 Mr. Gunther had the yellow and the single input member
- 13 language put onto that.
- 14 Q. Okay. So, it's all black and white in the original
- 15 application, correct?
- 16 A. Yes, sir.
- 17 Q. And, so, Nintendo's lawyers have colored part of it
- 18 yellow, correct?
- 19 A. Yes, sir.
- 20 Q. And they put on that big red box that says "Single
- 21 Input Member, " right?
- 22 A. Yes, sir.
- 23 Q. That's not in the patent application?
- 24 A. No, sir.
- 25 Q. Now, this is going to be hard to see. But if you

- 1 look at the knob on what Nintendo's lawyers have told
- 2 the jury is a single input member, do you see that there
- 3 is some little -- I don't know -- (indicating) yeah,
- 4 right there. Do you see that?
- 5 A. Yes, sir.
- 6 Q. What that arrow is pointing to?
- 7 A. Yes, sir.
- 8 Q. A little mark there.
- 9 A. Yes, sir.
- 10 Q. Is there a drawing in your patent that gives us a
- 11 better view of what that little mark is?
- 12 A. Yes, sir, there is.
- 13 Q. Well, let's take a look at it.
- 14 A. There it is.
- 15 Q. In the upper part, is that Figure 28 from your
- 16 patent --
- 17 A. Right.
- 18 Q. Is that right?
- 19 A. Yes, sir, that's Figure 28.
- 20 Q. And does that show a larger view and a view with
- 21 the top off of that handle that Nintendo's lawyers told
- 22 the jury was a single input member?
- 23 A. Yes, sir. That's Number 300. You can see the 300
- 24 in the previous drawing, also.
- 25 Q. Okay. Now, what are those things that we now can

- 1 see much larger that are marked 376 that we just saw as
- 2 little marks on the slide that Nintendo's lawyer showed
- 3 the jury yesterday?
- 4 A. Yes. Those are additional input members.
- 5 Q. What --
- 6 A. They're buttons on the handle. They are additional 7 input members.
- 8 Q. And did you actually describe that to the Patent9 Office in the text of your patent?
- 10 A. Yes, sir. I did in 1996.
- 11 Q. And is that reproduced at the bottom of this slide?
- 12 A. Yes, sir. That's --
- 13 Q. And did you point out to the Patent Office that
- 14 this handle that Nintendo's lawyer told us yesterday was
- 15 a single input member -- that this handle had, quote, a
- 16 button externally operated for additional input?
- 17 A. Yes, sir. That's a quote.
- 18 Q. Just a bit more on something we heard yesterday,
- 19 Mr. Armstrong. We saw this slide yesterday.
- 20 MR. CAWLEY: If we could put that up.
- 21 BY MR. CAWLEY:
- 22 Q. Do you remember seeing this slide when Nintendo's
- 23 lawyer was talking to the jury yesterday?
- 24 A. Yes, sir.
- 25 Q. Do you remember that this is another patent that's

- 1 not -- not one of your patents, a patent from a man
- 2 named "Chang," with an A.
- 3 A. Right.
- 4 Q. And there is a picture. Is that apparently from
- 5 Mr. Chang's patent?
- 6 A. Yes, sir.
- 7 Q. And you discussed Mr. Chang's patent with the
- 8 Patent Office, right?
- 9 A. Yes, sir, I did.
- 10 Q. Yesterday we saw this big stack of papers that was
- 11 the file history of your patent. Do you remember that?
- 12 A. Yes, sir.
- 13 Q. And one of the things in the file history is -- I
- 14 want to say "talk," but it's not really talk. It's
- 15 writing back and forth between you and the Patent
- 16 Office, discussing some of the things about your patent;
- 17 isn't that right?
- 18 A. Yes, sir.
- 19 Q. And one of the things you discussed was whether
- 20 Mr. Chang did what you did before you did it; is that
- 21 correct?
- 22 A. Yes, sir -- I think that this was actually in the
- 23 original application, yes.
- 24 Q. Okay. But in any event, this language that we see
- 25 that Nintendo told the jury about yesterday is some talk

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you had or dialogue in writing you had with the Patent
   Office about Mr. Chang's patent and how it relates to
3
   what you did?
        Yes, sir.
4
   Α.
5
              THE COURT:
                          And just for the record, counsel,
  is this the different Chang that you mentioned earlier;
   or is it the same Chang --
8
              MR. CAWLEY:
                           This is the different Chang.
   This person with this invention spells his name
   C-H-A-N-G.
10
11
              THE COURT:
                          Different than the previous
   gentleman he was talking to?
13
              MR. CAWLEY: And he is a totally different
   person than Howard Cheng, who spells his name C-H-E-N-G.
14
15
   He is the man who works for Nintendo that Mr. Armstrong
   met with to discuss a license.
16
17
              THE COURT:
                          Okay.
              MR. CAWLEY:
                           So, thank you for that
18
19
   clarification, your Honor.
   BY MR. CAWLEY:
20
        So, Mr. Armstrong, did you hear yesterday
21
22
   Nintendo's lawyer tell the jury that you told the Patent
23
   Office that your patent wasn't like Chang because you
   have a single input member -- excuse me -- because the
24
```

Chang controller does not have a single input member

- and, therefore, it's deficient? Do you remember hearing that?
- 3 A. Yes, in essence.
- 4 Q. Is that the only reason you told the Patent Office 5 your invention was different from Mr. Chang's
- 6 controller?
- 7 A. No, sir.
- 8 Q. Let's go to the next slide. What is this?
- 9 A. This is more discussion of the Chang device. It
- 10 was just -- the previous slide just represented by
- 11 Nintendo's counsel yesterday --
- 12 Q. Okay. Let me --
- 13 A. This is additional material that I talked to the
- 14 Patent Office about.
- 15 Q. Let me ask you some more specific questions. In
- 16 addition to what Nintendo's lawyers told the jury
- 17 yesterday, did you also --
- 18 A. Right.
- 19 Q. -- tell the Patent Office in writing that you --
- 20 your invention was different from Mr. Chang's invention
- 21 because --
- 22 A. Yes.
- 23 Q. -- there's the requirement that the trackball
- 24 housing be moved along a surface in order to input
- 25 linear movement information?

1 A. Right.

- Q. Was that a reason?
- 3 A. I described that as a major disadvantage of the
- 4 Chang device, yes, sir.
- 5 Q. Did you also point out, as we see below, that
- 6 substantial physical space is required on a desk or
- 7 table on which to propel a mouse-type controller?
- 8 A. Yes, sir, I did describe that.
- 9 Q. Is that another reason you told the Patent Office?
- 10 A. Yes, sir, I did.
- 11 Q. Is there more?
- 12 A. Yes, sir, I believe there is more.
- 13 Q. Let's see. Did you also tell the Patent Office
- 14 that a mouse-type controller such as Chang's cannot
- 15 provide the desirable aspect of automatic
- 16 return-to-center along the linear axes?
- 17 A. Yes, sir, I did.
- 18 Q. Is there more?
- 19 A. Yes. I think there is.
- 20 Q. Did you also tell the Patent Office that the Chang
- 21 device appears relatively expensive to manufacture?
- 22 A. Yes, sir, I did tell them that.
- 23 Q. Mr. Armstrong, this is the last thing I'm going to
- 24 ask you about; and it's something else that we heard
- 25 yesterday in the opening statement by Nintendo's lawyer.

- You know, don't you, sir, that the court reporter there
 is working hard to provide us actual written copies of
 the things that are said in court?
- 4 A. Yes. It's very impressive what they can do.
- 5 Q. This is a copy of something that Nintendo's lawyers
 6 told the jury yesterday: And, finally, ladies and
 7 gentlemen, probably most importantly, is it fair for
- 8 Mr. Armstrong to change his invention, his 1996 9 invention, after our multiple input member controllers 0 came on the market, the GameCube and the Wii, and try to
- 11 backdate those claims?
- 13 Q. Were you sitting in this chair when Nintendo's

Yes. I believe he said that.

- 14 lawyers stood here yesterday before the jury, in Federal
- 15 court, and accused you of backdating things in the
- 16 United States Patent Office?
- 17 A. Yes, sir.

12

Α.

- 18 Q. Mr. Armstrong, have you ever backdated any19 documents submitted to the United States Patent Office?
- 20 A. No, sir. I would never do anything like that.
- 21 MR. CAWLEY: I pass the witness, your Honor.
- THE COURT: Mr. Gunther.
- MR. GUNTHER: Yes, sir.
- Your Honor, may I hand out some binders?
- THE COURT: Yes, please.

MR. GUNTHER: Thank you.

Your Honor, may I approach?

THE COURT: Please.

MR. GUNTHER: Thank you.

Your Honor, do you have the depositions; or

should I give them up to you?

THE COURT: If you're going to use them,

8 sure.

1

2

3

4

5

6

7

9

MR. GUNTHER: Thank you.

10 Mr. Armstrong, I'm going to give you a set of

11 your depositions, as well. Here you go.

12 <u>CROSS-EXAMINATION OF BRAD ARMSTRONG</u>

- 13 BY MR. GUNTHER:
- 14 Q. Mr. Armstrong?
- 15 A. Yes, sir.
- 16 Q. How are you?
- 17 A. I'm doing okay. Thank you.
- 18 Q. My name is Bob Gunther. You and I know each other,
- 19 don't we?
- 20 A. Yes, sir.
- 21 Q. And, in fact, we had a chance in March to spend a
- 22 couple of days together, didn't we?
- 23 A. Yes, sir.
- 24 Q. And we talked about a lot of things, including the
- 25 fact that we both have Golden Retrievers, didn't we?

- 1 A. Yes, sir.
- 2 Q. How is your Golden Retriever doing?
- 3 A. Okay. Thank you.
- 4 Q. Now, Mr. Armstrong, I just want to get a couple of
- 5 things straight with you, if I can. Sir, you testified,
- 6 in response to questions from Anascape's lawyer, about a
- 7 continuation application and what that is, right?
- 8 A. Yes, sir.
- 9 Q. And you said -- and Mr. Cawley made the point --
- 10 that the reporters have taken down everything that's
- 11 been said in this courtroom, including your testimony
- 12 yesterday, right?
- 13 A. Yes, sir.
- 14 Q. And we got the transcript last night; and you got
- 15 it last night, right?
- 16 A. I suspect my team did, yes, sir.
- 17 Q. Okay. Did you get it yourself?
- 18 A. No, sir.
- 19 Q. Did you read your transcript from last night?
- 20 A. No, sir.
- 21 Q. Okay. Well, sir, in the transcript, on page 157,
- 22 beginning at line 14, you were asked a question; and you
- 23 talk about -- the question is: Did you claim everything
- 24 you could think of in the application in 1996?
- 25 And you said: No. Right?

And then the question from Mr. Cawley was: 1 2 Why not? And you said: Well, I just filed enough to 3 get a good start. My understanding is that the Patent Office allows you to write claims at a later date so long as they are the original application that you filed in the original patent application. 8 That was your testimony yesterday from the witness stand, sir, correct? Yes, sir. 10 Α. 11 And that's right as far as you understand it, right? 121 13 Yes, sir. Α. So, as a matter of patent law, if you're filing 14 15 claims in 2002 -- which is what you did in this case, correct? 16 17 I'm just going to put up the timeline here to kind of help orient ourselves. 18 19 If you file claims in 2002 -- that's when you 20 submitted your claims -- and you want to get back to 1996, what you filed in 1992 [sic] has to be the same 21 invention as what you filed in 1996, correct? 22 23 Yes, sir. Α. 24 Q. You can't change it.

25

Α.

Yes, sir.

- Q. And if you change it, you don't get back to 1996, 1 2 correct?
 - Α. It has to have the same technology, yes, sir.
- And, so, what that means -- and you 4 0. Okay. understand, don't you, that when I used the term "backdate," that's what I was talking about. I wasn't talking about you backdating a document; I was talking about you trying to say in 2002, that those claims that you wrote after the GameCube was on the market, were the same invention. That's what I'm talking about in terms 10 11 of backdating. You understand that?
- 12 Α. No, sir.

18

- You don't understand, sir, that what I'm talking 13 0. about is whether you can get back to 1996, not whether 14 15 that you filed a document that has the incorrect date on 16 it? Do you understand that?
- I understand that you're clarifying that now. 17 Α.
- And, so, that's what you understand me to Q. Okay. 19 mean now? I just want to make sure that we're on the 20 same page so that when I'm talking to you in this cross-examination about backdating, I'm not talking 22 about you putting the wrong date on a document. 23 talking about you trying to say in 2002, that your invention that you wrote to cover the GameCube is the 24 25 same as your invention in 1996. Now, I just want to

- make sure that you and I understand what we're talking
 about. Do you understand what I'm talking about?
- 3 A. I'm trying to.
- 4 Q. Do you get it?
- 5 A. I think so.
- 6 Q. Okay. Thank you.
- Now, sir, for all of the claims -- you're suing on five claims in this case, right?
- 9 A. Yes, sir, I think so.
- 10 Q. And for all of those claims, the invention in 2002
- 11 has to be the same as the invention that you disclosed
- 12 in 1996, right?
- 13 A. Yes, sir. The --
- 14 Q. And if --
- 15 A. The material in those claims has to be the same as
- 16 what I originally filed, yes, sir.
- 17 Q. And you agree, sir, don't you, that if you can't
- 18 get back to 1996, it would have a very bad influence on
- 19 the validity of your patent? You agree to that, right?
- 20 A. Yes, sir.
- 21 Q. In fact, you agree that if you can't get back to
- 22 1996, if you can't backdate -- remember, backdate in the
- 23 sense that you and I now understand we're using that
- 24 term. If you can't backdate to 1996, your patent is
- 25 invalid, correct?

- 1 A. I'm -- I think I understand what you're saying,
- 2 yes, sir, but --
- 3 Q. And that's true, isn't it?
- 4 A. I would never use the word "backdate" for that.
- 5 Q. Fair enough. Take backdating out of it.
- 6 A. Okay.
- 7 Q. If you don't like the word "backdating," I'll take
- 8 it out.
- You agree with me that if you can't get a date of invention of 1996 for your 2002 claims, you agree with me that the patent is invalid, right?
- 12 A. The claims I wrote in 2000 have to be supported in 13 the original 1996.
- 14 Q. So, if they are not and if we prove to this jury
- 15 that they are not, your patent is invalid, correct?
- 16 A. Well, I guess.
- 17 Q. Okay. All right. So, your testimony, sir, on that
- 18 issue of whether you're entitled to get back to 1996 --
- 19 your testimony is critical in this case, isn't it?
- 20 A. The most important thing is the facts.
- 21 Q. And, sir, your testimony on that issue, you would
- 22 recognize it's critical, won't you?
- 23 A. Well, I think the most critical thing is when I
- 24 wrote the claims in 2002, were they fully supported in
- 25 my original 1996 patent application.

- 1 Q. Let me try one more time. You agree, sir, that in
- 2 this case against Nintendo that Anascape has brought
- 3 asking for tens of millions of dollars, that it's
- 4 critical that you get a 1996 date of invention for the
- 5 '700 patent claims that you've asserted against
- 6 Nintendo. The answer to that question is "yes," right?
- 7 A. Yes.
- 8 Q. Now, sir, I want to ask you, if I can, about what
- 9 you invented. I want to talk a little bit about what
- 10 you invented and what you didn't invent. And when we're
- 11 talking now in terms of what you invented, we're talking
- 12 about 1996. We're talking about what you invented then.
- 13 Do you understand when I'm asking you these questions,
- 14 that that's what I'm talking about?
- 15 A. Okay.
- 16 Q. Okay. Do you understand?
- 17 A. You're talking about my originally-filed 1996
- 18 patent application.
- 19 Q. So that when I ask you questions about what you
- 20 invented, that's what I'm talking about. Do you
- 21 understand me?
- 22 A. Okay.
- 23 Q. Okay.
- 24 A. Are you talking about what's claimed in that or --
- 25 Q. I'm talking about --

- 1 A. -- what's the --
- 2 Q. I'm talking about what the invention is in there.
- 3 A. Okay.
- 4 Q. All right?
- Sir, were you the first to invent the concept
- 6 of 3-D graphics on a computer screen?
- 7 A. No, sir.
- 8 Q. Were you the first to invent a video game
- 9 controller?
- 10 A. No, sir.
- 11 Q. Were you the first to invent a 6-degree-of-freedom
- 12 video game controller?
- 13 A. No, sir.
- 14 Q. Were you the first to invent a single input member
- 15 6-degree-of-freedom controller?
- 16 A. No, sir.
- 17 Q. In fact, in your 1996 application, you described as
- 18 your invention -- part of your invention, certain
- 19 improvements to 6-degree-of-freedom controllers,
- 20 correct?
- 21 A. Yes, sir.
- 22 Q. And, sir, you were not the first to invent a
- 23 multiple input member 6-degree-of-freedom controller,
- 24 were you?
- 25 A. No, sir.

- 1 Q. In fact, Mr. Chang -- that's Chang with an A --
- 2 Mr. Chang two years before had a patent that showed a
- 3 multiple input member 6-degree-of-freedom controller for
- 4 controlling computer graphics, right?
- 5 A. I think that's correct, yes, sir.
- 6 Q. Okay. And you put that in your patent?
- 7 A. I did.
- 8 Q. You told the Patent Office about that, right?
- 9 A. Yes, sir.
- 10 Q. Now, sir, I want to -- if I can, I want to go back
- 11 to some of your testimony yesterday, as well. And I
- 12 want to ask you this question -- you were actually asked
- 13 this question by Mr. Cawley, Anascape's lawyer; and this
- 14 was when you were going through -- do you remember you
- 15 were going through the features of your invention? Do
- 16 you remember that testimony?
- 17 A. Maybe you could refresh my mind.
- 18 Q. Sure. I'll read you the transcript.
- 19 Question from Mr. Cawley: All right. And,
- 20 Mr. Armstrong, what is the next new or novel feature
- 21 that you included in your 2000 patent application that
- 22 eventually became the '700 patent?
- Answer: Well, it's the ability to control
- 24 three-dimensional graphics; in other words, structures
- 25 for controlling 3-D graphics.

```
Now, here's kind of the key that I want to
 1
   get to.
            Question:
                       What does that mean?
3
              Now, you answered yesterday: Well, it's the
   6 degrees of freedom that you've already described.
   It's also six axes of control. That was central.
6
              Okay. And why is that important?
7
              It's just -- it's just six axes is kind of a
   magic number in 3-D graphics control. You don't have to
   have exactly six but it is just -- it is kind of the
   highest calling. It is the best way to do things.
10
11
   is not the only way, but that is a high calling.
12
              That was your testimony yesterday, right?
              That sounds very familiar.
13
   Α.
        Yes.
14
        You were talking about the importance of six axes
   Q.
15
   control to your invention, right?
        It certainly is a valuable feature, yes, sir.
16
   Α.
        And, sir, you didn't invent six axes control.
17
   0.
   Controllers with six axes control already existed before
18
19
   you made your invention in 1996; isn't that right?
20
   Α.
        Yes, sir.
21
   0.
        Thank you.
22
              Now, sir, we've heard testimony about various
23
   sensors; and we're going to hear some more testimony
   about sensors in this case.
24
```

Were you the first to invent something called

- 1 a "unidirectional sensor"?
- 2 A. No, sir.
- 3 Q. Were you the first to invent something called a
- 4 "bi-directional sensor"?
- 5 A. No, sir.
- 6 Q. Now, those concepts are used in your patent, right?
- 7 A. Yes, sir.
- 8 Q. And they're used in your 1996 application.
- 9 A. Yes, sir.
- 10 Q. But you didn't invent those things?
- 11 A. No, sir.
- 12 Q. And, sir, were you the first to invent -- I'm going
- 13 to throw another one at you -- something called a
- 14 "bi-directional proportional sensor"?
- 15 A. No, sir.
- 16 Q. Okay. That's in your patent, too, and in your
- 17 application in 1996; but you didn't invent that, right?
- 18 A. Yes, sir, that's correct.
- 19 Q. So, there's a lot of stuff in the warehouse that
- 20 you didn't invent, isn't there?
- 21 A. Yes, sir.
- 22 Q. Now, sir, were you the first to invent -- and I'm
- 23 going to throw another term at you, and the experts will
- 24 explain this issue to the jury a little bit later. Do
- 25 you know what a -- were you the first to invent a

potentiometer?

1

2

- A. No, sir.
- 3 Q. Now, underneath the Nintendo joysticks in the
- 4 GameCube -- and I'm holding up a GameCube, if I can.
- 5 Here's two joysticks, correct? Can you see them?
 - MR. GUNTHER: Your Honor, may I approach?
- 7 THE COURT: You may.
- 8 MR. GUNTHER: Thank you.
- 9 BY MR. GUNTHER:
- 10 Q. I'll hand this to you, Mr. Armstrong. I'm sorry.
- 11 I didn't mean to make this a vision test. And maybe you
- 12 could hold this up to the jury while I'm asking you
- 13 questions.
- 14 A. Okay.
- 15 Q. My question is: Are there two joysticks there on
- 16 that controller?
- 17 A. I would presume that you're talking about this one
- 18 (indicating), this gray unit?
- 19 Q. Yes, sir.
- 20 A. Okay. Yes, sir, that -- and I would presume you're
- 21 talking about the yellow unit (indicating)?
- 22 Q. Correct.
- 23 A. Yes, sir.
- 24 Q. Correct. Now, underneath those there are
- 25 potentiometers, correct?

- 1 A. I don't know what's inside for sure.
- 2 Q. Okay. But you took this apart when you wrote the 3 claims in 2002, didn't you?
- 4 A. Well, I didn't take this one apart. I don't know 5 what's inside this one.
- 6 Q. Well, assuming it's -- let's do it this way.
- 7 Assuming it's the same as the one that you took apart in
- 8 2002 when you were writing your claims to copy
- 9 Nintendo's product, is there a potentiometer underneath
- 10 there?
- 11 A. I'm -- thinking back, I think that there is, yes,
- 12 sir.
- 13 Q. Okay. So, potentiometers are in the warehouse,
- 14 right, back in 1996?
- 15 A. Yes, sir.
- 16 Q. But you didn't invent potentiometers, right?
- 17 A. No, sir.
- 18 Q. You didn't invent rotary potentiometers, right?
- 19 A. No, sir.
- 20 Q. You didn't invent really any kind of potentiometer,
- 21 did you?
- 22 A. No. sir.
- 23 Q. Okay. Now, sir, I want to focus on the
- 24 cross-switch. And could you hold it up again for me,
- 25 for the jury?

- 1 A. Are you talking about this (indicating) right here?
- 2 Q. Yeah, sort of the cross.
- Now, sir, did you invent the cross-switch?
- 4 A. No, sir.
- 5 Q. Now, underneath that cross-switch, assuming it is
- 6 the same one that you took apart when you copied
- 7 Nintendo's product -- and we've got it up on the
- 8 screen -- are there unidirectional sensors underneath
- 9 each one of those things?
- 10 A. I believe there are, yes, sir.
- 11 Q. Okay. So, sir, there is a unidirectional sensor
- 12 under where that arrow is, right, underneath?
- 13 A. I believe so, yes, sir.
- 14 Q. And there is another one down here on the bottom,
- 15 where the bottom is, correct?
- 16 A. Yes, sir.
- 17 Q. And there is another one over here?
- 18| A. Yes, sir.
- 19 Q. And then there is a fourth one over here; so,
- 20 there's four unidirectional sensors, right?
- 21 A. Yes, sir.
- 22 Q. So, you didn't invent the cross-switch.
- 23 A. No, sir.
- 24 Q. In fact, Nintendo was using that since the
- 25 Eighties, weren't they?

- 1 A. I think so, yes, sir. I'm not sure.
- 2 Q. Okay. And you didn't invent the various
- 3 unidirectional sensors that are underneath each one of
- 4 those things, right?
- 5 A. That's correct.
- 6 Q. Okay. So, you didn't invent a potentiometer.
- 7 A. That's correct.
- 8 Q. Did you invent -- let me just ask you this: Did
- 9 you invent a joystick?
- 10 A. No, sir.
- 11 Q. Were you the first to invent that?
- 12 A. No, sir.
- 13 Q. People did that way before you. In fact, we saw
- 14 one of the Atari ones from the Seventies, right, the
- 15 Atari 2600 that was, I think?
- 16 A. Yes, sir.
- 17 Q. And that had a joystick on it, right?
- 18 A. Yes, sir.
- 19 Q. Okay. So, you didn't invent a joystick; you didn't
- 20 invent a cross-switch; and you didn't invent the other
- 21 joystick, correct?
- 22 A. That's correct.
- 23 Q. Okay. Now, sir, I want to ask you this -- and I
- 24 want to go back to your testimony yesterday, if I can.
- 25 MR. GUNTHER: And, Kam, I'm not as good as

- 1 Mr. Cawley at this. Would you mind helping me with this
- 2 for a second?
- 3 BY MR. GUNTHER:
- 4 Q. And while Kam is getting this set up,
- 5 Mr. Armstrong, let me ask you this question. You talked
- 6 about rumble as one of the features of your invention,
- 7 right?
- 8 A. Yes, sir.
- 9 Q. You said rumble was in the warehouse back in 1996,
- 10 right?
- 11 A. Yes, sir.
- 12 Q. And, sir, you also described rumble as another way
- 13 of -- maybe a more technical way of talking about rumble
- 14 as being tactile feedback, active tactile feedback,
- 15 right?
- 16 A. Yes, sir.
- 17 Q. In fact, you said -- question -- this is
- 18 yesterday -- Mr. Cawley: Is tactile feedback another
- 19 way of saying what we've been calling "rumble"?
- 20 Answer: Yes, sir. That's rumble. That's
- 21 the way they talk about it today.
- 22 Right?
- 23 A. Yes, sir.
- 24 Q. So, active tactile feedback equals rumble; and that
- 25 was all in the warehouse in 1996, right?

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A. Yes, sir.
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Q. All right. Now, I want to show you a piece of your testimony from yesterday. Okay. This is yesterday's transcript. And, sir, you see at --

THE COURT: Do you want to focus that in just a little bit more or just enlarge it just a tad?

MR. GUNTHER: Yes, we will do that.

THE COURT: Just hit the "enlarge" button if you want anybody to read it.

MR. GUNTHER: Yes, sir.

THE COURT: It will go in. It will go in

12 further.

MR. GUNTHER: Judge, what do you think?

THE COURT: There you go.

15 MR. GUNTHER: Thank you, judge. I appreciate

16 that.

- 17 BY MR. GUNTHER:
- 18 Q. So, this is from yesterday, your testimony when
- 19 Anascape's lawyers are asking you the questions: Let's
- 20 talk about some of the key aspects of your invention,
- 21 Mr. Armstrong. Tell us about the first one.

22 Answer: Rumble --

Active tactile feedback, translation, right?

24 That's what that is?

25 A. Yes, sir.

- 1 Q. (Reading) Rumble is a technology that I invented.
- That's what you said yesterday. That's what
- 3 you told the jury yesterday, correct?
- 4 A. That's what it says, yes, sir.
- 5 Q. And to sort of borrow a line from Mr. Cawley,
- 6 sitting here as a witness under oath in Federal court,
- 7 that's what you told the jury yesterday, right?
- 8 A. That's what it says, yes, sir.
- 9 Q. Okay. Now, sir, I want to show you what you told
- 10 me in your deposition.
- 11 MR. GUNTHER: Kam, can we put up --
- 12 BY MR. GUNTHER:
- 13 Q. This is from your deposition in March, two months
- 14 ago, Mr. Armstrong. So, you said: Rumble is a
- 15 technology that I invented.
- MR. GUNTHER: Can we put up from the
- 17 March 17, 2008, deposition of Mr. Armstrong, page 34,
- 18 line 14 -- oh, I'm sorry. We have to switch back.
- 19 Before you do that, I just want to --
- 20 BY MR. GUNTHER:
- 21 Q. (Reading) Rumble is a technology that I invented.
- 22 That's your testimony?
- 23 A. Yes.
- 24 Q. Okay.
- 25 A. Yes. I could certainly help clarify that if you'd

Like.

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I'm going to show you something from your deposition.

Sir, here is your deposition, March 17, 2008. And I'd like to focus on line 14 from page 34. And I'd like to blow up 14 to 25 and highlight it.

Now, you told the jury yesterday All right. that you invented rumble. Now, Mr. Armstrong, this is what you told me when I asked you questions two months ago: Okay. Now, were you, sir, the first to invent -strike that. I take it you were not the first to invent the use of a vibrating motor for active tactile feedback in a video game; is that correct?

> In a video game, I'm not sure. Answer:

Question: Okay. Were you the first to -- is 16 it fair to say, sir --

I'm not too good at getting a sentence out straight.

-- is it fair to say, sir, that you were not -- not the first to invent the use of a vibrating motor to provide active tactile feedback in a controller?

Answer: I think there was a motor and offset weight that I found somewhere, some German thing or something that had one.

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MR. GUNTHER:
                            Can we go to the next page?
1
   Page 35.
             Let's blow up lines 2 to 7, please.
2
   BY MR. GUNTHER:
3
        (Reading) Before your invention?
4
   0.
5
              This is the German thing you were talking
6
   about.
7
                      I think so.
              Answer:
8
                       Okay. All right. So, let's -- you
              Line 4:
   don't claim to have invented the two-axis joystick --
10
              We talked about that.
11
              MR. GUNTHER: But now focus on the rest of
   the page, Kam. If you can go down to starting at line
121
   15 and to the bottom of the page, 15 to the bottom.
13
   sorry. I'm messing you up.
14
15
   BY MR. GUNTHER:
16
   Q.
        (Reading) Okay. And you don't claim to have been
   the first to have invented vibration with a controller,
17
   correct, through some type of vibrating motor?
18
19
              Answer: I certainly didn't invent vibration.
20
              Right.
                      Right.
21
                      A motor with offset weight was
              Answer:
22
   really early on. I believe this was built from my
   teachings, but I probably don't think I -- I don't think
23
   I did the patents right; and, so, I didn't receive an
241
25 reward for that.
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So, sir, you told the jury yesterday that you invented rumble; but you told me two months ago that some fellow in Germany came up with rumble, using an offset weight and a vibrating motor for a controller before you did.

Now, sir, I'd like to go on --

MR. CAWLEY: I'm sorry, your Honor --

THE COURT: Was there a question?

BY MR. GUNTHER:

10 Q. Right?

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- 11 A. That was a long question. I believe that -- you
- 12 know, I suspect that that's an actual quote of what I
- 13 said yesterday. My intent is that I invented rumble in
- 14 the context of the entire invention in the 3-D graphic
- 15 world in a 3-D graphics controller.
- 16 Q. Is that what you said?
- 17 A. It doesn't look like that's what I said from the
- 18 quote, no, sir.
- 19 Q. Did Mr. Cawley try to correct you?
- 20 A. If that's a -- I think that probably is a correct
- 21 quote. I remember -- if we go back to that, I was
- 22 talking about the world, being in a world -- right -- I
- 23 mean, the next sentence.
- 24 Q. Sir, answer the question. Did Mr. Cawley try to
- 25 correct your testimony yesterday? It's a pretty easy

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question. Can you answer it "yes" or "no"?
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- A. I don't think he tried to correct that, but I don't think it was really wrong.
- 4 Q. Did he --
- 5 A. I think you're --
- 6 MR. CAWLEY: Your Honor.
- 7 A. -- taking it out of context.
- 8 THE COURT: Let him finish his answer,
- 9 please.

- 10 MR. GUNTHER: Yes, sir. I apologize.
- 11 BY MR. GUNTHER:
- 12 Q. Were you finished?
- 13 A. I think the statement was I invented it in a world
- 14 with -- meaning that I invented it with 3-D graphics
- 15 controllers and in the context of the entire patent
- 16 application.
- 17 Q. So, that's what --
- THE COURT: Okay. Counsel, we're going to go ahead and take a break at this time.
- 20 Ladies and gentlemen, I'll ask you to be back
- 21 at five past. Please remember my instructions. Don't
- 22 discuss the case among yourselves.
- (The jury exits the courtroom, 9:55 a.m.)
- THE COURT: Is your next witness Dr. Howe?
- 25 MR. CAWLEY: Yes, your Honor. On that

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subject, your Honor, I do have a suggestion.
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              THE COURT:
                          Please be seated.
3
              MR. CAWLEY:
                           This whole issue about
   Dr. Howe's testimony and whether or not the
   demonstratives are within or without his report really
  relates to an issue of invalidity which, in any event,
   on his testimony on our case-in-chief we would be
   anticipating what they are even going to say about that
   defense.
             So, my proposal is --
              THE COURT:
                          If you're not going to put it on
10
11
   now, then I won't deal with it now.
              MR. CAWLEY: -- that we take those slides out
12
   of his direct testimony. We won't put it on now, and we
13
   will redo the slides so that they comport more precisely
14
15
   to the court.
16
              THE COURT:
                          Very good.
17
              MR. CAWLEY:
                          That's our suggestion.
18
              THE COURT:
                          If I don't have to rule, I won't.
19
              We'll be in recess until five past.
20
              (Recess, 9:56 a.m. to 10:07 a.m.)
21
              (Open court, all parties present, jury
22
   present.)
23
              THE COURT:
                          Mr. Gunther.
24
                            Thank you, your Honor.
              MR. GUNTHER:
25
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- BY MR. GUNTHER:
- 2 Q. Mr. Armstrong, are you ready?
- 3 A. Yes, sir.
- 4 Q. Okay. I want to go to another piece of your
- 5 testimony from yesterday when you talked about the
- 6 second aspect of your invention that was in the 1996
- 7 warehouse. And you remember you talked about circuit
- 8 boards?

- 9 A. About what?
- 10 Q. Circuit boards.
- 11 A. Yes, sir.
- 12 Q. Okay. Let me put this on the screen. I'll see if
- 13 I can -- I've done some pretty poor highlighting, a
- 14 pretty poor highlighting job here, Mr. Armstrong, but if
- 15 you'll bear with me.
- 16 Question: Did you, in 1996, disclose to the
- 17 Patent Office in your patent application the idea of
- 18 using circuit boards in game controllers?
- 19 Do you see that?
- 20 A. Yes, sir.
- 21 Q. And you said: Yes, sir, I did.
- 22 A. Yes, sir.
- 23 Q. This is the text from my 1996 application, the
- 24 original parent patent application, where it says:
- 25 Providing structure with the advantage of mounting the

sensors in a generally single area or on at least one planar area, such as on a flat flexible membrane sensor sheet or circuit board sheet, so that the controller can be highly reliable and relatively inexpensive to manufacture.

That's what you pointed to in your 1996 warehouse as supporting the notion that you -- part of your invention was sensor-connected sheets, correct?

9 A. Yes, sir.

4

5

- 10 Q. Now, sir, you remember during Mr. Cawley's opening 11 statement that he held up this controller (indicating)?
- 12 A. Yes, sir.
- 13 Q. Do you know what it is?
- 14 A. It appears to be an Atari controller.
- 15 Q. It's a controller for the Atari 2600, correct?
- 16 A. Okay.
- THE COURT: Okay. Counsel, you probably want to be behind the podium so we can --
- 19 MR. GUNTHER: I apologize, your Honor.
- THE COURT: -- pick up on the microphone.
- 21 MR. GUNTHER: Thank you for that, your Honor.
- 22 I apologize.
- 23 BY MR. GUNTHER:
- Q. This is a controller from one of the early Atari
- 25 systems in the 1970s, right?

- 1 A. Yes, sir.
- 2 Q. It was the controller that was used to play games 3 like Pac-Man, right?
- 4 A. Yes, sir.
- 5 Q. And that was -- Pac-Man was one of the things that
- 6 Mr. Cawley showed during his opening statement, right?
- 7 A. Yes, sir.
- 8 Q. Okay.
- 9 MR. GUNTHER: Your Honor, may I approach?
- THE COURT: You may.
- 11 BY MR. GUNTHER:
- 12 Q. Can I hand that to you, sir?
- 13 A. Yes, sir.
- 14 Q. Thank you.
- Now, Mr. Armstrong, have you ever taken that
- 16 controller apart? I know you testified about you sort
- 17 of have this insatiable appetite for taking things
- 18 apart. Have you ever taken that apart?
- 19 A. You know, it's quite likely. If I have, it's been
- 20 really a long time.
- 21 Q. Do you remember doing that at any point in time?
- 22 A. This particular one, no, sir.
- 23 Q. Okay. At any time before you decided to file this
- 24 lawsuit, did you ever take it apart, to your knowledge?
- 25 A. I don't have a specific memory of that.

- 1 Q. And after you filed this lawsuit, did you ever take
- 2 it apart?
- 3 A. I don't have a specific memory of that, no, sir.
- 4 Q. All right. Now, I want you to do this, sir. Could 5 you hold it up high?
- 6 A. (Complying.)
- 7 Q. It's got a rubber band on it, and I'll tell you I
- 8 got the drill out last night and drilled out a couple of
- 9 the screws so that we could take it apart. So, can you
- 10 take the rubber band off and take it apart for me?
- 11 A. Sure. (Complying.) Yes, sir.
- 12 Q. Sir, there is a -- if you could hold it up high,
- 13 there is a --
- 14 A. This is what you want to see, I'm sure.
- 15 Q. Yeah. What color is that thing?
- 16 A. What color is what?
- 17 Q. That thing that you're holding in your right hand.
- 18 A. It's some kind of like an orange-brown.
- 19 Q. Okay.
- 20 MR. GUNTHER: Your Honor, could I approach
- 21 again? I'd just like to get that back.
- THE COURT: You may.
- 23 BY MR. GUNTHER:
- 24 Q. Mr. Armstrong, I'll just take that if you don't
- 25 mind.

- 1 A. Yes, sir.
- 2 Q. Thank you so much.
- 3 I'll grab that, too.
- 4 A. Do you want your rubber band?
- 5 Q. You can have that. I think I've got an extra one.
- 6 Mr. Armstrong, you had a chance to take a
- 7 look at this after you opened it up?
- 8 A. I just now did, yes, sir.
- 9 Q. It's a sheet, isn't it?
- 10 A. Yes, sir.
- 11 Q. And it has sensors on it, doesn't it?
- 12 A. Yes, sir.
- 13 Q. And it has several sensors on it, right?
- 14 A. Yes, sir, it looks like five.
- 15 Q. So, this is a sheet from the 1970s, a
- 16 sensor-connected sheet, before -- I don't know -- how
- 17 many years before the warehouse? Twenty? Twenty years
- 18 before the warehouse?
- 19 A. I don't know how many. A lot.
- 20 Q. A lot.
- 21 A. Yes, sir.
- 22 Q. So, sensor-connected sheets for video games,
- 23 they've been around since the Seventies.
- 24 A. Yes, sir.
- 25 Q. You didn't invent sensor-connected sheets for video

- 1 games, did you?
 - A. No, sir.

- 3 Q. The warehouse -- you threw that in the warehouse;
- 4 but it's nothing that you invented, is it?
- 5 A. By itself, no, sir.
- 6 Q. Okay. But you didn't say that to the jury.
- 7 Yesterday you told the jury that this was one of your
- 8 inventions, didn't you?
- 9 A. No, sir.
- 10 Q. All right. Well, we'll go -- the jury will
- 11 remember that, what they remember.
- 12 A. I said I disclosed it to the Patent Office.
- 13 Q. Now, sir, let me ask you this: Do you know what
- 14 this is?
- 15 A. Yes, sir.
- 16 MR. GUNTHER: Can we put up the N64? Just
- 17 wait a second for it to come up. We're going to put up
- 18 a picture of this on the screen.
- 19 BY MR. GUNTHER:
- 20 Q. That's the Nintendo 64 controller, right, up on the
- 21 screen?
- 22 A. Yes, sir.
- 23 Q. And I'm holding that in my hand, as well, right?
- 24 A. Yes, sir.
- 25 Q. Now, sir, this was a controller that you did not

- invent, correct?
- A. I believe I testified to that.
- 3 Q. Right. Your testimony is still the same today,
- 4 isn't it? You didn't invent this, right?
- 5 A. Yes, sir.
- 6 Q. Okay. So, you didn't invent this controller. This
- 7 controller was out at the time you filed the warehouse
- 8 application in 1996, right?
- 9 A. I'm not sure of the date.
- 10 Q. But you don't accuse this of infringement, right?
- 11 A. I did not accuse that of infringement.
- 12 Q. And you did not say that you invented anything
- 13 that's in this controller, either individually or in
- 14 combination, correct?
- 15 A. Okay.
- 16 Q. When you say "okay," I just want to make sure you
- 17 and I are communicating. We're communicating on the
- 18 backdating thing now. I want to make sure we're
- 19 communicating on the "okay."
- 20 When you say "okay," you mean "yes," don't
- 21 you?
- 22 A. You know, I'm just not really clear on that --
- 23 what's in that controller.
- 24 Q. You're not clear on what's in this controller?
- 25 A. No, sir.

- 1 Q. But, sir, you don't say you invented -- there's 2 nothing in the warehouse that covers this controller, 3 right?
- 4 A. (Pausing.)
- 5 Q. That's what you told me in your deposition, right?
- 6 A. You know, I'm just not real clear on that at this 7 time. I may have said that in the deposition --
- 8 Q. You don't have any doubt that you told me that in 9 the deposition, right?
- 10 A. I'm sure you could pull it up if I did say that.
- 11 Q. Okay. Now, sir, let me ask you this -- this is
- 12 something you claim not to -- you admit you did not
- 13 invent. Does this have a circuit board in it?
- 14 A. I presume it does.
- 15 Q. And does it have sensor-connected -- sensors on the
- 16 circuit board that are connected to each other?
- 17 A. I would think it does.
- 18 Q. So, here is something that you don't say you
- 19 invented, that's not in your warehouse, that has
- 20 sensor-connected circuit board sheets on it, correct,
- 21 within -- inside it?
- 22 A. If you say so, yes, sir.
- 23 Q. All right. But you don't have any doubt that
- 24 that's, in fact, the case. If I got the drill out and
- 25 you and I kind of drilled it open, that's what would be

- in there, right?
- 2 A. I certainly believe there is a circuit board in 3 there, yes, sir.
- 4 Q. With sensors on it, right?
- 5 A. Yes, sir.
- 6 Q. Okay. Now, sir -- let me just do this because it's
- 7 a little bit bigger up here. You don't claim to have
- 8 invented the joystick (indicating)?
- 9 A. No, sir.
- 10 Q. Right, that's in this N64 controller, right?
- 11 A. That's correct.
- 12 Q. You don't claim to have invented the cross-switch
- 13 that's in this N64 controller, right?
- 14 A. That's correct.
- 15 Q. You don't claim to have invented the buttons.
- 16 A. That's correct.
- 17 Q. And there's one other thing, Mr. Armstrong -- and
- 18 I'm going to take this -- I actually don't have it in
- 19 the picture, which is a little bit unfortunate. But I
- 20 want to see if I can do this. This is why you're
- 21 supposed to practice beforehand.
- There is a pack in here. Do you see what
- 23 this is (indicating)? I'm holding it up.
- 24 A. Yes, sir.
- 25 Q. What is that called? Do you know?

- 1 A. I think that that's the rumble module.
- 2 Q. That's a rumble module that's made to be inserted 3 into the Nintendo 64 controller, right?
- 4 A. Yes, sir.
- 5 Q. It's got a motor with an offset weight in it,
- 6 right?
- 7 A. Yes, sir.
- 8 Q. So that when you're playing a game, if the software 9 designer decides that if you crash the car into the
- 10 wall -- which I do with a lot of frequency when I
- 11 play -- that you're going to get some vibration. You'll
- 12 get a little feedback to know that that happened, right?
- 13 A. Yes, sir.
- 14 Q. That active tactile feedback, correct?
- 15 A. Yes, sir.
- 16 Q. And all of that was out at the time that you filed
- 17 your 1996 application; and you do not claim to have
- 18 invented any of this, right?
- 19 A. I'm not exactly clear on that, to tell you the
- 20 truth.
- 21 Q. You're not clear on that? Well --
- 22 A. No, sir.
- 23 Q. -- sir, are you clear enough that if you thought
- 24 that this was an infringement, that you had invented it
- 25 and it was covered, you're clear enough that you would

- 1 have sued us on that, right? You already sued us on the 2 GameCube and the Wii. Did you let us off easy on this
- 3 one?
- 4 A. Yeah. I have for many years, yes, sir.
- 5 Q. You let us off easy on this one. Is that your 6 testimony?
- 7 A. It's very, very difficult.
- 8 Q. Do you want to add it to the lawsuit now?
- 9 A. No, sir.
- 10 Q. Okay. Now, sir --
- MR. CAWLEY: Your Honor, I'm going to object to the implication that we could simply at this late date add something to the lawsuit.
- MR. GUNTHER: I'll withdraw the question.
- THE COURT: Sustained.
- 16 BY MR. GUNTHER:
- 17 Q. Now, Mr. Armstrong, I want to go to the third.
- 18 We've talked about rumble. We've talked about
- 19 sheet-connected sensors -- circuit board connected
- 20 sensors. Now I want to go to the third thing that you
- 21 talked about as part of your invention, which was
- 22 proportional buttons. Do you recall that testimony?
- 23 A. Yes, sir.
- 24 Q. And the proportional buttons -- the testimony that
- 25 you gave is it's a button that you push; and as you push

- 1 it, you can get a different output. You testified that
- 2 it's like a gas pedal. The harder you push, the more
- 3 gas you get, right?
- 4 A. Yes, sir.
- 5 Q. And the less you push the button, it's like taking
- 6 your foot off the gas pedal, right?
- 7 A. Yes, sir.
- 8 Q. Now, sir, I want to ask you --
- 9 MR. GUNTHER: Your Honor, may I approach?
- THE COURT: You may.
- 11 BY MR. GUNTHER:
- 12 Q. I'm going to hand you the Wii Remote plus the
- 13 Nunchuk.
- Now, sir, here's my question. You agree with
- 15 me that in terms of following the money in this case --
- 16 can you hold those up for us, please? Would you mind?
- 17 A. (Complying.)
- 18 Q. I'm turning you into a model for us.
- 19 A. You've done that before.
- 20 Q. Okay. Sir, let me ask you this -- it's one of my
- 21 bad habits.
- 22 You agree with me that 90 percent of the
- 23 money that you're asking for from Nintendo relates to
- 24 those two things, right?
- 25 A. I haven't made an assessment like that.

- 1 Q. Sir, do you have any doubt -- let me ask you this:
- 2 You know, sir, that Anascape -- and you're the majority
- 3 owner of Anascape -- is going to ask this jury for tens
- 4 of millions of dollars, right?
- 5 A. I presume so, yes, sir.
- 6 Q. You presume so? You don't know that?
- 7 A. I know that's true.
- 8 Q. Okay.
- 9 A. Yes, sir.
- 10 Q. All right. In fact, they've got a damages
- 11 expert -- let me see if he's here.
- 12 MR. GUNTHER: Mr. Bratic, would you stand up?
- 13 Do you mind?
- 14 THE COURT: Counsel, that's not appropriate.
- MR. GUNTHER: I'm sorry, your Honor. I won't
- 16 do that.
- 17 BY MR. GUNTHER:
- 18 Q. Without asking Mr. Bratic to stand up, there is a
- 19 damage expert that's sitting here in the courtroom that
- 20 is going to give an opinion with respect to how much
- 21 money Nintendo should give to you, right?
- 22 A. Yes, sir.
- 23 Q. Okay. And 90 percent -- let me just ask it to you
- 24 this way: Do you have any reason to disagree with me
- 25 that over 90 percent of the damages in this case relate

- to those two products that I gave you, the Nintendo Wii and the Nintendo Nunchuk?
- 3 A. I don't have any reason to disagree with that, no, 4 sir.
- O. Okay. Now, sir, I want to come back to the proportional button question that I asked you, which is one of the inventions that you have in the 1996 warehouse.
- In looking at those things, sir, are there any proportional buttons on the Wii Remote?
- 11 A. No, sir.
- 12 Q. Are there any proportional buttons on the Wii
- 13 Nunchuk?
- 14 A. Depending on -- I don't think so. Depending on the 15 definition of "button," I don't believe there is, no.
- 16 Q. Okay. So, as far as you know, sir, sitting here
- 17 today, with 90 percent of the damages that you're
- 18 requesting, there's no proportional buttons on either
- 19 the Nunchuk or the Remote, correct?
- 20 A. Yes, sir.
- 21 Q. Okay. So, that's the third part of your invention.
- Now let me ask you about the last part of
- 23 your invention, which you testified was better control
- 24 of 3-D graphics, I think?
- 25 A. Okay. Yes, sir.

Q. Yes. Okay.

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- Now, sir, I want to talk to you about some of the prototypes that you showed the jury yesterday.
- 4 MR. GUNTHER: Do we have those prototypes 5 from yesterday? They're in the box?
- Your Honor, may I approach the witness?
- 8 BY MR. GUNTHER:
- 9 Q. Mr. Armstrong, I'm going to just pick the box up

You may.

- 10 because I'll never get them right. But I'm going to
- 11 walk over here, if I can, and ask you to pick out the
- 12 controllers that you talked about yesterday. Can I hand
- 13 those over to you?
- 14 Have you got them, sir?

THE COURT:

- 15 A. Yes, sir.
- 16 Q. Thank you.
- Can you pick out the first controller that
- 18 you showed the jury yesterday?
- 19 A. Yes, sir.
- 20 Q. And hold it up for us.
- 21 A. Are you talking about this one?
- 22 Q. Yeah, the one with the VCR and popsicle sticks and
- 23 the coke cans. Have you got that one?
- 24 A. Yes, sir.
- 25 Q. Now, sir, can you hold that one up?

- 1 A. Yes, sir.
- 2 Q. Now, how many input members does that have?
- 3 A. One.
- 4 Q. And is that input member movable in 6 degrees of
- 5 freedom?
- 6 A. Yes, sir.
- 7 Q. Now, can you explain to us what that means in terms
- 8 of moving that around? And let me ask you some
- 9 questions to help you through it.
- That means that you can pull the stick up,
- 11 right?
- 12 A. Yes, sir.
- 13 Q. And you can push it down.
- 14 A. Yes, sir.
- 15 Q. And you can move it forward.
- 16 A. Yes, sir.
- 17 Q. And you can move it back.
- 18 A. Yes, sir.
- 19 Q. And you can move it to the side?
- 20 A. Yes, sir.
- 21 0. And you can move it to the side?
- 22 A. Yes, sir.
- 23 Q. And then you can take the ball -- this is why you
- 24 like the ball -- and you can rotate it, as well.
- 25 A. Yes, sir.

- 1 Q. So, with all of those different manipulations, you 2 can get a single input member that's operable or movable 3 in 6 degrees of freedom, correct?
- 4 A. That's true.
- 5 Q. That's okay.

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Now let's take the next prototype that you showed the jury yesterday. And, sir, can you identify before you do that -- I'm sorry. Can you identify the exhibit number of that that you just showed to the jury?

- 10 A. On the Wii Remote?
- 11 Q. No, sir, the first prototype, your coke cans and 12 popsicle sticks.
 - THE COURT: I thought we said that the exhibit numbers were on the photographs, not the demos; so, I don't know if there is any way of doing that.
- 16 MR. CAWLEY: Correct, your Honor.
- THE COURT: There's not labels on those.
- 18 Those are demos. They're on photographs somewhere.
- 20 understand. I think I've identified it by the popsicle

MR. GUNTHER: All right. Your Honor, I

- 21 sticks and the coke cans, that I'm okay with that for
- 22 the record. But I appreciate your making me aware of
- 23 that. I should have been.
- 24 BY MR. GUNTHER:
- 25 Q. Can you pick out the second prototype that you

- showed to the jury yesterday?
- A. I don't recall which one was second.
- 3 Q. You know what? Don't stress about that. Second or
- 4 third, whichever it is.
- 5 A. I suspect this is the one you want me to pick up.
- 6 Q. Well, you can pick that up. Sure.
- 7 A. Just trying to help you, Bob.
- 8 Q. Well, I appreciate that. Can you hold that up, as 9 well?
- 10 A. (Complying.)
- 11 Q. Now, sir, that has a single handle on it, too,
- 12 right?
- 13 A. Yes, sir, it does.
- 14 Q. And it's operable in 6 degrees of freedom, right,
- 15 just like the first prototype with the popsicle sticks
- 16 and the coke cans and the VCR box and the light bulb.
- 17 A. Yes, sir.
- 18 Q. So, that means, again, you can do the same thing.
- 19 You can lift it up. You can push it down. You can move
- 20 it forward, back, side, side; and you can twist it
- 21 around, right?
- 22 A. Yes, just like the Wiimote.
- 23 Q. Okay. Now, let me ask you this, sir, about the
- 24 Wilmote. Can you hold that up? You called it the
- 25 "Wiimote." I call it the "Wii Remote." But, you know,

apples and oranges.

If you could hold that up.

- A. (Complying.)
- 4 Q. Now, sir, let me ask you a question. Does that by 5 itself infringe any claim of your patent?
- 6 A. No, sir.

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- 7 Q. It doesn't infringe any claim of your patent. So, 8 to the extent that the Wii Remote is movable because of 9 the accelerometer and there's various movement that can 10 be sensed, that doesn't infringe your patent, does it?
- 11 A. That's correct.
- 12 Q. Okay. So, let's put the Wiimote aside, or Wii
 13 Remote or whatever you'd like to call it; and let's go
 14 back to what you were doing before the 1996 application.
 15 Can you pull out the third one? And I know it might be
 16 the second or third that you showed the jury.
 - And before you do that, Mr. Armstrong -- I'm sorry. I keep giving you different instructions. If you could take that second one that you just showed, and I want to describe it a little bit because I don't have an exhibit number so we have that for the record. Could you hold it up?
- 23 A. The second one has an exhibit number.
- 24 Q. Oh, does it?
- 25 A. 347.

- 1 Q. That actually may be a deposition exhibit, which
- 2 will help a little bit. But what color handle does it
- 3 have?
- 4 A. Blue.
- 5 Q. And what color bottom does it have?
- 6 A. Blue.
- 7 Q. And does it have sort of a long, undulating armrest
- 8 thing?
- 9 A. Yes, sir.
- 10 Q. Okay. All right. So, we've done two of them. And
- 11 let me ask you this, Mr. Armstrong: Both of those
- 12 things reflect inventions that you put in the warehouse
- 13 in 1996, right?
- 14 A. Yes, sir.
- 15 Q. Okay. Now can you take out the third one? There
- 16 is a third one, I think.
- 17 A. I don't know what you're talking about.
- 18 Q. Did you only do two? I thought you did three.
- 19 A. Well, we did one that had a lot of wires in it.
- 20 Q. No, the concept.
- 21 A. This one?
- 22 Q. That is the concept guy. That's right.
- 23 A. This one.
- 24 Q. Can you hold that one up?
- 25 A. Yes, sir.

- 1 Q. Now, the concept guy, that again -- just to
- 2 describe it for the record, if you hold it face-up, in
- 3 the way it would normally appear, there is a handle on
- 4 the top --
- 5 A. Yes, sir.
- 6 Q. -- right?
- 7 And then there is a piece of wood or
- 8 something like that, right?
- 9 A. Right.
- 10 Q. And then there is all those different doohickeys on
- 11 the bottom, right?
- 12 A. Yes, sir.
- 13 Q. And that's part of what kind of came out of your
- 14 dream.
- 15 A. It all did, yes, sir.
- 16 Q. Okay. Now, can you turn it sort of the way
- 17 somebody would hold it if they were actually using it?
- 18 A. Yes, sir.
- 19 Q. Okay. Now, sir, that has a single handle on it,
- 20 right?
- 21 A. Yes, sir.
- 22 Q. And that single handle is operable in 6 degrees of
- 23 freedom.
- 24 A. Yes, sir.
- 25 Q. Right. And, so, all the same things that I talked

- about before, all those different manipulations, that can be done, right?

Yes, sir.

- 4 Q. Okay. And, sir, you put that one in the warehouse,
- 5 too, right?

3 A.

- 6 A. Yes, sir.
- 7 Q. As a matter of fact, that's shown in Figures 20,
- 8 21, and 22 of your patent application, right?
- 9 A. I'll take your word for it.
- 10 Q. All right. Don't take my word for it. I'm on the
- 11 other side. So, why don't you take a look at 306 and
- 12 look at Figures 20 -- if you look in your binder, you
- 13 can see --
- 14 A. Can I put these back down in the box?
- 15 THE COURT: Okay. Wait, wait, wait. You're
- 16 talking over each other again. You need to slow down a
- 17 little bit.
- 18 MR. GUNTHER: Yes, sir.
- 19 THE WITNESS: Sorry, your Honor.
- 20 THE COURT: Go ahead.
- 21 BY MR. GUNTHER:
- 22 Q. Mr. Armstrong, go ahead and put those back, and if
- 23 you can get the witness binder in front of you, the
- 24 exhibit binder.
- 25 A. This one, too, in the box?

- 1 Q. Sure. You can put them all back in there. If we
- 2 need them back, we'll get them.
- 3 A. Can I put yours in there? Just kidding.
- 4 Q. I know it's hard to get a Wii, Mr. Armstrong, but 5 come on.
- Do you have your exhibits in front of you?
- 7 A. Yes, sir.
- 8 Q. Okay. Would you look at Defendant's Exhibit 306?
- 9 A. 306? Yes, sir.
- MR. GUNTHER: Could you, Kam, put 306 up on
- 11 the screen, Figure 20?
- 12 BY MR. GUNTHER:
- 13 Q. That's Figure 20 from your 1996 application, right?
- 14 A. Yes, sir.
- 15 Q. That's part of the warehouse, right?
- 16 A. This exhibits the 1996 --
- 17 Q. Yes, sir.
- 18 A. Is that right?
- 19 Q. Yes, sir.
- 20 A. You were --
- 21 Q. Yes, sir.
- 22 A. Okay.
- 23 Q. So, if you look at page 76 -- and when I'm
- 24 orienting you, if you look up on the upper right-hand
- 25 corner -- either the upper right-hand corner or the

- 1 lower right-hand corner of your page should have
- document Bates numbers on it. Are you with me?
- 3 A. Yes, sir.
- 4 Q. Okay. So, that's part of the warehouse, Figure 20.
- 5 A. Yes, sir.
- 6 Q. And that, sir, is essentially the same as your
- 7 concept prototype that you showed us a moment ago that
- 8 came out of the dream that you had, right?
- 9 A. Yes, sir.
- 10 Q. And, sir, Figure 21, the next page, that's another
- 11 version of that concept prototype; it's just shown with
- 12 everything kind of crunched down, the way it would
- 13 normally be used in operation, right?
- 14 A. Yes, sir.
- 15 Q. And then if we look at Figure 22, Figure 22 is part
- 16 of -- it shows a part of Figures 20 and 21, right?
- 17 A. Yes, sir.
- 18 Q. So, all of what I've just shown you, including this
- 19 figure, are all talking about a controller that has a
- 20 single input member that itself is operable in 6 degrees
- 21 of freedom, correct? That's what this Figure 22,
- 22 Figure 20, and 21 are all about, right?
- 23 A. Yes, sir.
- 24 Q. Okay. Now, sir, you've got the GameCube in front
- 25 of you, the GameCube controller.

- 1 A. Yes, sir.
- 2 Q. Can you hold that up and show it to the jury?
- 3 A. That's this one (indicating)?
- 4 Q. Yes, sir.
- Now, sir, does that have a single input member operable in 6 degrees of freedom?
- 7 A. No, sir.
- 8 Q. How many input members does it take to get what you 9 believe to be 6 degrees of freedom on the GameCube?
- 10 A. This one here looks like it has three two-axis
- 11 members.
- 12 Q. Three two-axis members. Let's kind of go through
- 13 them. The joystick is one -- is that correct -- the
- 14 gray joystick?
- 15 A. Yes, sir.
- 16 Q. And then the cross-switch is the second?
- 17 A. Yes, sir.
- 18 Q. And then the candlestick is a third?
- 19 A. Yes, sir.
- 20 Q. So, when you wrote your claims in 2002, you were
- 21 trying to copy this. You were trying to cover this,
- 22 right?
- 23 A. Yes, sir.
- 24 Q. And, sir, what that means is that you were trying
- 25 to cover a controller that had three separate input

- members which you contended got you to 6 degrees of freedom, right?
- 3 A. I don't think that that claim requires 6 degrees of 4 freedom.
- 5 Q. But that's what the effect of it is, right? By
 6 claim -- whatever claim it is, the claims that you're
 7 thinking of right now, that you would get the 6 degrees
 8 of freedom, whether it was required or not, that that's
 9 what you would get out of those three different input
 10 members, right?
- 11 A. Okay. Yes, sir.
- 12 Q. Okay. And, so, sir, what you disclosed in the
 13 warehouse was a single input member capable of movement
 14 in 6 degrees of freedom, correct? We went through the
 15 prototypes; and we went through some of the figures,
 16 right?
- 17 A. I described some single input members capable of18 that. I also described some additional input members.
- 19 Q. Okay. But you described in your patent application 20 in 1996 input members that were operable in 6 degrees of 21 freedom, correct?
- 22 A. Yes, sir, I did.
- Q. Okay. Now, I want to go, if we can, to your -- I'm going to go to a couple of pages in your 1996
- 25 application that you talked about with Mr. Cawley

- 1 towards the end of your direct testimony. And he showed
- 2 you a figure of the patent that had a trackball around a
- 3 collet on it, right, or a collar kind of around the
- 4 trackball? Do you remember that?
- 5 A. Yes, sir.
- 6 Q. Okay.
- 7 MR. GUNTHER: Could you put up Figure 4 from
- 8 the patent -- sorry -- Figure 4 from the application?
- 9 I'll give you the page number, Kam. It's page number
- 10 60.
- 11 BY MR. GUNTHER:
- 12 Q. Now, that, Figure 4, shows the trackball with the
- 13 collar around it, correct?
- 14 A. Yes, sir, it does.
- 15 Q. The collar is 16, and the trackball is 12.
- 16 A. Yes, sir.
- 17 Q. Right?
- Now, sir, that trackball is a single input
- 19 member operable in 6 degrees of freedom, right?
- 20 A. Yes, sir.
- 21 Q. So, when I talked about -- in my opening statement
- 22 about you talking about single input members, what I was
- 23 talking about -- and I want to make sure we're
- 24 communicating. We already talked about backdating. I
- 25 want to make sure we're communicating -- 6 degrees of

- freedom. I was talking about a single input member on 6 degrees of freedom, correct?
- MR. CAWLEY: Objection, your Honor. He's asking the witness what the lawyer was talking about.
- 5 THE COURT: Sustained.
- 6 BY MR. GUNTHER:

- 7 Q. Sir, that trackball is a single input member 8 operable in 6 degrees of freedom, right?
- 9 A. Yes, sir, it is.
- 10 Q. Okay. And that's one of the inventions in your 11 warehouse, right?
- 12 A. It's one of the components, yes, sir.
- 13 Q. Even when the collar is there, you can grab the
- 14 trackball like a little basketball, as you described it
- 15 in your patent application, and move it in all six
- 16 degrees of freedom, can't you?
- 17 A. It would depend on how it is designed.
- 18 Q. Sir, isn't that what you said in your patent
- 19 application?
- 20 A. I'm sure that there certainly are some embodiments
- 21 in which you can do that.
- 22 Q. You grab it; and even with the collar, you move it
- 23 around. So, in that embodiment, the one I'm showing you
- 24 there, that embodiment, the trackball has full 6 degrees
- 25 of freedom, correct?

- 1 A. Okay.
- 2 Q. And it's a single input member, correct?
- 3 A. Yes, sir.
- 4 Q. Okay. Now let's go -- that was one of the ones 5 that Mr. Cawley showed you. Let's go, sir, to Figure 9.
 - Now, Figure 9, Mr. Cawley pointed out that there were buttons on there; and there is that thing, I guess -- looks like 16 or 14 or something like that that can turn around, right? Do you see that, sir?
- 10 A. Yes, sir.
- 11 Q. But, sir, the trackball on there, Number 12, is a
- 12 single input member operable in 6 degrees of freedom,
- 13 isn't it?
- 14 A. Well, with this particular collet design, it would
- 15 be pretty hard to manipulate the ball itself on a linear
- 16 axis.

- 17 Q. That's not my question. My question, sir, is
- 18 Number 9 -- Figure 9 is Item 12 -- whether it might be
- 19 difficult or not, is that a single input member operable
- 20 in 6 degrees of freedom?
- 21 A. If you say so. Just -- I mean, the ball can move
- 22 in 6 degrees of freedom but --
- 23 Q. It can move in 6 degrees of freedom.
- 24 A. In this design, you know, the collet is integrated
- 25 with that.

- 1 Q. So, it's integrated. The collar is integrated like 2 the collar was integrated in Figure 4, but in both cases 3 there is still a single input member operable in 6 4 degrees of freedom, right?
- A. Well, in this particular design I think I would have to say that the -- I mean, I don't know exactly what the specification says; but there's not much access to moving the ball in the linear axis without moving that collet on those axes. So, it might be that the ball is just three axes and the collet is four. I'm not sure I've read the spec on that. It just appears that way to me at this time, that there's -- there's a great variety of stuff in this patent application.
- 14 Q. Wait a second. Wait a second. Mr. Cawley just 15 asked you questions on your direct examination --
- 16 A. Right.
- 17 Q. -- about Figure 9.
- 18 A. Okay. Well -- let me -- I concede.
- 19 Q. You concede?
- 20 A. Ball 12 is a 6-degree-of-freedom --
- 21 Q. Thank you. Thank you. So, Figure 4 -- let's go
- 22 back to my question. Figure 4 that I showed you before
- 23 with the collar and the ball, in Figure 9 that's got the
- 24 ball and sort of the other collar. Both of them have a
- 25 ball that's operable in 6 degrees of freedom, right?

- 1 A. Okay. Yes, sir.
- 2 Q. Okay. Now, sir, let's go to Figure 20.
- 3 MR. GUNTHER: Could we put up Figure 20?
- 4 BY MR. GUNTHER:
- 5 Q. Now, Mr. Cawley asked you about this figure, too,
- 6 right?
- 7 A. Yes, sir.
- 8 Q. And he said that, "Look, there's a couple of
- 9 buttons on there. Gunther is wrong." That's what he
- 10 said, right?
- 11 A. I don't recall exactly what he said.
- 12 Q. Well, forget about Gunther. He said that this is
- 13 not a single input member because it has buttons on it,
- 14 right? And you said that's right. That was your
- 15 testimony a few moments ago.
- 16 A. No, sir. I think that -- you know, my
- 17 understanding was that -- that you were presenting that
- 18 there was only a single input member here and that I was
- 19 putting forward -- my side was putting forth, well, no,
- 20 there is actually more than just a single input member
- 21 here.
- 22 Q. But --
- 23 A. In those other drawings there is a collet, and in
- 24 this one there are the additional input buttons.
- 25 Q. But even though there is buttons, there is still in

- this embodiment a single input member that's movable in 6 degrees of freedom, right?
- 3 A. Yes, sir.
- 4 Q. So, again, let's kind of count through. Mr. Cawley
 5 showed you Figure 4 or Figure 6 -- but, you know, same
 6 thing -- that ball with the collar. He showed you
 7 Figure 9. That was kind of like the remote control
- 8 thing with the ball and the collar. And he showed you 9 Figure 20 and the buttons.
- In every one of those embodiments, there is a single input member operable in 6 degrees of freedom,
- 12 right?
- 13 A. Yes, sir.
- 14 Q. Thank you.
- Now, sir, I want to talk to you a little bit
- 16 about your background. Sir, you are a -- you're a
- 17 pilot, aren't you?
- 18 A. Yes, sir.
- 19 Q. How long have you been flying?
- 20 A. Well, it depends on how you define that.
- 21 Q. Any definition you like.
- 22 A. Well, my father would take me up when I was a
- 23 child.
- 24 Q. Did he give you the controls sometimes?
- 25 A. Yeah. Yes, sir.

- 1 Q. Did he maybe sit you on his lap and let you work
- 2 the handles and the pedals?
- 3 A. Yes, sir.
- 4 Q. Okay. And did you get your pilot's license at some 5 point?
- 6 A. Yes, sir.
- 7 Q. When did you get your pilot's license?
- 8 A. Just recently.
- 9 Q. Okay. But have you flown even without a pilot's
- 10 license, you know, not improperly but with an instructor
- 11 or something like that from time to time?
- 12 A. Yes, sir.
- 13 Q. So, you basically know kind of -- at least for
- 14 small airplanes, kind of how they work and whatnot?
- 15 A. Pretty much, yes, sir.
- 16 Q. Okay. Did you ever operate an airplane or see an
- 17 airplane operated that had kind of a joystick-type
- 18 control rather than, you know, a lot of those different
- 19 controls that you might see when you look into the
- 20 cockpit of an airplane?
- 21 A. Yes, sir.
- 22 Q. Okay. When did you first see that?
- 23 A. Well, probably very young.
- 24 Q. Probably when you were a kid?
- 25 A. Yes, sir.

- 1 Q. Okay. Something that might have stuck in your
- 2 mind?

- A. It's something I'm familiar with, yes, sir.
- 4 Q. Something that might have been maybe an influence
- 5 on you in determining how to -- when you started
- 6 thinking about video game controllers, what would be
- 7 good?
- 8 A. I try to think of everything.
- 9 Q. Because you have a broad experience -- broad range
- 10 of experience, right?
- 11 A. Try to.
- 12 Q. Okay. Now, sir -- now, your field where you've
- 13 really kind of spent your time is in developing
- 14 mechanical and electrical aspects of controllers, right?
- 15 A. Yes, sir.
- 16 Q. Remember, Mr. Cawley asked during the voir dire --
- 17 you were in here -- he asked the jurors who was a gamer.
- 18 A. Yes, sir.
- 19 Q. And a few folks raised their hands?
- 20 A. Yes, sir.
- 21 Q. You are not a gamer, are you?
- 22 A. No, sir.
- 23 Q. So, your focus in developing video game controllers
- 24 was on your experience which was based on, you know,
- 25 being a pilot and all of the other different things that

- you -- experiences that you had traveling around and
 working at different jobs as a roughneck and things like
 that throughout the country, right? You brought that
 all kind of to bear in terms of what you were coming up
 with.
- 6 A. Yes, sir.
- 7 Q. But what you weren't is you weren't a gamer, right?
- 8 A. No, sir.
- 9 Q. So, in determining whether or not a controller that0 you developed would be a controller that gamers would
- 11 like to play, you really didn't have experience with
- 12 that, did you?
- 13 A. No, sir.
- 14 Q. So, you were kind of off in your part -- look,
- 15 everybody's prisoners of their experience. I'm still
- 16 trying to get out of the bike shop. But when you were
- 17 doing what you were doing, you were looking at things
- 18 from your point of view, what you knew about the world.
- 19 And what you knew about the world was not video games as
- 20 you were not a video gamer, right?
- 21 A. Well, I was selling them in the late Seventies;
- 22 and, so, I had quite a bit of experience with that.
- 23 Q. But you, yourself, were not a gamer, right?
- 24 A. I don't -- I don't spend many hours a day playing
- 25 games. I don't define myself that way.

- 1 Q. Okay.
- 2 A. No, sir.
- 3 Q. You've never defined yourself that way, right?
- 4 A. No, sir.
- 5 Q. Okay. Now, sir, you've never built a piece of
- 6 video game software, a video game like Mario, right?
- 7 A. No, sir.
- 8 Q. That's not your field, right?
- 9 A. No, sir.
- 10 Q. And there's no disclosure in your patent that would
- 11 allow somebody to make a video game like Mario or Donkey
- 12 Kong or any of those kind of games, right?
- 13 A. A software designer would not need my patent to
- 14 write Donkey Kong or Mario.
- 15 Q. That wasn't quite my question. My question is:
- 16 There's nothing in your patent that would help anyone
- 17 who wanted to design Donkey Kong or Mario to do that, is
- 18 there?
- 19 A. You know, I haven't thought about it that way. I
- 20 would have to think about that.
- 21 Q. So, you don't have an answer for me on that?
- 22 A. I don't. I'm sorry.
- 23 Q. All right. Fair enough.
- But is it fair to say that in terms of
- 25 developing video games, that's not your area of

- 1 expertise?
- 2 A. That's true.
- 3 Q. Now, sir, your first company, you testified was
- 4 Global Devices.
- 5 A. Yes, sir.
- 6 Q. And that was a company that existed in the
- 7 Nineties, correct?
- 8 A. Yes, sir.
- 9 Q. And you made prototypes and some controllers,
- 10 right?
- 11 A. Yes, sir.
- 12 Q. Now, Mr. Cawley asked you if you sold some of those
- 13 controllers; and you said "yes," right?
- 14 A. Yes, sir.
- 15 Q. How many did you sell?
- 16 A. Oh, not many. I think maybe 30 or 40 or something
- 17 maybe.
- 18 Q. Was the Global Devices controller a commercial
- 19 success?
- 20 A. No, sir.
- 21 Q. Now, sir, after Global Devices you made a company
- 22 called "Extreme" 6-degree-of-freedom controllers, right?
- 23 A. Yes, sir.
- 24 Q. Now, sir, did that company sell any controller
- 25 products?

- 1 A. I don't think I sold anything at that time.
- 2 Q. Did that company have any licensing activities?
 - A. It was in that time frame that I licensed Mad Catz.
- 4 Q. Okay.

- 5 A. And Kelly Tyler.
- 6 Q. That's Kelly Tyler -- Kelly Tyler, the gentleman
- 7 who is your good friend who you started Anascape with a
- 8 few years later, right?
- 9 A. Yes, sir.
- 10 Q. And you licensed him under two of your earlier
- 11 patents for video game controllers, the '828 and '891
- 12 patents, correct?
- 13 A. I believe that's correct, yes, sir.
- 14 Q. And you also licensed him the application -- the
- 15 warehouse application, right?
- 16 A. I believe so, yes, sir.
- 17 Q. Okay. Now, Mr. Tyler, he's a pretty successful
- 18 businessman, isn't he?
- 19 A. Yes, sir.
- 20 Q. He started Mad Catz, right?
- 21 A. Yes, sir.
- 22 Q. And he founded that company as a young man; and he
- 23 built it up into a very large company before he sold it
- 24 in 1999, right?
- 25 A. Yes, sir.

- 1 Q. He actually, I think, made -- I think he
- 2 testified -- and tell me if you disagree with this. He
- 3 made something like \$20 million when he sold Mad Catz,
- 4 right?
- 5 A. I have no idea.
- 6 Q. Does that sound reasonable to you?
- 7 A. I just really don't know.
- 8 Q. Okay. But he had money to invest in your
- 9 enterprise, Anascape, right?
- 10 A. Yes, sir, he did.
- 11 Q. He put almost \$2 million into Anascape, didn't he?
- 12 A. Yes -- it was certainly more than a million.
- 13 Q. So, he's a gentleman of means; and he's a gentleman
- 14 of -- he's a gamer probably. Wouldn't you say?
- 15 A. I wouldn't define him that way.
- 16 Q. You would not?
- 17 A. No, sir.
- 18 Q. Okay. Is he knowledgeable about video games and
- 19 what people want in terms of video game controllers in
- 20 the marketplace?
- 21 A. Yes, sir, I think so.
- 22 Q. Now, Mr. Tyler had a license to the warehouse; and
- 23 he had a license to two of your other patents in the
- 24 Nineties.
- Let me ask you this: Did Mr. Tyler ever make

- 1 a video game controller that practiced any of your
- 2 inventions?
- 3 A. No, sir.
- 4 Q. Mr. Tyler, the guy who founded Mad Catz, who had
- 5 his finger on the pulse of controllers, video game
- 6 controllers, never made a controller when he had his
- 7 license from you; is that correct? Is that your
- 8 testimony?
- 9 A. Yes, sir.
- 10 Q. Now, sir, has Anascape -- which formed in 1999, I
- 11 think you testified?
- 12 A. Yes, sir.
- 13 Q. And, sir, has Anascape ever competed in the market
- 14 for video game controllers since its formation?
- 15 A. You mean as a manufacturer? Is that what you're
- 16 saying?
- 17 Q. As a manufacturer or seller of controllers?
- 18 A. No, sir.
- 19 Q. Has Anascape ever made any video game controllers?
- 20 A. No, sir.
- 21 Q. Does Anascape compete with Nintendo in the market
- 22 for video game controllers?
- 23 A. No, sir.
- 24 Q. Now, sir, I want to talk about --
- MR. GUNTHER: Could we put the timeline back

- 1 up, Kam, please?
- 2 BY MR. GUNTHER:
- 3 Q. I want to shift to talking a little bit about your
- 4 application that you filed in 2000 that led to the '700
- 5 patent. We've got a new date up on the timeline. This
- 6 is a timeline that I used in my opening statement. It's
- 7 got your 1996 application. Do you see that?
- 8 A. Yes, sir.
- 9 Q. It has the 2002 claims that you wrote in 2002,
- 10 right?
- 11 A. Yes, sir.
- 12 Q. It has the GameCube controller that you're accusing
- 13 of infringement in this case but which you copied in
- 14 writing your claims in 2002, right?
- 15 A. (Pausing.)
- 16 Q. That's on there.
- 17 A. Is that the one with the November, 2001, date?
- 18 Q. Yes. Yes. Can you see that?
- 19 A. Yes, sir.
- 20 Q. And we've added a new date sort of in the -- a
- 21 little bit below the GameCube controller graphic, which
- 22 is November 16, 2000. That's a new date we haven't
- 23 talked about in this case yet. That's the date that you
- 24 filed the application that matured into the '700 patent,
- 25 right?

- 1 A. I believe so, yes, sir.
- 2 Q. And, sir, that application, that '700 application, 3 issued as the '700 patent.
- 4 A. Yes, sir.
- Q. And the description of what you put in the
 application ultimately became part of the printed patent
 which is, I think, Defendant's Exhibit 1 -- may be
- 8 Plaintiff's Exhibit 1 -- but it's the '700 patent, 9 right?
- 10 A. Okay.
- 11 Q. Am I right about that?
- 12 A. Would you say the question again, please?
- 13 Q. My question is that when that application
- 14 ultimately issued as the '700 patent, what's in the
- 15 patent itself, the '700 patent itself, is actually the
- 16 full description of the invention exactly the same as
- 17 you wrote it in the 1996 application, right?
- 18 A. (Pausing.)
- 19 Q. Strike that. Let me ask you another question.
- The 2000 application that matured into the
- 21 '700 patent, when the patent issued in -- the '700
- 22 patent issued, it had the full description of what was
- 23 in the application in 2000, right?
- 24 A. Yes, sir. I believe so.
- 25 Q. Okay. So, now we can sort of think about two

- 1 documents. We can think about the 1996 application, the
- 2 warehouse that had your inventions, which must be the
- 3 same invention as your claims in 2002, right?
- 4 A. I'm sorry. I'm just not -- I'm not following too
- 5 well.
- 6 Q. Okay. So, we've got your 1996 application up
- 7 there, right?
- 8 A. Okay.
- 9 Q. All right. And now we have the '700 patent. We
- 10 can compare those two documents, right?
- 11 A. Sure.
- 12 Q. And you testified on your direct examination that
- 13 you made some changes to the application in 2000, right?
- 14 A. Yes, sir.
- 15 Q. Before you filed it.
- 16 A. Yes, sir.
- 17 Q. So, you started with the 1996 warehouse
- 18 application; and then you made changes to it, right?
- 19 A. Yes, sir.
- 20 Q. Now, you told us that you made changes just to
- 21 clarify the invention, right?
- 22 A. Yes, sir.
- 23 Q. And you didn't make changes to broaden the
- 24 invention, did you?
- 25 A. No, sir.

- 1 Q. Because if you made changes to broaden the
- 2 invention, that would be a problem, wouldn't it? If you
- 3 broadened the invention from 1996 to what you filed in
- 4 2000, then you wouldn't be able to get back to 1996,
- 5 right?
- 6 A. Yes, sir. I just wanted to clarify when I made
- 7 those changes.
- 8 Q. Okay. But stick with me. I understand the
- 9 clarification point. But now I'm asking you that -- you
- 10 say you didn't broaden the patent --
- 11 A. Right.
- 12 Q. -- in 2000 --
- 13 A. Right.
- 14 Q. -- because if you had broadened it, then you
- 15 wouldn't be able to get back to 1996 because you would
- 16 have changed the invention. Remember, the invention has
- 17 to be the same at both points in time, right?
- 18 A. Yes, sir.
- 19 0. Okay. So, now let's take a look at some of the
- 20 changes that you made from the 1996 warehouse
- 21 application to the '700 patent.
- 22 MR. GUNTHER: All right. Let's put the first
- 23 slide up.
- 24 BY MR. GUNTHER:
- 25 Q. This is the Abstract of the Disclosure from your

- 1 1996 warehouse application. Do you see that?
- 2 A. Yes, sir.
- 3 Q. Okay. This is the first sentence of text that I
- 4 showed you, that Mr. Cawley showed you during his
- 5 examination, right?
- 6 A. I think so.
- 7 Q. Okay. So, this is 1996. This is then. The
- 8 abstract of the disclosure shows comprised of a single
- 9 input member operable in 6 degrees of freedom. Do you
- 10 see that?
- 11 A. Yes, sir.
- 12 Q. Now, when you filed the application that actually
- 13 became the '700 patent in 2000, you took that whole
- 14 sentence out, didn't you?
- 15 A. Possibly.
- 16 Q. You deleted it, didn't you?
- 17 A. Possibly.
- 18 Q. Do you have any doubt about that?
- 19 A. I don't know exactly what the changes were.
- 20 Q. Well, sir, why don't you take a look -- do you have
- 21 the '700 patent in front of you in your witness binder?
- 22 A. Yes, sir.
- 23 Q. Take a look at the abstract, sir. Do you see that
- 24 first sentence in the abstract of the '700 patent? Is
- 25 it there?

A. No, I don't see it, sir.

application in 2000, right?

- 2 Q. So, you deleted it. You kind of hit the "delete"
 3 key when you were filing the 2000 application, and you
 4 took that whole sentence that talked about a single
 5 input member operable in 6 degrees of freedom out of the
- 7 A. It appears so.
- 8 Q. Okay.

- 9 MR. GUNTHER: Can we go to the next slide?
- 10 BY MR. GUNTHER:
- 11 Q. Now, this is page 2 of your application. 1996.
- 12 MR. GUNTHER: Can we bring it up?
- 13 BY MR. GUNTHER:
- 14 Q. This is a part of the application that talks about
- 15 your invention. It says: In the prior art there exist
- 16 6-degree-of-freedom controllers of a type having a
- 17 hand-operable, single input member -- and it goes on --
- 18 movable in 6 degrees of freedom. And it says: It is
- 19 with this type of 6-degree-of-freedom controller that
- 20 the present invention is primarily concerned.
- Do you see that?
- 22 A. Yes, sir.
- 23 Q. Now, sir, I will represent to you that that was
- 24 deleted in the '700 patent. Do you have any reason to
- 25 doubt my representation?

- 1 A. I don't have a reason to doubt that, no, sir.
- 2 Q. So, you hit the "delete" key and deleted that
 3 entire paragraph of your 1996 application when you filed
 4 the '700 application in 2000. You took out all that
 5 stuff about single input member operable in 6 degrees of
- 6 freedom, didn't you?
- 7 A. If you say so.
- 8 Q. And you have no reason to doubt my representation,
 9 correct?
- 10 A. No, sir, not at this time.
- 11 Q. All right.
- MR. GUNTHER: Let's put up the next one, please.
- 14 BY MR. GUNTHER:
- O. This is under the Summary of the Invention, Summary of the Invention in your 1996 warehouse application. It talks about controllers providing structuring for converting full 6 degrees of freedom physical input by a human hand on a hand-operable single input member.
- So, it's got both concepts; the single input
 member which is operable in 6 degrees of freedom, right?
- 22 A. Yes, sir.
- 23 Q. Now, when you filed your '700 patent, you made a change to that. I want to show you what the change is.
- MR. GUNTHER: Could we put that up?

BY MR. GUNTHER:

Q. And we've got it underneath.

MR. GUNTHER: Excuse me one moment.

THE COURT: All right, counsel, we're going to take a break.

Ladies and gentlemen --

MR. GUNTHER: Thank you, your Honor.

THE COURT: -- let me be sure that -- and lawyers and judges in this field sometimes can use shorthand. Each claim in this '700 patent, the five claims you're looking at, is considered an invention, a separate invention. The specification in the previous application is not the invention. It's a description; it's a disclosure. And what you're going to be asked to do at the end of this is compare those claims -- one of the things you're going to be asked to do is you'll be comparing each of those claims against the accused product. It's the claim that's the invention. So, there's five of them.

And sometimes lawyers will talk about a shorthand of, well, the patent is the invention. The patent is not the invention. Each claim is an invention. And, so, you'll compare that.

You're also at some point going to be asked to compare each claim to see if it's fully disclosed in

that prior specification, that prior application. So, it sometimes can be confusing the way we all throw these words around and you'll see this again in your written descriptions, but as you're going through this, to help you follow, just remember that each claim is an invention and you compare those against the accused products, that Wii, that GameCube. And then you're also going to be asked to take a look and see is it disclosed, completely, properly described in that 1996 application.

All right. At this time we are going to take a break. I'll ask you to be back at quarter past.

Please remember my instructions not to discuss the case among yourselves.

(The jury exits the courtroom, 10:59 a.m.)

THE COURT: If either side thinks my definitions are incorrect, you need to make your objection so that I can make a -- provide a correct definition. But I think those, in fact, are correct statements of the law. And I've been concerned in a number of these trials about that possible confusion because we sometimes talk about the patent being the invention or the specification being the invention; and later on they're going to get this instruction to do it claim by claim, step by step. And, in fact, local

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counsel might as well get used to it. I'm going to
start emphasizing that more because I think it's
important to avoid confusion at the end on that. But if
someone -- again, just to avoid any later claim that
I've made a final decision, if someone thinks I'm giving
an improper instruction, it's incumbent on you to bring
that to my attention. You can do it outside the
presence of the jury to let me rule on it, but I think
I'm stating the law correctly.
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At this time we'll be in recess until quarter past.

- 12 (Recess, 11:00 a.m. to 11:14 a.m.)
- (Open court, all parties present, jury
- 14 present.)
- THE COURT: Mr. Gunther.
- 16 MR. GUNTHER: Thank you, your Honor.
- 17 BY MR. GUNTHER:
- 18 Q. Mr. Armstrong, before the break we were talking19 about your 1996 warehouse application and then the later
- 20 application that was filed in 2000 that became the '700.
- 21 Do you recall that?
- 22 A. Yes, sir.
- 23 Q. And you testified that you made changes from the
- 24 1996 application when you wrote the '700 application in
- 25 | 2000, correct?

- 1 A. Yes, sir.
- 2 Q. And in several instances where you mentioned in
 3 this 1996 application a single input member operable in
 4 6 degrees of freedom, you deleted those from the 2000
- 6 A. I think so, yes, sir.

application, correct?

- 7 Q. Okay. Now, you also made certain changes -- not 8 just deletions; but you made some changes to that 9 specification, as well, correct, sir?
- 10 A. Yes, sir.
- 11 Q. And the changes were made simply to clarify but not 12 to broaden; is that right?
- 13 A. Yes, sir.
- 14 Q. Because if you broaden -- broadening is bad, right?
- 15 A. Yes, sir. I just wanted to clarify.
- 16 Q. Okay. Now let's -- if we can, I want to show you 17 part of the 1996 application; and we're going to put a
- paragraph of that up on the screen. And what that is is that's from Defendant's Exhibit 306 at page 14. That's
- 20 a quote from the 1996 application.
- 21 And it says: Another object of the invention
- 22 is to provide an easy-to-use 6 DOF controller -- so,
- 23 it's talking about 6 degrees of freedom -- which
- 24 includes a single input member. Do you see that?
- 25 A. Yes, sir.

- 1 Q. That's what you said an object of the invention was
- 2 in 1996, right?
- 3 A. That's an object of the invention, yes, sir.
- 4 Q. Okay. And that's what it was then, in 1996, right?
- 5 A. Yes, sir.
- 6 Q. Now, in 2000, when you filed the '700 application,
- 7 what became the '700 patent -- you made a change to that
- 8 paragraph.
- 9 MR. GUNTHER: Let's put it up, Kam.
- 10 BY MR. GUNTHER:
- 11 Q. And this is from the '700 patent, Defendant's
- 12 Exhibit 1, at Column 4, line 44. It says: Another
- 13 object of the invention is to provide an easy-to-use 3-D
- 14 controller. Do you see -- and I didn't highlight this.
- 15 But you changed "6 degree of freedom" to "3-D."
- 16 A. Yes, sir.
- 17 Q. Right?
- 18 A. Yes, sir.
- 19 Q. And then you go on and you say: Which includes at
- 20 least one input member, right?
- 21 A. Yes, sir.
- 22 Q. So, 1996, then you say your invention is a single
- 23 input member operable in 6 degrees of freedom, right?
- 24 A. Yes, sir.
- 25 Q. And in 2000, when you filed the '700 application,

- 1 you change it to say that your invention is at least one
- 2 input member operable in 3-D, which you say is the same
- as 6 degrees of freedom, right?
- 4 A. Yes, sir.
- 5 Q. And that doesn't broaden the application.
- 6 A. No, sir.
- 7 Q. Is that your testimony?
- 8 A. Yes, sir.
- 9 Q. It just clarifies it?
- 10 A. Yes, sir.
- 11 Q. All right. Sir, do you have the GameCube
- 12 controller?
- 13 A. Yes, sir.
- 14 Q. Can you hold that up?
- 15 A. Yes, sir (complying).
- 16 Q. Hold it up nice and high for us, please.
- 17 A. (Complying.)
- 18 Q. Now, sir, is that a single input member
- 19 6-degree-of-freedom controller?
- 20 A. No, sir.
- 21 Q. So, sir, looking at that first part of the
- 22 specification, the object of the invention, where it
- 23 talks about a single input member that's operable in
- 24 6 degrees of freedom, would the GameCube controller with
- 25 multiple input members fall within that language?

- 1 A. Is that a question?
- 2 Q. Yes, sir.
- 3 A. What was the question again?
- 4 Q. The question is the GameCube -- can you hold that
- 5 up again for us?
- 6 A. Yes, sir.
- 7 Q. The GameCube controller doesn't have a single input
- 8 member, does it?
- 9 A. (Pausing.)
- 10 Q. That's operable -- again, that's operable in
- 11 6 degrees of freedom. Is that correct?
- 12 A. Yes, sir.
- 13 Q. So, it doesn't fit within the language of the 1996
- 14 warehouse application because that talks about a
- 15 6-degree-of-freedom controller which includes a single
- 16 input member, right?
- 17 A. Well, the GameCube controller has a single input
- 18 member. It has more than one input member.
- 19 Q. Wait a minute, now. This talks about a single
- 20 input member that's operable in --
- 21 A. Right.
- 22 Q. -- 6 degrees of freedom. Does the GameCube
- 23 controller have a 6 degree of freedom -- a controller --
- 24 single input member that's operable in 6 degrees of
- 25 freedom? Yes or no?

- 1 A. No, sir.
- 2 Q. Okay. So, it doesn't fall within that language, 3 right?
- 4 A. Yes, sir.
- 5 Q. It doesn't? Am I correct? I'm correct it does 6 not?
- 7 A. Well, are you saying that this is like a legal 8 claim?
- 9 Q. Sir, I'm not -- I'm just asking you a question. I
 10 didn't say anything about a claim. I'm asking you if
 11 that language that I just read to you that's in your

warehouse application in 1996, if that covers single

- 13 input member 6 degree of freedom -- does that embrace
- 14 that GameCube controller that has multiple input
- 15 members?

12I

- 16 A. Well, this GameCube controller does not have a
- 17 single -- I'm trying to help you -- does not have a
- 18 single input member that moves in 6 degrees of freedom.
- 19 Q. Okay. So, it doesn't fit within that language,
- 20 right, up in the top?
- 21 A. I mean, if you're saying that's a claim or
- 22 something, then --
- 23 Q. No. I'm just asking you a very specific -- a very
- 24 easy question. Does it fit within that language?
- 25 A. Okay.

- 1 Q. Yes? Okay means "yes"?
- 2 A. Yes.
- 3 Q. Okay. Now let's look down at the way you changed
- 4 it, because you're not allowed to broaden.
- 5 A. Right.
- 6 Q. Right. You're not allowed to broaden. You changed
- 7 it to another object of the invention is to include at
- 8 least one input member, right? That was the change you
- 9 made, right?
- 10 A. Yes, sir.
- 11 Q. Now hold up the GameCube again.
- 12 A. Yes, sir (complying).
- 13 Q. Does that have at least one input member operable
- 14 in 6 degrees of freedom?
- 15 A. No, sir.
- 16 Q. Does it have at least one input member -- forget
- 17 about that -- strike the last question.
- Does it include at least one input member?
- 19 A. Not one in 6 degrees of freedom, no, sir.
- 20 Q. Okay. That's fine. But does it include at least
- 21 one input member?
- 22 A. Yes, sir.
- 23 Q. Okay. So, sir, that language, the at least one
- 24 input member, that fits the GameCube, right?
- 25 A. It does have one input member, yes, sir.

- 1 Q. Okay.
- 2 A. More than one, yes.
- 3 Q. Okay. More than one, right?
- 4 A. Yes, sir.
- 5 Q. All right. But you can't broaden. You're not
- 6 allowed to broaden, right?
- 7 A. Yes, sir.
- 8 Q. Okay. Now, sir, I want to ask you this. I went
- 9 and counted up and I found five times in the patent --
- 10 in the 2000 application that led to the '700, I found
- 11 five different instances where you changed "single input
- 12 member" to "at least one input member." Does that
- 13 basically jive with your understanding of what you did?
- 14 A. That's very believable.
- 15 Q. Okay. It doesn't surprise you a bit?
- 16 A. Doesn't surprise me.
- 17 Q. As a matter of fact, sir, you went through this
- 18 application -- isn't it fair to say -- and your
- 19 intention was to either delete or to change from
- 20 "single" to "at least one," each of those instances in
- 21 the 2000 application, right?
- 22 A. I think that's a more clear teaching of the
- 23 original.
- 24 Q. It's a clearer teaching of the original?
- 25 A. Yes, sir.

- Q. That's your testimony.
- 2 And that's the only reason that you did it?
- 3 A. Yes, sir.

- 4 Q. Now, sir, when you made this change, you filed this
- 5 application, the one on the bottom where you changed it
- 6 to "at least one input member," you made that change in
- 7 November of 2000 when you filed that application, right?
- 8 A. I think so, yes, sir.
- 9 Q. Okay. So, in November of 2000, you knew about the
- 10 GameCube controller, didn't you?
- 11 A. I'm not sure.
- 12 Q. Okay. Well, let me --
- 13 A. I may be -- it wouldn't surprise me.
- 14 Q. Okay. Let me see if I can help you out -- well,
- 15 actually I'll come back to that.
- 16 I want to go to one other thing.
- MR. GUNTHER: Kam, could we go to Slide 17,
- 18 please?
- 19 BY MR. GUNTHER:
- 20 Q. And I want to talk to you about Mr. Chang, with an
- 21 A, your discussion of Mr. Chang.
- 22 A. Yes, sir.
- 23 Q. Now, sir, what I'm showing you -- and obviously the
- 24 people won't be able to read this, but it's just to get
- 25 the point across -- that there were seven paragraphs in

- 1 the 1996 application relating to Chang and your
- 2 discussion of the Chang patent, right?
- 3 A. Yes, sir.
- 4 Q. And I've highlighted them. It begins at about line
- 5 17 on the page on the left, and it takes up the whole
- 6 page on the right.
- 7 A. Okay.
- 8 Q. Okay. Now, sir --
- 9 MR. GUNTHER: Kam, could we bring the first
- 10 thing up?
- 11 BY MR. GUNTHER:
- 12 Q. Okay. We've got them both. Now, I've brought up
- 13 the first and last paragraphs of those seven paragraphs
- 14 of Chang from your 1996 application.
- 15 A. Yes, sir.
- 16 Q. And you talk about the Chang device being a
- 17 6-degree-of-freedom controller and you say that in
- 18 Chang's controller the lack of a hand-operable single
- 19 input member operable in 6 degrees of freedom has many
- 20 significant disadvantages.
- 21 You say that in the first paragraph where you
- 22 talk about Chang, right?
- 23 A. I'll take your word for it.
- 24 Q. Can you see it?
- 25 A. Are you talking about the second yellow part?

- 1 Q. The second yellow part, yes.
- 2 A. On the top, yeah.
- 3 Q. On the top on the left-hand side?
- 4 A. Yes, sir.
- Q. Okay. Then in the lower right-hand side, this is
 the last paragraph where you talk about Chang in your
 1996 application. You say: The Chang controller does
 not have one ball or one handle which can be operated ---

9 And we didn't highlight this, but I want to 10 emphasize it.

- -- in 6 degrees of freedom.
- And then you say: Thus, the Chang device is functionally and structurally deficient.
- 14 Right?
- 15 A. Yes, sir.
- 16 Q. You say that?
- 17 A. Yes, sir.
- 18 Q. Now, sir, the GameCube controller, that has more
- 19 than one input member to achieve 6 degrees of freedom,
- 20 right?
- 21 A. Yes, sir.
- 22 Q. And the Wii Remote, when hooked up to the Wii
- 23 Nunchuk, has more than one input member in order to get
- 24 6 degrees of freedom, right?
- 25 A. Well, the Wiimote can do 6 degrees of freedom by

1 itself.

- Q. Sir, you testified in your deposition in March, two months ago, that you weren't sure if the Wii Remote was
- 4 a 6-degree-of-freedom controller. Do you recall that
- 5 testimony?
- 6 A. I recall some testimony as to that effect.
- 7 Q. Okay. All right. So, two months ago you told me
- 8 you weren't sure.
- 9 A. Yes, sir.
- 10 Q. And, sir, have you done anything now that changes
- 11 your mind?
- 12 A. Yes, sir.
- 13 Q. What have you done?
- 14 A. I just looked at it in that light.
- 15 Q. So, after the deposition you looked at it in that
- 16 light. But did you make any change to your deposition?
- 17 A. No, sir.
- 18 Q. Okay. So, we didn't know that you, in fact, now
- 19 had an answer to that question; is that right?
- 20 A. Yes, sir.
- 21 Q. Because you didn't change it.
- 22 A. I didn't...
- MR. CAWLEY: I guess, your Honor, I object to
- 24 that. Because he didn't change it? He was asked this
- 25 question on cross-examination, and he answered.

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                                                            325
              MR. GUNTHER: I'll withdraw the question,
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2
   your Honor.
   BY MR. GUNTHER:
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        So, in nineteen --
4
   Q.
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              MR. CAWLEY: I also -- I hate to interrupt.
   May I ask if the screen is on in front of the witness?
6
7
              THE WITNESS:
                           Yes, sir, it is.
8
              MR. CAWLEY:
                            Okay. Thank you. I just wanted
   to make sure that he --
10
              THE WITNESS:
                             It wasn't yesterday.
11
              MR. GUNTHER:
                             Mr. Cawley, thank you very
          Appreciate that.
121
   much.
   BY MR. GUNTHER:
13
         So, in 1996, seven paragraphs on Chang. Chang is
14
15
   structurally and functionally deficient because it does
   not have a single input member that's operable in 6
16
   degrees of freedom.
                         Right?
17
         (Pausing.)
   Α.
   Q.
        That's what you said.
         I'm sorry. Could you restate it?
   Α.
```

- 18
- 19
- 20
- Sure. In 1996 --21 0.
- 22 Α. Yes, sir.
- 23 Q. -- in your warehouse application --
- 24 Α. Yes, sir.
- 25 -- you talk about Chang and you say that Chang is Q.

- structurally and functionally deficient because Chang only has -- it has multiple input members and not a single input member, right?
- 4 A. Yeah. I said what's printed right there, yes.
- Q. Now, when you filed the application in 2000, whenyou filed that application in 2000, you took all of
- 7 those paragraphs about Chang out, didn't you?
- 8 A. Yes, sir, I did.
- 9 Q. They're all gone.
- 10 A. Yes, sir.
- 11 Q. They're all missing.
- 12 A. Yes, sir.
- 13 Q. You deleted every one of them, didn't you?
- 14 A. Yes, sir.
- 15 Q. And, sir, you recognize, though, that in this case,
- 16 in order to determine whether or not your claims in 2002
- 17 are the same invention as what you filed in 1996, we've
- 18 got to look at the 1996 application, right?
- 19 A. Yes, sir.
- 20 Q. We can't look at the 2000 application; we've got to
- 21 look at what you said in 1996, right?
- 22 A. That's okay with me, yes, sir.
- 23 Q. And as a matter of fact, sir, that means that
- 24 you've got to live with everything that you said about
- 25 Chang. You don't get to hit the "delete" key if you

- want to get back to 1996, right?
- 2 A. Yes, sir.
- 3 Q. Why did you hit the "delete" key with respect to 4 Chang?
- A. It just was faster to get to the point, to get to the invention.
- Q. Now, you testified -- I just want to make sure --8 in 2000, when you hit the "delete" key on the seven 9 paragraphs of Chang, you knew about Nintendo's GameCube 0 controller, right? You had seen it?
- 11 A. Probably.

15

- 12 Q. You don't have any doubt that you saw it, right?
 13 At that time, in the 2000 time frame, you were hunting
 14 on the Internet for information about Nintendo's next
- 16 A. Probably, yes.

generation controller, right?

- 17 Q. Okay. So, you have that in your mind; and then at that point after learning about the GameCube -- is it 19 fair to say that information about the GameCube started
- 20 to come out and its controller a couple of months before
- 21 you filed your application in November of 2000?
- 22 A. That's possible, yes.
- 23 Q. Okay. And, so, sir, when you filed your
- 24 application and hit the "delete" key, you did that with
- 25 knowledge of the Nintendo GameCube controller.

- 1 A. I certainly wouldn't have done it because of that.
- 2 Q. I'm not asking you if you did it because of it or
- 3 not. I'm asking you: Did you do that -- at the time
- 4 that you did it, did you know about the game controller?
- 5 Did you have the GameCube controller in your mind?
- 6 A. I don't have a specific memory, but I probably did.
- 7 Q. Okay. And, so, you deleted everything; but now, in
- 8 order to get back, in order to get back to 1996, the
- 9 "delete" key doesn't work. You've got to live with
- 10 everything that's in the Chang, right, all seven
- 11 paragraphs?
- 12 MR. CAWLEY: Objection, your Honor. That's
- 13 argumentative, the "delete" key doesn't work.
- 14 THE COURT: Overruled.
- 15 BY MR. GUNTHER:
- 16 Q. Do you have the question?
- 17 A. I want to live with the 1996 application. That's
- 18 the one I -- that's my warehouse. That's my home.
- 19 That's where I live. That's what I want to live with.
- 20 Q. Okay. All right. And your home, it's before
- 21 you've deleted Chang, right?
- 22 A. Sure.
- 23 Q. And it's before you changed "single input member"
- 24 to "at least one input member," right?
- 25 A. Sure. That's fine with me.

- 1 Q. And it's before you changed "6 degrees of freedom"
- 2 to "3-D," right?
- 3 A. Yes, sir.
- Q. Every one of those changes that you made in 2000 after you learned of the GameCube, you can't rely on if you want to get back to 1996, right?
- 7 A. I think those changes are irrelevant.
- 8 Q. Okay. But can you answer my question?
- 9 A. No, I can't. I don't want to rely on any of those
- 10 changes, no, sir.
- 11 Q. Right. Okay. So, you're not relying on any of
- 12 them.
- 13 A. No, sir.
- 14 Q. But you made them after you learned of our product,
- 15 right?
- 16 A. I guess so.
- 17 Q. Okay. Well, let me just see if we can do just a
- 18 little bit more on what you knew about the GameCube
- 19 controller at the time shortly before you filed the 2000
- 20 application.
- 21 MR. GUNTHER: Can we put up Defendant's
- 22 Exhibit 211, please?
- And can you bring up and highlight the
- 24 first -- where it says "Kelly," the first paragraph?
- Yeah, from "Kelly" on down to the first

- | paragraph, right there. Bring it up.
- 2 BY MR. GUNTHER:
- 3 Q. Now, this is an email that you wrote to Mr. Tyler
- 4 in August of 2000, right?
- 5 A. (Pausing.)
- 6 Q. And you can look at the screen in front of you if
- 7 it will help you, sir.
- 8 A. Well, I can't see the date on the screen.
- 9 Q. On the small screen? We'll bring it up.
- 10 MR. GUNTHER: Let's bring it up. Thank you,
- 11 Kam.
- 12 BY MR. GUNTHER:
- 13 Q. All right. So, now we've got it up there. It's an
- 14 email. It's actually from Mr. Tyler to you; but inside
- 15 the body of it, it's an email string, right? So, there
- 16 is an email embedded in there which is an email from you
- 17 to Mr. Tyler, correct?
- 18 A. Yes.
- 19 Q. And the date of Mr. Tyler's email was August 22,
- 20 2000, right?
- 21 A. Yes, sir.
- 22 Q. And Mr. Tyler's email, it says: To Brad Armstrong.
- 23 It says: Re: Nintendo Controller, question
- 24 mark.
- 25 Right?

- 1 A. Yes, sir.
- 2 Q. August of 2002, right before -- within a couple of
- 3 months before you'd filed your November, 2000,
- 4 application, right?
- 5 A. Okay.
- 6 Q. Is that right?
- 7 A. Yes, sir. That appears correct.
- 8 Q. Okay. And it says: Kelly, I have read that this 9 is the best site for Nintendo Dolphin unofficial info.
- 10 Here is the Web page for the controller.
- 11 You were telling Mr. Tyler in August of 2000,
- 12 "Here's a place to look on the Internet with respect to
- 13 what Nintendo's next generation controller is going to
- 14 look like, "right?
- 15 A. That appears true.
- 16 Q. Shortly before you file your new application that
- 17 leads to the '700 patent.
- 18 A. Okay.
- 19 Q. And then, sir, you say: Here is the Web -- it
- 20 says: This is the best site for Nintendo Dolphin
- 21 unofficial information.
- 22 "Dolphin" is the code name for what?
- 23 A. I think it's probably the GameCube.
- 24 Q. Okay. All right. Because the GameCube came out in
- 25 2001, right?

I think so. Α.

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Okay. So, you're telling him about information about the Nintendo Dolphin, a/k/a GameCube, in August of 2000; and you give him a Web site. 4

Now, I want to show you, sir, the next Exhibit, 212. That's a copy of the Web site which we got out of the -- there was an archive on the Web. you recall I showed you this at your deposition, right?

10 Now let's look at the -- this is what you told 11 Mr.

I do vaguely, yes, sir.

- MR. CAWLEY: Your Honor, I'm sorry. I think there was an objection lodged to this exhibit, and we continue that objection. It's hearsay. And -- I'm sorry. In addition, your Honor, there is no authentication of it.
- 17 MR. GUNTHER: Your Honor, I don't --

THE COURT: I'll sustain as to authentication 18 19 unless you can authenticate it.

MR. GUNTHER: Sir, I don't think there has been an objection to this exhibit. There was a later exhibit that was a Web site printout as to which there was an objection. I don't believe there was any objection as to 212.

> THE COURT: Do you have the list there,

Betty?

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MR. GUNTHER: I could be wrong on that, your Honor; but that's my recollection.

MR. CAWLEY: Your Honor, I'm corrected. We withdraw our objection to this exhibit.

THE COURT: All right. Go ahead, counsel.

MR. GUNTHER: Thank you, your Honor.

B BY MR. GUNTHER:

- 9 Q. So, I've put it up back on the screen. This is the
 10 Web site that corresponds to the Web address that you
 11 put on the email to Mr. Tyler. Let's look at the second
 12 page.
 - Now, this was a Web site run by a company called "IGN," not Nintendo. But this was a Web site by that company where they were guessing what Nintendo's controller for the GameCube was likely to look like, right?
- 18 A. I presume so.
- 19 Q. Okay. And they actually got it pretty close,
- 20 didn't they? If you look, it's got two joysticks down
- 21 at the bottom, an analog joystick; and it's got a camera
- 22 stick. Right? They actually got placed a little bit
- 23 differently in the GameCube, but they got that right.
- 24 They're both there, right?
- 25 A. Essentially, yes.

- 1 Q. And, then, it's a little hard to see because of the 2 page but they call it a "D-pad," but there is a 3 cross-switch over here, too, right?
- 4 A. Yes, sir.
- O. So, in August of 2000, you knew and you had actually directed your business partner, Mr. Tyler, to this Web page which had IGN's best belief as to what the Nintendo GameCube controller would look like, right?
- 9 A. Yes, sir.
- 10 Q. And it also talks about built-in rumble, right?
- 11 A. Yes, sir.
- 12 Q. And they got that right, too.
- 13 A. Yes, sir.
- 14 Q. So that when you sat down to rewrite your
 15 application in November of 2000, when you sat down to do
 16 that, you knew that this was what people were saying -17 people knowledgeable in the industry were saying the
- 18 GameCube controller was likely to look like, right?
- 19 A. I probably did.
- 20 Q. Okay.
- MR. GUNTHER: Can we go back to Defendant's
 Exhibit 11, the email -- 211, sorry. And could we put
 up at the very -- could you highlight from "Space World
 is at the end of this week" to the bottom and bring that
 out?

BY MR. GUNTHER:

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- Now, you told Mr. Tyler -- this is now back to your August email where you're telling him about information on the GameCube controller. It says: Space World is at the end of this week.
- 6 That's what you say, right?
- 7 I don't remember doing this, but I don't Α. doubt it.
- 9 0kay. 0.
- It's believable. 10 Α.
- 11 Q. Okay. What is Space World?
- Must be a show. 12 Α.
- 13 Okay. And it says: At the end of this week, I 0. think, and much Dolphin info may be released by Nintendo 14 15 at that time.
- So, what you were saying to Mr. Tyler is that there was going to be likely more information released 17 about the GameCube controller as well as the rest of the 18 19 GameCube system by the end of the week in sometime in
- August of 2000, right? 20
- 21 Α. Yes, sir.
- Do you have any doubt that, in fact, happened at 22
- 23 that show?

- I don't know. 24 Α.
- 25 Sir, let me ask you this: If it did happen, would Q.

- you have been looking for it, given the fact that you were searching the Internet for information about the GameCube controller in 2000?
- 4 A. It would appear that I would have been; but, you 5 know, I'm not -- I go from one thing to another. But I 6 suspect that I did.
- 7 Q. But one of the things that -- you may go from one 8 thing to another. But one of the things that you were 9 doing in the summer of 2000 -- you and Mr. Tyler, your 10 business partner, were doing -- was looking as much as 11 you could for information about what the Nintendo 12 GameCube controller was going to look like, didn't you?
- 14 Q. Okay. And that was a part of the information that 15 you had in your head when you sat down in 2000 to write

Well, I at least had when I wrote this, yes.

- 16 the 2000 application that became the '700 patent, right?
- 17 A. Yes, sir.

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Α.

- 18 Q. And that was information you had in your head and
 19 that you had learned only a couple of months before you
 20 wrote the 2000 application where you deleted all seven
 21 paragraphs of Chang, right?
- 22 A. Yes, sir.
- Q. And that was the information that you had
 concerning the GameCube controller in your mind when you
 made five different times a change from "single input

- 1 member to multiple input members -- or "at least one
- 2 input member, " correct?
- 3 A. The question is from "single input member" to "at
- 4 least" --
- 5 0. "At least one."
- 6 A. -- "a single input member."
- 7 Q. "At least one," yes.
- 8 A. Yes.
- 9 Q. Okay. And that was in your mind. You knew about
- 10 the GameCube information you had seen on the Web, right?
- 11 A. I think I saw that email you just got there, yes,
- 12 sir.
- 13 Q. Okay. All right. Now, sir, I want to ask you a
- 14 few questions about Mr. Tyler.
- 15 A. Yes, sir.
- 16 Q. Now, Mr. Tyler you actually entered into business
- 17 with in 1999 with respect to the Anascape company,
- 18 right?
- 19 A. Yes, sir.
- 20 Q. Now, he was the money man, right?
- 21 A. Well, he's more than that but he did have money and
- 22 I didn't, yes, sir.
- 23 Q. Right. You had the patents; he had the money. Is
- 24 that a fair way to look at it?
- 25 A. It's a little bit simple; but yes, sir.

- 1 Q. Okay. I'm sure there was more to the relationship.
- 2 I understand you're friends. But in terms of the
- 3 business part of your relationship, you had the patents;
- 4 he had the money, right?
- 5 A. Yeah, I'll accept that.
- 6 Q. Okay. And, sir, like any good businessman -- and
- 7 Mr. Tyler seems like he's an awful good one -- he wanted
- 8 a return on his investment, right?
- 9 A. He was remarkably unpushy about that.
- 10 Q. Remarkably what?
- 11 A. Unpushy. I suspect that he eventually wanted money
- 12 back from his investment, yes, sir.
- 13 Q. I mean, he put over a million dollars into the
- 14 venture, right?
- 15 A. Yes, over time he did.
- 16 Q. And Mr. Tyler being the good businessman that he
- 17 was and is, even though he's good friends with you, he
- 18 was looking to make some money, wasn't he? That's why
- 19 he did this.
- 20 A. Yeah. He wouldn't invest in any business he didn't
- 21 think was a good business, for sure.
- 22 Q. Right.
- Now, sir, let me put up an email from
- 24 Mr. Tyler to you dated June 25th of 2000. It's
- 25 Defendant's Exhibit 216. And, sir, can you --

- MR. GUNTHER: Kam, can you blow out sort of the heading first for us?
- 3 BY MR. GUNTHER:
- 4 Q. So, it's an email from Kelly Tyler to you dated
- 5 June of 2000. So, about -- what? About five months
- 6 before you filed your November, 2000, application that
- 7 became the '700 patent, correct?
- 8 A. Yes, sir.
- 9 Q. All right.
- 10 MR. GUNTHER: Now can we move that up, Kam,
- 11 to the top?
- 12 Now I want to pull out where it says "O app"
- 13 in the first sentence underneath that. Do you see where
- 14 it says "Re: O app. I believe we can get some
- 15 additional" -- thank you very much. Can we pop that
- 16 out?
- 17 BY MR. GUNTHER:
- 18 Q. Now, this is Mr. Tyler talking to you, right?
- 19 A. Yes, sir.
- 20 Q. In June of 2000.
- 21 A. Yes, sir.
- 22 Q. Shortly after you formed Anascape with him as a
- 23 venture in 1999, right?
- 24 A. Yes, sir.
- 25 Q. Now, Mr. Tyler didn't invent the inventions that

- are in the 1996 application, did he?
- 2 A. No, sir.
- 3 Q. He didn't write any of those -- that specification
- 4 of that application, right?
- 5 A. No, sir.
- 6 Q. He didn't do any of the drawings?
- 7 A. No, sir.
- 8 Q. He didn't write the abstract?
- 9 A. No, sir.
- 10 Q. That was all you.
- 11 A. Essentially, yes, sir.
- 12 Q. Okay. And he didn't -- let's talk about the
- 13 application in 2000. That was all you, too, right?
- 14 A. Yes, sir.
- 15 Q. But what he says to you in June of 2000, your
- 16 business partner who had not been involved in any of the
- 17 inventions, he says: Re: Zero application.
- 18 Now let's talk about that for one second.
- 19 The zero application is the application that's the 1996
- 20 warehouse application, right?
- 21 A. Yes, sir, it is.
- 22 Q. Okay. He says: Re: Zero application --
- This is Mr. Tyler, not the inventor, the
- 24 business guy. He says: I believe that we can get some
- 25 additional valuable claims out of this application.

He's telling that to you, right?

- A. Yes, sir.
- 3 Q. So, he looked at the -- he took the warehouse --
- 4 you gave him the warehouse application, right?
- 5 A. Yes, sir. He was very aware of it.
- 6 Q. Right. You gave it to him; and he read it,
- 7 correct?

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- 8 A. Yes, sir.
- 9 Q. And then he started making suggestions to you. The
- 10 business guy started making suggestions to you about how
- 11 to write claims, right?
- 12 A. Yes, sir.
- 13 Q. He said: I believe that we can get some additional
- 14 valuable claims out of this application.
- Now let's look a little bit further down the
- 16 page, if we can.
- 17 MR. GUNTHER: Can you blow up -- that's
- 18 right.
- 19 BY MR. GUNTHER:
- 20 Q. I'm blowing up paragraph 3. This is again
- 21 Mr. Tyler talking about the 1996 warehouse application
- 22 that he calls the "zero application," and he points --
- 23 his third point is pointing to a portion of the 1996
- 24 application and he says, remember: I believe there is
- 25 additional valuable claims out of this application.

This says: Page 28, lines 31 through 35, broadens definition of 6-degree-of-freedom controllers to 3-D graphic image controllers, probably a better definition of controllers on the market today.

That's what Mr. Tyler told you in 2000,

correct?

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- 7 A. Yes, sir.
- 8 Q. So, the business guy, your business partner who is 9 not the inventor, looks at the 1996 warehouse 10 application and starts telling you how to write new 11 claims to cover products that are on the market, right?
- A. Well, he just read it and, you know, gave me his best advice; and I really appreciate it.
- Q. And his best advice was that you could write additional claims to cover 3-D graphic image controllers which were a better definition of controllers on the market today. That's what he told you. That was the business advice that he gave you, right?
- 19 A. Well, no. I don't think so.
- 20 Q. That wasn't business advice? He did that as a 21 friend?
- 22 A. I think that -- I think you're mischaracterizing 23 this email.
- Q. Sir, I'm just reading it to you. It says -- he'stalking about getting some additional valuable claims.

- And then the third point is one part of the application broadens definition of 6-degree-of-freedom controllers to 3-D graphic image controllers. Then he says that's probably a better definition of controllers on the market today.
- So, he's telling you write some claims like that, right?
- 8 A. No, sir.
- 9 Q. Oh, that's not what he's saying?
- 10 A. No, sir.
- 11 Q. Okay. All right. We can get some additional
- 12 valuable claims, and then he points to that as the third
- 13 item. But he's not suggesting you to write claims like
- 14 that. Is that your testimony?
- 15 A. Yes, sir.
- 16 Q. All right. Let's look at Exhibit -- now I want to
- 17 look at Exhibit 214. This is another email from
- 18 Mr. Tyler to you dated September 10th, 2000?
- 19 MR. GUNTHER: Let's actually see if we can
- 20 blow up the heading first, Kam. Thank you.
- 21 BY MR. GUNTHER:
- 22 Q. So, it's Mr. Tyler to you, September 10th, 2000;
- and the heading is "6 dof." Do you see that?
- 24 A. Yes, sir.
- 25 Q. "6 degrees of freedom," that's what that stands

- 1 for, right?
- 2 A. Yes, sir.
- 3 Q. September 10th, 2000, about three months before you
- 4 file your 2000 application, right?
- 5 A. Yes, sir.
- 6 Q. The business guy sends you another email, right?
- 7 A. Kelly Tyler did, yes, sir.
- 8 Q. Now let's look at the body of the text. He's
- 9 talking about a patent response -- initial application
- 10 response that he got -- that you guys got from the PCT,
- 11 right?
- 12 A. Yes, sir.
- 13 Q. What is the PCT?
- 14 A. It's an organization that deals with foreign-filed
- 15 patent applications.
- 16 Q. Okay. So, it's about one of your 6 DOF patents,
- 17 right?
- 18 A. It appears to be. I mean, the subject is "6 dof."
- 19 Q. Right. So -- okay. So now let's look at the last
- 20 sentence, sir. It says: I wonder if we can change the
- 21 claims to reflect our new direction.
- Do you see that?
- 23 A. Yes, sir.
- 24 Q. So, the businessperson, in 2000, September of 2000,
- 25 is sending you a letter -- the guy who wants a return on

May be the most patient guy in the his investment. world, but he wants a return on his investment, is over a million dollars. He sends you an email that says: wonder if we can change the claims to reflect our new 5 direction.

Right?

- 7 Α. That's what this says, yes, sir.
- 8 Sir, by this time, August/September of 2000, your efforts to market a single input member controller that was operable in 6 degrees of freedom, those efforts were 10 11 unsuccessful, correct?
- I'll accept that, yes, sir. 12 Α.
- As a matter of fact, you talked a little bit 13 0.
- earlier about a license -- or joint venture agreement 14I
- 15 that you entered into with a company called "Key Tronic." Do you remember that on your direct
- examination? 17
- 18 Α. Yes, sir.

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- 19 Mr. Cawley didn't ask you if Key Tronic ever Q.
- actually made any product, did he? 20
- Α. I don't recall that. 21
- Did Key Tronic make any product pursuant to any of 22 Q.
- 23 your inventions?
- No, sir. 24 Α.
- 25 So, in 2000 you're sitting there going back and Q.

- forth with Mr. Tyler, the business guy. You've been unable to interest anyone in your single input member 6-degree-of-freedom controller; and you go with -- you're talking about -- he's talking about and telling you about a new direction for your claims, right?
- 6 A. I don't agree with that question, no, sir.
- 7 Q. I wonder if we can change the claims to reflect our 8 new direction. That's what he was telling you with 9 respect to 6 DOF in September of 2000, wasn't he?
- 10 A. I believe that he wrote this email, yes, sir.
- 11 Q. And you have no doubt that you received it, do you?
- 12 A. No, I don't doubt it.
- 13 Q. And when you sat down, sir, to write the claims
 14 that matured into the '700 patent, you had received this
 15 email and you had discussed with Mr. Tyler what your new
- 16 direction -- what the new direction should be, right?
- 17 A. I don't know that. I don't remember this email. I
- 18 mean, I remember your presenting it to me earlier; but I
- 19 don't remember the email itself.
- 20 Q. You don't remember this email?
- 21 A. No. I --
- 22 Q. That's your testimony?
- 23 A. I'm not contesting it.
- 24 Q. Okay.
- 25 A. I'm just -- you're saying I did these things, and I

- 1 don't remember.
 - Q. And --

- A. But I'm not disputing it, either.
- 4 Q. All right. It's an email that you received within
- 5 a couple of months before you filed your 2000
- 6 application where you deleted the seven paragraphs of
- 7 Chang and where you changed all of those "single" input
- 8 members to "at least one" input member. That's an email
- 9 that you received from him talking about a new direction
- 10 about three months before you did that, right?
- 11 A. I believe so, yes, sir.
- 12 Q. Now, sir, I want to ask you, sir, a couple of
- 13 questions about the issue of the accelerometer.
- 14 Mr. Cawley asked you, did he not, whether or not you
- 15 invented an accelerometer, right?
- 16 A. I think he did ask me that.
- 17 Q. And, sir, you agree that you didn't invent the
- 18 accelerometer, right?
- 19 A. Yes. I did not invent an accelerometer.
- 20 Q. You did not invent the idea of including an
- 21 accelerometer in a controller, did you?
- 22 A. No, I did not invent that idea.
- 23 Q. That idea was Nintendo's idea, right?
- 24 A. I suspect it was long before Nintendo.
- 25 Q. You think it was before Nintendo?

- 1 A. I would think.
- 2 Q. All right. Do you know as you sit here --
 - A. I don't know.

- 4 Q. Do you know as you sit here today any video game
 5 controller that's ever been introduced in the United
 6 States, a controller that has an accelerometer so that
 7 it can respond to body motion like the Wii?
- 8 A. I know of flying controllers in the past that had
 9 things like acoustic sensors that could certainly sense
 10 accelerations.
- 11 Q. Let me try to make my question a little more

 12 precise. Do you know of any controller that's ever been

 13 introduced in the United States for a video game system,

 14 a home video game system, prior to the Wii Remote that

 15 had an accelerometer built in so that it was able to

 16 sense body motion?
- 17 A. I'm not recalling one right now, no, sir, for a 18 home video game system.
- 19 Q. So, as far as you know, Nintendo was the first to 20 do that, correct, for a home video game system?
- 21 A. Would you say the full question that you're asking?
- 22 Q. Yes, sir. The full question is: As far as you
- 23 know, Mr. Armstrong -- and you're a guy who keeps his
- 24 ear to the video game market, aren't you?
- 25 A. I try to but...

- Q. Okay. As far as you know, Nintendo was the first, with the Wii Remote, to come out with a controller that had an accelerometer that could sense body motion so that you could use the Remote, for example, to swing it like a golf club or use it to bowl like a bowling ball, right?
- 7 A. You said with an accelerometer in it?
- 8 Q. Yes, sir.
- 9 A. Yes, sir. As far as I know, yes, sir.
- 10 Q. All right. So, Nintendo was the first.
- 11 Now, sir, you didn't invent an accelerometer.
- 12 Did you ever design a controller that contained an
- 13 accelerometer?
- 14 A. Not -- not specifically, no, sir.
- 15 Q. Okay. Sir, let me ask you this.
- MR. GUNTHER: Mr. Cawley, can I -- do you
- 17 have the plaintiff's -- I think it's Plaintiff's
- 18 Exhibit 2, the file history for the '700 patent?
- 19 Thank you, sir.
- 20 BY MR. GUNTHER:
- 21 Q. You'll recall that during your direct examination
- 22 Mr. Cawley held up Plaintiff's Exhibit 2, which is the
- 23 file history of the '700 patent which represents all of
- 24 the back and forth that you had with the Patent Office,
- 25 right?

A. Yes, sir.

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- 2 Q. So, it has in it your inventions plus all of the 3 discussion that you had with the patent examiner during 4 the time -- I think it was five years, you said, that it 5 took you from the time you filed the application in 2000 6 to get the patent, right?
- 7 A. Yes, sir.
 - MR. GUNTHER: Your Honor, may I approach?
- 9 THE COURT: You may.
- MR. GUNTHER: Thank you.
- 11 BY MR. GUNTHER:
- 12 Q. Mr. Armstrong, I'm going to hand this to you; and
- 13 I'm going to ask you this question: Is there anywhere
- 14 in that big pile of documents, anywhere can you point to
- 15 it -- dig through it for me, if you will -- where you
- 16 can find the disclosure of an accelerometer?
- 17 A. I can tell you for sure there's not the word
- 18 "accelerometer" in there.
- 19 Q. It's not in there, is it?
- 20 A. The word, no.
- 21 Q. In all of that big stack of documents, it doesn't
- 22 appear, right?
- 23 A. Yes, sir.
- 24 Q. And in your warehouse application, the big
- 25 warehouse that you go into from time to time and take

- things out -- but sometimes you add things and delete
 things, don't you? Isn't that true?
- 3 A. No, sir. I don't add anything to it.
- 4 Q. You didn't add -- you've never added anything to 5 it?
- 6 A. Well, I didn't add any -- like, anything that could 7 be considered inventive material, no, sir.
- 8 Q. Okay. Sir, in that 1996 warehouse application,
- 9 Defendant's Exhibit 306 that's in the jurors' notebooks,
- 10 that you've got to get back to or your patent is
- 11 invalid, is there any mention anywhere in the warehouse
- 12 of an accelerometer?
- 13 A. I don't believe that word is used.
- 14 Q. So, if you rummage through the warehouse, you're
- 15 not going to find it, are you?
- 16 A. Not that word, no, sir.
- 17 Q. Okay. So, despite the fact that you got a lot of
- 18 stuff in there -- potentiometers, unidirectional
- 19 switches, bi-directional proportional switches -- you've
- 20 got lots of stuff in there, you don't have an
- 21 accelerometer, do you?
- 22 A. That word is not used in there, as far as to the
- 23 best of my knowledge.
- MR. GUNTHER: Your Honor, could I ask a
- 25 question of the court in terms of what time we go to?

THE COURT: To 12:15.

MR. GUNTHER: Thank you, sir.

THE COURT: Anything further, counsel?

MR. GUNTHER: No, your Honor. I'm sorry.

5 I'm just going to my next section. I apologize.

6 BY MR. GUNTHER:

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- 7 Q. I want to talk to you, if I can, about the Sony
- 8 license, Mr. Armstrong.
- 9 A. Yes, sir.
- 10 Q. And you were shown the Sony license on your direct
- 11 examination by Mr. Cawley, correct?
- 12 A. Yes, sir.
- 13 Q. Now, sir, you testified that you were very pleased
- 14 that Sony -- although you thought it was low -- that
- 15 Sony had paid you \$10 million, correct?
- 16 A. I said I thought it was "love"?
- 17 Q. "Low."
- 18 A. Oh.
- 19 Q. I'm sorry. If I said "love," I think maybe --
- 20 maybe I'm getting a little tired.
- 21 Let me try it again.
- 22 A. This is a Freudian ink blot issue. Sorry.
- 23 Q. Okay. I won't get into that.
- Let me ask you this: You entered into that
- 25 agreement; and Sony paid you \$10 million, correct?

- 1 A. Yes, sir.
- 2 Q. Now, sir --
- 3 A. They did.
- 4 Q. -- you testified that for tax reasons it was
- 5 structured in a certain way. But as a matter of fact,
- 6 sir, I want to look at how the agreement reads, in terms
- 7 of what it says --
- 8 A. Okay.
- 9 Q. -- not what people thought they might do in terms
- 10 of structuring.
- 11 A. Okay.
- 12 MR. GUNTHER: And I want to put up, if I can,
- 13 on the screen, paragraph 2.1 -- excuse me -- paragraph
- 14 2.2 from the Plaintiff's Exhibit 54, the Sony license.
- 15 BY MR. GUNTHER:
- 16 Q. Sir, I've got it up there on the screen; and it
- 17 talks about -- do you see the '606 patent there?
- 18 MR. GUNTHER: Maybe we can highlight it and
- 19 actually -- thank you, Kam. If you could highlight it
- 20 each time it appears. Once more, in the third line.
- 21 Thanks, Kam.
- 22 BY MR. GUNTHER:
- 23 Q. This paragraph is an exclusive license by you to
- 24 Sony for the '606 patent, correct?
- 25 A. Yes, sir, it is.

- 1 Q. Okay. So, that's 2.2, the '606 patent, exclusive
 2 license. And, in fact, it talks about a transfer to
 3 Sony of all rights held by each of the Anascape parties
 4 in that patent.
- What that means, Mr. Armstrong, is that you sold the '606 patent to Sony, right?
- 7 A. No. No, sir.
- 8 Q. It wasn't a sale?
- 9 A. No, sir -- you know, there's legal terms for sales
 10 and exclusive rights that I don't know; but it was an
 11 exclusive license.
- 12 Q. Let me just try it one more time. Okay?
- 13 It says: This exclusive license to be
 14 transferred to Sony all rights held by each of the
 15 Anascape parties in the '606 patent.
- 16 Is it your understanding, sir, that Anascape 17 essentially sold the '606 patent to Sony?
- 18 A. I wouldn't use that word --
- 19 Q. All right.
- 20 A. -- myself, but I -- I really don't know the legal 21 definition of it.
- MR. GUNTHER: Kam, could we put up, from the
 March 18th session of Mr. Armstrong's deposition, at
 page 591, line 9 -- beginning on line 9?
- And could we highlight lines 9 to 19?

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BY MR. GUNTHER:
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This is a question that I asked you, basically the same question I just asked you a moment ago. then -- this is from Section 2.2 of the license: This transfer is of a capital asset by each of the Anascape parties in accordance with -- this title. And I was reading the various paragraphs.

(Reading) Now, is it your understanding that Anascape was essentially selling the '606 patent to Sony --

There is an objection.

Question: -- is that right?

Answer: "Sale" meaning transfer of all rights without limit, is that what you meant by --

> Question: That's --

Answer: I think that's essentially true, yes.

Did you -- were you asked those questions, and did you give those answers in March of 2008 in your deposition?

- I'm not even clear what this says, but I have no 22 way to -- you know, I wouldn't dispute that this is a 23 real transcript, no.
- 24 Q. And you wouldn't dispute that you told the examiner 25 that -- you answered "yes" to the fact that it's

- essentially true that Anascape was essentially selling the '606 patent to Sony. That was the question; and that was your answer, right?
- 4 A. No, sir.
- 5 Q. That's not what that says? That's not what I just 6 read to you?
- A. Well, I think that I'm saying, sale -- I'm asking him does sale mean, you know, transfer of all rights without limit, is that what you meant. And then there's some "that's" I don't understand and then "I think that that's essentially true, yes," meaning I think that -- you know, this is a transfer of all rights.
- 13 Q. Right. So --
- 14 A. It's an exclusive transfer of all rights.
- 15 Q. Right. So --
- A. You know, honestly, right now I'm feeling very
 afraid because I think you're trying to pull some legal
 trick on me. I have no idea what the word "sale" means
 as far as exclusive rights.
- 20 Q. I'll make a deal with you. If I'm going to trick
 21 you, I'll raise my hand. How about that? And everybody
 22 can see. All right?
- Now, sir, I just want to ask you a very
 simple question. This isn't hard. Did you tell me in
 your deposition that the '606 transfer was essentially a

1 sal e?

- 2 A. It was an exclusive license. That's exactly what 3 it was.
- 4 Q. Okay. That's the best you can do, sir? Is that 5 the best you can do?
- 6 A. That's what it was.
- 7 MR. GUNTHER: Okay. Why don't we go back to 8 the license agreement.
- 9 BY MR. GUNTHER:
- 10 Q. Now, '606, exclusive license.
- MR. GUNTHER: Now, Kam, can you put up the
- 12 next part?
- 13 BY MR. GUNTHER:
- 14 Q. Now I'm going to bring up another paragraph, which15 is paragraph 3.1. It's "Payment." Do you see that?
- 16 And it says: 3.1. Sony shall pay the
- 17 Anascape parties \$10 million no later than July of 2004
- 18 in consideration for Sony's receipt of all substantial
- 19 rights in the patent described in 2.2 above.
- 20 2.2 is the '606 patent, right?
- 21 A. (Pausing.)
- 22 Q. Are you with me?
- 23 A. I'm trying to be.
- 24 Q. Okay. Let's try it again. 2.2 gives an exclusive
- 25 license to the '606 patent from Anascape to Sony. And

- Sony, in 3.1, pays \$10 million to Anascape for that license.
- Isn't that what's up on the screen right now?
- 4 A. Yes, sir, that's correct.
- 5 Q. So, the payment by Sony was for the '606 patent.
- 6 That's not a patent that's involved in this lawsuit,
- 7 right?
- 8 A. That's correct.
- 9 Q. And as a matter of fact, you agree that Nintendo
- 10 does not infringe that patent, correct?
- 11 A. I might have, but it's not at issue here.
- 12 Q. Right. And, sir -- so, '606, the 10-million-dollar
- 13 payment is for that. That's not involved in this case,
- 14 is it?
- 15 A. The '606 patent is not involved in this case, yes,
- 16 sir.
- 17 Q. Okay. So, that's Part 1 of the Sony license.
- 18 Let's look at part 2.
- MR. GUNTHER: Let's put up the next, if we
- 20 can, Kam.
- 21 BY MR. GUNTHER:
- 22 Q. This is 2.3. So, this is really a second part of
- 23 the license agreement. We got the \$10 million for the
- 24 '606, right?
- 25 A. (Pausing.)

- 1 Q. (Demonstrating.) Just kidding.
- 2 A. Oh, you're trying to trick me?
- 3 Q. So, now, this --
- 4 A. What's the question?
- 5 Q. Okay. Let me ask the question. So, in 2.3, what the Anascape parties do is they give -- no, that's the wrong paragraph. Excuse me. Let me see if I can get the right paragraph.
- 9 MR. GUNTHER: And that's my fault, Kam.
- 10 That's not yours. It's 3.2. 3.2.
- 11 BY MR. GUNTHER:
- 12 Q. Now, this is 3.2. This is another part of the
- 13 license. It says: The Anascape parties' right to the
- 14 nonexclusive use of the Sony patents and permitted third
- 15 parties' right, et cetera, to all of the licensed
- 16 Anascape patents described in 2.1 that's talked about.
- MR. GUNTHER: Let's bring that down, if we
- 18 can, Kam; and let's put on top of that -- let's put 2.1
- 19 on top of that. Let's have 3.2 on the bottom and 2.1 on
- 20 the top.
- 21 BY MR. GUNTHER:
- 22 Q. Just give me a second, Mr. Armstrong. We'll get
- 23 there.
- 24 A. I don't mind looking at a 10-million-dollar
- 25 license. I like it.

- 1 Q. Now, sir, let's look at the first sentence of 2.1.
- 2 This is now not talking about the '606 patent; it's
- 3 talking about the Anascape parties hereby grant a
- 4 nonexclusive, irrevocable, worldwide license under all
- 5 of the Anascape patents -- licensed patents except the
- 6 one in 2.2, which was the '606, right?
- 7 MR. GUNTHER: Let's highlight that whole
- 8 first sentence, if we can, Kam.
- 9 A. Yes, sir.
- 10 BY MR. GUNTHER:
- 11 Q. So, the structure of the license is '606, exclusive
- 12 license for \$10 million, right?
- 13 A. Yes, sir.
- 14 Q. And then all of your other patents are then
- 15 licensed; and some cross-licenses from Sony come in,
- 16 right?
- 17 A. Yes, sir.
- 18 Q. And one of the patents that was nonexclusively
- 19 licensed to Sony in 2.1 is the application that led to
- 20 the '700 patent, right?
- 21 A. Say that again, please.
- 22 Q. One of the applications that's listed -- that's
- 23 included in your -- in all of the rest of the licenses,
- 24 everything that's thrown in under 2.1, one of those was
- 25 the application for the '700 patent, right?

A. Yes, sir.

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- 2 Q. And that's because it was an application because in 2004 when the license was signed, at that point in time 4 it wasn't a patent yet, right?
- 5 A. Yes. It was a patent application, yes, sir.
 - Q. It was an application.

So, all of your other patent rights are included in that nonexclusive cross-license.

MR. GUNTHER: Now let's look at 3.2, and let's actually -- we're going to have to get a little bit more of -- let's see if we can squeeze 2.1 up a little bit. Oh, I'm sorry. Let's put 3.2 in its entirety, then. Thanks, Kam. The wonders of technology.

- 15 BY MR. GUNTHER:
- So, Mr. Armstrong, now we've got 3.2 up; and this 16 Q. is basically talking about all of the patents that were 17 thrown in in the nonexclusive license that included your 18 19 '700 application. And I want to focus on the sentence 20 that begins, right at the bottom, before the blue line: Due to the uncertainty as to the value of any of these 21 22 patents that are subject of the provisions of the 23 cross-license, the parties agree and acknowledge that they are unable to arrive at an appropriate royalty for 241 25 these licenses.

That's what it says, right?

- A. Yes, sir, it says that.
- 3 Q. So, sir -- and you didn't talk about that on your 4 direct examination, did you?
- 5 A. I don't think so.
 - O. Okay. So, the patent application that became the '700 that was included in the Sony license, that was one of the ones that due to the uncertainty as to the value of that application, the parties agree and acknowledge they are unable to arrive at appropriate royalty rates, right? That was one of them that was in that group.
- 12 A. Yes, sir.

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- Q. And let's look at the last sentence. This talks about the '700 application, too: Accordingly, the parties have agreed to forego any royalties or other payment of any kind for those patents subject to the cross-licenses.
- 18 Right?
- 19 A. Yes, sir.
- 20 Q. And that includes the '700 application, correct?
- 21 A. Yes, sir.
- 22 Q. So, what we've got in the Sony license is an
 23 exclusive license to the '606 patent that's not part of
 24 this case for which Sony paid \$10 million, right?
- 25 A. That's what this agreement says, yes, sir.

- 1 Q. And what we also have here is that everything else 2 was thrown in, including the '700 application, for zero 3 payment of money, correct?
- 4 A. Yes, sir.
- 5 Q. So, the '700 application, Sony paid zero for that 6 application. That's what this says, correct?
- 7 A. I'll give you the easy answer. Yes, sir.
- 8 Q. I like easy.
- 9 Mr. Armstrong, let me ask you this: In
- 10 2000 --
- 11 MR. GUNTHER: Kam, could you put the timeline
- 12 back up?
- 13 BY MR. GUNTHER:
- 14 Q. Mr. Armstrong, in 2002, when you wrote your claims
- 15 that you are suing here on today, the five claims in the
- 16 '700 patent, you had gotten a GameCube controller,
- 17 right?
- 18 A. I suspect I had, yes, sir.
- 19 Q. And you had taken it apart, right?
- 20 A. Probably had, yes, sir.
- 21 Q. And when you were writing those claims on that
- 22 controller with three inputs, two joysticks and a
- 23 cross-switch, when you wrote those claims, you were
- 24 copying the GameCube controller, right? You were
- 25 writing those claims onto that product, correct?

- 1 A. Yes, sir. I believed that it was covered by my 2 invention; and, so, I needed to write a claim that 3 covered it clearly.
 - Q. So, the answer to my question is "yes," right?
- 5 A. I don't know what the word "copying" means.
 - Q. Sir, I'll leave that out.

At the time that you wrote the claims in 2002, you had the GameCube in front of you. You had taken it apart, and you were writing those claims to cover, among other things, the two joysticks and the cross-switch in the GameCube controller, correct?

12 A. Yes, sir.

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- Q. And when you wrote claim 19, which is the only claim that's asserted against the Wii Remote plus the Nunchuk, when you wrote that claim, you had the Nintendo GameCube controller in front of you; and you were writing the claim specifically to cover that product, correct?
- A. Well, I write claims to express my invention, yes, sir. But I'm not sure that that claim was written for that product, no, sir.
- THE COURT: All right. Counsel, at this time we're going to take a break for lunch.
- Ladies and gentlemen, I'm going to ask you to be back at 1:30. Please remember my instructions.

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Don't discuss the case even among yourselves; and don't
let anybody else talk to you about it, obviously.
anybody should try to approach you or influence you, get
their name and report it.
           For your planning purposes, I have had a
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notice of an emergency hearing that I'm going to have to hold at the end of this afternoon; so, we will probably be breaking a little early, about 4:00 or ten past 4:00 because these parties are coming in and I've got to handle that matter. I don't like to interrupt this way, but I'll have to do that. So, we'll be breaking a little bit early and then starting again tomorrow at 8:45 in the morning. You're excused at this time for Lunch.

(The jury exits the courtroom, 12:15 p.m.) THE COURT: Anything to be taken up outside the presence of the jury from plaintiff's point of view? MR. PARKER: I do have one matter that I had hoped to discuss in chambers with the court with Mr. Germer.

THE COURT: Okay. Anything else to be 22 taken --

MR. PARKER: It won't take but a couple of minutes.

> THE COURT: Okay. Anything else to be taken

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   up outside the presence of the jury from defendant's
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   point of view?
 3
              MR. GUNTHER:
                             No, your Honor.
              THE COURT:
                          All right. In that case we are
4
   in recess until 1:30.
                          And if counsel from each side
   want to come back into chambers, that's fine.
7
              (Recess, 12:16 p.m. to 1:26 p.m.)
              (Open court, all parties present, jury
8
   present.)
              THE COURT:
                         All right. Counsel, go ahead
10
11
              MR. GUNTHER:
                             Thank you, your Honor.
12
   BY MR. GUNTHER:
        Mr. Armstrong, I think I'm getting close. Let me,
13
   0.
   if I can, hold up this controller. Can you see that,
14
15
   sir?
16
   Α.
        Yes, sir.
17
                            Your Honor, may I approach?
              MR. GUNTHER:
              THE COURT:
18
                         You may.
19
              MR. GUNTHER:
                            Thank you, sir.
   BY MR. GUNTHER:
20
        I'm going to hand this to you, Mr. Armstrong.
21
22
   again, I'm going to ask you to be a model for us; and if
   you could hold that up for the jury.
23
   Α.
        Okay. (Complying.)
24
25
        Sir, that's the Sony Dual Shock controller, correct?
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- 1 A. Yes, I think so.
- 2 Q. And that was released for the PlayStation console
- 3 in 1998, correct?
- 4 A. I'll take your word for it.
- 5 Q. Do you have any reason to doubt, sir, that that was
- 6 available in 1998?
- 7 A. No, sir.
- 8 Q. And, sir, that has the Sony -- that's called the
- 9 "Sony Dual Shock controller," right?
- 10 A. I think it is, yes, sir.
- 11 Q. And, sir, if you hold that up so we can all get a
- 12 little bit of a look at it, it's got a cross-switch on
- 13 there, right?
- 14 A. Are you talking about this (indicating) area here?
- 15 Q. Yes, sir.
- 16 A. Yes, I believe so.
- 17 Q. Or sometimes people call it a "D-pad," right?
- 18 A. Yes, I've heard it called that.
- 19 Q. What does that stand for?
- 20 A. I don't know.
- 21 Q. "Directional pad," does that sound right?
- 22 A. That sounds reasonable.
- 23 Q. Okay. So, it's got a cross-switch. It has two
- 24 joysticks. And does it have vibration?
- 25 A. I can't tell you.

- 1 Q. Okay. Sir, let me ask you this. Let me put up on 2 the screen, sir, what's been marked as Defendant's 3 Exhibit 97.
- What we've put up on the screen is a press release that was released by Sony in May of 1998.
 - MR. GUNTHER: Kam, can you blow up where it says "body" and then there's a date, a little bit down?

 BY MR. GUNTHER:
- 9 Q. Okay. So, this is a May 27, 1998, press release.
- 10 Do you see that, sir?

- 11 A. I see that date, yes, sir.
- 12 Q. Okay. And, sir, if you look, it says: Headline:
- 13 New PlayStation game controller to include DualShock
- 14 Analog Controller as standard pack-in for 149.
- Do you see that?
- 16 A. Yes, sir.
- 17 Q. So, that's May of 1998. Right?
- 18 A. Yes, sir.
- 19 Q. Now, if you look a little bit further down, it
- 20 says -- under the body it says -- right under the date
- 21 it says: Addition of dual vibrating controller provides
- 22 added value and unrivaled gaming experience for millions
- 23 of new PlayStation owners.
- 24 Do you see that, sir?
- 25 A. Yes, sir.

- 1 Q. Now, sir, what you have in front of you again --
- 2 please, if you wouldn't mind holding it up. That's the
- 3 DualShock; and, sir, that is, in fact, what we're
- 4 talking about here, right?
- 5 A. I think so.
- 6 Q. And, sir, if you are thinking correctly, then it
- 7 does have active tactile feedback, correct?
- 8 A. Yes. If this is what's described in that document,
- 9 yes, sir, it would.
- 10 Q. It has rumble, right?
- 11 A. Yes, sir.
- 12 Q. So, that's 1998 that's on the market. That's
- 13 before your application that was filed for the '700
- 14 patent in November of 2000, right?
- 15 A. Yes, sir.
- 16 Q. And, sir, if you -- let me ask you this: You agree
- 17 with me, don't you, that the Sony Dual Shock controller
- 18 that you have in front of you has all of the elements of
- 19 claim 19 of your patent, correct?
- 20 A. I'm not sure about that, no, sir.
- 21 Q. Well, sir, do you have any reason to doubt that, in
- 22 fact, it has all the elements of claim 19?
- 23 A. I would have to go over that.
- 24 Q. Okay. Sir, does it have -- let me ask you to
- 25 compare it to the GameCube controller. Can you do that

- 1 with me?
- 2 A. The GameCube controller?
- 3 Q. Yes, sir. Do you have the GameCube in front of
- 4 you?
- 5 A. Yes, sir.
- 6 Q. All right. Can you hold them both up for me?
- 7 A. Yes, sir (complying).
- 8 Q. Does the Dual Shock and the GameCube both have a
- 9 cross-switch?
- 10 A. Yes, sir.
- 11 Q. Does the Dual Shock and the GameCube both have two
- 12 analog joysticks?
- 13 A. Yes, sir.
- 14 0. Does the Dual Shock and the GameCube both have
- 15 proportional buttons?
- 16 A. I don't think so, no, sir.
- 17 Q. Okay. Let's leave that one aside.
- 18 Do the Dual Shock and the GameCube both have
- 19 built-in rumble?
- 20 A. I think so, yes, sir.
- 21 Q. Do the Dual Shock and the GameCube both have
- 22 independent finger-pressible [sic] buttons?
- 23 A. I think so, yes, sir.
- 24 Q. Okay. Now, the Dual Shock was out in 1998, before
- 25 your 2000 application that led to the '700 patent,

right?

- A. I think so, yes, sir.
- 3 Q. And, sir -- so, if you can't get back to 1996, if 4 you can't say that those 2002 claims are the same as
- 5 what you've put in the warehouse in 1996, then the
- 6 Dual Shock controller invalidates claim 19 of your
- 7 patent; isn't that correct?
- 8 A. I believe all my claims are based on the 19969 patent application.
- 10 Q. Now, I'm asking you to work with me on this -- in
- 11 this respect. I know that's your testimony, but I'm
- 12 asking you to do this for me. Suppose the jury ends up
- 13 disagreeing with you. Suppose the jury concludes that
- 14 you can't get back to 1996 because you, in fact, changed
- 15 your invention. If that happens, if that's the case,
- 16 wouldn't you agree with me, won't you admit that the
- 17 Dual Shock controller from Sony invalidates claim 19 of
- 18 your patent?
- 19 A. I don't know for sure. No, sir.
- 20 MR. GUNTHER: Kam, could we put up from
- 21 Mr. Armstrong's March 18, 2008, deposition, the
- 22 transcript at 425, lines 17 to 25? And for the record,
- 23 the Dual Shock controller is Defendant's Exhibit 103.
- 24 BY MR. GUNTHER:
- 25 Q. Okay. Sir, this is your deposition in March, two

- months ago in Tyler, when we sat down and I asked you some questions, right?
- 3 A. Okay.
- 4 Q. "Okay" means "right," right? It means "yes"?
- 5 A. I presume that it's from then, yes, sir.
- 6 Q. And, so, there is the question: Sir, I'm asking
- 7 you -- that's not my question. My question is: If the
- 8 jury in this case or Judge Clark makes a determination
- 9 that your earliest date of invention is November 16,
- 10 2000, the filing date of your '700 application, does the
- 11 Sony Dual Shock invalidate claims 19 and 20 of your
- 12 patent?
- There is an objection.
- And then there is your answer: If there was such a determination, it probably would.
- Did I ask you that question, and did you give
- me that answer on March 18th, 2008, in Tyler, Texas?
- 18 A. I probably -- you probably did ask me that
- 19 question; and I probably did give you this answer, yes,
- 20 sir.
- 21 Q. Thank you, sir.
- Now I want to ask you one more thing. I'm
- 23 holding up the Wii Remote. We've talked a lot about
- 24 that, right, Mr. Armstrong?
- 25 A. A little, yes, sir.

- 1 Q. Okay. The Wii Remote has got the accelerometer in
- 2 it, right?
- 3 A. I believe it does, yes, sir.
- 4 Q. And it allows the sensing of body motions so you
- 5 can do all different kinds of games that really are kind
- 6 of new and different. Wouldn't you agree with me on
- 7 that?
- 8 A. Yes, sir.
- 9 Q. Sir, this Wii Remote by itself does not infringe
- 10 any claims that you're asserting against Nintendo from
- 11 the '700 patent, correct?
- 12 A. By itself, it does not infringe any of the current
- 13 claims, yes, sir.
- 14 Q. And there is only one claim that's asserted against
- 15 the Wii Remote plus the Nunchuk; and that's claim 19,
- 16 right?
- 17 A. I believe that's true, yes, sir.
- 18 Q. So, all the money that you're asking for, 90
- 19 percent of it -- over 90 percent of it is on the Wii
- 20 Remote plus the Nunchuk, and it's all hinged on claim 19
- 21 whether there is infringement. Isn't that fair?
- 22 A. I have no idea the proportion of money.
- 23 Q. Okay. All right. But leaving aside the proportion
- 24 of money, isn't it fair that whether or not you win on
- 25 the game -- on your infringement claim with respect to

- 1 the Wii Remote plus the Nunchuk, there is only one claim
- 2 to consider, just one, claim 19, right?
- 3 A. I believe that's correct.
- 4 Q. And claim 19 is not infringed by the Wii Remote by 5 itself, correct?
- 6 A. I believe that's correct.
- Q. So, remember the commercial that I showed during
 the opening statement where you see some people bowling?
 Is that an infringement of your patent when the Wii
- 10 Remote is used like that?
- 11 A. I don't remember the commercial.
- 12 Q. Well, forget the commercial. You know the bowling
- 13 game in Wii Sports?
- 14 A. Okay.
- 15 Q. When that game -- when somebody is playing that
- 16 game with the Wii Remote by itself, are they infringing
- 17 claim 19 of your patent?
- 18 A. I don't believe so.
- 19 Q. When they're playing the baseball game, when they
- 20 use the Wii Remote as a baseball bat, by itself, do they
- 21 infringe claim 19 of your patent?
- 22 A. I think there have been some infringement analyses
- 23 that I don't know what they are. And, so, on the
- 24 previous question, the bowling, I don't know.
- 25 Q. So, your answer is you don't know?

- 1 A. There's professionals that have determined this.
- 2 Q. I see. But did you talk to the professionals?
- 3 A. I have talked to them, yes.
- 4 Q. Because you're the head of Anascape, aren't you?
- 5 A. Yes, sir.
- 6 Q. You're not just the inventor of the '700 patent;
- 7 you're the majority owner of Anascape, right?
- 8 A. Yes, sir, I am.
- 9 Q. How much of an ownership interest do you have in
- 10 Anascape?
- 11 A. I think it's 56 percent.
- 12 Q. Fifty-six percent.
- 13 A. Roughly.
- 14 Q. Okay. So, you have a 56 percent ownership in that;
- 15 so, you have majority control of Anascape.
- 16 A. Yes, sir, I do.
- 17 Q. So, you're in charge of Anascape. Is that fair?
- 18 A. Yes, sir.
- 19 Q. And you made a decision to bring this lawsuit,
- 20 didn't you?
- 21 A. Yes, sir.
- 22 Q. And, sir, is it your testimony that you, as the
- 23 head of Anascape, the person who authorized this filing
- 24 of this lawsuit -- is it your testimony that you don't
- 25 know, as you sit here today, whether when someone plays

- bowling with the Wii Remote by itself, whether it
 infringes claim 19 of the '700 patent? Is that your
 testimony?
- 4 A. My testimony is that there are professionals that 5 have determined that, and that's what I -- I want to 6 rely on their opinions.
- 7 Q. And what did the professionals tell you, as the 8 head of Anascape, with respect to that question?
- 9 A. I don't think they described the bowling game or 10 any of those games.
- 11 Q. So, you never asked them that question. Is that 12 fair?
- 13 A. No, I didn't ask that question.
- 14 Q. Okay. And, so, as you sit here today in that
 15 witness stand as the head of Anascape, you can't tell me
- 16 or this jury or the judge whether or not when we play
- 17 bowling with the Wii Remote by itself, it infringes your
- 18 patent. Is that your testimony?
- 19 A. My understanding is that there are no claims right20 now that describe the Wiimote by itself.
- 21 Q. Well, when you say "there are no claims right now,"
- 22 we're only here about the '700 patent, right?
- 23 A. Yes, sir.
- Q. We're not here about what might happen sometime in
- 25 the future, correct?

A. That's correct.

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2 Q. All right. So, what we're talking about and what
3 this jury is going to have to decide is not something
4 that you may do later, what you've done with respect to
5 the '700 patent. In the '700 patent you will admit to
6 me, will you not -- maybe you can just give me the easy
7 answer, Mr. Armstrong.

When I'm using the Wii like a baseball bat to play Wii baseball and Wii Sports with the Wii Remote by itself, I'm not infringing your patent, am I?

- 11 A. Well, you're kind of confusing me because you're
 12 describing a method or a process, you know, kind of
 13 something that you're doing, versus the device itself.
- 14 And, so -- but I don't think you would be, no, sir.
- 15 Q. So, the device itself when it's used in that way 16 doesn't infringe claim 19 of your patent, right?
- 17 A. I'm just going to rely on the experts.
- 18 Q. And is the answer to the question it doesn't 19 infringe?
- 20 A. The answer is I'm going to rely on the experts for that.
- 22 Q. All right. Thank you very much.
- MR. GUNTHER: I have no further questions.
- 24 A. Thank you, sir.
- MR. CAWLEY: May I ask some redirect

questions, your Honor?

REDIRECT EXAMINATION OF BRAD ARMSTRONG

3 BY MR. CAWLEY:

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- 4 Q. Mr. Armstrong, I have just a few questions that I'd Iike to ask you just to clarify some of the matters that 6 the jury heard about on your cross-examination.
 - You were asked about a lot of things that you testified you didn't invent. Do you remember that?
- 9 A. Yes, sir.
- 10 Q. You said you didn't invent circuit boards, you
- 11 didn't invent thumbsticks, you didn't invent
- 12 potentiometers, and a lot of other things you didn't
- 13 invent.
- 14 A. Yes, sir.
- 15 Q. Let me ask you a few more. Here's a GameCube
- 16 controller. Did you invent plastic?
- 17 A. No, sir.
- 18 Q. Did you invent wires?
- 19 A. No, sir.
- 20 Q. Did you invent buttons?
- 21 A. No, sir.
- 22 Q. What did you invent, Mr. Armstrong?
- 23 A. Well, I invented a collection of items that all
- 24 together make for a terrific video game controller.
- 25 Q. Are all of those things you were asked by

- Nintendo's lawyer this morning that you didn't invent -- are those all like building blocks?
- 3 A. Yes, sir, they are.
- 4 Q. Are they inventions?
- 5 A. You know, all of those things -- wire, plastic,
- 6 joysticks -- at one time in the way distant past, each
- 7 one of those things was an invention, I'm sure. But now
- 8 they're just -- they are like common building blocks.
- 9 Yes, sir.
- 10 Q. And did you put those building blocks and some
- 11 other building blocks and take them and describe those
- 12 building blocks to the Patent Office in your warehouse
- 13 application in 1996?
- 14 A. Yes, sir.
- 15 MR. GUNTHER: Objection, leading.
- 16 THE COURT: Sustained.
- 17 BY MR. CAWLEY:
- 18 Q. What did you do with those building blocks in 1996?
- 19 A. I had this warehouse patent application and it had
- 20 a lot of inventive material in it and I combined them in
- 21 inventive ways in which the -- to basically build
- 22 something with the building blocks. And then the Patent
- 23 Office, you know, makes an assessment of that.
- Q. And when you filed the application that became the
- 25 patent in this lawsuit, in 2000, did you describe to the

- 1 Patent Office what you thought was a new way of putting
- 2 those building blocks together?
- 3 A. Yes, sir, I surely did.
- 4 Q. And after the five years of examination, did the 5 Patent Office agree with you?
- 6 A. Yes, sir, they did.
- Q. You were asked a lot of questions about the single member of control. Is a single member of control one of the things that you disclosed in your application in
- 10 1996?
- 11 A. Yes, sir.
- 12 Q. Is it the only thing that you disclosed?
- 13 A. Oh, no, sir. It's like one building block.
- 14 Q. Let's take a look at Figure 4 from that application
- 15 briefly, something you were shown in your
- 16 cross-examination.
- THE COURT: And for the record, is this the
- 18 2000 application or the '96 application?
- 19 MR. CAWLEY: Thank you, your Honor. It's the
- 20 '96 application.
- 21 BY MR. CAWLEY:
- 22 Q. Is the ball that's Number 12 a member of control
- 23 thereto -- I'm sorry. Bad question.
- Is the ball that's labeled Number 12 a member
- of control, something that you can use to control?

- 1 A. Yes, sir.
- 2 Q. But is it the only member of control that's shown
- 3 in this drawing?
- 4 A. No, sir.
- 5 Q. Let's take a look at Figure 9. We saw that before.
- 6 Is the ball that's labeled Number 12 there a member of
- 7 control?
- 8 A. Yes, sir.
- 9 Q. Is it the only one?
- 10 A. No, sir.
- 11 Q. Are there others?
- 12 A. Yes, sir.
- 13 Q. What are they?
- 14 A. There's the Number 16 which I call a collet. And
- 15 then there's the buttons, 136.
- 16 Q. And let's take a look at Figure 20. That's the one
- 17 with the handle at the very top, correct?
- 18 A. Yes, sir.
- 19 Q. And in this figure we can still see those two
- 20 little buttons on the front of it, right?
- 21 A. Yes, sir.
- 22 Q. Does this show a single member of control?
- 23 A. Yes, at least. Yes, sir, it does.
- 24 Q. What else does it show?
- 25 A. It shows additional input members.

- 1 Q. Now, Mr. Armstrong, did you ever suggest in your
- 2 '96 application that it might, under some
- 3 circumstances -- sorry -- be a good idea to take some of
- 4 the control from the ball and put it somewhere else?
- 5 A. Yes, sir.
- Q. Can you explain what this tells us, particularlythe last sentence here that I've got highlighted?
- 8 Let me read it.
- 9 A. Right.
- 10 Q. (Reading) The rotatable collet of Figures 5 through
- 11 6 may at least for some users be an easier process to
- 12 achieve rotation about the yaw axis as compared to
- 13 rotating trackball 12 at least in terms of rotation
- 14 about yaw.
- 15 A. Yes, sir.
- 16 Q. Is yaw one of the 6 degrees of freedom of movement?
- 17 A. Yes, sir.
- 18 Q. And does this suggest taking it out of the ball and
- 19 putting it into the collet?
- 20 A. Yes, sir, it does.
- 21 Q. Now, Mr. Armstrong, I believe you -- you testified
- 22 in cross-examination that at various times after you'd
- 23 filed your continuation application in 2000, you wrote
- 24 claims in that patent to cover the Nintendo GameCube
- 25 controller; is that right?

- 1 A. Yes, sir.
- 2 Q. Is there anything wrong with that as far as you
- 3 know?
- 4 A. No, sir.
- 5 Q. Did you hear Judge Clark's instruction about that
- 6 yesterday?
- 7 A. I believe he did give one, yes, sir.
- 8 Q. And did he say that there's nothing wrong with 9 that?
- 10 A. That's my understanding, yes, sir.
- 11 Q. You also testified -- and we just heard a lot of
- 12 testimony from you about the bowling game and so forth
- 13 and the Wii Remote. Do you remember that?
- 14 A. Yes, sir.
- 15 Q. And why -- whether you had accused the Wii Remote
- 16 and you said that you talked to experts and so forth and
- 17 so on.
- Now, does Nintendo make many products that
- 19 you're aware of?
- 20 A. Yes, sir.
- 21 Q. Do they all infringe your patents?
- 22 A. No, sir.
- 23 Q. Have you even accused the Wii Remote by itself of
- 24 infringing in this lawsuit?
- 25 A. No, sir.

- 1 Q. What have you accused of infringing as far as the
- 2 Wii Remote goes?
- 3 A. The Wii --
- MR. GUNTHER: Objection, your Honor. The witness testified in cross-examination that he didn't know and it was up to the expert.
- 7 THE COURT: Overruled.
- 8 A. My understanding is that the Wii Remote connected 9 to the Nunchuk is accused.
- 10 BY MR. CAWLEY:
- 11 Q. You've accused that combination of infringing; is
- 12 that correct?
- 13 A. Yes, sir.
- 14 Q. So, whether the Remote by itself infringes has
- 15 nothing to do with anything you've claimed in this
- 16 lawsuit, does it?
- 17 A. That's correct.
- 18 Q. And let me ask you some questions about Kelly
- 19 Tyler. You were asked several questions about him, and
- 20 Nintendo's lawyer persisted in referring to him as "the
- 21 money guy. " Do you remember that?
- 22 A. Yes, sir.
- 23 Q. How long have you known Mr. Tyler?
- 24 A. Well, let's see. It's 12 or 13, 14 years,
- 25 something like that.

- 1 Q. Do you consider him your money guy?
- 2 A. Oh, no, sir.
- 3 Q. Have you spent time with Mr. Tyler outside of
- 4 business matters?
- 5 A. Yes, sir.
- 6 Q. Have you been to his house?
- 7 A. Yes, sir, I have.
- 8 Q. Met his wife?
- 9 A. Yes, sir.
- 10 Q. Met his children?
- 11 A. All of them.
- 12 Q. Has he been to your house?
- 13 A. Yes, sir, he has.
- 14 Q. Has he spent the night at your house when he's
- 15 traveled to Tyler to meet with you?
- 16 A. Yes, sir.
- MR. CAWLEY: Let's bring up Defendant's
- 18 Exhibit 211 and highlight, if we can, the middle of the
- 19 page there, the analog buttons.
- 20 BY MR. CAWLEY:
- 21 Q. This was the email from Mr. Kelly to you; is that
- 22 right? I know it's a little confusing. Actually the
- 23 whole --
- 24 A. I think --
- 25 Q. Let me start over. The whole document was an email

- 1 from Mr. Kelly to you; but in the middle of it was a
- 2 reproduction of an email that you had first sent to him,
- 3 right?
- 4 A. I believe that's correct, yes, sir.
- 5 Q. And this statement: Analog buttons, four
- 6 exclamation points, you wrote that, right?
- 7 A. Yes. That looks like my -- I wrote that.
- 8 Q. Why did you put four exclamation points after that?
- 9 A. It was very exciting.
- 10 Q. Why?
- 11 A. It appeared to me that Nintendo was going to make
- 12 my controller.
- 13 Q. Why were you excited about that?
- 14 A. Well, I always like to see my inventions get made.
- 15 Q. Did you think that it would increase your chances
- 16 of getting a license from Nintendo?
- 17 A. I would hope so, yes, sir.
- 18 Q. Now, we also saw an email -- and I won't take the
- 19 time to pull this one up -- where Mr. Tyler was making
- 20 some suggestions to you about maybe how your claims
- 21 should be written in the patents that you were applying
- 22 for. Do you remember that?
- 23 A. Which one?
- 24 Q. Well, it's that -- go ahead.
- 25 A. Are you talking about the one that Mr. Gunther --

- 1 Q. Yes. Yes. Yes.
- 2 MR. GUNTHER: Mr. Cawley, it's Defendant's
- 3 Exhibit 214.
- 4 A. Point Number 3 on that?
- 5 BY MR. CAWLEY:
- 6 Q. Right.
- 7 A. Yes, sir.
- 8 Q. Do you think there is anything wrong with your
- 9 friend and business partner, Mr. Tyler, making
- 10 suggestions to you about how you should prosecute your
- 11 patents?
- 12 A. No, sir.
- 13 Q. Were you grateful to have someone to talk to --
- 14 A. Yes.
- 15 Q. -- about the issues involved in your patent
- 16 prosecution?
- 17 A. I'm very thankful.
- 18 Q. I mean, after all, you're not doing this through a
- 19 lawyer, are you?
- 20 A. Yes. I'm -- you're right.
- 21 Q. And, finally, let me ask you just a couple
- 22 questions about the Sony agreement. We walked through
- 23 that agreement in a lot of detail in your
- 24 cross-examination and I won't take the time to do that
- 25 again, but let me just ask you about the big picture.

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              At the end of the Sony deal, did Anascape
1
   walk away with $10 million?
3
   Α.
        Yes, sir.
        And the right to use some Sony patents?
4
   0.
5
   Α.
        Yes, sir.
        And at the end of the deal, did Sony walk away with
6
   Q.
   the right to use all of your game control patents?
        Yes, sir; and that was the critical element.
8
   Α.
9
   0.
        Well -- and did it include the '700 patent that's
   involved in this lawsuit?
10
11
   Α.
        Yes, sir, it did.
12
              MR. CAWLEY:
                          Pass the witness, your Honor.
13
              THE COURT:
                           All right. You may step down,
14
   sir.
15
              Next witness.
              MR. CAWLEY: Call Professor Robert Howe.
16
17
              THE COURT:
                           Step forward, please, sir.
18
              (The oath is administered.)
                          May I proceed, your Honor?
19
              MR. CAWLEY:
20
              THE COURT:
                           Go ahead, counsel.
21
               DIRECT EXAMINATION OF ROBERT HOWE
               CALLED ON BEHALF OF THE PLAINTIFF
22
23
   BY MR. CAWLEY:
24
        Professor Howe, would you introduce yourself to the
   Q.
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25

jury, please?

- 1 A. Certainly. I'm Robert Howe. I'm a professor of2 engineering at Harvard University in Cambridge,
- 3 Massachusetts.
- 4 Q. Why are you here, Professor Howe?
- A. Well, Anascape has hired me to give my expert
 opinion on the technology in the patents and to
 investigate whether the Nintendo controllers infringe
- 8 those -- that patent.
- 9 Q. Now, Professor Howe, earlier today Judge Clark
 10 reminded us all that it's actually the claims that
- 11 define infringement of the patent. Are you the man
- 12 who's here to talk about the claims?
- 13 A. Yes, indeed. I have considered them most14 carefully.
- 15 Q. And what opinion have you arrived at?
- 16 A. It is my opinion that the Nintendo controllers do
 17 infringe those claims.
- 18 Q. All right. I'd like to go through your opinion in
- 19 a good bit of detail to make sure that we all understand
- 20 how you arrived at it; but before we do that, can you
- 21 tell the jury how you do work like this? What kind of
- 22 things did you consider in this case?
- 23 A. Sure. I -- well, I considered quite a few things.
- 24 First of all, the controllers, I ordered those over the
- 25 Internet; and when I got them home, I took them apart

and looked carefully into them and figured out how they work.

Of course, I also read through the patent many times and the patent history file, that patent prosecution file from the Patent Office.

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Let's see. I played a few video games. I'm not a big gamer myself, but I did confirm that the controllers work the way they are described in the claims.

- Let's see. I went through dozens of documents provided by Nintendo; and I also reviewed the depositions, the records of the testimony by various Nintendo employees and experts and all.
- 14 Q. And have you sat through some of the testimony at 15 the trial so far?
- 16 A. Yes, I have, not all of it but most of it.
- 17 Q. Before we go on, I'd like the jury to be able to
 18 learn a little more about you. Tell us where you went
 19 to college.
- 20 A. Sure. I went to college in Portland, Oregon, at 21 Reed College. I majored in physics there.
- 22 Q. And what did you do after that?
- A. Well, after that I worked in the electronics
 industry down in Silicon Valley in California, where I
 was an electrical engineer.

Q. And then what?

- 2 A. After that, I went to graduate school at Stanford 3 University in California; and I got a master's degree 4 and then a PhD in mechanical engineering.
- O. And did you specialize in anything at Stanford
 while you were getting a master's degree and a doctor's
 degree?
- 8 A. Sure. My doctoral research in particular was on 9 robotics; and I looked at how to give robots an 10 effective sense of touch; so, new tactile sensors and 11 that sort of thing.
- 12 Q. Just so we'll understand, what is robotics?
- 13 A. Oh, that's -- well, in a general sense, it's how to
 14 make a robot that duplicates a lot of the functions of
- 15 people. And I was particularly interested in robot
- 16 hands at that time.
- 17 Q. And after you got your PhD at Stanford, what did 18 you do then?
- 19 A. Well, I went to Harvard, where I joined the
- 20 faculty. I started out as an assistant professor and
- 21 since then I've worked my way up through the ranks
- 22 through associate professor and now I'm a full
- 23 professor.
- 24 Q. Do you teach at Harvard?
- 25 A. I do. Every year I teach -- well, lately I've been

- teaching a freshman course for brand-new engineering students on machine design and computer-aided design.

 And then I've taught various classes at different levels, up to graduate level courses for doctoral students, in things like robotics and human-machine interfaces.
- 7 Q. Now, you used a phrase there that you teach 8 graduate students about "human-machine interfaces." 9 What do you mean by those three words?
- A. Well, it's kind of a broad term. It refers to finding good ways for people to control complicated systems. So, for instance, finding good ways for people to control robots that are in remote locations, like exploring outer space or under the ocean, or controlling complicated computer systems, which could even include video games.
- 17 Q. Do you have a research lab at Harvard?
- A. I do. I've got about a dozen graduate students and postdoctoral fellows; and we do research in robotics, again, and these human-machine interfaces.
- 21 Q. Now I'd like to ask you at this time, Professor
 22 Howe, to give us a general description of the features
 23 of some of the controllers you looked at. And let's
 24 start with Plaintiff's Exhibit 413.
- MR. CAWLEY: May I approach, your Honor?

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THE COURT:
                          You may.
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              MR. CAWLEY: And, your Honor, at this time we
3
   have exemplars of this exhibit that we would request to
   present to the jury during Dr. Howe's testimony.
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              THE COURT:
                          One for each of them?
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              MR. CAWLEY:
                          Yes, your Honor.
7
              THE COURT:
                          Any objection?
8
              MR. PRESTA:
                           No objection.
9
              THE COURT:
                          All right. Go ahead.
10
              Now, is that a marked exhibit; or is that one
11
   of the demonstratives?
              MR. CAWLEY:
12
                           Once again, your Honor, the
   picture of that exhibit is marked.
13
              THE COURT:
                          What number?
14
15
              MR. CAWLEY:
                           413.
16
              THE COURT: All right. Ladies and gentlemen,
   the model you are holding is the actual thing.
17
                                                    In the
  jury room you'll see a picture marked Plaintiff's
18
   Exhibit 413.
19
20
              Go ahead, counsel.
21
              MR. CAWLEY: Thank you, your Honor.
22
              And, your Honor, could I request that since
23
   the professor will be showing the jurors various
24
   features of this controller, could be step down --
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              THE COURT:
                          PLease.
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MR. CAWLEY: -- in front of the jury box?
BY MR. CAWLEY:

Q. First of all, let me turn this microphone on.

Now, I think that the question that I asked you, Professor Howe, is: Can you explain to the jury the features of the controller that you have in your hand?

A. Certainly. Happy to do that. So, you've all figured out by now, I'm sure, you hold it in two hands like this and you'll see there are a couple of joysticks or thumbsticks and they are thumbsticks, of course, because you put your thumbs on them very carefully and they move in two directions. You can move them up and down. You can move them right and left. So, there are two different directions you can use there and, of course, any combination they'll move around.

Down here we have this cross-switch or D-pad, directional pad. It goes by different names. I'm going to call it the "D-pad" because that's what I'm used to. And that has four different directions you can push. So, again, you can go right, go left, go up, go down. This one you don't do combinations on. You pick one direction and push that. And you can feel a little click when you push it down. That's just to tell you that the switch is closed so you know that you actually

pushed it down.

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There are some other buttons on the face, some simple buttons; and then on the front here are a couple of triggers. Okay? And there's one under each of your index fingers; and then there is a little button above it, the purple one here. So, those are the basic input features of the device.

Now, there's --

- 9 Q. Okay.
- 10 A. -- one other feature that you can't see; and that's 11 this idea of a rumble motor, vibration feedback.
- 12 Q. Let me interrupt you because I have something to show you that may help you show that.
 - MR. CAWLEY: If I may approach the witness, your Honor.
- 16 THE COURT: You may.
- So, this is a disassembled version. The cover has 17 Α. been taken off. And the circuit board in here covers 18 19 up -- underneath here there is a little motor you can 20 see just peeking out there. And quite conveniently, we've packaged that up into a little box. You can see 21 22 there is a battery. Here is the motor on top. And as 23 you push it, you get a vibration. Okay?
- So, that's what you feel when you're playing the game if you run into a wall, that sort of thing,

however the game programmer decided to use that vibration.

BY MR. CAWLEY:

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- Q. Thank you. Now if you'll take a seat on the stand again.
- I'd like to ask you now, Professor Howe, about the subject of infringement. What is your understanding of how you can tell if something infringes a patent?
- 10 A. Okay. Well, I should start out by saying I'm not a
 11 lawyer; so, I don't know the intricacies of
 12 infringement. But I do know the basic idea and that is
 13 when you get a patent, you have to give a careful
 14 description of what's in that patent and those are the
 15 claims.

And then infringement refers to the situation where you have a product who -- that has all of the features described in that claim. So, if the claim describes all -- all of the features in the claim are present in the device, then it infringes the claim.

- Q. Okay. Now, let me -- just orient us again before we go on to make sure that everybody is literally on the same page of the patent. And the jury has a copy of the '700 patent, of course, in their notebooks; and we've
- 25 seen a lot of different excerpts from things.

- But in most patents, are there some drawings at the beginning?
- A. Yes, of course.

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- 4 Q. And then in most patents, are there a lot of words 5 called the "written description" in the middle?
- 6 A. That's right.
- 7 Q. And you've been in court for most of this trial;
 8 so, you've seen on the screen and elsewhere lots and
 9 lots of displays of some of those drawings and some of
 0 those written descriptions.
- 11 A. Yes, that's right.
- 12 Q. But, then, what are the claims; and where are they 13 in the patent?
- A. Well, the claims are at the very end. And in some sense, they are the real meat of the matter. They're the ones that give the detailed and very specific description of the inventions that are patented. Each one of the claims represents one invention so --
- 19 Q. And is that where you've gone to find out if there
 20 is infringement by these Nintendo products?
- A. That's right. That's the key thing you compare to the products to see if there is infringement.
- Q. Have you studied the claims -- at least some of the claims of the '700 patent to determine whether they are infringed by the Nintendo products that you've studied?

Yes, I have. Α.

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- Now, have you also used some definitions of certain terms or words in some of the claims of the patents?
- Α. The judge's -- Judge Clark here has given us 4 Yes. some claim construction orders in which he gives us the specific technical meanings of some of the words in the patent, in the claims, so that we can use those to understand exactly how we're supposed to interpret some of these words in deciding if there is infringement.
- And for all of the claims that you have considered, 10 11 have you applied all of the definitions that Judge Clark has given us for those claims? 12
- 13 Α. Yes. I have.
- So, tell us the process that we're about to go 14 15 through in looking at some of the actual claims of the patent. 16
- Sure. Well, again, the idea is we have to make sure that all of the elements in a claim are present in the invention. So, an analogy might be suppose you order something by mail, you know, a box of auto parts or perhaps the Sears Roebuck catalog, you order a bunch of different kind of clothes. Well, the mailman or UPS 22 23 driver brings a box; and you want to make sure that everything is in that box that's supposed to be. 241 you get your original order; and as you take things out

- of the box, you check them off so that you're sure that everything that's in that order is present in the box.
- 3 And that's what we'll do here with the claims. We'll go
- 4 through element by element -- it can be a little
- 5 tedious, but we have to do it -- to make sure that
- 6 everything listed in that claim is present in that
- 7 controller.
- 8 Q. Have you prepared something to sort of help us keep 9 track of that process?
- 10 A. Yes. We have a nice big poster. We can start with
- 11 claim 19.
- 12 Q. Okay. Now, is this claim 19 from the '700 patent?
- 13 A. Yes, it is. That's all the words in claim 19.
- 14 Q. And they've been retyped onto this poster?
- 15 A. That's right.
- 16 Q. So, what's the first Nintendo product that you
- 17 would like to tell us about that you've studied? And
- 18 take us through claim 19 to tell us about your
- 19 conclusion about whether or not that product infringes.
- 20 A. Sure. Well, let's use the Nintendo GameCube
- 21 controller that you already have in your hands.
- Q. Let me label this chart so later on we can remember
- 23 what we were talking about. This is the GameCube.
- So, how shall we begin?
- 25 A. Okay. Well, let's start at the very top. And the

- first words in the claim are "a hand operated controller comprising."
- Q. Now, let's stop you right there. We've only gotten through five words, but I want to stop you there and ask you: Has Judge Clark defined any of those words, any of those five words that are in this very first part of claim 19?
- 8 A. Yes, he has. And in particular, the word
 9 "controller" was defined; and I can read that
 10 definition. (Reading) Controller means a device held in
 11 the user's hand that allows hand or finger inputs to be
 12 converted into electrical signals for manipulation of
 13 images or graphics on a display device which are capable
 14 of being perceived by a human.
- 15 Q. And applying that definition, have you looked to 16 see if this is present in the GameCube controller?
- 17 A. Yes. It certainly does describe the capabilities
 18 of this controller. It can control images as described
 19 in the definition there given us by Judge Clark.
- 20 Q. What have you concluded about this first bit of 21 claim 19?
- A. Well, it is present in the controller; so, we can check that one off.
- 24 Q. All right. What's the next part of claim 19 that 25 you want to consider?

- A. Okay. Here we have: Structure allowing hand inputs rotating a platform on two mutually perpendicular axes to be translated into electrical outputs by four unidirectional sensors to allow controlling objects and
- 6 Q. Okay. Has Judge Clark given us definitions of any 7 of the terms in that part of claim 19?
- 8 A. Yes. And the key here is "navigating a viewpoint,"9 towards the end of that element. Let me read that:
- 10 Navigating a viewpoint means positioning or orienting a 11 user's view.
- 12 Q. Okay. Is this part of claim 19 in the GameCube 13 controller?
- A. Yes, it is. It describes the cross-switch or the D-pad. And I can explain that in a little more detail.
- 16 Q. Have you -- sure. Go ahead.

navigating a viewpoint.

- 17 A. Yeah. So, I've got a slide, if I could have that.
- 18 Q. Have you prepared some slides to help explain --
- 19 A. Yes.

- 20 Q. -- your testimony and your research?
- 21 A. Yes, I have.
- 22 Q. Okay. Go ahead.
- 23 A. Okay. So --
- THE WITNESS: Your Honor, if I might stand up
- 25 agai n?

THE COURT: You may.

THE WITNESS: Thank you. I wonder if I could get a pointer, laser pointer.

Thank you.

A. Okay. Let me stand out of your way but where I can still be heard.

Okay. So, this is the controller again.

It's redrawn here so that we can use some animations to give you a better idea of what's going on. And this is what you see if you take off the cover of the housing, and we colored blue here this cross pad that sticks out the top.

Now, if we take off that cross pad, underneath it is a little rubber thing. That's called "dome caps." And underneath them are some sensors mounted to the circuit board. And you can see they are labeled "left," "right," "up," and "down." So, what happens is -- is you push down the button in the up direction, for example. That forces down that dome cap, and that closes the circuit here. It's essentially a switch. So, this is a convenient way to make a bunch of switches in a small space. And you can see that you have four different sensors.

Now, these are unidirectional sensors. That means I can only go in one direction. I can go up.

There is a separate sensor for down. I can go right, but there is a separate sensor for left. So, they are unidirectional and we have four of them and we have two different directions. We have the up/down direction. We have the left/right direction. So, all of those pieces are present here in the cross pad.

Q. And is this structure to create outputs?

video game.

- A. Yes, it is. So, the circuit board here is essentially a bunch of fancy wiring. So, there is a lot of copper traces that are sandwiched in between insulators; and various computer chips are attached.
- 12 Some other sensors we'll talk about in a little bit.
 - And then these wires take the signal over, and eventually that signal is sent over the cable you see at the end of your controller there to the game console.

 And the game console is the computer that's running the

That's where the software does its thing.

So, these signals from the sensor, then, are sent over that cable, where they can be used by the programmer of the video game to control various things inside the video game such as changing the viewpoint.

And it's clear from knowing how these work, if you're an engineer and familiar with this kind of thing, that that capability is present. And, furthermore, I played video games where it works that way; you can use this to

- navigate your viewpoint. So, it's clear that capability is present here in this device.
- 3 Q. I'm not sure if you said this or not; but just to 4 be clear, in addition to being capable of navigating a 5 viewpoint, is it capable of controlling objects?
- A. Oh, yes, it is. Again, the signal that is
 present -- that's generated here when it's sent over to
 the game console can be used as a lot of things,
- 9 controlling objects and navigating a viewpoint included.
- 10 Q. So, what have you concluded about this second piece 11 of claim 19?
- A. We've gone through all of it and it matches the D-pad or cross-switch and, so, we should check it off.
- 14 Q. What's the next language in claim 19 that you'd 15 like to consider?
- 16 A. Okay. Let's see. My eyesight is not real good.17 You'll forgive me if I read off this instead.
- Okay. So, the next piece we have is: The controller including a tactile feedback means for providing vibration detectable by the user through the hand operating the controller.
- 22 Q. Now, did Judge Clark define any of these terms for us?
- A. Yes, he did. "Detectable by the user" means

 25 "capable of being perceived by the hand or ear of the

- user of the controller."
- 2 Q. Okay. Have you taken these words from the claim
- 3 and Judge Clark's definition and looked into the
- 4 GameCube controller to see if this is there?
- 5 A. Yes, I have. And, once again, it's this vibration
- 6 feedback motor. And I have a slide; but I can also show
- 7 you here that if you peek underneath the front of this,
- 8 there is the motor present inside the controller. And
- 9 here you can see what it looks like when it's removed.
- 10 So, we should check that one off. It's also present.
- 11 Q. Okay. But before we get along to that --
- 12 A. Okay.
- 13 Q. -- this picture is the inside -- is that the inside
- 14 of that demonstration unit that you showed us before?
- 15 A. I believe so. So, again, if you take this --
- 16 Q. We heard -- I'm sorry. Go ahead.
- 17 A. Yeah. If you take this apart, this is what you
- 18 see. The weight is separated here so you can actually
- 19 see it. It's inside a container here; but once you take
- 20 it apart the next step, you can see it. We didn't do
- 21 that here so it would actually operate and we can show
- 22 you how it works.
- 23 Q. Show us the weight on the slide.
- 24 A. Oh, yeah, sure. It's actually this piece
- 25 (indicating) right here.

Q. That's the weight?

- 2 A. Oh, no. I'm sorry. Right here (indicating).
- 3 Q. That thing that looks about like a triangle?
- 4 A. Yeah. And it's off-center so that as it spins 5 around, it generates that vibration.
- Q. All right. So, excuse my interruption; but what
 did you tell us then about your conclusion on this third
 piece of the language in claim 19?
- 9 A. Once again, it's a good description of this
 10 component of the GameCube controller; so, we should
 11 check it off. It's present.
- 12 Q. Tell us about the next piece of language that 13 you've considered in claim 19.
- A. Certainly. Okay. Here we have (reading) a second element movable on two mutually perpendicular axes, said second element structured to activate two bi-directional proportional sensors providing outputs at least in part controlling objects and navigating a viewpoint.
- 19 Q. And, once again, has Judge Clark given us20 definitions of any of these terms?
- A. Yes, he has. In this case it's the term "movable on two mutually perpendicular axes," which means capable of 2 degrees of freedom of movement on axes that intersect at a 90-degree angle.
- 25 Q. Okay. So, have you looked for this part of claim

19 to see if it's in the GameCube controller?

A. Yes, I have. And this describes the thumbstick feature. So, we have two thumbsticks here. And if you take them apart, it turns out the sensor pieces underneath these are the same. The caps are different shapes; they're different colors. But the way they function is the same.

So, we'll pick one and talk about that here.

Could I have my next slide, please?

And here you see them again with the cover taken off so you can see what's underneath. And this is on one of those thumbsticks.

You can move on.

And this animation will show you how it works. So, there we go moving in the right/left and moving in the up/down direction.

Now, in each case, as this thing moves, there is a little set of shafts in there; and they couple to these darker boxes down below. And those darker boxes are the sensors. So, here you can see -- as this one rotates, you see the center shaft of the sensor move. Those boxes are called "rotary potentiometers," and they work something like the dimmer switch in your dining room so you can turn the light up or down to make it brighter or darker. Another analogy might be the gas

pedal on a car. So, it isn't just on/off. You can control how fast the car goes or how bright the light is to any value you want in between.

Okay. So, here we have our second element, then, is the top of the joystick here; and it activates these two bi-directional proportional sensors. They are bi-directional because they can go right or left, one single sensor. The other sensor can go up or down; so, that's bi-directional. And proportional, again, is this idea that it can hit any value from a small value to a high value or anything in between.

12 Q. And does this create outputs?

A. Yes. So, once again, these are the wires coming out the bottom. They are soldered onto the circuit board. Those signals are transmitted over the cable to the game console, and there the game designer can write software that uses those signals in lots of different ways. And the language in the element here about controlling objects and navigating a viewpoint is certainly met.

Once again, I've played games where I've used these thumbsticks to do those things in the video games; so, I'm certain that capability is present in the controller.

25 Q. So, what have you concluded about this fourth part

of claim 19?

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- A. Again, it's a good description of the GameCube controller; so, we can check it off.
- Q. What's next?
- A. Well, okay. The next piece starts out: A third element -- and then all the words are exactly the same as the piece we just read that starts out "a second element." So, this basically says one more just like the last one.

Now, as I mentioned, here we have two thumbsticks; and when you take off those different caps, underneath it, you see the same sensing structure. So, at the end of the day, we have two that are the same and, thus, we've met that next term the same way we did in the previous one and we can move along.

- 16 Q. So, check it off?
- 17 A. Check it off, yep.
- 18 Q. And what's next?
- 19 A. Next, we have: A plurality of independent20 finger-depressible buttons, each button associated with.
 - So, the idea here is that we have these triggers -- this is a description of these triggers and they are obviously finger-depressible. You can put one finger on each one to move it up and down, and they are independent. I can work this one, or I can work this

They are not coupled at all with each other. one.

So, we can go ahead and check off that element.

- And what's the last piece of claim 19 that you 4 0. consi dered?
- And the last one is just a continuation of 6 Okay. that last piece. It says: A button sensor, said button sensor outputs at least on/off data to allow controlling of the objects. So, that --
- Is that in the controller? 10

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- Yes, indeed. And that's just the sensor that's hooked up to these trigger buttons. Again, in looking 12I at how they are constructed, the sensors are 13 constructed, and in playing video games, I've confirmed 14 that they can be used, once again, to allow controlling 16 objects in the video game. So, that capability is present here again; and we can check off that last element.
- All right. Why don't you take the witness stand 19 Q. 20 again while I do that.

It looks as though, Professor Howe, that --22 THE COURT: Excuse me one minute, counsel.

23 Ladies and gentlemen, let me remind you you have in your juror book a copy of the patent with the 25 actual claims because we're going to start getting

- testimony from both sides about them. You have the patent, where you have the claims set out there; and you also have the large size version under the "Claims" section, if you want to follow along in your books.
- 5 Go ahead, counsel.
- 6 BY MR. CAWLEY:
- Q. And somebody handed me a note. Just to make sure
 I'm clear, Dr. Howe, how did you define the plurality of
 finger-depressible buttons? What does that mean?
- 10 A. I'm sorry. I never defined "plurality" for you,
 11 did I?
- Plurality just means more than one. And as
 we saw, there are two triggers; so, we've definitely met
 that criteria as well.
- 15 Q. So, it looks as though we've checked off all the 16 parts of claim 19.
- 17 A. That's right.
- 18 Q. What does that mean?
- 19 A. Well, that means that the GameCube controller20 infringes claim 19.
- 21 Q. And is that your conclusion after your study?
- 22 A. Yes, it is.
- Q. Now, do you see anywhere in claim 19 where it says
- 24 that it requires a single input member?
- 25 A. No. Those words are not present.

- 1 Q. What kind of input members does claim 19 talk 2 about?
- A. Well, there's more than one. You know, it starts out, for instance -- it talks about (reading) a structure allowing hand inputs rotating a platform on two mutually perpendicular axes. And then on down, all the way to the bottom, there is a plurality of independent finger-depressible buttons. So, there is
- 10 Q. And there's been a lot of talk in the courtroom
 11 about what Mr. Armstrong's invention is or is not. Is
 12 it your understanding that these words define what the
 13 invention of claim 19 is?

not just one input element described in this claim.

- 14 A. Yes. That's right.
- 15 Q. Now, does claim 19 require a 6-degree-of-freedom 16 controller?
- 17 A. Well, let's see. It doesn't say so explicitly but
 18 it describes a number of inputs and they add up to at
 19 least six; so, in effect, it does describe a
 20 6-degree-of-freedom controller.
- 21 Q. Are there other ways to make a 6-degree-of-freedom 22 controller other than what's described in claim 19?
- A. Certainly. This is a particularly nice one, but there are many ways you can make a 6 degree of --
- 25 Q. What's the simplest way you can think of to make a

6-degree-of-freedom controller?

- 2 A. Well, I suppose you could put six push buttons on a 3 box and call that a 6-degree-of-freedom controller. It 4 would give you six signals.
- 5 Q. How would that compare to the controller that 6 you've seen described in claim 19?
- A. Well, I would say it's a piece of junk, you'll
 forgive me. It would not do a very good job of
 controlling video games; although, it would have six
 degrees of freedom in it.
- 11 Q. Now, now that you have shown us your analysis of 12 claim 19 for the Nintendo GameCube controller, what's 13 the next step in your study?
- 14 A. Okay. Well, I looked at other claims.
- 15 Q. Okay. Now, "looked at other claims" -- and for 16 what product?
- 17 A. Okay. Well, let's stick with the GameCube. There
 18 are several more claims which are infringed.
- 19 Q. Okay. So, do you want to go through all of the
 20 claims that the GameCube has been accused of infringing
 21 first?
- A. Yes. I think it's easier if we go through GameCube first, and then we'll talk about some of the other controllers.
- 25 Q. Okay. Very good. Then, what's the next claim

- 1 you'd like to talk about that you've studied for
 2 purposes of seeing if the GameCube controller infringes
 3 some other claim?
- A. Well, let's go to claim 22 next. And we have a slide rather than a chart for this one. If I can begin by reading it: A hand-operated controller according to claim 19 wherein -- and those words mean it's a dependent claim; and that is to say, this is saying that for this invention, it includes everything that's already in claim 19 plus some new things.
- 11 Q. Okay. So, does that mean that if we were really
 12 going to be tiresome about this, we would take those
 13 first few words and go back and recheck off all of these
 14 things from claim 19?
- 15 A. Yes, but I'm hoping we're not quite that thorough.
- 16 Q. Okay. Well, I'm in agreement with you. So, since
 17 you've already shown us -- you've already shown us that
 18 everything in claim 19 is there, let's use that as the
 19 launching point; and tell us what's new or additional in
 20 this claim 22 that you have to tell us about.
- A. Sure. Well, the next words here are: Wherein said button sensor outputs data proportionate to depression of one of said buttons.
- 24 Q. Okay. And, then, tell us what that means and if 25 you found that in the GameCube controller.

- A. Sure. Well, it refers to the button sensors. And the button sensors, you'll recall, were just the triggers here, the two of them on the front.
- And it goes on to say that they output data proportionate to the depression of one of the buttons.

 So, this is the idea of proportional sensors again.
- 7 It's like your dimmer switch in your dining room or your
- 8 gas pedal on your car. It's not just on/off. It's all
- 9 the values in between. So, I can slide my finger slowly
- 10 up and down. That might be the gas pedal on a driving
- 11 game, for instance. And, so, this, in fact, matches the
- 12 description given in claim 22.
- 13 Q. So, can we check this off as infringed?
- 14 A. Yes, please.

- Q. And what is the next claim of the patent thatyou've considered for infringement of the GameCube?
- 17 A. Let's go on to claim 23. Okay. Claim 23 states:
- 18 A hand-operated controller according to claim 22 --
- 19 Q. Okay. Let me stop you there.
- So, does that mean -- since claim 22 was
- 21 based on claim 19, you have to have, for this claim 23,
- 22 everything in 19 --
- 23 Is that right?
- 24 A. That's right.
- 25 Q. And you've already found that.

- 1 A. Yep.
- 2 Q. -- and then everything in 22 that we just saw,
- 3 right?
- 4 A. Yep.
- 5 Q. And you found that.
- 6 A. Indeed.
- 7 Q. Plus something additional; is that right?
- 8 A. That's right.
- 9 Q. Tell us what the additional thing is in claim 23.
- 10 A. So, the additional part here are the words:
- 11 Wherein the bi-directional proportional sensors are
- 12 rotary potentiometers.
- So, here that describes the thumbsticks. And
- 14 we've already been through this, in fact, because the
- 15 bi-directional proportional sensors here were, as we saw
- 16 in our illustration, rotary potentiometers. And, so, in
- 17 fact, we've already ascertained that the description
- 18 here matches the GameCube controller.
- 19 Q. So, what have you concluded about claim 23?
- 20 A. That we should check it off because it's infringed.
- 21 Q. Thank you. And what's the next claim that you've
- 22 studied?
- 23 A. Okay. Next, I'd like to do claim 16.
- 24 Q. Okay. This one looks like a problem because it's
- 25 got a lot of words in it.

- Well, fortunately a lot of them are the same, not 1 Α. all of them. But, for instance, there is a description in there about an element to activate first two bi-directional proportional sensors. That's the same description of the joystick. We've already done that. 6 Okay. Well, then, let's take this approach. there's something in this claim that you've already discussed and already decided or explained to us how it's in the GameCube, let's not take the time to discuss it all over again. Instead, let me ask you to point out 11 what's new in this claim 16 that you have not discussed yet and have not showed us how that new piece is present 12 in the GameCube controller. 13
- 14 A. Very good. I like it.

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So, let's begin at the first part because that is something new; and I have a slide that highlights this. It begins: A 3-D graphics controller for controlling a television-based game.

Now, a couple of those terms were defined in the court's claim construction order. Let me read those definitions.

- "3-D" means capable of movement in 6 degrees of freedom.
- And "controller" means a device held in the user's hand that allows hand or finger inputs to be

- converted into electrical signals for manipulation of images or graphics on a display device which are capable of being perceived by a human.
- 4 Q. All right. And have you taken into account and 5 applied that definition and looked for that in the 6 GameCube?
- 7 A. Yes, indeed.
- So, it's clear that the GameCube controller matches that definition of a 3-D graphics controller for controlling a television-based game.
- 11 Q. Okay. What's the next new language or words in 12 claim 16 that you haven't told us about yet?
- 13 A. Okay. Well, this looks a little messy, if I could 14 have the next --
- 15 Q. Well, I'm looking at 3-D graphic here; and let me 16 just make sure that I understand.
- Does 3-D, as the judge defined it, mean like those old movies that I went to as a kid where you have cardboard glasses and you put them on and something jumps out of the screen at you?
- A. No. I certainly remember those movies where things come out of the screen, and this is completely
- 23 different. Again, we have a definition from Judge Clark 24 which gives us the technical meaning of that term here;
- 25 and it's not a 3-D movie.

- 1 Q. Okay. And, likewise, can the GameCube controller control graphics that are movable in 6 degrees of freedom?
- 4 A. Yes, it can.
- 5 Q. Tell us about that. Why do you say that the 6 controller is capable of controlling graphics movable in 7 6 degrees of freedom?
- 8 A. Right. Well, we can, first of all, just count up 9 the number of different ways you can control things.
- 10 So, with the directional pad we can do one direction
- 11 that's right or left, another that's up and down. We've
- 12 got the same thing, two directions on each of the
- 13 thumbsticks. So, if we just add those up, that alone
- 14 gives us six different degrees of freedom or six
- 15 different ways of controlling things.
- 16 Q. And is this helpful in controlling 3-D graphics?
- 17 A. Certainly.
- $18 \mid Q$. How is that?
- 19 A. Well, it's useful in controlling a single object
- 20 that moves in 6 degrees of freedom. So, for instance, a
- 21 spaceship in outer space can move in a line in three
- 22 different ways. It can also rotate in three different
- 23 ways. But it can also be mapped to a lot of other
- 24 systems; so, it can be used to control multiple objects
- 25 that have fewer degrees of freedom of control.

- 1 Q. Well, let's talk about some specific games. Have 2 you played any car racing games?
- 3 A. Yes, I have.
- 4 Q. How do you control a car on the screen in some of the car racing games you've played?
- 6 A. Okay. Well, obviously there's steering. There's
 7 right and left. And then there's, you know, usually a
 8 brake and an accelerator. So, you can go forward or
 9 less forward, I guess.
- 10 Q. Well, I'm not sure I counted right; but are the 11 things you just described to play the racing game 6 12 degrees of freedom?
- A. Well, no. That really is just two different directions, the right/left direction for rotation and then the forward direction. But you can imagine having other things you'd like to control. So, for instance, you might like to have the -- a separate control for the brake and for the accelerometer -- and for the accelerator. Those are separate controls in a real car.
- Even though they really control the same thing, the same direction, having separate functions for those would be nice.
- There are other things like the viewpoint.

 You might want to be able to get a bird's-eye view so

 you can see what's ahead as you're driving along and

It might be fun if you go off the road in other things. a driving game, you run into some mud and you have to turn on the windshield wipers so you can see again out the windshield in a game.

So, there are a lot of functions; and designers can use them in creative ways to make interesting and fun video games.

- Okay. We're still on claim 16, right? Q.
- 9 Α. That's right.

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- 10 Q. Why don't you take us, then, to the new things that are in claim 16 that you have not talked about yet?
- 12 Now if I could have my next slide here. Α.

So, there are a bunch of different things highlighted there; and they all talk about sheets. for instance, down towards the bottom there, it talks about (reading) sensors at least in part connected to a second sheet, said first sheet located on a first plane and said second sheet located on a second plane. so, the yellow stuff above that also talks about these ideas of sheets.

Now, the sheets in this case are circuit So, it's a very general term. And in the case of the GameCube controller, you can see that these -the circuit board here onto which the various sensors and electronics components are mounted is in the form of

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And it goes on to talk about a first sheet and
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   a sheet.
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   a second sheet.
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              And if I can pull this out here, you can see
   that one of the sheets -- and do I have a slide on this,
5
   too?
         Yeah.
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              So, one of the sheets is shown in dark green
           That's the main circuit board here.
7
   there.
                                                 And it has
   a thumbstick and the directional pad attached to it.
9
              But then the second thumbstick, you see the
   yellow one here, is actually attached to a different
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11
   little circuit board connected to the first one by
12
   wires.
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              So, there are two sheets; and they are
   located on different planes; that is, one is mounted
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   higher than the other.
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              THE COURT: All right. Excuse me, counsel.
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              Ladies and gentlemen, we're going to go ahead
   and take a break. I'll ask you to be back at ten of.
18
   Please remember my instructions. Don't discuss the case
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20
   among yourselves.
21
              (The jury exits the courtroom, 2:34 p.m.)
22
              THE COURT:
                          We'll be in recess until ten of.
23
              (Recess, 2:34 p.m. to 2:48 p.m.)
24
              (Open court, all parties present, jury
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   present.)
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THE COURT: Go ahead, counsel.

MR. CAWLEY: Thank you, your Honor.

BY MR. CAWLEY:

- Q. Professor Howe, where were we?
- A. Well, let's see. I think we were talking about claim 16 and we had gotten to the part where we mentioned that there were two sheets inside the GameCube controller and I think I showed you in the actual disassembled controller, but let me point it out on the slide here.

The dark green is that first large circuit board and you can see it has one of the thumbsticks and the directional pad on it and if you flip it over, it actually has the trigger sensors on that, as well.

But then if we could remove those various components, you'll see there is a second bright green circuit board there that's on a different level.

So, this meets the condition given in the claim that there are two sheets on two planes.

- Q. Thank you. And I think, to reorient us here, you were in the process of going through this claim 16 and telling us just about the new additional things that you hadn't discussed yet. So, please proceed with that.
- A. Okay. So, let's see, the next piece here is shown bighlighted; and it talks about (reading) an independent

first button sensor, said first button sensor depressible by a single finger of the user, said first button sensor at least in part connected to said first sheet, said first button sensor capable of transforming depression into a proportional signal useful to control the television-based game.

Q. That's a mouthful; so, walk us through that, please, and show us if you found these things in the GameCube controller.

A. Certainly. So, let's break it up into smaller bits so we can get through it. The first one is: The button sensor depressible by a single finger of the user.

Now, again, this turns out to be another way of describing the triggers. So, we can take one of them and call that the first one; and you can press it with a single finger, as you can see.

The second part of this term is: At least in part connected to said first sheet. So, here again, I've got the disassembled controller. If I lift it up, the sensors here are underneath and slide back and forth like so. And those are the button sensors in this case. So, this meets the part of the sensors connected to said first sheet.

And then the last part is: Capable of transforming depression into a proportional signal. So,

here these sliders are potentiometers; the ones we looked at before were rotary potentiometers that go around in a circle. These are linear potentiometers. They just slide back and forth, but they have the same basic idea that it's proportional. It's not just on/off. You can get all those different in-between values like the gas pedal in a car.

So, that's the last of the new parts of this particular element; and they've all been met by the GameCube controller.

11 Q. And what is the last of the new things in this 12 claim 16?

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13 A. Okay. That's way down at the bottom. Yeah, that's 14 it.

It says: Said tactile feedback means supported within said controller.

So, the tactile feedback means again -- it's our favorite little motor here that wobbles around, and it's certainly mounted within the controller. It's just another way of describing it. So, that condition is also met by the GameCube controller; and, so, including the pieces that we had covered before for claim 19, we've now covered every bit of claim 16 for this controller.

25 Q. And what have you concluded about claim 16?

- A. Because all the elements of claim 16 describe the GameCube controller, the GameCube controller infringes claim 16 as well.
- 4 Q. And what's the next claim that you've considered in 5 connection with the GameCube controller?
- 6 A. Okay. Let's go to claim 14.

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- 7 Q. That's another long one; so, let's do what we did
 8 before. Don't bother telling us again about the things
 9 you've already told us that you found are in the
 10 controller. Instead, let's concentrate on anything
 11 that's new in this claim that you haven't yet talked
 12 about.
- A. Excellent. Okay. There are only a few things in this one. So, if I could have the first highlight, please.
 - And these words, talking about the four unidirectional sensors, it says: Used to input a first axis and a second axis of control for the game.
 - Now, the "four unidirectional sensors" part once again describes the D-pad or the cross-switch here, as we saw before. What's different here is the language that describes it. It says: These sensors are used to input a first axis and a second axis of control for the game.
- 25 And that axis of control idea is really just

an input signal; that is, it tells us one way we can move things in the game. And as we saw before, the right/left direction is one axis; the up/down direction is a second axis. So, once again, the GameCube controller meets the description given by that claim.

Q. Okay. And what's the next new feature of this

claim?

A. Okay. Moving down to the next highlight, very good.

Here it talks about (reading) the first bi-directional proportional sensor, and it says that it's used to input a third axis of control for the game.

Now, the bi-directional sensors, you'll recall, are the thumbsticks. They go up and down, or they go right and left, the same sensor there, that rotary potentiometer, does both. And, again, it just uses that same axis of control language. So, moving this up and down provides a signal that can be used to control something in the video game in a particular way. So, this one is met by one of those four thumbstick sensors -- two on one thumbstick, two on the other.

And then there are other terms there. It talks about a first bi-directional proportional sensor. The next bit is a second, a third, and a fourth. So, those are met by these two thumbsticks just as we saw

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- Q. What else is new? Okay.
- 3 Α. Okay. Then all the way down at the bottom. Good. (Reading) A sheet connecting to at least eight of the 5 sensors.

Well, the sheet is the circuit board. So. this is saying that you want to have at least eight of them connected to one circuit board. So, here is our circuit board again. We have the D-pad. That's got the right/left, up and down. That's four sensors. the thumbsticks. It's got the two directions. that's another two sensors. Those are bi-directional And then we've got those trigger sensors on sensors. the front here that are connected to the bottom of the board. So, this sheet in this case has eight -- four, two, and two.

- So, looking for all of the things that you told us 0. about before that you told us were in the GameCube and that are also in this claim 14 and then looking at the things that are new in claim 14 that you've just told us about, what have you concluded about how the GameCube matches up to claim 14?
- Α. Well, all of the elements are there. We've gone through and checked off both the old ones and the new 25 And, so, claim 16 is infringed by the ones now.

- GameCube controller.
- Q. You said 16?
- 3 A. I'm sorry. Claim 14 is infringed by the GameCube
- 4 controller. Sorry.
- 5 Q. Okay. Now, is that all of the claims that you have
- 6 considered relevant to the GameCube controller?
- 7 A. Yes, that's right. We're through with GameCube.
- 8 Q. Have you also considered other controllers?
- 9 A. Yes, I have.
- 10 Q. Okay. Let me hand you --
- 11| MR. CAWLEY: If I may approach, your Honor.
- 12 THE COURT: You may.
- 13 BY MR. CAWLEY:
- 14 Q. -- what has been marked -- at least the picture of
- 15 it has been marked as Plaintiff's Exhibit 440.
- 16 Could you tell us what that is, Professor
- 17 Howe?
- 18 A. Yes. This is the GameCube Wavebird wireless
- 19 controller.
- 20 Q. Okay. Can you tell us how this controller compares
- 21 to the one that the jurors have in their hands, the
- 22 GameCube controller?
- 23 A. Sure. Well, as you can see, the input looks the
- 24 same. The big difference here, of course, is that this
- 25 one has a cable and this one doesn't. This has a

wireless connection so that you don't need to worry about that cable while you're playing.

reason for that is it has to have batteries so it can operate. This one can get the power over the cable from the console. This one has to have batteries in it. So, it's kind of a bigger, clunkier-looking housing.

Now, the actual input elements are the same.

You can see there are two thumbsticks. There is the cross pad, a bunch of buttons on the front. If we look at the trigger, the trigger configuration is the same.

There is an extra on/off switch here which is present, an extra little dial here. But the basic input elements that we've been talking about are just the same.

Now, there is one key difference. This device, the Wavebird wireless controller, does not have rumble. It does not have the motor in it that gives you active tactile feedback.

Q. Okay. So, let me make sure that I understand where we are, then. You told us that this new controller that we're looking at has a wireless communicator in it as opposed to the wire of the first one and the new one has an extra on/off switch and a little bit different housing. Do any of those things have anything to do with infringement?

- 1 A. No. None of those are described by the claims 2 we've been talking about.
- Q. Okay. So, you've also said, though, that there is a difference between the GameCube controller that the jurors have and this Wavebird controller because -- I think you said that the Wavebird controller has no rumble motor. Correct?
- 8 A. That's it, yes.
- 9 Q. Okay. So, for the claims of the patent that say,
- 10 for example -- where is that in claim 19?
- 11 A. Let's see. Again, I have to look at my copy.
- 12 Q. It's the third? Okay. For the claims such as
- 13 claim 19 that say (reading) the controller including a
- 14 tactile feedback means, which we've heard is rumble,
- 15 does that mean that claim 19 is infringed?
- 16 A. No. It is not infringed by this controller.
- 17 Q. Okay. So, we couldn't -- for this controller at
- 18 least, we couldn't check off this box, right?
- 19 A. Correct. So, it does not infringe.
- 20 Q. Okay. But are there any claims of the patent, the
- 21 '700 patent, that are still infringed by the Wavebird
- 22 even though it doesn't have rumble?
- 23 A. Yes, there is, in fact. And that is claim 14.
- So, claim 14 never describes this tactile
- 25 feedback feature. It's not present there.

- Q. Okay. Is everything else there?
- 2 A. Yes. All the rest of the sensors, the input
- 3 switches and all that we talked about for the GameCube
- 4 controller, are just the same. They're accurately
- 5 described by the claim language. So, for that case, for
- 6 claim 14, for the same reasons we talked about with the
- 7 GameCube, the Wavebird controller infringes claim 14.
- 8 Q. Thank you, sir. Is that the only claim of the
- 9 patent that is infringed by this Wavebird controller?
- 10 A. That's the only one we're discussing, yes.
- 11 Q. Shall we move on to a new controller, then?
- 12 A. Yes, let's do.

- 13 Q. Which one is this?
- 14 A. Well, why don't we talk about the Wii Remote with
- 15 the Wii Classic Controller.
- 16 Q. All right.
- MR. CAWLEY: Your Honor, I'd like to approach
- 18 the witness to hand him Plaintiff's Exhibit 416 and 414.
- 19 THE COURT: You may.
- 20 MR. CAWLEY: And at the same time, we request
- 21 permission to publish replicas -- or not replicas,
- 22 publish duplicates of these exhibits to the jury.
- 23 THE COURT: Any objection?
- 24 MR. PRESTA: No, your Honor.
- THE COURT: Okay. You may do so. Will you

collect back up the other ones?

MR. CAWLEY: Yes, your Honor. If I could ask everyone to hand the old controllers up and we'll give you the new ones.

BY MR. CAWLEY:

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- 6 Q. All right. Professor Howe, show us what this is.
- 7 A. Sure. Well, this is the Wii Classic Controller 8 plugged into the Wii Remote controller.
- 9 Q. Okay. And I guess since part of this is being
 10 written down and just so people who are reading it
 11 instead of looking at what you have in your hands -12 give us a little more of a visual description of which
 13 one is which.
 - A. Oh, sure. Okay. So, the Wii Classic Controller has a pair of these thumbsticks, once again. It has a cross pad, some buttons on the face of it; and it also has a pair of these triggers and some buttons on the front, not unlike the GameCube controller you saw earlier.
 - Then the other piece of this, the Wii Remote controller, the long, thin one, has a cross pad on the top and has some buttons on the face. It has a simple trigger, an on/off switch for a trigger underneath it. And the two are connected by a cable.
- 25 Q. Now, can the Wii Classic -- and hold that up again

- if you would, please.
- A. (Complying.)
- 3 Q. Can the Wii Classic be used to control games by
- 4 itself?
- 5 A. No, it cannot.
- 6 Q. And why is that?
- 7 A. It can't communicate with the console, with the
- 8 computer that runs the video games. It has to be
- 9 connected to the Wii Remote, and then the Wii Remote has
- 10 a wireless connection over to the console.
- 11 Q. So, is it true that you have to have the Wii Remote
- 12 connected to be able to use the Wii Classic Controller?
- 13 A. That's right. The two of them together really make
- 14 up one controller in terms of communicating with the
- 15 consol e.
- 16 Q. And how does one use the controller?
- 17 A. Well, there are a couple different ways you can do
- 18 it. For instance, you can hold the Remote in one hand
- 19 and use the cross pad and buttons there. You could hold
- 20 the Classic in the other and use the thumbstick here.
- 21 Another alternative, you might drop this in
- 22 your lap and then you could use two hands, one on each
- 23 thumbstick, and so on.
- 24 Q. Okay. Now, you've told us that you can't use the
- 25 Classic by itself. Can you use the Remote by itself

- without the Classic?
- 2 A. Yes, you can.

- 3 Q. And is there, nevertheless, some useful
- 4 functionality in the Classic part?
- 5 A. Sure. For instance, if you're used to playing a
- 6 game, perhaps from the old GameCube that you want to
- 7 play on the Wii, you might want to have the same
- 8 interface functions that you did on that old controller,
- 9 thus the name the "Classic Controller."
- 10 Q. Okay. Does the Wii Classic Controller have a
- 11 rumble motor inside of it?
- 12 A. Well, this piece here does not have a rumble motor
- 13 in it; however, the Wii Remote does have a rumble motor
- 14 in it.
- 15 Q. And since you've told us that you can't use the
- 16 Classic piece without the Remote, does that mean that
- 17 every time you're using the Wii Classic, you have a
- 18 rumble feature?
- 19 A. Yes, you do. That's right.
- 20 Q. And have you actually used this setup of
- 21 controllers to see if it uses rumble?
- 22 A. Yes. For instance, you can use the Wii Remote to
- 23 go through the menu options in a game; and every time
- 24 you go from one menu option to the next, you feel a
- 25 little pulse of vibration and that helps let you know

- how far down the menu you've gone and that sort of thing, gives you useful feedback.
- Q. And is the rumble in this controller capable ofbeing used in other ways in other games?
- 5 A. Sure. The capability is there. So, we know,
- 6 because we've observed that -- I've observed that, that
- 7 the programmer can activate that rumble feature at will;
- 8 that is, there is a built-in way in the system for doing
- 9 that. So, a game controller -- a game programmer,
- 10 rather, could put that feature in if they want the
- 11 capabilities built into the system.
- 12 Q. And is this rumble that you felt in the menu on the
- 13 Wii screen menu feature?
- 14 A. I'm sorry. Is it in the Wii...
- 15 Q. The Wii screen menu, the menu for the Wii screen.
- 16 A. Yes.
- 17 Q. Okay. Now, tell us about the other features of the
- 18 controller. Does this controller have many of the same
- 19 features as the other controllers that we've seen?
- 20 A. Yes, it does. And as I mentioned before, a lot of
- 21 the input elements are just the same as with the
- 22 GameCube.
- 23 Q. Have you taken these controllers apart to be sure
- 24 they work in the same way?
- 25 A. Yes, I have.

- 1 Q. And have you concluded that they do?
- 2 A. Yes. They do.
- Q. And have you -- as a result of that study, have you
 reached an opinion about whether the Wii Classic
 Controller connected to the Wii Remote controller
 infringes any of the asserted claims?
- 7 A. Yes, I have.

Okay.

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- So, for instance, claim 19, we can go through and once again identify each of the elements in the claim just as we did with the GameCube controller and show that they are equivalent; and I performed that exercise. But to save time, we might simply note that they are the same and check them off in this case.
- Q. Okay. And what's the next claim that you've
 studied and found the same features in this controller
 as in the earlier controller you described to us?
 - is dependent on claim 19; so, we've checked off claim 19 terms. And now we need to have the button sensor outputs data proportionate to depression of one of the buttons. In the GameCube, that was the trigger; and

Let's go to claim 22. And as before, this

- buttons. In the GameCube, that was the trigger; a once again, here it's the trigger.
- 23 Q. Okay. So, what have you concluded about this controller's infringement of claim 22?
- 25 A. So, the Wii Remote and Classic infringe claim 22.

- Q. And what's the last claim you've considered for this controller?
- A. Claim 23. And once again, it's a dependent claim.

 It says everything in claim 22 plus the bi-directional

 proportional sensors are rotary potentiometers. And

 sure enough, if you look underneath the thumbsticks

 here, just as with the GameCube, they are rotary

 potentiometers. So, once again, all the claim terms are

 met; and this combination of the Classic and Remote
- 11 Q. Okay.

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- MR. CAWLEY: May I approach, your Honor?
- THE COURT: You may.

infringes claim 23.

- MR. CAWLEY: I'd like to provide the witness
 with Plaintiff's Exhibit 418, the Wii Nunchuk connected
 to the Wii Remote. I'll ask the court if we may publish
 this controller to the jury.
- THE COURT: Any objection?
- MR. PRESTA: No, your Honor.
- THE COURT: You may.
- 21 BY MR. CAWLEY:
- 22 Q. All right, Professor Howe. This is the last of the
- 23 controllers that you're going to tell us about; is that
- 24 right?
- 25 A. That's right.

- 1 Q. So, would you please explain to the jury what they 2 are holding in their hands as Plaintiff's Exhibit 418?
- 3 A. Sure. Once again, we have the Wii Remote. This
- 4 time, plugged into it, we find the Wii Nunchuk
- 5 controller. And the Nunchuk controller has one
- 6 thumbstick, and it has a couple of buttons on the front
- 7 where the trigger goes.
- 8 Q. Now, can the Wii Nunchuk controller -- and hold
- 9 that up again so we make sure we know what we're looking
- 10 at.
- 11 A. (Complying.)
- 12 Q. Can the Wii Nunchuk be used by itself?
- 13 A. No. It's just like the Classic. It doesn't have
- 14 any way of communicating with the console. You have to
- 15 plug it into the Wii Remote, and then the Wii Remote can
- 16 communicate wirelessly with the video game.
- 17 Q. So, do you have to have both things operating
- 18 together to be able to use the Nunchuk?
- 19 A. That's right.
- 20 Q. And together do they both infringe at least one
- 21 claim of the patent?
- 22 A. Yes, they do.
- 23 Q. What claim is that?
- 24 A. Could I have my slide, please?
- 25 Claim 19. I'll just say it.

- 1 Q. Okay. But before we get to that, because I want to
 2 look at claim 19, not in the great detail like we did
 3 before but at least thoroughly, tell us about the
 4 features in this controller that you've already
 5 described to us, that are similar to the ones in the
 6 controllers you've already testified about.
- A. Sure. Well, some things are certainly the same.

 8 For instance, here we have the cross pad; and we have

 9 one thumbstick. We also have buttons of various sorts,

 10 a couple where the triggers are and a couple on the face

 11 of this. There are a few on the face of this. What we

 12 don't have is a second thumbstick.
- O. Okay. Does that mean, if this controller lacks a second thumbstick, that it has less functionality than the GameCube that has two thumbsticks?
- 16 A. No, it does not.
- 17 Q. Why not?
- Well, no words in claim 19 talk about a joystick or 18 Α. 19 a thumbstick. They talk about the way sensors function, 20 the way hand inputs work. And, so, if there are components of this controller which match that claim 21 22 language, then it's infringed even though there isn't a 23 thumbstick; that is, a thumbstick is one example of an invention that matches claim 19 but it's not the only 241 25 example.

- Q. What does this Wii Nunchuk use for a second input?
- 2 A. Okay. Well, in this case it's an accelerometer
- 3 built into the Wii Remote itself. And that's a motion
- 4 sensor. It's a way of turning motion of a hand into
- 5 electrical signals just as the thumbstick motion of the
- 6 thumb is turned into an electrical signal.
- 7 Q. Now, how long have accelerometers been around?
- 8 A. Oh, for decades certainly.
- 9 Q. How big is an accelerometer?
- 10 A. Well, nowadays they're pretty small. They make
- 11 them using the same technology that they use for making
- 12 computer chips; so, you can see on the screen here --
- THE WITNESS: If I might get down once again,
- 14 your Honor.

- THE COURT: You may.
- 16 THE WITNESS: Thank you.
- 17 A. So, here you see circled in red this little black
- 18 chip here. That's the accelerometer.
- 19 If I could have the next slide, please.
- Here is a blowup of it. You can see it
- 21 soldered onto the circuit board there.
- 22 Now, I can give you an idea of how this works
- 23 with the animation, the next slide. So, here's the
- 24 housing once again; and we can imagine the accelerometer
- 25 mounted inside it.

Now, this is a little bit bigger than that tiny black square you just saw; and that's just to help explain it. This is the same idea of what happens inside that little chip in a miniature way.

So, in the center you see something that's labeled a "mass." And it's connected to the frame -- that is, to the rest of the circuit board and all -- through these springs. And parallel with these springs are little distance sensors.

Now, what happens if I grab the housing to the Wii Remote and I start moving it? So, in this case you'll see I'm moving it up and down. And as it moves, that mass kind of lags behind; that is, you move quickly and the mass doesn't quite keep up. And when you get to the next place where you stop, of course, it finally does. And that lag is an example of a way to measure acceleration.

So, in this case there is an element in the middle. This little bit of motion up and down you see here is causing it to move. It compresses the springs in either the up or the down direction and then the sensors measure that displacement. So, it's another way of taking hand motion and turning it into an electrical signal.

Now, here we've shown the up and down

- direction. You can see the way this is drawn. The same thing would apply if you moved it in a perpendicular direction, as well.
- 4 Q. Do you use accelerometers in your work?
- 5 A. Yes. We have for, oh, 15, 20 years.
- 6 Q. Thank you. If you'd take the stand again.
 - What I'd like to do now is to put up a blank version of the same claim 19 chart that we looked at before. I'm going to label this one -- since we're talking about the Wii Nunchuk here, I'll label this one Wii -- I want to make sure how to spell it. I don't want to misspell it -- Wii Nunchuk and Remote.
- Now, you earlier testified that these

 (indicating) two parts of claim 19 that I'm pointing to,

 the ones that begin "a second element movable" and "a

 third element movable" -- do you see those?
- 17 A. I do.

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- 18 Q. That these two parts were in the GameCube19 controller because of the two thumbsticks, right?
- 20 A. That's right.
- 21 Q. Are these two parts in the Wii controller?
- 22 A. Yes, they are.
- 23 Q. Tell us how.
- A. Well, one of them is a thumbstick. You can see in the Nunchuk side of things you've got a thumbstick.

- These are things you put your thumb --
- 2 Q. You call that the "second element" one here?
- 3 A. You can call that the "second element," yes.
- 4 Q. Is that present in the device?
- 5 A. Yes, it is.
- 6 Q. Can we check it off?
- 7 A. Please.
- 8 Q. Okay. And, then, how about this one?
- 9 A. Well, that one describes the accelerometer in this
- 10 case. So, inside the Remote, as we saw, there is a
- 11 little accelerometer chip; and that's able to sense
- 12 motion on two perpendicular axes, as required in the
- 13 claim language there. It's able to actuate --
- 14 structured to activate two bi-directional proportional
- 15 sensors. Those are the spring sensors we saw in our
- 16 animation there and they provide outputs that we know
- 17 can control objects and navigate viewpoints in the video
- 18 game because we play video games -- I've played video
- 19 games where you are able to do that. So, all the
- 20 structure and the capability described there is present
- 21 through that accelerometer.
- 22 Q. So, have you concluded that this piece in claim 19
- 23 is there?
- 24 A. Yes, it is.
- 25 Q. Can we check it off?

A. Yes, please.

- 2 Q. All right. Now, just to make sure that we've been thorough and that we all remember your conclusions at the end of the trial, would you quickly go through the things in claim 19 that are not yet checked off, tell us if they're in the Wii Nunchuk with Remote and tell me if I can check them off or not.
- 8 A. Okay. Let's go through that.

So, the first part is a hand-operated controller; and, of course, these are -- according to the definitions, the claim construction definitions that we have from the court, these two constitute a hand-operated controller. So, we can check the first element off.

The next part we have here is (reading) structure allowing hand inputs rotating a platform on two mutually perpendicular axes to be translated into electrical outputs by four unidirectional sensors to allow controlling objects and navigating a viewpoint. So, once again, taking into account the claim construction definitions, this is met by the directional pad on the Wii Remote just as it was met by the directional pad on the GameCube controller. So, we can check that one off.

Okay. The next piece is (reading) the

controller including a tactile feedback means for providing vibration detectable by the user through the hand operating the controller.

So, as I said before, there's a rumble motor inside the Wii Remote; and that produces a vibration you can easily see when the game programmer activates it.

So, we can check that one off.

Okay. So, we've already done the next two.

And then at the bottom, (reading) a plurality of independent finger-depressible buttons. And we've got lots of buttons here. There are buttons on the Wii Remote; and there are buttons on the Nunchuk, as well. So, we match that plurality, more than one condition. And it says -- and we can check that one off.

And, finally, (reading) each button is associated with a button sensor, said button sensor outputs at least on/off data to allow controlling of the objects.

So, each of these buttons, in fact, does put out on/off data; and we've confirmed by playing games, for instance, that those signals are useful for controlling objects. So, once again, it gives a good description of this controller. We can check that one off, as well.

Q. Dr. Howe, they are all checked off. What have you

- concluded about claim 19 and the Wii Nunchuk controller with Remote?
- 3 A. Well, this means that the Wii Nunchuk and Remote 4 infringe claim 19.
- 5 Q. All right, Dr. Howe. Can you summarize for us the conclusions that you have reached about infringement of the '700 patent by the Nintendo controllers as a result 8 of the study that you've just explained to us?
- 9 A. Sure. So, to summarize, the GameCube controller 0 infringes claims 14, 16, 19, 22, and 23.
- The Wavebird wireless infringes claim 14.
- The Wii Classic and Wii Remote combination 13 fringes claims 19, 22, and 23.
- And the Wii Nunchuk/remote combination infringes claim 19.
- 16 Q. Okay. Professor Howe, we appreciate your coming today.
- MR. CAWLEY: And, your Honor, we pass the witness.
- THE COURT: All right. Counsel?
- MR. PRESTA: Your Honor, if I could approach and hand out some binders.
- THE COURT: You may.
- 24 MR. GUNTHER: Your Honor, could I help?
- THE COURT: You may.

Do you want to go ahead and collect up the --MR. CAWLEY: Yes, your Honor.

CROSS-EXAMINATION OF ROBERT HOWE

4 BY MR. PRESTA:

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- 5 Q. Good afternoon, Dr. Howe.
- 6 A. Good afternoon.
- 7 Q. My name is Joe Presta. I represent Nintendo in 8 this matter. I believe -- you'll recall that we met 9 when I came up to Harvard and took your deposition 10 several months back.
- 11 A. Yes, of course.
- 12 Q. How are you today?
- 13 A. Just fine. How are you?
- 14 Q. Good. Thank you. Nice to get a chance to talk15 with you again.
- First of all, I'd like to just go over a

 17 little bit of your history and your work experience.
- 18 A. Sure.
- 19 Q. And I'm looking over your resumé. I don't want to 20 take much time with it, but it looks like you have been
- 21 working at universities teaching or doing research for
- 22 most of your career, right?
- 23 A. Yes, that's right.
- Q. Okay. Did you actually have a job as an engineer or working outside of the university environment?

- 1 A. Well, I do regular consulting work for companies,
- 2 yes.
- 3 Q. Okay. Did you ever work full-time outside the --
- 4 A. Yes. I worked --
- 5 Q. -- university environment?
- 6 A. Sorry. Yes. I worked in Silicon Valley as an 7 engineer.
- 8 0. And when was that?
- 9 A. Let's see. That was back before I went to graduate
- 10 school; so -- boy, it's painful to count those years.
- 11 Twenty years ago, probably more.
- 12 Q. Is that when you were at Kratos Display Systems?
- 13 A. Yes, that's correct.
- 14 Q. And that was back from 1979 to '81, right?
- 15 A. Sounds right, yeah.
- 16 Q. Okay. But since then you have been primarily in --
- 17 working in the university environment, right?
- 18 A. That's right.
- 19 Q. Okay. And have you ever built any video game
- 20 controllers?
- 21 A. Well, I have to be a little careful here. Let's
- 22 see. So, let me mention two instances.
- First, back not long after I started graduate
- 24 school, I did as part of a project put together a very
- 25 simple version of a controller which interacted with a

- very simple video game. So --
- 2 Q. When was that?
- 3 A. That was back when I started at Stanford as a
- 4 graduate student.
- Q. Okay. It's not part of your regular job to work onor build video game controllers, is it?
- 7 A. Well, again, some of our research concerns human
- 8 machine interfaces and, for instance, vibrotactile
- 9 feedback, the active tactile feedback sort of thing
- 11 some research. So, some of that technology is, in fact,

we've been talking about here is an area in which we do

- 12 used in video game controllers; and I've been employed
- 13 as a consultant by a company that's very actively
- 14 involved in developing --
- 15 Q. Okay.
- 16 A. -- video game controllers.
- 17 Q. Now, you have been hired as an expert by Anascape,
- 18 right?

- 19 A. That's correct.
- 20 Q. Okay. And they're actually paying for your time in
- 21 connection with this case, right?
- 22 A. Yes, they are.
- 23 Q. Okay. But you consider yourself to be an
- 24 independent expert, right?
- 25 A. I believe that's the term, yes.

- 1 Q. Okay. And, in fact, you are the first expert that
 2 has testified in this case; and I just want to
 3 understand from you to make sure the jury understands
 4 that -- is it your understanding that your job is to
 5 provide independent testimony, that --
- 6 A. Yes.
- 7 Q. -- it's not supposed to be biased to one side or 8 the other?
- 9 A. That's my understanding, yes.
- 10 Q. And is it also your understanding that it's

 important for your opinions -- because you, unlike many

 witnesses in a trial, are allowed to give opinions

 regarding, for example, infringement and technical

 issues because you're an expert. Do you understand

 that?
- 16 A. Yes, uh-huh.
- 17 Q. And do you understand that because you're allowed 18 to give opinions, it's important that you have done the 19 underlying research and studying to make sure that your 20 opinions are accurate? Do you also understand that?
- 21 A. Yes, sir.
- 22 Q. In fact, if you didn't conduct a thorough
 23 investigation or a proper investigation before giving
 24 your opinions, you would agree with me that would be
 25 problematic in connection with testifying in a lawsuit?

- 1 A. Certainly.
- 2 Q. Okay. Because the jury, in fact, may rely on your
- 3 opinions in making a decision in this case. You
- 4 understand that, right?
- 5 A. Sure.
- 6 Q. Okay. Before this case, had you ever heard of Brad
- 7 Armstrong?
- 8 A. Let's see. I believe I've run across at least one
- 9 of his patents in some years gone by.
- 10 Q. Okay. Now, was that in connection with the
- 11 Immersion case that you were involved with?
- 12 A. I believe so, yes.
- 13 Q. Okay. Now, other than your prior involvement with
- 14 the litigation, had you ever heard of Brad Armstrong?
- 15 A. I don't believe so, no.
- 16 Q. Okay. Had you ever heard of his company, Anascape?
- 17 A. No.
- 18 Q. Had you ever seen any of Mr. Armstrong's patents
- 19 other than in that litigation that you were involved
- 20 with?
- 21 A. Except for that previous litigation, no.
- 22 Q. Okay. That litigation, just to be clear, didn't
- 23 involve any of Mr. Armstrong's patents, right?
- 24 A. Well, Mr. Armstrong's patents may constitute prior
- 25 art; and, thus, they would be pertinent to that previous

litigation.

his patents.

- Q. Okay. But the litigation didn't involveinfringement or invalidity allegations regarding any of
- 5 A. No.

- 6 Q. Now, you heard -- you were here -- in fact, I saw 7 you here when Mr. Armstrong was testifying, right?
- 8 A. I heard most of his testimony, not all.
- 9 Q. Okay. You understand, of course, that there is no
- 10 claims in this case that Mr. Armstrong is alleging would
- 11 go back beyond the 1996 application that he filed? Do
- 12 you understand that?
- 13 A. That is my understanding, yes.
- 14 Q. Okay. You understand, of course, that
- 15 Mr. Armstrong does not have a patent on rumble.
- 16 A. That is my understanding.
- 17 Q. Okay. In fact, would you agree with me that
- 18 Mr. Armstrong didn't invent rumble?
- 19 A. Well, I have to be careful here. I'm not sure --
- 20 well, let's see. When you use the word "rumble," that's
- 21 usually in the context of video games. I'm not sure who
- 22 first used this kind of vibrotactile feedback in video
- 23 games; so, I'm afraid I can't help you there.
- 24 Q. Did you hear Mr. Armstrong's testimony when he
- 25 explained that he had learned that through some foreign

reference?

- A. I don't believe I heard Mr. Armstrong say that.
- 3 Q. Did you hear Mr. Armstrong testify regarding a
- 4 rumble feature that he learned of through a foreign
- 5 reference?
- 6 A. I may not have been present during that.
- 7 Q. Okay. Do you know what the term "proportional"
- 8 buttons means when I use that term?
- 9 A. I believe, at least in the context of these
- 10 patents, yes.
- 11 Q. Okay. Did you read the opening statement in this
- 12 case by the plaintiff's attorney?
- 13 A. No, I did not.
- 14 Q. And you weren't here for that?
- 15 A. I was not.
- 16 Q. Okay. Do you think that Mr. Armstrong invented
- 17 proportional buttons?
- 18 A. By themselves or in the context of his patent?
- 19 Q. Proportional buttons by themselves.
- 20 A. No, not by themselves.
- 21 Q. Okay. Did he invent proportional buttons in the
- 22 context of his patent?
- 23 A. Well, they're part of the inventions described in
- 24 this patent, if that's what you're asking.
- 25 Q. Does he have patent protection on proportional

buttons themselves?

- 2 A. In isolation, no.
- 3 Q. Because he didn't invent that, right?
- 4 A. In isolation, no.
- 5 Q. Okay. Mr. Armstrong also didn't invent -- did you
- 6 hear his testimony where he said he didn't invent
- 7 sheet-connected sensors?
- 8 A. I don't recall hearing that. I'm sorry.
- 9 Q. Okay. Do you believe that Mr. Armstrong invented
- 10 sheet-connected sensors?
- 11 A. Again, no, not in isolation.
- 12 Q. Okay. Now, you've given us a --
- THE COURT: Excuse me. Would you pull the
- 14 microphone in front of you a little bit just to be sure
- 15 we -- thank you.
- 16 MR. PRESTA: Now, if I could pull up the
- 17 first slide, Slide 3, please.
- 18 BY MR. PRESTA:
- 19 Q. Now, Professor Howe, based on your testimony -- or
- 20 we understood what your testimony was going to be. So,
- 21 we took the liberty of putting together a chart that I
- 22 believe summarizes your testimony. And if you could
- 23 look at that chart, please, and just confirm to me that
- 24 that corresponds with the opinions that you just gave
- 25 that, in fact -- with respect to the infringement of the

- four different products that are alleged here.
- A. I believe that's correct.
- 3 Q. Okay. Now, I notice that the GameCube product,
- 4 which is on the far right, here (indicating), is
- 5 identified as infringing all of the claims -- 14, 16,
- 6 19, 22, and 23 -- right?
- 7 A. Yes, that's right.
- 8 Q. Now, you understand, of course, that -- and you
- 9 heard the testimony that Mr. Armstrong had that GameCube
- 10 product in front of him when he wrote those claims,
- 11 right?
- 12 A. I believe I caught that in the testimony, yes.
- 13 Q. In fact, Mr. Armstrong admitted that he was using
- 14 that product as a guide to draft those claims, right?
- 15 A. Again, I don't recall hearing that specific piece
- 16 of the testimony.
- 17 Q. Well, you do understand that Mr. Armstrong had the
- 18 Nintendo GameCube product in his possession when he was
- 19 drafting the claims, right?
- 20 A. Yes.
- 21 Q. Okay. So, it's not a surprise, then, that, in
- 22 fact, you're testifying that all of these claims are met
- 23 by the GameCube controller, because they were drafted
- 24 for the -- specifically to read on the GameCube
- 25 controller, right?

- A. Again, I haven't heard Mr. Armstrong testify in that regard; so, I'm sorry, I can't help you with that.
- 3 Q. Okay.

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- 4 MR. PRESTA: I'm going to go to the next 5 slide.
- 6 BY MR. PRESTA:
- 7 Q. Now, this is a timeline that has been shown several 8 times by Nintendo in this case. And, in fact, the 9 claims that are written in this case that are being 10 alleged were drafted July 15th of 2002. Were you aware 11 of that?
- 12 A. Yes.

- 13 Q. Okay. And are you aware that Nintendo's GameCube
 14 product came out in November of 2001?
- 15 A. I'm happy to take your word for that.
- 16 Q. Okay. Now, in view of the fact that Mr. Armstrong
- 17 had Nintendo's products in his hands when he was writing
- 18 this aspect of his patent, we didn't really need a
- 19 Harvard professor to come in and read the claims onto
- 20 those products and attempt to show that there is
- 21 infringement. Would you agree with me?
- 22 MR. CAWLEY: Your Honor, I object to that.
- 23 That's an argumentative question.
- 24 THE COURT: Sustained.

BY MR. PRESTA:

- 2 Q. Okay. Well, again, the GameCube was the product
- 3 that Mr. Armstrong had in his possession at the time he
- 4 wrote those claims; and it's -- the GameCube is the only
- 5 product that infringes all of the claims. You'll agree
- 6 with me on that, right?
- 7 A. Yes.
- 8 Q. Okay. Now, I'd like to help -- understand a little
- 9 bit better what you believe Mr. Armstrong invented.
- 10 And, in fact, I'd like to ask you if you recognize that
- 11 controller.
- 12 A. Yes, I do.
- 13 Q. What is it?
- 14 A. That's the Nintendo 64 controller.
- 15 Q. Okay. You understand that that's not an accused
- 16 product in this case, right?
- 17 A. Yes, I do.
- 18 Q. Okay. Do you have an opinion on whether that
- 19 controller would infringe claim 19?
- 20 A. Well, I haven't done a detailed analysis; so, I
- 21 can't say for certain.
- 22 Q. Okay. Well, you just testified --
- THE COURT: Hold on a minute, counsel.
- 24 Since this lawyer is a little further over, I
- 25 think if you'll -- yes. If you'll slide that microphone

over.

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THE WITNESS: Great.

THE COURT: The acoustics in here are not real good over where I'm sitting, and sometimes they're not real good over there. So, it's important that you speak up.

THE WITNESS: I understand. I will do.

- 8 Thank you, sir.
- 9 MR. PRESTA: Thank you, your Honor.
- 10 BY MR. PRESTA:
- 11 Q. Now, Professor Howe, do you recall at your
- 12 deposition where I showed you the N64 and you did a
- 13 detailed review of it?
- 14 A. Vaguely, yes.
- 15 Q. Okay. And you have been testifying that, for
- 16 example, claim 19 -- an important aspect of claim 19
- 17 that you mentioned was that it has two joysticks and a
- 18 cross-switch, right?
- 19 A. That's right.
- 20 Q. Now, this particular controller does not have two
- 21 joysticks and a cross-switch, does it?
- 22 A. No. It apparently does not.
- 23 Q. Okay. So, in view -- then based on that, would you
- 24 agree with me that the N64 does not infringe claim 19?
- 25 A. It does not appear to.

- 1 Q. Okay. Now, Dr. Howe -- I'm going to demonstrate
- 2 with this camera slightly how the controls work on this
- 3 N64. Okay. You'll agree with me that there is a
- 4 joystick here that can be moved in two directions,
- 5 right?
- 6 A. Yes.
- 7 Q. You'll also agree with me that this cross-switch
- 8 can be moved in two directions that has four
- 9 unidirectional sensors under it. You explained that,
- 10 right?
- 11 A. That's right.
- 12 Q. Okay. Now, the one difference that this has is
- 13 four yellow buttons. Do you see those?
- 14 A. I do.
- 15 Q. Okay. Do you know what those buttons are called,
- 16 by any chance?
- 17 A. Well, the letter "C" appears next to them. That
- 18 might be a good guess maybe.
- 19 Q. Okay. Now, would you agree with me that these
- 20 buttons could be used to control a game?
- 21 A. Yes, I imagine they could.
- 22 Q. Okay. In fact, you could use the right button to
- 23 make something go right, the left button to make
- 24 something go left, right?
- 25 A. That's right.

- 1 Q. Same with up and down, correct?
- 2 A. Yes.
- 3 Q. Okay. So, this controller actually, in your view,
- 4 would provide 6 degrees of freedom of control, right?
- 5 A. Yes.
- 6 Q. Okay. Now, again, tell me the reason that this 7 controller does not infringe claim 19.
- 8 A. Well, again, we would have to go through and check
- 9 that each of the terms that are present in claim 19 are
- 10 present in the controller. The two-thumbstick
- 11 requirement, for instance, talks about pairs of
- 12 bi-directional proportional sensors. Those aren't
- 13 present here; so, it would seem it doesn't infringe.
- 14 Q. Okay. So, the important point of why it doesn't
- 15 infringe is because it doesn't have two joysticks,
- 16 right?
- 17 A. Well, again, we'd have to check it off and look at
- 18 each term separately.
- 19 Q. And you have done that now, right, for claim 19?
- 20 A. Well, we went through some of the terms. Would you
- 21 like to go through all of the terms?
- 22 Q. Okay. Do you need to look at claim 19 to see if,
- 23 in fact, the second joystick would be needed for
- 24 infringement?
- 25 A. No, no. That, I'm sure of.

- 1 Q. Okay. So, it avoids infringement because it
 2 doesn't have the second joystick. You'll agree with me,
 3 right?
- 4 A. That's -- yes. That's one reason.
- 5 Q. Okay. Now, do you know of any others?
- 6 A. Let's see. I don't off the top of my head.
- 7 Q. Okay. Well, it's not a memory test; so, we'll move 8 on.
- Now, let me ask you -- when we go to the
 GameCube product, however, you see that there is
 actually two joysticks. And it's your opinion that that
 GameCube controller infringes, right?
- 13 A. That's right.
- Q. Okay. So, obviously the requirement of twojoysticks is important, in your view, for this productto infringe, right?
- A. Well, not two joysticks. The two joysticks do
 infringe; but as we discussed with the Wii Remote, for
 instance, there are other ways of meeting the claim
 terms.
- 21 Q. Okay. Now I'm going to -- I want to show you a
 22 hypothetical controller. Okay? It's not a real
 23 controller. It's not a Nintendo controller. But I've
 24 modified it; and we've replaced a cross-switch, which
 25 was previously here, with a third joystick. Now, you'll

- 1 agree with me, of course, that that modified
- 2 hypothetical controller does not infringe claim 19, does
- 3 it?
- 4 A. Well, we need to talk about the sensors that are 5 present underneath that new joystick.
- 6 Q. Okay. Let's assume that they are two
- 7 bi-directional proportional sensors just like the other
- 8 joysticks that you had looked at.
- 9 A. Okay.
- 10 Q. Then, you will agree with me that that controller
- 11 wouldn't infringe claim 19, right?
- 12 A. Doesn't appear to.
- 13 Q. Okay. So, if we look -- if I understand your
- 14 testimony, the N64 controller does not infringe because
- 15 it only has one joystick. It doesn't have a second
- 16 one -- element to meet the other part of the claim. You
- 17 agree with me on that, right?
- 18 A. Yes.
- 19 Q. Okay. But your testimony is that the GameCube
- 20 controller -- because it has two joysticks and the other
- 21 features in the claim, it's your testimony that that is
- 22 alleged to infringe -- in fact, it is your opinion that
- 23 it does infringe, right?
- 24 A. Yes.
- 25 Q. Okay. Now, if Nintendo, of course, modified the

- controller to put another joystick on there, then you'll agree with me, based on your testimony a minute ago,
- 3 that that wouldn't infringe, right, claim 19?
- 4 A. Yes.
- 5 Q. Okay. So, what we're really -- in your view, then,
- 6 really, for purposes of claim 19 -- and, in fact, other
- 7 claims, as well -- that it's important to have this
- 8 combination of the two joysticks and a cross-switch,
- 9 correct?
- 10 A. Well, again, there are various ways you can embody
- 11 the language in the claims that talk about sensors and
- 12 function and all --
- 13 Q. Well, that's not really my question. You
- 14 understand, of course, that the reason that the two
- 15 joysticks and the cross-switch are important was because
- 16 Mr. Armstrong, in fact, had this product in front of him
- 17 when he drafted the claims, correct?
- 18 A. I'm sorry. Again you're asking about
- 19 Mr. Armstrong's testimony that I didn't hear.
- 20 Q. Well, Mr. Armstrong didn't have the pink one -- I'm
- 21 sorry -- didn't have this in front of him when he
- 22 drafted the claims, did he?
- 23 A. Not that I know of.
- 24 Q. Okay. And that one doesn't infringe.
- Now, if we could take a look at claim 19.

- 1 Okay. Now what I have up on the screen is claim 19. Do
- 2 you see the paragraph that says "second element"?
- 3 A. I do.
- 4 Q. And the paragraph that says "third element"?
- 5 A. Yes.
- 6 Q. You'll agree with me that the language of those two
- 7 paragraphs is identical except for the words "second"
- 8 and "third," right?
- 9 A. That's right.
- 10 Q. Had you noticed that before, or are you just aware
- 11 of that now?
- 12 A. I believe I testified to that effect a few minutes
- 13 ago.
- 14 Q. Okay. Now, you also testified that as far as the
- 15 GameCube goes, it's this platform that corresponded to
- 16 the cross-switch, right?
- 17 A. That's right.
- 18 Q. And then it was one of the joysticks that
- 19 corresponded to the second element, right?
- 20 A. That's right.
- 21 Q. And it was another one of the joysticks that
- 22 corresponded to the third element.
- 23 A. That's right.
- 24 Q. You agree with me on that.
- 25 A. Yes.

- 1 Q. Now, you understand how those joysticks work, don't
- 2 you?
- 3 A. Yes, I do.
- 4 Q. In fact, you demonstrated how they worked.
- 5 A. Yes.
- 6 Q. I just would like to quickly show you something 7 with the camera.
- Now, Defendant's Exhibit 158 is the inside of the GameCube controller. You're familiar with the
- 10 inside of the GameCube controller, right?
- 11 A. Yes, I am.
- 12 Q. Okay.
- 13 And, in fact, you recognize this as the
- 14 inside of the GameCube controller?
- 15 A. Looks like.
- 16 Q. Okay. Now, it has the two separate joysticks
- 17 mounted on two circuit boards, right?
- 18 A. That's right.
- 19 Q. Okay. Now, the thing that you're calling the third
- 20 element in the claim is this little yellow joystick,
- 21 right?
- 22 A. We can call it that. They're interchangeable for
- 23 purposes of the claims; but, sure, we could --
- 24 Q. Okay.
- 25 A. -- call it that.

- 1 Q. Well, when you ran through the claim, it looked
- 2 like you were pointing to this one.
- 3 A. Okay.
- 4 Q. Okay. Now, this joystick, in fact, can be moved to
- 5 the right and to the left, like that (demonstrating),
- 6 right?
- 7 A. Yes.
- 8 Q. And, in fact, it can be moved back and forth
- 9 (demonstrating), right?
- 10 A. Yes.
- 11 Q. And under it, right there, those two black items,
- 12 what are they?
- 13 A. They're rotary potentiometers.
- 14 Q. And how many are there?
- 15 A. There are two.
- 16 Q. Okay. One for each direction?
- 17 A. That's right.
- 18 Q. Okay. And this yellow piece that I'm touching with
- 19 my finger, that's what you consider to be the third
- 20 element when you're reading that claim on the GameCube,
- 21 right?
- 22 A. That's right.
- 23 Q. And not the piece I'm touching with my lower finger
- 24 but the piece I'm touching now with my top finger; is
- 25 that right?

- 1 A. That's right.
- 2 Q. Okay. And this is actually a piece of structure, a
- 3 joystick, that I can touch; and when I move it, it
- 4 activates those sensors, right?
- 5 A. That's right.
- 6 Q. And that's how joysticks work.
- 7 A. Sure.
- 8 Q. Okay. And, of course, Mr. Armstrong didn't invent
- 9 the joystick. You'll agree with me on that.
- 10 A. No.
- 11 Q. And he didn't invent the rotary potentiometer.
- 12 A. No.
- 13 Q. Okay. I want to take a closer look at the claim
- 14 language in claim 19 relative to the joystick. Now
- 15 we're looking at just that third element paragraph in
- 16 claim 19. See that?
- 17 A. Okay.
- 18 Q. And you'll agree with me that your contention is
- 19 that this element right here, which is blown up, is, in
- 20 fact, that third joystick, right?
- 21 A. Yes.
- 22 Q. Okay. And these two black things right here are
- 23 the rotary potentiometers; and that corresponds to the
- 24 item I was just demonstrating with the camera, right?
- 25 A. Yes.

- 1 Q. Now, in fact, it's your testimony that that third 2 element is the yellow piece on the top, right?
- 3 A. That's right.
- 4 Q. And that third element -- I just demonstrated it -- 5 is movable on two mutually perpendicular axes, right?
- 6 A. Yes.
- 7 Q. Because the claim actually requires that you have a 8 third element that's movable on two mutually 9 perpendicular axes. You understand that, right?
- 10 A. I do.
- 11 Q. Okay. Now, the third element has to do more than
- 12 that, doesn't it, to meet the claim limitation?
- 13 A. Yes. It continues up there.
- 14 Q. Okay. What else does it have to do?
- 15 A. Okay. So, I can read it if you like, said: Third
- 16 element structured to activate two bi-directional
- 17 proportional sensors providing outputs at least in part
- 18 controlling objects and navigating a viewpoint.
- 19 Q. Thank you, Professor Howe.
- Now, the third element -- as you mentioned,
- 21 the third element must be structured to activate -- the
- 22 claim language requires that, right?
- 23 A. That's right.
- 24 Q. And it must be structured to activate two
- 25 bi-directional proportional sensors. So, in order to

- 1 satisfy this claim element, it must have those features,
- 2 right?
- 3 A. That's right.
- 4 Q. Okay. And, in fact, this joystick does have these 5 two bi-directional proportional sensors that we talked
- 6 about, right?
- 7 A. Yes.
- 8 Q. And, in fact, you needed to find those things to9 show infringement, right?
- 10 A. Yes.
- 11 Q. Okay. And this third paragraph is exactly the same
- 12 as the -- this third element paragraph, as we already
- 13 said, is exactly the same as the second element
- 14 paragraph; and the language is exactly the same except
- 15 for the word "second," right?
- 16 A. That's right.
- 17 Q. So, the other joystick would have these same exact
- 18 features. It would have a second element that's
- 19 movable, that when you move it, it activates these two
- 20 bi-directional proportional sensors, right?
- 21 A. Yes.
- 22 Q. Okay. Now, back to this timeline. I've added
- 23 another feature on the timeline. When Mr. Armstrong
- 24 wrote his July, 2002, claims that now are being alleged
- 25 that you say are infringed here today in court, the

- 1 GameCube product was already out; and he had that in his
- 2 possession. Now, of course, the Wii, which is also
- 3 accused, didn't come out until after he wrote those
- 4 claims. Do you understand that?
- 5 A. Yes.
- 6 Q. Okay. In fact, do you have any reason to believe
- 7 that the Wii didn't come out until November of 2006?
- 8 A. I don't know the date of introduction. Sounds
- 9 about right.
- 10 Q. Okay. But you know for sure it wasn't before
- 11 July 15th of 2002, right?
- 12 A. As a product, no.
- 13 Q. Okay. As anything, was it before July of 2002?
- 14 A. Again, I'm not familiar with the development effort
- 15 inside Nintendo on that, you know, when it might have
- 16 started.
- 17 Q. Okay. But you'll agree it wasn't actually a
- 18 product until about four years after Mr. Armstrong wrote
- 19 the claims that Nintendo's accused of infringing, right?
- 20 A. That's right.
- 21 Q. Now, taking a look at the Wii Remote itself --
- 22 you're familiar with that, right?
- 23 A. I am.
- 24 Q. Did you have a chance to play any of the Nintendo
- 25 games using the Wii Remote?

- 1 A. Yes.
- 2 Q. Did you play it with the Wii Remote by itself?
- 3 A. No. I believe I used the Classic and the Nunchuks.
- 4 Q. Okay. So, you never had an opportunity just to use
- 5 the Wii Remote by itself to play any game?
- 6 A. I don't recall. I might have tried that. But I'm 7 sure the others; I'm not sure of this one.
- 8 Q. Okay. But you did have an opportunity to use the
- 9 Wii Remote and the Nunchuk together to play some
- 10 Nintendo games?
- 11 A. I did.
- 12 Q. Do you recall what games they were?
- 13 A. Oh, I played quite a few. And, again, I'm not a
- 14 real gamer myself. I had some help with that. Let's
- 15 see if I can recall a few. I played golf with Tiger
- 16 Woods, as I recall. Let me think. I believe I played
- 17 some of the Super Mario games. Super Mario Galaxy is
- 18 one.
- 19 Q. Okay. And you said you had some help playing
- 20 games. Who was helping you?
- 21 A. Members of the Anascape team.
- 22 Q. The lawyers?
- 23 A. Yes; and I believe some of the technical people
- 24 with them, as well.
- 25 Q. Okay. What technical people?

- 1 A. You know, I'm bad with names.
- 2 Q. Okay. That's fine.
- 3 A. Sorry.
- 4 Q. Okay. So, you'll agree with me, of course, that
- 5 the Wii Remote is not accused of infringement in this
- 6 case?
- 7 A. By itself, no.
- 8 Q. Right. And, in fact, you're aware that -- there
- 9 are many games that you can actually just use the Wii
- 10 Remote to play the Wii, right?
- 11 A. Yes.
- 12 Q. Okay. But your contention, then, is that when you
- 13 add the Nunchuk and you plug it into the Wii Remote,
- 14 then you allege that claim 19 is infringed.
- 15 A. Yes.
- 16 Q. And that's the allegation in this case, right?
- 17 With respect to the Wii and the Wii Nunchuk, there's
- 18 only one claim, claim 19 -- right?
- 19 A. That's right.
- 20 Q. That's the only claim in the '700 patent that is
- 21 alleged to be infringed, right?
- 22 A. That's right.
- 23 Q. Now, in fact, if we go back to your chart, we can
- 24 see that the GameCube, of course, is accused to infringe
- 25 all their claims; the Wavebird, only one. But what we

- were just talking about was the Wii Remote and the Wii Nunchuk, and it's only claim 19. Right?
- 3 A. That's right.
- Q. Now, if we take a look at this same third element paragraph that we were just talking about with respect to the joysticks -- that's that same -- out of claim 19, we were just looking at this language relative to the joysticks, right?
- 9 A. Yes.
- 10 Q. On a GameCube product.
- Now I'm going to ask you to take a look at
 this language relative to the Wii Remote. I'm going to
 take the cover off of the Wii Remote. You're familiar
 with, in fact, what the inside of it looks like?
- 15 A. Yes.
- 16 Q. And you've taken it apart, right?
- 17 A. Yes.
- 18 Q. Okay. Just so it may help the jury, I'm going to 19 show that.
- Now, I know you couldn't see it when I had it over here; but now that it's on the screen, do you recognize what that is?
- 23 A. Yes. That's the Wii Remote circuit board.
- Q. Okay. Now, if I come really -- now, there's a lot of chips on there, right?

A. Yep.

- 2 Q. Are there a variety of chips?
- 3 A. There are some, yes.
- 4 Q. Okay. And, in fact, on the backside there is 5 actually a large chip. Do you know what that chip is?
- 6 A. I do not.
- 7 Q. Okay. Will you be surprised to learn that it's a 8 microcontroller that handles motion detecting?
- 9 A. Let's see. I know there's a microcontroller built
 10 into the Wii Remote. My understanding is that it does
 11 not include sensors for motion detecting, if that's what
- 12 you were asking.
- 13 Q. Okay. Well, do you know what it does?
- 14 A. Well, the microcontroller receives signals from the 15 various sensors on the Remote and communicates to the --
- 16 handles part of the communication to the console.
- 17 Q. Okay. Now, do you know what the element is that's 18 on the end of the Wii Remote that I'm showing now?
- 19 A. I don't, and it's awful hard to see.
- 20 Q. I'm sorry.
- Are you aware whether or not there is a camera on the Wii Remote?
- 23 A. I'm not.
- Q. You're not familiar with the fact that there is a camera feature on the Wii Remote?

- 1 A. I'm familiar with the fact there are optical2 detectors. I don't know if it's configured as a camera.
 - Q. Okay. So, it is your understanding that there is an optical detector on the Wii Remote?
- 5 A. Yes.

- 6 Q. What does it do?
- 7 A. Let's see. One of the things I believe it does is 8 it allows you to look at the video screen and interact 9 with it during games.
- 10 Q. And do you have any idea how it does that?
- 11 A. Since it's not related to the patent, I don't.
- 12 Q. Okay. Are you aware of a piece of equipment that
- 13 comes with the Wii Remote called a "light bar"?
- 14 A. Oh, I remember seeing that; but, again, since it's
- 15 not concerned with the patent, I didn't go into the
- 16 details.
- MR. PRESTA: May I approach, your Honor?
- THE COURT: You may.
- 19 BY MR. PRESTA:
- 20 Q. I'm going to hand you Defendant's Exhibit 162 -- is
- 21 that one marked 162?
- 22 A. No.
- 23 Q. You have that already; so, I'll keep this one,
- 24 then. Thank you.
- So, you have a copy of Defendant's

- 1 Exhibit 162; and so do I. And I wanted to ask you to
- 2 take a look at the end part of it right here
- 3 (indicating).
- 4 A. No.
- 5 Q. Could you take a look at it?
- 6 A. Oh, sure.
- 7 Q. Do you have any idea what that is for?
- 8 A. Presumably it's a window that the optical detector 9 looks through.
- 10 Q. Okay. And, in fact, it is a window for the optical
- 11 detector. Do you have any understanding how that might
- 12 operate with the light bar to -- that comes with the
- 13 Wii?
- 14 A. Well, I could speculate if you like.
- 15 Q. But you don't know?
- 16 A. No.
- 17 Q. Okay. Do you know that, in fact, the light bar --
- 18 when you buy a Wii, you set a light bar on top of the
- 19 television? Are you aware of that?
- 20 A. I've seen it, yes.
- 21 Q. And that when you move the Wii around, it detects
- 22 where that light bar is and that's part of the motion
- 23 sensing of the Wii? Are you familiar with that?
- 24 A. I believe I've heard that, yes.
- 25 Q. Okay. You've only heard that, or do you know that

that's true?

- A. I did not look into that.
- 3 Q. Okay. Now, that motion sensing -- that motion
- 4 microcomputer that I showed you on the back of the
- 5 board, do you have an understanding that, in fact, that
- 6 takes signals from the camera as well as from the
- 7 accelerometer to figure out whether, in fact, the Wii is
- 8 being moved?
- 9 A. Again, I have a general understanding of that.
- 10 don't know the details.
- 11 Q. Okay. Now, that information is -- you know, is
- 12 readily available. Did you look for it?
- 13 A. Again, I knew enough about it to realize it wasn't
- 14 pertinent to the patent claims.
- 15 Q. Okay. So, the operation of the product, in your
- 16 view, wasn't really pertinent to the patent?
- 17 A. Well, the product has lots of features; and I
- 18 became familiar with the ones that were important for
- 19 the patent, considering infringement to the patent.
- 20 Q. Okay. Now, I'll try to hold this in perspective
- 21 for you for a second so you can see it. I'm not trying
- 22 to -- I want to make sure you can see it. Do you see
- 23 that small chip that --
- 24 A. I do.
- 25 Q. -- I'm showing you now?

Do you know what that chip is?

- A. That's the accelerometer, I believe.
- 3 Q. Okay. How many chips are right there? How many
- 4 chips constitute the accelerometer?
- 5 A. I'm sorry. There's one chip there. Is that what
- 6 you're asking?

1

- 7 Q. Yes. Is there one chip there?
- 8 A. There's one chip, yes.
- 9 Q. Okay. Is that chip mounted on the circuit board?
- 10 A. Yes, it is.
- 11 Q. Okay. Can I -- is there any way for me to put my
- 12 finger on that chip and move it --
- 13 A. No.
- 14 Q. -- relative to the circuit board?
- 15 A. No.
- 16 Q. Okay. And, in fact, when I don't have it opened
- 17 up, I can't even actually get my finger onto the chip,
- 18 can 1?
- 19 A. No.
- 20 Q. So, you would have to open it up. And then if you
- 21 tried to put your finger on the chip, you won't be able
- 22 to move it, right?
- 23 A. I guess not. I'm not sure what you meant but...
- 24 Q. Okay. Well, the chip is mounted. It's fixed,
- 25 mounted on the circuit board, right?

- 1 A. Oh, you mean you won't be able to move it with 2 respect to the circuit board.
- 3 Q. Yes. You won't be able to put your finger onto the 4 chip and move it with respect to the circuit board.
- 5 A. That's correct, yes.
- 6 Q. Okay. And there's nothing on the outside of the
 7 Wii Remote that would enable me to touch anything that
 8 would cause the accelerometer to be activated.
- 9 A. Correct.
- 10 Q. So, there's no -- for example, there's nothing like
- 11 this cross-switch -- touching the cross-switch doesn't
- 12 activate the accelerometer, does it?
- 13 A. No, it does not.
- 14 Q. And none of these other buttons on the face
- 15 activate the accelerometer, do they?
- 16 A. No, they don't.
- 17 Q. Okay. Taking again -- this is that chip I was just
- 18 showing you in the camera. You agree with me that
- 19 that's the accelerometer?
- 20 A. Yes, sir.
- 21 Q. And that it's one chip, right?
- 22 A. Yes.
- 23 Q. Okay. And, in fact, if we enlarge it, you can
- 24 actually see what we were just showing, that it's, in
- 25 fact, a chip.

- Now, what do we mean when we say "a chip,"

 Professor Howe, just for the jury? Do you know what I

 mean when I say "a chip"?
- 4 A. It typically means an integrated circuit, an
 5 electronic component that includes little electronic
 6 processing elements and nowadays it can include
 7 mechanical sensors, as well.
- 8 Q. Okay. Now, you, of course, agree with
- 9 Mr. Armstrong's testimony -- or do you agree with
- 10 Mr. Armstrong's testimony that accelerometer is not
- 11 disclosed anywhere in Mr. Armstrong's 1996 application
- 12 or in the '700 patent that's accused of being infringed
- 13 in this case?
- 14 A. I'm sorry. What was the question?
- 15 Q. You agree that there is no accelerometer disclosed
- 16 in the 1996 application.
- 17 A. No.
- 18 Q. Or in the '700 patent that is accused of being
- 19 infringed in this case, right?
- 20 A. No.
- 21 Q. "No" means that there is no accelerometer
- 22 disclosed?
- 23 A. That is correct.
- 24 Q. Thank you.
- Now, when we looked at this third element a

- few minutes ago, you showed me how, in fact, that third element of claim 19 matched up word-for-word with the joystick. Do you recall that?
- 4 A. I do.
- 5 Q. Okay. And it's because the third element had the structure, because it was movable on two mutually perpendicular axes, because I can touch this thing and 8 move it, right?
- 9 A. Yes.
- 10 Q. And then the third element, this yellow piece, was
 11 also structured to activate these two sensors when I
- 12 move it. We just saw that, right?
- 13 A. Yes.
- 14 Q. Okay. In fact, the claim language requires that
 15 the third element have structure to activate those two
 16 sensors, right?
- 17 A. Yes.
- 18 Q. Okay. Now, Professor Howe, it's your testimony
 19 here today that this same claim language that you said
- 20 covers this joystick -- and, in fact, Mr. Armstrong
- 21 drafted to cover Nintendo's joystick -- also identically
- 22 covers this accelerometer chip, right? That's your
- 23 testimony.
- 24 A. Yes.
- 25 Q. Now, I didn't hear you testify to this on your

- 1 direct examination; but what are you identifying as the
- 2 piece that corresponds to this third element that the
- 3 claim requires?
- 4 A. The proof mass.
- 5 Q. Okay. And, so, you're saying that the proof mass,
- 6 which is actually part of the accelerometer, is the
- 7 third element?
- 8 A. That's right.
- 9 Q. Okay. And, in fact, the proof mass is part of the
- 10 sensor, isn't it?
- 11 A. Yes.
- 12 Q. The proof mass is inside the accelerometer sensor,
- 13 right?
- 14 A. Yes.
- 15 Q. Okay. And, so, it's your position -- and the proof
- 16 mass is actually part of the acceleration sensor, right?
- 17 A. That's right.
- 18 Q. Okay. So, it's inside this little chip. You're
- 19 trying to say there is something called a "proof mass,"
- 20 in your opinion, inside this chip, right?
- 21 A. Yes.
- 22 Q. Okay. Now, where did you get an understanding that
- 23 there is a proof mass inside that accelerometer?
- 24 A. Well, I'm familiar with the way micro-machined
- 25 accelerometers operate.

- 1 Q. Are you familiar with the way the particular
- 2 micro-machined accelerometer that is used in the Wii
- 3 Remote is structured and operates?
- 4 A. I believe so. I think this is the same part we
- 5 used in my lab.
- 6 Q. I'm sorry? Could you repeat that?
- 7 A. Yes.
- 8 Q. Yes, you are familiar with --
- 9 A. Yes. I believe this is the same part we've used in
- 10 my lab; so, I'm familiar with it.
- 11 Q. You believe that this accelerometer is some same
- 12 part that you've used in your lab?
- 13 A. That's right.
- 14 Q. Do you know that for a fact?
- 15 A. Model numbers change quite often with these
- 16 devices; so, it may not match exactly.
- 17 Q. Okay. Now, do you know who makes --
- THE COURT: All right. Counsel, we're going
- 19 to go ahead and break.
- 20 Ladies and gentlemen, as I said before, I've
- 21 got this emergency hearing I have to take up. I'm going
- 22 to ask you to be back here tomorrow morning at 8:45.
- 23 Again, please remember my instructions. Don't discuss
- 24 the case with anybody. Don't let anybody discuss the
- 25 case with you, and don't do any research. At this time

you are excused. I'll ask you to be back at 8:45 in the morning.

(The jury exits the courtroom, 4:04 p.m.)

THE COURT: Anything to be taken up outside the presence of the jury from point of view of the

MR. CAWLEY: No, your Honor.

plaintiff?

THE COURT: Anything from point of view of defendant?

MR. GERMER: Yes, your Honor. I have an issue. We'd like to request an instruction in terms of the Sony license. And it doesn't have to be done right now. I know you've got some other matters. It could be done -- as long as it's done tomorrow morning before the experts, it's fine with me; but if the court would like to hear it now, I'd be glad to present it.

THE COURT: Well, I'm going to go ahead -I'm dealing with an emergency motion for stay in the
last case we tried here. Whoever's going to discuss
this can wait around a little bit. I'm hoping this will
be over within 30, 40 minutes. We can deal with it
then. If it's something you want taken up tomorrow
morning -- I'd just as soon discuss it this evening
rather than at 6:00 or 7:00 in the morning. So -- I
don't think that will require everyone to be here; but

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if somebody on each side can be here, I'll get through
   this other just as soon as I can.
3
              All right.
                          We're going to be in recess,
   then, for about ten minutes while we get these people on
   the phone and get stuff cleared out and get things set
5
6
   up.
7
              (Recess, 4:06 p.m. to 5:15 p.m.)
8
              (Open court, all parties present, jury not
   present.)
10
              THE COURT:
                          Mr. Germer, go ahead.
11
              MR. GERMER:
                           I wanted to ask the court to
   give an instruction on this Sony agreement that we've
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   heard so much about and we're going to hear a whole lot
13
                They wanted to put that in. We said it's a
14
   more about.
15
   settlement. You decided that it was going to come in
   because it showed a payment of $10 million for a related
16
   patent, '606, which was some evidence that their expert
17
   could consider in terms of how much the license should
18
19
   be. And that was fine. And that is clearly what the
20
   agreement was.
              I'm sure accidentally Mr. Cawley has taken
21
   that and run with it in his opening, talking about
22
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10 million for the patents, especially the '707 [sic].

23

24

thing, which is strong evidence -- we could lose this case on the jury believing, well, Sony paid -- and obviously they weren't exactly in our position; so, that establishes the fact that it was valid and there is infringement. And that's what they were getting across, I'm sure accidentally, by saying that they did the right thing.

The last question that was asked to Mr. Armstrong was something about: At the end of the day, isn't it correct that Sony got paid \$10 million for these patents, the '700 in particular being included. It is clear to me -- and I hope it is to the court -- that even though under the court's ruling it's proper for the jury to think about here's a related technology license that they paid 10 million for -- it is clear to me and hopefully to the court that they shouldn't be able to use that to say this is being paid for the '700 patent, nor should they be able to say, indirectly as they've done, that this establishes that the patent was valid and infringed, which is clearly what the jury is going to take and they may go on.

Therefore, I would request that the court instruct the jury and instruct -- and the court can come up with a much better instruction, I'm sure, than I can, but something along the line of telling the jury that

they are instructed that the Sony agreement consisted of \$10 million for the '606 patent and that, in addition, Anascape got, for all of its other patents, including the '700 application, a number of cross-licenses from Sony.

And the court would further instruct the jury that the testimony about that license is not to be taken by the jury as any evidence or be given any consideration on the issue of whether or not the '700 patent is either valid or infringed.

Now, I recognize, as I've heard the court say it -- and I know it -- that's not a perfect solution because the jury can't put that out of their mind. But at least it gives us something to talk to the jury about and keep this thing in context. Thank you.

THE COURT: Mr. Cawley?

MR. CAWLEY: Your Honor, that's just a straightforward request for a comment on the weight of the evidence. There's nothing that the jury hasn't heard here. The agreement says what the agreement says. Mr. Armstrong was cross-examined about it extensively. He has an explanation that he's offered for why they did it that way. The jury may believe that, or they may not.

But, you know, let's face it. Since we're

alone in the courtroom here, we're all pretty experienced in this area and we know what happened here.

Anascape went to Sony; and they said, "You should take a license."

Sony at first, of course, said, "We don't want to; but for sure if we ever pay you any money, it's going to be for your portfolio and every continuation in the future." That's the deal.

The parties managed to agree on \$10 million and then somebody within Anascape had the idea, "Well, if we structure this deal so that it's for the exclusive license to one patent, maybe we can take capital gains treatment" and Sony didn't care because it didn't cost them any more money.

Well, where does that leave us? I think it leaves us in the lap of the jury that the agreement is available to them. Counsel for the defendant can argue, as they already have forcefully, that the agreement says that this is \$10 million for that one patent.

And then Mr. Armstrong has already testified, "Well, yeah; but that's why I did it this way," blah, blah, blah. And who knows what the jury will believe about that, but I don't think there is a legal issue here.

The court will instruct the jury, of course,

on what they are supposed to consider in evaluating infringement and what they are supposed to consider in evaluating validity and what they're supposed to consider in evaluating reasonable royalty. I know that the court in the past has given jury instructions that the court is to consider licenses for similar technology, which this certainly is. It's a patent that is -- like the '700 is a continuation of the '96 application. It's very similar technology.

So, maybe the finder of fact will find that it's probative. But I say again I don't think that there is a legal issue here that's appropriate for an instruction.

17I

THE COURT: Well, I'll -- at this time I'm going to deny the request for an instruction. I would caution plaintiff, of course, about being very careful of making an inference of validity based on that agreement. I wouldn't expect you to, and there will be -- I mean, if something like that happened, I might have to tell the jury, "Now, wait a minute. This goes to damages, not to validity." So, I would -- I don't know how eager your damages or validity experts are going to be, but they need to be warned not to try to let that one slip out because that --

MR. CAWLEY: Of course, your Honor. I mean,

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the damages experts are going to say that in the damages
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   analysis, you assume that the patent is infringed and
   valid anyway.
4
              THE COURT:
                         Okay. Just with that caveat, I
   will deny that request.
              Was there another item, Mr. Germer?
6
7
              MR. GERMER:
                           No, sir. But could I just say a
  couple more things about that?
9
              One is the infringement side is of equal
  concern or more because they've already used it very
10
11
   effectively on both, by him saying Sony did the right
   thing. I don't think it's going to come from his
121
13
   experts.
             His experts -- in fact --
              THE COURT:
                          Well, if I hear it from some
14
15
   other witnesses saying -- I mean --
              MR. GERMER: And I would also tell the
16
   court -- well, two things. One, this is not just a tax
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   deal -- and this is why we shouldn't have to get into
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   all of this. But actually that particular license, the
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   '606, was the one license that Sony had to have.
                                                      We
   didn't have to, but they did. So, there was a reason
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   why they did that.
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              But my concern continues to be -- and I would
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implore the court to continue considering --

THE COURT: It doesn't --

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MR. GERMER: If the court makes a call to let this in --

> THE COURT: Okay.

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MR. GERMER: -- but at least let's keep it confi ned. There is no evidence other than the fact that \$10 million went for that. There really is no other evidence except now they're trying to sort of speculate. He didn't even say that. The plaintiff didn't even say it clearly. He just sort of said, "Well, somebody said tax stuff."

So, they're using an inference to try to take away from what the -- I thought the court had the clear understanding about the setup of this, and I thought the court was letting it in for that limited purpose; so,

Well, I think my remark was -- is THE COURT: that I will let it in; but, of course, then plaintiff is going to have to explain why we have a lump-sum 10-million-dollar payment as opposed to a reasonable royal ty.

And in most cases I've seen, defendants are 22 jumping up and down with joy when they get a lump sum -small lump sum; and the plaintiffs are desperately trying to dodge around those small lump sums because they want the percentage when it's an ongoing.

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So, I expect that there was going to be some
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   explanation and obviously there is another explanation
   and that is the trade of the patents.
                                           And either side
   can argue that one, that either the patents were -- the
   patent rights they got from Sony were worthless or the
   patent rights they got from Sony were incredibly
   valuable, worth far more than a mere 50 million we're
   asking for now. I mean, I don't know how that's going
   to play out; but that could go either way, too. I mean,
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   we've had no testimony at all on that.
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              But, yes, you've alerted me to the issue.
                                                          Ιf
   I see some attempt to take what is obvious unfair and
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   improper advantage of the testimony in violation of
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   Rule 403, I'm usually not very shy about instructing the
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   jury as necessary. You're both experienced attorneys
   and are probably well aware of that.
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              I had the impression, though, from Ms. Chen
   that you had two issues.
                            Was there another one?
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              MR. GERMER:
                           No, sir.
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              THE COURT:
                          Just the one?
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              MR. GERMER:
                           That's all I have.
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              THE COURT:
                          Oh, okay. Well, great.
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              MR. GERMER:
                          And I may have misstated it
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   but --
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              THE COURT:
                          Okay.
                                 In that case I will see
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Jury Trial, Volume 2 you at 8:45 in the morning. You're excused. The court is in recess. (Proceedings adjourned, 5:24 p.m.) COURT REPORTER'S CERTIFICATION I HEREBY CERTIFY THAT ON THIS DATE, MAY 6, 2008, THE FOREGOING IS A CORRECT TRANSCRIPT FROM THE RECORD OF PROCEEDINGS.