

# **Exhibit 1**

**[REDACTED]**

1 UNITED STATES DISTRICT COURT  
2 NORTHERN DISTRICT OF CALIFORNIA  
3 OAKLAND DIVISION  
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7 )  
8 THE APPLE IPOD ITUNES ANTI-TRUST ) No. C-05-0037 YGR  
9 LITIGATION )  
10 )  
11 \_\_\_\_\_ )  
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13 VIDEOTAPED DEPOSITION OF ROGER G. NOLL  
14 San Francisco, California  
15 Thursday, May 16, 2013  
16 Volume 1  
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21 Reported by:  
22 JENNIFER L. FURIA, RPR, CSR  
23 CA License No. 8394  
24 Job No. 1663538  
25 PAGES 1 - 262

1 San Francisco, California, Thursday, May 16, 2013  
2 9:15 a.m.  
3  
4 THE VIDEOGRAPHER: Good morning. We are on  
5 the video record at 9:15 a.m. on May 16th, 2013. This 09:15:10  
6 is the video deposition of Mr. Roger Noll.  
7 My name is Alexei Dias and our court reporter  
8 today is Jennifer Furia. We are here from Veritext  
9 Legal Solutions. This deposition is being held at Jones  
10 Day, 555 California Street, San Francisco. The caption 09:15:30  
11 of this case is In Re Apple iPod iTunes Antitrust  
12 Litigation, case number is C-05-00037-JW(RS).  
13 Counsel, would you please introduce  
14 yourself.  
15 MS. SWEENEY: Bonny Sweeney, Robbins, Geller, 09:15:50  
16 Rudman and Dowd, for the plaintiffs.  
17 MR. MITTELSTAEDT: And for the defendant, Bob  
18 Mittelstaedt, David Kiernan, Kyle Andeer.  
19 THE VIDEOGRAPHER: Thank you.  
20 Would the court reporter please swear in the 09:16:00  
21 witness.  
22 ROGER G. NOLL,  
23 having been administered an oath, was examined and  
24 testified as follows:  
25 THE WITNESS: I do. 09:16:01

1 Q Do you have any estimate of what they've  
2 charged?  
3 A No, I wouldn't know. I don't know.  
4 Q Do you teach at Stanford?  
5 A Well, I -- I'm technically retired, but yes, I 09:17:46  
6 do teach a course a year.  
7 Q Okay. And what course are you teaching now?  
8 A Well, right now I'm not teaching anything. I  
9 taught a course in the winter quarter that was a seminar  
10 on the economics of sports. 09:17:57  
11 Q Economics of sports?  
12 A Yes.  
13 Q Is most of your compensation derived from  
14 consulting as opposed to teaching?  
15 A Well, yeah. I -- I'm -- I receive no 09:18:09  
16 compensation for teaching. I'm not paid to teach. I  
17 don't have any formal employment relationship with  
18 Stanford.  
19 Q Do you have a corporate entity or a  
20 partnership entity that you operate under or -- 09:18:25  
21 A No.  
22 Q So the money that you're paid by plaintiffs  
23 comes directly from plaintiffs or their counsel to  
24 you?  
25 A Correct. 09:18:34

1 EXAMINATION  
2 BY MR. MITTELSTAEDT:  
3 Q Good morning.  
4 A Good morning.  
5 Q What has your compensation been so far in this 09:16:19  
6 case?  
7 A This has been going on so long, I can't  
8 possibly remember. I haven't looked at it in a long  
9 time. I mean it's, what, we're in six years or seven  
10 years? I don't remember. 09:16:33  
11 Q Can you give us any estimate?  
12 A Somewhere -- no, each expert report is  
13 somewhere in the range of 50 to a-hundred-thou and then  
14 add to that the depositions, which are another few  
15 thousand each. So, 250 to 500, somewhere in that range, 09:17:0  
16 but I don't know.  
17 Q What is your hourly rate?  
18 A Sev -- I've continued to charge what it was at  
19 the time this started, which was 700.  
20 Q What is the compensation for Economists, Inc.? 09:17:19  
21 A I don't know.  
22 Q Do you have anything to do with that?  
23 A No. I have nothing to do with that.  
24 Q They submit their bills directly to counsel?  
25 A Yes. 09:17:34

1 Q Okay. Have you done any work on this case  
2 since submitting your last report?  
3 A The only work I've done has been  
4 conversations. I haven't done anything other than that.  
5 I've had some conversations -- gave some instructions to 09:18:34  
6 the people at Economists, Inc. about some additional  
7 things to do. But myself, I haven't done anything other  
8 than just prepare for the deposition.  
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1 MS. SWEENEY: Objection, vague and  
2 ambiguous.  
3 THE WITNESS: In a logarithmic equation  
4 they're all interactive. That's what a logarithmic  
5 equation is. It's a -- the underlying equation is a 09:22:18  
6 multiplicative equation where the price is determined by  
7 the product of a bunch of variables raised to some  
8 exponent, so they're already interactive.  
9 Then you take the logarithm of both sides  
10 and -- but the -- but when you -- then raise both sides 09:22:35  
11 of the equation to e.  
12 BY MR. MITTELSTAEDT:  
13 Q Raise it to what?  
14 A Well, you have price equals a, times x to the  
15 alpha, times y to the beta. You take a logarithm on 09:22:48  
16 both sides, you estimate a alpha and beta. And then to  
17 calculate the actual damages you raise -- you take both  
18 sides of the equation to the -- you raise them as if  
19 they were an exponent on e. And that brings you back to  
20 a, x to the alpha, y to the beta, which are interactive. 09:23:09  
21 They're multiplicative terms.  
22 Q Have you seen a printout of this new  
23 regression?  
24 A No. I -- what I have been told is that  
25 essentially everything is the same except the 09:23:24

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**Q So were you interacting 7.0 variable with the individual models?** 09:22:10

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1 coefficient on the 7.0 variable.  
2 Q And how does that change?  
3 A It roughly doubles.  
4 Q When did Econ One -- is Econ One the --  
5 A Yeah. Well, no, not Econ One. That's Jeff 09:23:39  
6 Leitzinger. This is Economist, Inc.  
7 Q Okay, fair enough.  
8 Is Econ One -- does that have anything to do  
9 with this case?  
10 A No. It has nothing to do with this case. 09:23:52  
11 Q Who at Ec -- who at Economics, Inc. told you  
12 about this new regression?  
13 A Bob Stoner.  
14 Q Bob Stoner?  
15 A Uh-huh. 09:24:00  
16 Q When did he tell you the --  
17 A A couple of days ago.  
18 Q Okay. Do you think he had some hard copy or  
19 some printout of this?  
20 A I don't think he did, because I think it was 09:24:07  
21 done by somebody in the Washington, D.C. office of  
22 Economist, Inc. and I think they just had a phone  
23 conversation about it, but I'm not sure.  
24 I mean, I didn't pursue it, because, you know,  
25 I thought the deposition was going to be about my 09:24:23

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1 report, so I didn't -- I -- I asked them to do this, but  
 2 it wasn't in preparation for the deposition. It was  
 3 just because I thought we should do it in preparation  
 4 for what I anticipate to be a new Fruggia declaration or  
 5 by somebody, which changes the story about when 7.0 was 09:24:42  
 6 loaded onto new models of iPods.  
 7 **Q When did counsel tell you about this**  
 8 **information about the Shuffle that you're referring**  
 9 **to?**  
 10 A I don't recall. It was soon -- it was after 09:24:59  
 11 my report was submitted. Probably around the time that  
 12 David Martins was reported, something like that.  
 13 **Q And then how long after that did you ask**  
 14 **Stoner to run an additional regression?**  
 15 A Well, we had talked about doing it. I don't 09:25:17  
 16 remember. I mean, again, there was no sense of urgency,  
 17 because I was anticipating this would be something that  
 18 would be an issue in June as opposed to now.  
 19 **Q Have you asked Stoner or his group to do**  
 20 **anything else?** 09:25:34  
 21 A No, not yet.  
 22 **Q Do you anticipate asking them to do anything**  
 23 **else?**  
 24 A Depends what additional information I get  
 25 changing the story from Apple. 09:25:42  
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1 **Q Are you anticipating receiving any?**  
 2 A I am anticipating receiving something other  
 3 than information from a lawyer as to what -- what models  
 4 had 7.0 loaded on them when. I anticipate that you will  
 5 probably have a technical expert actually submit like a 09:26:01  
 6 sworn declaration about -- about that. And that would  
 7 then be the basis for running some new regressions if  
 8 necessary.  
 9 **Q Okay. What assumption did you make in your**  
 10 **most recent report about which iPods were affected by** 09:26:18  
 11 **7.0?**  
 12 A I assumed that all new iPods as of September  
 13 2006 going forward were affected. I relied on  
 14 Fruggia.  
 15 **Q And by what you just said, do you mean any** 09:26:33  
 16 **iPod that was sold after September 12, 2006?**  
 17 A Yes. Any -- any iPod that -- yes, any model  
 18 that was released after September 2006, yes.  
 19 **Q Well, are you saying -- when you say model,**  
 20 **what do you mean?** 09:26:53  
 21 A Generation, class generation.  
 22 **Q And did you do any investigation before your**  
 23 **most recent report to verify that assumption?**  
 24 A Well, I --  
 25 MS. SWEENEY: Objection, vague and ambiguous, 09:27:14  
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1 overbroad.  
 2 THE WITNESS: I -- only in the sense I --  
 3 ultimately I have to rely upon David Martin for the  
 4 technical expertise, so I'm not doing any independent  
 5 assessment of my own about when a particular iPod became 09:27:29  
 6 incompatible with Harmony. I'm relying upon him for  
 7 that.  
 8 BY MR. MITTELSTAEDT:  
 9 **Q You're relying on Mr. Martin for that?**  
 10 A Yes. 09:27:43  
 11 **Q Your most recent report, did you write every**  
 12 **word yourself?**  
 13 A Yes.  
 14 **Q Did you do all the charts and exhibits**  
 15 **yourself?** 09:27:50  
 16 A Yes and no. I mean I -- they were done under  
 17 my instruction and -- but, actually making them pretty  
 18 is not my job.  
 19 **Q But substantively.**  
 20 A Substantively I did them, yes. 09:28:02  
 21 **Q And did you check them for accuracy?**  
 22 A I did, but I wouldn't be the right person to  
 23 do that. We actually have research assistants who  
 24 double-check everything for accuracy.  
 25 **Q By "we" who do you mean?** 09:28:15  
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1 A Economist, Inc.  
 2 **Q What is your relationship with Economist,**  
 3 **Inc.?**  
 4 A My relationship to Economist, Inc. is that I  
 5 have been on the board of directors of Economist, Inc. 09:28:23  
 6 since its founding, but I have no financial stake in it  
 7 at all. And I'm not paid anything at all as a cut of  
 8 their billings.  
 9 **Q Okay. Do you have a practice about whether**  
 10 **you use them for support when you're an expert** 09:28:34  
 11 **witness?**  
 12 A No, I -- sometimes I do, sometimes I don't. I  
 13 I -- I have -- I have -- I have been supported by  
 14 several economics consulting firms over the years.  
 15 **Q Do you have any other matters that you're** 09:28:49  
 16 **doing with any of the plaintiff's counsel in this**  
 17 **case?**  
 18 A No. I don't think so. They may -- may be  
 19 secondary counsel on something, but I don't have any  
 20 direct dealings with anybody from their law firm. 09:29:00  
 21 **Q Other than what you've testified about so far**  
 22 **today about the Shuffle, are you aware of any mistakes**  
 23 **or flaws or problems with the regressions that are**  
 24 **reported in your --**  
 25 A No. I mean, the only thing I'm aware of is 09:29:15  
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I, Jennifer L. Furia, holding CSR License No. 8394, a Certified Shorthand Reporter, licensed by the State of California, hereby certify:

That the foregoing proceedings were taken before me at the time and place herein set forth; that any witnesses in the foregoing proceedings, prior to testifying, were placed under oath; that a verbatim record of the proceedings was made by me using machine shorthand which was thereafter transcribed by me or under my direction; further, that the foregoing is an accurate transcription thereof.

I further certify I am neither financially interested in the action, nor a relative or an employee of any attorney or party to this action.

IN WITNESS WHEREOF, I have on this date subscribed my name.

Dated: 6/3/2013



JENNIFER L. FURIA  
Certified Shorthand Reporter  
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