THE COURT: If you would please raise your right hand and be sworn, please.

**Q. Ms. Knox, please introduce yourself to the jury**.

A. My name is Julie Knox. I'm from San Francisco and I do general business and litigation consulting, including on damages issues.

**Q. Please tell us about your educational background**.

A. I attended the University of Virginia, where I obtained a bachelor’s degree in commerce at the undergraduate business school, with a concentration in accounting and finance. I also have a masters degree in accounting, also from the University of Virgina.

**Q. Do you have any credentials?**

A. I am a certified public account (CPA). I am also a Chartered Financial Analyst (CFA), and am Certified in Financial Forensics.

**Q. Where are you currently employed?**

A. I'm currently a partner at a consulting firm called HKA

**Q. What was your assignment in this case. What did we ask you to do?**

A. To determine the amount of damages owed for infringement of Uniloc’s '216 patent by EA.

**Q. To do that analysis, what if any assumptions did you make?**

A. That patent was valid and that EA infringes the patent.

**Q. Why did you make those assumptions?**

A. That's the necessary assumption that people in my business have to make. Only if you assume infringement and validity do you get to damages. So we make that assumption to begin with.

**Q. And what's the legal basis upon which you've come here to determine or testify about a reasonable royalty?**

A. Well, a reasonable royalty is one of the suggested methods of compensating patent owners who have suffered from infringement. It's listed in the patent statute.

**Q. What is that statutory requirement?**

A. That the patent owner be compensated for the infringing use that the infringer has made of the patented technology. The patent owner is to be compensated in an amount that is no less than a reasonable royalty for that use.

**Q. How did you go about determining a reasonable royalty?**

A. The most common method of estimating a reasonable royalty is to use what's known as a hypothetical negotiation. And that's what I did in this case. It's a way of determining what the reasonable royalty is based on a hypothesized negotiation between the parties (in this case between Uniloc and EA). It assumes that both parties are negotiating willingly.

**Q. And just briefly, could you summarize your ultimate opinion?**

A. My opinion is that Uniloc is owed royalty damages of 4.3 million.

Q**. To arrive at this opinion, what factors did you apply in your analysis?**

A. The basis for establishing reasonable royalty through a hypothetical negotiation is usually done by looking at various financial, economic and market considerations and those are summarized in the list of 15 factors called the Georgia-Pacific factors.

**Q. Do you always look at all 15 Georgia-Pacific factors?**

A. All 15 factors are considered. But in some cases, some of the factors are more relevant to the analysis than others.

**What did you assume in terms of when that negotiation would have occurred?**

A. In these types of hypothetical negotiation analyses, the hypothetical negotiation is assumed to have taken place at or around the time of first infringement. In this case, the date of first infringement would be when EA began selling Origin.

**Q. And so what's the date for you?**

A. That would be August of 2012 is when the first infringing Origin connection was made.

**Q. Please explain to the jury the factors where you began your analysis**.

A. Three of the Georgia-Pacific factors relate to licenses. Factor 1 discusses licenses that the patent owner may have entered into, that are similar to the license that we're trying to figure out. Factor 2 deals with licenses where the Defendant has licensed comparable technology. And Factor 12, although it doesn't use the word "license," talks about the common proportion of the value of the technology that's used in the industry. We won't go into Factor 12, because there is no common proportion in the industry in this case. But I did have the opportunity to deal with both Factors 1 and 2 by looking at licenses that were produced in the record of this case that either the Defendant or the Plaintiff entered into.

**Q. How many licenses did you look at it total?**

A. Approximately 90 licenses.

**Q. Is that all that you looked at in developing your opinions?**

A. Oh, no, no. This is only the first group of factors. We went much beyond this.

**Q. Approximately how many documents did you review?**

A. Over 10,000 pages of documents; a number of depositions, deposition transcripts; and the licenses; of course, the patent; and a great many pleadings; and representations going back and forth between the parties called interrogatory answers.

**Q. What if any independent research did you do?**

A. I researched about the parties and relevant products. I also read lots of literature about the market for software authentication.

**Q. Based on your review of the 90 licenses, did you conclude that one or more licenses were particularly useful in determining a reasonable royalty?**

A. Yes. The one that I found most comparable and could be used as a comparable in this case is a license that Uniloc negotiated with Microsoft in 2012.

**Q. And why did you reach that conclusion?**

A. I reviewed the licenses that were produced by both sides and tried to determine whether I could conclude that any particular license was comparable. And the only one that came close was the Microsoft license.

**Q. What kinds of things did you look at to make that determination?**

A. First, Are the parties comparable? Here we're dealing with Uniloc and Electronic Arts, which is a giant 3-billion-dollar, 4-billion-dollar software company. Uniloc was negotiating with Microsoft, in that case, and Microsoft is also a very large software company. So both are large, sophisticated software vendors. .

**Q: What else did you consider as to that license?**

A. The litigation status. In a real negotiation, especially a settlement negotiation, people don’t typically assume infringement and validity of the patents. The Defendant is always saying I don't infringe; your patent is invalid. The patent owner is concerned about whether their patents will survive being challenged at trial .

**Q. In thinking through the litigation status, anything in particular that you considered?**

A. In the Microsoft case, unlike most settlement situations, the court had already determined that, in fact, the Uniloc patent was valid and infringed by Microsoft. So even though Microsoft is a settlement license and our hypothetical is not a settlement license, we can say they are in similar situation, because in the hypothetical negotiation we are assuming infringement and validity, and in the Uniloc/Microsoft litigation, the court had already made that decision.

**Q. What if any differences did you have to account for?**

A. In this case, we're talking about EA using Origin in an infringing way – and there are some differences in how EA infringes as compared to how Microsoft was infringing. In the Microsoft case, Microsoft was using the Uniloc technology as a one-time activation tool. In Microsoft's case, you bought software on a disk, Word or Microsoft Office. It did its activation and that's it. You could use that forever. What you couldn't do, though, is you couldn't take it and give it to a friend. That's what the activation prevented.

In EA's case, with Origin, the infringement is not a one-time act. It's something that continues for a long time – for as long as you have your Origin account. My understanding is that when the product is purchased, an activation leads to an entitlement call in Origin, and that's the first infringing act. And then subsequently, many other infringing acts occur as the person stays on the game, plays it online, or adds new devices to it. So EA uses it much more intensively than Microsoft did, so we're going to have to correct for that.

**Q. Ms. Knox, what about the royalty structure in the license Microsoft agreed to with Uniloc. Did you consider that?**

A. Yes. And royalty structure is a case where we -- again, we have a difference between the Microsoft license and what the hypothetical royalty would be in this case. In my opinion, based on my experience, the form of royalty that Uniloc and EA would agree to in this case is a running royalty. And that means that you pay as you go – as EA makes more infringing sales in the future. That's a running royalty. And that's a common form for people to negotiate when they're doing in a looking forward-type negotiation when parties are sitting down to negotiate.

In a settlement, like in the Microsoft case, the payment is often a lump sum. And the reason for that is that when you're settling, you know how many infringing sales there were. They're already done. So you don't have to say I'll give you a dollar for every unit because the unit has already been sold. So in the Microsoft case, there was a lump sum; but we can tell from the Microsoft records what the lump sum represented in terms of the number of dollars per unit, the running royalty, if you will, that was there. So we can convert the lump sum to a running royalty amount.

**Q. Before we do that, let's just quickly cover time period. What did you conclude about the time period covered by the Microsoft agreement and the hypothetical negotiation with EA?**

A. Again, there's good similarity there, because the settlement agreement with Microsoft was in early 2012. The hypothetical negation between Uniloc and EA would have been in mid-2012 – so around the same time

**Q. All right. How did you convert the Microsoft license amount to a royalty rate**.

A. The Microsoft license specifically said that the '216 patent was entitled to 42 million dollars of the total settlement amount. In addition, from the record of that trial, we can find how many products were activated during the damage period by Microsoft. So then it becomes arithmetic. We take the total dollar value, which is 42 million, divide that by the number of units that Microsoft was accused of infringing on, and it shows that Microsoft paid an effective royalty rate of 11-and-a-half-cents per infringing activation.

**Q. Moving on, please explain how you considered the benefits of the invention in your reasonably royalty analysis**.

A. Several of the other Georgia-Pacific factors deal with that question – what are the benefits of the technology, how is it used, what are the profits? Most of my information on this comes from technology that -- descriptions that I found in documents, in EA documents from deposition testimony and things like that, that are in the record. I also rely on inputs from the technical experts in the case.

From all of that information it's clear that building the Uniloc technology in the Origin product gave significant benefits to EA.

**Q. We heard about how Origin could be used to support free trials earlier in the case. How if at all did you take that into account?**

A. One of EA’s plans was to be able to give away games for free. And if I go online and get my game for free, I can get a two-day free trial and I can play the game. But at the end of those two days, if I then want to continue, I then have to pay. And so they think that this is a way of getting customers, which makes some sense. Gamers can try out a game. If they like it, then they can sign on. That's what this system is going to give them. It will drive revenue through free trials.

**Q. Let's turn to the last Factor 15, which is the hypothetical negotiation and the determination of a reasonable royalty. So now you -- you've talked about 11-and-a-half cents, but your reasonable royalty is actually based on 20 cents**.

A. That's right.

**Q. Why is that?**

A. That's the adjustment that I make to account for the fact that Microsoft and EA used the technology differently. Remember Microsoft uses it when you get a disk to let you play the disk and that's it; nothing more. But for Origin, when I buy a game, whether I do it online or do it on a disk, I'm getting involved in a long-term relationship with EA, and that long-term relationship is largely governed by Origin. I activate my disk. I download my game. I'm put onto the Origin system. I put myself onto Origin system or I'm put on by EA, and that relationship continues. Each time I buy a new game, each time I buy a follow-on, if I get a new iPad, I have to get on. So that is what I'm intending to do is to -- is to show that the Microsoft license, while a good base, should be increased significantly to account for that additional use.

**Q. And did you base your adjustment from 11-and-a-half cents to 20 cents on data that you were provided?**

A. In part, yes.

**Q. And does that data include Exhibits 221 and 222 in the notebook in front of you?**

A. Yes. Those are the revenue and sales figures, unit sales figures that were provided. We had them electronically, but they were -- that's the data.

**Q. What did the data show you?**

A. Well, the one thing I observed was that in the data that for every dollar's worth of sales of new games, they were getting an additional 78 cents from follow-on sales. So that shows that -- that showed me that I wouldn't want to double the Microsoft rate, but it's an important component of their business. They were selling and making a lot of follow-on sales. That was one basis for it.

The other basis for adjusting the royalty from 11-and-a-half cents to twenty cents is, as we discussed, there were many non-revenue generating uses of the Origin system that require infringing entitlements, like the free games. But to be conservative, I limited the increase in the rate from 11 cents to the ratio that I calculated for the amount of follow-on sales during the damages period.

**Q. All right. Let's sum up the reasonable royalty that you concluded should apply in this case**.

A. Yes, I can do that. Now we have to adjust it to account for only the damage period, and that means that we end up with 21,700,000 games. And if you apply the 20 percent rate, 20-cent rate to those, the total is $4.34 million.

**Q. Thank you. Pass the witness.**

**CROSS**

**Q. Good afternoon, Ms. Knox. How are you today?**

A. Very well. Thanks.

**Q. All right. Now, you have talked quite a bit about the Microsoft license agreement, correct?**

A. Yes, I have.

**Q. But you also reviewed, if I took my notes right, 82 other agreements that concerned Uniloc and the '216 patent, right?**

A. Yes.

**Q. And, to get a little perspective on this, please turn to Exhibit 2 in your most recent report. This is a document that you prepared, right, sir?**

A. Yes. It's a summary document of all the licenses produced.

**Q. And this is information that you recorded from the settlement agreements themselves, many of which are in evidence in this case, right, sir?**

A. Yes.

**Q. And you recorded this information in this exhibit to help explain your opinions and the reasons for same, right?**

A. Yes.

**Q. And the information you recorded here was important, correct?**

A. Yes.

**Q. And in particular, you recorded, with regard to each of these patent agreements, the amount that was paid for them and whether or not it was a lump sum structure, right?**

A. Yes.

**Q. All right. Let's go through that information, if we could. And I know there's a lot of them, but I think it's important that we see all of the evidence.**

A. Sure.

**Q. With regard to 2X Software, what did they pay for a license to the '216 patent?**

A. They paid a 25,000-dollar lump sum.

**Q. With regard to ABBYY, what did they pay?**

A. They paid 155,500.

**Q. With regard to Adobe Systems, what did they pay?**

A. They paid 300,000.

**Q. With regard to Algorithmic Implementations, what did they pay?**

A. 66,000.

**Q. How about Alien Skin**?

A. 75,000.

**Q. Alt-N Technologies, what did they pay**?

A. $1 million.

**Q. And then we'll go to the next ones**. **Apex, what it did it pay**?

A. 30,000.

**Q. Argus, what did it pay**?

A. 175,000.

**Q. Articulate Global**?

A. 95,000.

**Q. Aspyr Media**?

A. 150,000.

**Q. Automatic Duck**?

A. 30,500.

**Q. Avid Technology**?

A. 200,000.

**Q. BCL**?

A. 30,000.

**Q. BinaryNow**?

A. 2,500 is the lump sum, and they also had a running royalty.

**Q. Right. Now, what we're going to find is 76 of the 79 involve a lump-sum payment, right?**

A. I think so. I think there were three that involved a running royalty, and one or two that a royalty can be -- could be inferred.

**Q. Thank you. So just to make sure we note that distinction as we go through all of these agreements to see the whole picture, we'll see that 73 of them involved a lump-sum payment in -- in which the licensee pays one lump sum and then can use the patent as much as they want to; fair enough?**

A. No.

**Q. Okay. Correct me**.

A. These are settlement licenses.

**Q. Straighten me out**.

A. These are settlement licenses. Many of them – these are settlement agreements. Some of them are licenses that would have allowed additional use. Some of them don't. Some of them were, in fact, signed after the patent expired.

**Q. In any event, what we see when we look at these is that 76 of the 79 only involve one lump-sum payment of a royalty, right**?

A. I believe that's right.

**Q. Doing a little math here, I have divided the 10.9 million, which would be what was paid by everybody that took a license except for Microsoft, and divided by 78 and the average figure comes out to approximately $140,000. Does that sound about right**?

A. It sounds right, sure.

**Q. So excluding Microsoft, what we find is the average license royalty that was paid was $140,000; fair enough**?

A. That's right.

**Q. Now, if we include Microsoft, then I come out about approximately $670,000. Does that sound about close?**

A. Yes.

**Q. Now, the figure you opine with regard to reasonable royalty damages to be paid by Electronic Arts in this case is $4.3 million, right**?

A. That’s correct.

**Q. That greatly exceeds the average royalty amounts that have been paid, correct**?

A. Well, it greatly exceeds the 670,000, sure it does, yeah.

**Q. It's about seven times more; fair enough**?

A. Yeah. That's not an appropriate comparison, but...

**Q. And it also greatly exceeds the average price that's been paid by everybody else but Microsoft. It's about 30 times more than that; fair enough**?

A. It's much higher, yeah.

**Q. Only five of the 79 them are above $500,000; fair enough**?

A. Sure.

**Q. Now, if -- and so what you have done is you have told us that you used the Microsoft as a starting place, and that rate was 11-and-a-half cents, right**?

A. Yes.

**Q. And then what you did after that is you decided that I need to increase that rate to 20 cents, right?**

A. Yes, to account for the additional infringement due to the way that EA is using the technology.

**Q. Now, this is another one that I've done the math to, but if we had used the 11-and-a-half-cent Microsoft rate and multiplied it by 21.7 million units, I come up with that your figure would be about $2-and-a-half million. Does that sound about right**?

A. Yes.

**Q. You're being compensated by Uniloc for your work in case; is that true**?

A. My firm has been compensated.

**Q. What’s that hourly rate**?

A. $600 per hour

**Q. Now, your best estimate as the total amount your firm has received for its work for Uniloc in connection with the '216 patent is approximately $100,000 to $300,000, right**?

A. Probably. Including this case and several other cases that involve the '216 patent. Not only on this case, but that includes all of it.

**Q. Now, the damages period in this case runs from August 8, 2012 to September the 21st, 2013**.

A. That's right.

**Q. And I'd like to help -- get you to help me explain, if you could, to the jury exactly how we come up with that. Now, on June 3rd, 2011, Origin was launched, right?**

A. Yes.

**Q. But there's no contention in this case or trial that that version infringes, right**?

A. Yes. I understand the original version of Origin is not at issue in this case.

**Q. Then on August the 8th, 2012, Origin Version 9.0 was launched, right**?

A. Yes, that's my understanding.

**Q. Okay. And that date, August the 8th, 2012, the date of first infringement, is where we start the damages period**.

A. That's right.

**Q. And then the damage period ends when the patent terminated on September the 21st, 2013, right?**

A. Yes. The patent expired on that date.

**Q. So we're assuming that this negotiation would be completed by August 8th, 2012. And we also are assuming that the parties would know that they are negotiating the use of the '216 patent for just 13 months**?

A. Yes, that's right.

**Q. Now, with regard to the Microsoft case, their date of first infringement was in March of 2001, right?**

A. Yes.

**Q. So their damage period would have been 12 years**?

A. That's right.

**Q. So what we've got here is that with regard to Uniloc, we've got 13 months left or a 13-months' damage period**?

A. Yes.

**Q. And with regard to Microsoft, we have 12 years, right**?

A. Yes.

**Q.In this case, the parties dispute whether or not there's infringement**.

A. Sure.

**Q. But you, as a damage expert you assume there's infringement**?

A. Absolutely. Have to.

**Q. But you have no opinion on it whatsoever, right**?

A. No. It's a technical and legal matter, the infringement and validity issues.

**Q. It's just an assumption you have made**.

A. Absolutely.

**Q. You know there are other technologies for user authentication besides the '216 patent, correct**?

A. Sure.

**Q. You also know that EA Access and Origin have many technologies in them outside whatever may be claimed to be part of the '216 patent**?

A. Presumably they do.

**Q. Back in August of 2014, you wrote a report concerning the triggering that -- that had statements in it about the triggering event for infringement for Origin**?

A. Right. That report dealt with Access, and there were a couple of paragraphs in it saying that I understand that something coming down the road on -- might require me to do something on Origin; and I had a couple of paragraphs in it about Origin.

**Q. Now, in that report, you stated it was your understanding that the event triggering infringement was login in Origin, right**?

A. Probably, yeah.

**Q. And now your understanding is that the event triggering infringement is the entitlement call, right**?

A. Yes.

**Q. So your understanding about what infringes has changed, right?**

A. Yes, but there I have to rely on the technical expert for that input.

**Q. Fair enough, but your damages number for Origin didn’t change, did it**?

A. No, it did not.

**Q. Let’s switch to another assumption. Instead of assuming that infringement has occurred, let’s assume no infringement. Would you agree with me that damages are zero?**

A. If there's no infringement, there would be no damages, that's right. None of us should be here if there's no infringement, yeah.

**Redirect**

**Q. Ms. Knox, Mr. Kamber asked you a series of questions about the time periods covered by the hypothetical negotiation and the Microsoft settlement**.

A. Yes.

**Q. How did you go about resolving the difference between the time periods**?

A. The damage period in Microsoft ran from 2001 through 2013, but the negotiations that resulted in the settlement amount occurred in 2012. At that point, all of those historical accused sales would have been known, and they would only be anticipating future sales for a short period of time. So the lump sum amount of that agreement can be converted to a running royalty.

**Q. And does the conversion of the Microsoft lump sum to a running royalty assist you in applying that royalty amount to the hypothetical negotiation in this case**?

A. Sure. And that's the only way I can do it. And that is the primary reason why the Microsoft license is the one that's most comparable and why none of the others are comparable.

**Q. Mr. Kamber asked you a series of questions about settlements in this case that were all lump sum. Do you recall that testimony**?

A. Yes.

**Q. Did you have any information to tell you either how many units or what amount of revenue was associated with those settlement agreements**?

A. In only a couple of cases.

**Q. And were you, with respect to those couple of cases, able to convert the license to a running royalty?**

A. Off the top of my head, I can remember the Sony license, which was convertible to a running royalty on a percentage basis, and there were two or three others as well --

**Q. Do you recall calculating a running royalty with respect to Pervasive Software**?

A. Yes.

**Q. Do you recall what the amount was**?

A. I don't recall offhand. It's in my report.

**Q. Was it higher than 11-and-a-half cents**?

A. Oh, yeah. In fact, the ones that I was able to compute on a dollar-per-unit basis were all significantly higher than 11 cents.

In most cases, the settlement negotiations did not include any identification of the number of sales involved. So looking at a license that's, say, for $300,000, you can't tell what that comes out to be on a unit basis unless you know what the products were that were accused and how many sales there were.

There were only a few that I was able to do that in, and those were all much higher than 11 cents. But I did not use those as comparable licenses, for other reasons, in each case.

**Q. Were they also higher than 20 cents**?

A. Yes.

**Q. And so is it true that in selecting the running royalty calculated from the Microsoft agreement, that you chose the most conservative of the royalty rates available from the licenses that you were provided?**

A. Yeah, absolutely. All of the running royalties were a good deal higher than the one that I selected, because Microsoft was the more comparable.