

Exhibit C

1 IN THE UNITED STATES DISTRICT COURT
2 FOR THE EASTERN DISTRICT OF TEXAS
3 TYLER DIVISION

4 WI-LAN, INC.)
5 -vs-) DOCKET NO. 6:10cv521
6 ALCATEL-LUCENT USA, INC.,) Tyler, Texas
7 ET AL) 8:50 a.m.
8) July 10, 2013

9 *****

10 WI-LAN, INC.)
11 -vs-) DOCKET NO. 6:13cv252
12 HTC CORPORATION,)
13 ET AL)

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17 TRANSCRIPT OF TRIAL
18 MORNING SESSION
19 BEFORE THE HONORABLE LEONARD DAVIS,
20 UNITED STATES CHIEF DISTRICT JUDGE, AND A JURY

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22
23

24 COURT REPORTERS: MS. SHEA SLOAN
25 MS. JUDY WERLINGER
211 W. Ferguson
Tyler, Texas 75702
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26 Proceedings taken by Machine Stenotype; transcript was
27 produced by a Computer.
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1 (Jury in.)

2 THE COURT: Please be seated.

3 Welcome back, Ladies and Gentlemen of the
4 Jury. Welcome back. We're about to begin our third
5 day.

6 And Plaintiff will call their next
7 witness, please.

8 MS. ROSS: Good morning, Your Honor.
9 Avelyn Ross on behalf of the Plaintiff.

10 The Plaintiff would call Mr. John Jarosz.

11 THE COURT: Okay. You have been sworn,
12 haven't you?

13 THE WITNESS: I have not.

14 THE COURT: You have not?

15 All right. Please raise your right hand
16 and be sworn.

17 (Witness sworn.)

18 THE COURT: All right. You may have a
19 seat.

20 THE WITNESS: Thank you.

21 JOHN JAROSZ, PLAINTIFF'S WITNESS, SWORN

22 DIRECT EXAMINATION

23 BY MS. ROSS:

24 Q. Good morning, Mr. Jarosz.

25 A. Good morning, Ms. Ross.

1 Q. Would you please introduce yourself to the
2 jury.

3 A. Yes. My name is John Jarosz. I was born and
4 raised in Wisconsin, although I now live on the East
5 Coast.

6 My wife and I have been married for 28 years.
7 We have six children, five of whom are grown and out on
8 their own. One is still with us for a couple of more
9 years. So the house has become very quiet lately.

10 Q. Mr. Jarosz, what do you do for a living?

11 A. I'm an economist.

12 Q. And what does an economist do?

13 A. Well, we economists do lots of things; but
14 among the things that we do is, we assess businesses and
15 we value assets and intellectual property. And patents,
16 in particular, are a form of assets.

17 Q. And do you specialize in any particular area
18 of economics?

19 A. Most of the work that I do is in evaluating
20 intellectual property assets. So intellectual property
21 is the area that covers patents, copyrights, trademarks,
22 and trade secrets.

23 And what I do is, I help companies and
24 individuals value their intellectual property rights,
25 and I often get involved in litigation disputes like

1 this, to figure out what the worth or the value of a
2 patent is if one party has infringed another party's
3 rights.

4 Q. And who do you work for, sir?

5 A. Analysis Group, Incorporated.

6 Q. What is Analysis Group?

7 A. We are an economic, financial, and strategy
8 consulting firm of about 600 people. We have offices
9 throughout the United States, in Canada, and now in
10 China.

11 Q. And what is your position with Analysis Group?

12 A. I'm a managing principal of the firm, which
13 means I'm one of the owners of the firm. I'm also the
14 founder and director of the Washington, D.C. office. I
15 founded that office about 17 years ago.

16 Q. And how long have you been an economic
17 consultant?

18 A. For about 27 years.

19 Q. And have you prepared a set of demonstrative
20 charts to assist in your testimony today?

21 A. Yes, I have.

22 Q. And have you prepared a chart that summarizes
23 some of your qualifications?

24 A. Yes, I have.

25 MS. ROSS: May I see Slide 1, please?

1 Q. (By Ms. Ross) Is this a copy of the chart that
2 you prepared?

3 A. It is. It's a very brief summary of some of
4 the things that describe my background.

5 Q. Can you please describe your educational
6 background?

7 A. Sure. I have a bachelor's in economics in
8 organizational communication from Creighton University,
9 which is located in Omaha, Nebraska.

10 After that, I was a fellowship student in the
11 Ph.D. program in economics at Washington University,
12 which is located in St. Louis. And there I completed
13 most of the requirements for my Ph.D. but not all of
14 them. I was awarded a master's, but I'm fairly close to
15 a Ph.D. I just haven't had the time to finish it.

16 Q. I notice from your chart that in addition to a
17 bachelor's degree and a master's degree, you also have a
18 law degree; is that true, sir?

19 A. Yes. I went to law school at the University
20 of Wisconsin and earned my J.D. from there as well.

21 Q. Are you licensed to practice in any state?

22 A. I'm licensed to practice in the State of
23 Wisconsin, but I've been on inactive status for
24 27 years.

25 Q. Have you ever practiced law, sir?

1 A. I have not.

2 Q. So you've been an economist your entire
3 career?

4 A. I have.

5 Q. Are you a member of any professional
6 organizations?

7 A. Yes. I'm a member of the American Economic
8 Association; the American Law and Economics Association;
9 the AIPLA, which is the American Intellectual Property
10 Law Association; and the Licensing Executive Society.

11 Q. Can you tell me a little bit about the
12 Licensing Executive Society?

13 A. Yes. That's the group of individuals here in
14 the United States, and actually worldwide -- there are
15 about 6 or 8,000 of us -- that orient much of our
16 careers to assessing intellectual property rights and
17 finding the best ways to put a value on those rights and
18 to share those rights among parties and help companies
19 share their intellectual property rights.

20 Q. Have you held any leadership positions with
21 the Licensing Executive Society?

22 A. Yes. I've been fairly active with the LES
23 over the years. Fairly recently, for a two-year period,
24 I was chairman of the Valuation and Taxation Committee.

25 And then I became a -- after that, I became a

1 charter member of a subgroup that gives a certification
2 as a certified licensing professional. I was then asked
3 to be part of a small group who wrote the exam to
4 determine who would earn that CLP in the future.

5 So I was at the -- I was the initial group
6 that drafted up the exam for people to get that
7 certification; and I can assure you, it's much better to
8 be drafting up the exam than taking the exam.

9 Q. How do you keep active in the field?

10 A. Well, I do lots of things, but among the
11 things that I do is I write and publish articles. I
12 give speeches, and I teach courses.

13 Q. Where do you teach courses or give
14 presentations?

15 A. I -- I give presentations and teach courses
16 throughout the country. Fairly recently, I've been
17 active at the Georgetown University Law Center helping
18 teach a course there.

19 And the U.S. Patent and Trademark Office has
20 asked me to come in and give a valuation course to an
21 international delegation of people that came from a
22 variety of different countries and are learning about
23 the U.S. patent system, and in particular, they wanted
24 to learn about how we in the United States value
25 intellectual property rights.

1 Q. Have you ever acted as a damages expert in a
2 patent case before?

3 A. Yes, many times.

4 Q. About how many times have you testified as a
5 damages expert in a trial like this one?

6 A. Over the years, I've probably testified about
7 75 times. Several of those are here in Texas.

8 Q. Can you give me a couple of examples of your
9 experience?

10 MS. ROSS: May I have Slide 2?

11 A. Sure. You'll see here I've worked in many
12 different industries, just about every imaginable
13 industry; some of which are related here, some of which
14 are very different.

15 Q. Have you worked on cases in the mobile
16 communications industry?

17 A. Yes. I've done quite a number of cases in
18 that area, both in the software and hardware realm.

19 Q. Could you give me some examples of that?

20 A. Sure. I've worked for handset manufacturers,
21 including Nokia, Motorola Mobility, and BlackBerry.
22 I've also worked for people that are involved in the
23 infrastructure. Qualcomm is a name that came up in
24 opening. I worked for them for quite some time years
25 back.

1 In the opening statement, you might remember
2 there was a wall of patents put up. When I first
3 started working with Qualcomm, there were just a few up
4 there. Now I think that whole wall is filled with
5 patents.

6 Q. Now, in this case, you're testifying on behalf
7 of Wi-LAN, who's the patent owner. Over your career,
8 how does your testimony break down between patent owner
9 versus accused infringer?

10 A. It's about an even split, meaning about half
11 the time, I'm representing companies that own patent
12 rights, and about half the time, I'm representing
13 companies that are accused of infringing on patent
14 rights.

15 MS. ROSS: Your Honor, at this time, we
16 tender Mr. Jarosz as an expert in the fields of IP
17 valuation and damages es -- es -- excuse me --

18 THE COURT: You may proceed.

19 MS. ROSS: -- estimation.

20 THE COURT: All right. You may proceed.

21 Q. (By Ms. Ross) Mr. Jarosz, let's start out and
22 talk a little bit about your work in this case.

23 What was your assignment?

24 A. I was asked to assess the damages issues,
25 to -- to look at evidence that would be relevant to the

1 jury in determining what the proper amount of damages
2 would be if the jury finds that the patents here are
3 valid, not unenforceable, and infringed.

4 So if the jury finds that there is liability,
5 I've been asked to provide assistance on thinking about
6 evidence that would determine how much money should be
7 paid for that infringement.

8 Q. And did you prepare any written materials as
9 part of your assignments?

10 A. I did. I prepared two reports; one that I
11 submitted in the fall -- fall of 2012, and one that I
12 submitted in the last couple of weeks.

13 MS. ROSS: Jen, may I have Slide 4,
14 please?

15 Q. (By Ms. Ross) So let's talk a little bit about
16 how you reached your opinions on your damages assessment
17 in this case.

18 What type of evidence did you evaluate in your
19 assessment?

20 A. Well, I looked at quite a bit. This is kind
21 of a listing of the kinds of things. In some regards,
22 it's fun to get access to all this material, and in
23 other regards, it's overwhelming, but it's always
24 necessary.

25 So I looked at information from the files of

1 each of the four companies here: Sales information,
2 licensing information, marketing information. I looked
3 at the patents. I looked at research done by outside
4 observers of the industry. I read deposition testimony
5 and reports, and I talked to people involved in the
6 business.

7 Q. Did you talk with Mr. -- or Dr. Wells, who
8 testified yesterday?

9 A. Yes. I've talked with Dr. Wells on several
10 occasions, I've read his materials, and I saw his trial
11 testimony transcript.

12 Q. Did you speak with anybody from Wi-LAN?

13 A. I did.

14 Q. Who did you speak with; do you know?

15 A. I spoke with Mr. Parolin, who testified here
16 yesterday. I spoke with him on several occasions over
17 our engagement here.

18 Q. Did you consider the expert reports and
19 testimony provided by the Defendants' experts?

20 A. Yes, I did. Dr. Becker is representing two of
21 the parties here, and Mr. Bakewell is representing two
22 of the other parties.

23 Mr. Bakewell is representing Alcatel-Lucent
24 and HTC, and Dr. Becker is representing Ericsson and
25 Sony Mobile. They have each submitted several reports

1 and given depositions, and I have reviewed those
2 materials.

3 Q. Did you also review the trial testimony that's
4 been given in the case so far?

5 A. Yes. I looked at Dr. Wells' testimony, and I
6 was here for some fair amount of the proceedings. I was
7 here the first day and a good portion of yesterday.

8 Q. Okay. Let's focus a little more on how you've
9 reached your damages analysis.

10 Are you familiar with the subject matter of
11 the patents that Wi-LAN is asserting in this case?

12 A. Generally, I am. I'm not a technical expert
13 like Dr. Wells and other people are. I'm an economist,
14 but I do have some general understanding of the
15 technology and its footprint or its significance in the
16 marketplace.

17 Q. What aspect of the accused -- what aspect of
18 the accused products do they relate to?

19 A. I believe they relate to what's called HSDPA,
20 which, as I understand it, is oriented to how
21 information is downloaded onto smartphones and tablets
22 and other devices.

23 Q. Do you understand the benefits that HSDPA
24 offers?

25 A. I understand them generally. Again, I'm not a

1 technical expert, but I understand generally that the
2 advantages of the patents and HSDPA are related to
3 faster communications, faster downloads, and to more
4 efficient downloading.

5 So that means it has advantages to us users
6 using our smartphones and our tablets. And it has
7 advantages to the infrastructure providers, the
8 operators, those people who are trying to provide us
9 with that information.

10 Q. Is it your understanding that Wi-LAN invented
11 HSDPA?

12 A. They did not, to my understanding.

13 Q. Then why do Wi-LAN's patents matter to HSDPA
14 from an economic point of view?

15 A. Well, according to Dr. Wells and other
16 information that I've seen in this case, the patents
17 relate to very important functionalities in HSDPA. And
18 I understand from Dr. Wells that, in fact, it's
19 essential technology to HSDPA.

20 Q. And what do you understand that to mean?

21 A. Essential. As I understand it from an
22 economist's standpoint, means that in order to have a
23 handset or a base station that complies with HSDPA, you
24 have to practice these patents. You cannot comply with
25 HSDPA protocol and not practice these four patents.

1 Q. Did you also consider Dr. Wells' testimony
2 that the patents-in-suit were not only essential, but
3 that they pertained to core functionality of HSDPA?

4 A. Yes. I believe he talked a fair amount about
5 that both on Monday and on Tuesday.

6 Q. In addition to Dr. Wells' testimony, did you
7 see any other evidence regarding the benefits of HSDPA?

8 A. Yes. I've seen it in documents and deposition
9 testimony.

10 Q. Okay. And let me clarify. That's the
11 patented technology to HSDPA?

12 A. Yes.

13 Q. Did you consider the deposition testimony
14 given by Defendants in this case?

15 A. I did.

16 Q. Did you prepare some excerpts of deposition
17 testimony to assist the jury today?

18 A. Yes. And I converted those into slides.

19 Q. Okay.

20 MS. ROSS: Jen, may I have Slide 3,
21 please?

22 Oh, I'm sorry, not that one. Slide 5. I
23 apologize.

24 Q. (By Ms. Ross) According to Dr. Wells -- excuse
25 me. Let's start with Sony Mobile. What is shown here?

1 A. This is an excerpt from the testimony of
2 Mr. Hernquist, who I understand is at Sony Mobile. And
3 he's asked some questions about HSDPA.

4 I don't know if you want me to read those or
5 just simply summarize what I understand the testimony to
6 be.

7 Q. Summarizing what you understand the testimony
8 to be, will be fine.

9 A. He was asked about Sony's understanding about
10 the benefits of HSDPA; and he responded on behalf of
11 Sony that HSPA, which is sort of the broader structure
12 within which HSDPA resides, allows for faster
13 downloading of apps, which is applications, games,
14 Internet, Facebook, and other information.

15 So he's talking about the issue of fast
16 downloads, us users getting that information quicker
17 than we did before.

18 Q. And in -- in his testimony here, the bottom
19 part, he's talking about the downloading part?

20 A. Yes.

21 Q. And that corresponds to HSDPA; is that your
22 understanding?

23 A. That's my understanding.

24 MS. ROSS: Let's call up Slide 6, please.

25 Q. (By Ms. Ross) Let's look at HTC's testimony.

1 What does this show?

2 A. This is an excerpt from the transcript of
3 Ms. Markovich from HTC, and she was also asked about the
4 benefits of HSDPA. I see we had a typo there in the
5 title. It's HSDPA from HTC's perspective, and she talks
6 about it allowing for streaming content, in particular
7 streaming video.

8 So when we watch live program -- or -- or
9 pre-recorded programs, for instance, HSDPA is important
10 in us receiving and having a favorable consumer
11 experience of watching that type of content.

12 MS. ROSS: Let's go to Slide 7, please.

13 Q. (by Ms. Ross) What does this document show or
14 what is this document?

15 A. This is a excerpt from a report done by a
16 group called Dell'Oro. Dell'Oro is a market research or
17 market analyst firm. They follow businesses very
18 closely; and for our purposes, they follow the wireless
19 industry very closely. And they produce reports that
20 use input from many different sources, including company
21 people, and then they sell these reports.

22 And they're used by many people in the
23 industry. Dell'Oro reports are quite commonly used by
24 virtually every provider in this industry.

25 And Dell'Oro reported here that subscribers

1 are willing to pay a premium, pay more W-CDMA handsets
2 and devices that provide better experiences and
3 data-intensive application. And then it goes on to
4 specifically talk about HSDPA.

5 So it matters, this report says, to us
6 consumers for our handsets and other devices, because we
7 can get data faster and better because of HSDPA.

8 Q. And you considered materials such as this one
9 in forming your opinions?

10 A. Yes, I did.

11 Q. Is this the kind of information that experts
12 regularly use in forming their opinions?

13 A. Absolutely. We use third-party reports that
14 talk about the industry as often as we can, both because
15 they know a lot about the industry, and they typically
16 represent kind of objective views of the business.

17 Q. Did you consider any other industry reports?

18 A. Yes. For a variety of purposes, I also used
19 reports by IDC. Those are, for my purposes, very useful
20 with regard to data. They have data that many of the
21 Defendants here rely upon and many wireless providers
22 rely upon.

23 Mr. Parolin talked about the fact that
24 Dell'Oro and IDC are two of three most important
25 industry reports that the company is aware of that are

1 used commonly in the industry.

2 Q. Are the patents-in-suit the only ones
3 necessary in order to implement HSDPA?

4 A. No, they are not.

5 Q. Do you recall Dr. Wells' testimony regarding
6 HSDPA as it relates to HSUPA and HSPA?

7 A. Yes.

8 Q. Could you explain that for me?

9 A. I understand HSPA is kind of the umbrella, and
10 within HSPA is HSDPA and HSUPA, and they work together.

11 HSDPA deals with downloading; HSUPA deals with
12 uploading. But together they're combined to make up
13 HSPA.

14 Q. Then the patents-in-suit would fall under the
15 HSDPA side of the umbrella?

16 A. Absolutely.

17 MS. ROSS: Let's pull up Slide 8, please.

18 Thank you.

19 Q. (By Ms. Ross) What does this show?

20 A. This is an excerpt from the patent damages
21 statute. That is, if the jury finds the patents are
22 valid, not unenforceable, and infringed -- so they find
23 that there was something wrong that was done, and they
24 get to -- if the jury gets to the issue of how much
25 money should be paid, I understand that they should be

1 driven by the provision here on the screen which reads:
2 ...damages adequate to compensate for the infringement,
3 but in no event less than a reasonable royalty.

4 Q. Now, the passage you read mentions a
5 reasonable royalty. What is that, sir?

6 A. That can be thought of as a payment that
7 should be made for use of the patents.

8 Q. And what form can a reasonable royalty take?

9 A. Well, it can take -- typically, it takes one
10 of two forms. The first form is a lump-sum payment that
11 is a single amount, one dollar amount.

12 The second is what's called a running royalty,
13 and that's an amount per infringing activity. So it's
14 typically an amount per product sold or tied to the
15 selling price of each product sold.

16 So lump-sum royalty on one hand, running
17 royalty on the other hand are the two most common forms.

18 Q. How did you evaluate the amount that the
19 royalty should be here?

20 A. I used -- and -- and I think it would be
21 useful for the jury to consider using what's called a
22 hypothetical negotiation construct. What that means is
23 we pretend that these parties would have sat down at a
24 negotiating table or a series of negotiating tables,
25 because we have four different Defendants; and these two

1 parties would have -- we need to figure out what these
2 two parties might have agreed to, instead of having the
3 infringing activity.

4 So what was -- what would be a fair payment
5 for each of the four Defendants to make to Wi-LAN? So
6 what's really important is to think about what a
7 hypothetical license would be, arising out of these
8 negotiations.

9 Q. So where does this concept of the hypothetical
10 negotiation come from?

11 A. It comes from a very famous court case called
12 Georgia-Pacific, which was issued about 40 years ago.
13 And since then, many, many courts and many, many experts
14 like myself and Dr. Becker and Mr. Bakewell have used
15 the hypothetical negotiation construct in assessing
16 damages issues.

17 MS. ROSS: May I have Slide 9, please?

18 Q. (By Ms. Ross) What is this list?

19 A. This is a list of factors that came from that
20 Georgia-Pacific case. The last factor, Factor 15, talks
21 about this hypothetical license which I just described a
22 few moments ago.

23 The factors above that are also relevant to
24 consider. And for most of us involved in this field and
25 many courts, we have looked at those above-factors to

1 help figure out what a hypothetical license should look
2 like. So these are factors that are important in
3 considering what fair compensation might be.

4 Q. How does the hypothetical negotiation compare
5 with a real-life negotiation?

6 A. Well, in some regards, it's very similar, but
7 in important regards, it's very different.

8 Q. Well, are there any assumptions about the
9 patents-in-suit that you need to account for in the
10 hypothetical negotiation?

11 A. In the hypothetical negotiation, that becomes
12 relevant if the jury has found that the patents are
13 valid, not unenforceable, and infringed. So if they are
14 strong patents that have been infringed. In that case,
15 if we get to the damages issues, the jury has found that
16 these are strong and infringed rights.

17 In a real-world negotiation, that doesn't
18 exist. There's not a court finding. In the real world,
19 what happens -- in almost every instance -- is both
20 parties are still disagreeing about the strength of the
21 patents and whether they've been infringed. So they
22 enter licenses with this cloud of uncertainty.

23 Here, the hypothetical license doesn't have
24 that cloud of uncertainty anymore. We get the
25 hypothetical negotiation, if the jury has said, in

1 essence, remove that cloud of uncertainty; we know we
2 have strong rights. And so that's an important
3 difference with real-world licenses.

4 Q. And why is that an important difference?

5 A. Well, like I said, in real-world licenses,
6 you're just not sure what the strength of your patents
7 are. So when a patent owner comes to a potential
8 licensing partner, they say: I think I have pretty good
9 patent rights, and I think you're using those rights.

10 And real-world licensing partner says: I
11 don't think those are strong rights and, trust me, I'm
12 not infringing those, so let's come to a moderated
13 amount on that.

14 That doesn't happen in the hypothetical
15 negotiation.

16 Q. So what does it do to the bargaining positions
17 of each of the participants to the hypothetical
18 negotiation?

19 A. It greatly enhances the bargaining position,
20 the bargaining strength of the patent owner, and reduces
21 the bargaining strength of the licensees or the accused
22 infringers. And the reason is because the jury has said
23 these are strong rights, and they have been infringed.

24 Q. What assumptions do you make regarding the
25 parties at the hypothetical negotiation?

1 A. You assume that the parties are willingly
2 sitting down at a table. We know they haven't played
3 very well with each other so far. We're, unfortunately,
4 in litigation. The parties haven't found a way to come
5 up with an agreeable license.

6 In the hypothetical negotiation, we have to
7 say strip out that emotion, and we have to figure that
8 both parties are willing to enter a license.

9 Q. Are there any other assumptions regarding the
10 facts during the hypothetical negotiation?

11 A. Yes. Courts have allowed -- in fact, asked us
12 to consider how history has unfolded over time to figure
13 out how the Defendants or the accused infringers -- how
14 they have used the patents and how they have benefited.

15 So it's something called the book of wisdom.
16 We can consider how history has unfolded since, for
17 instance, 2005 through today.

18 Q. When does the hypothetical negotiation occur?

19 A. Courts have set the hypothetical negotiation
20 at the point of first accused infringement, which is
21 typically the point of first sale after a patent has
22 issued.

23 Q. Okay.

24 MS. ROSS: Let's pull up Slide 10,
25 please.

1 Q. (By Ms. Ross) What does this show?

2 A. This shows the four different hypothetical
3 negotiations that would be in effect here, associated
4 with the four different Defendants.

5 Q. Let's start with Ericsson, just by way of
6 example. You have Airspan as the patent holder.

7 Who's Airspan?

8 A. Airspan is the company that owned the patents
9 as of 2005. I think Mr. Parolin talked about that at
10 some length. They owned the patents. They sold them to
11 Wi-LAN later. But in 2005, they owned each of these
12 four patents, so they would be sitting down with
13 Ericsson at that point in time.

14 Q. When did Wi-LAN acquire the patents from
15 Airspan?

16 A. In early 2009.

17 Q. And so that's why you have Airspan as the
18 patent holder at the time of the hypothetical
19 negotiation?

20 A. Yes. For the Ericsson negotiation and the
21 Alcatel-Lucent negotiation and the HTC negotiation. At
22 each of those points in time, Airspan is the owner of
23 the patents.

24 Q. Can you tell the jury the dates that the
25 negotiations occur with respect to the other Defendants,

1 please?

2 A. Yes. As I said before, with Ericsson, it's
3 2005; with Alcatel-Lucent, it's as well in 2005; with
4 HTC, it's in 2008; and with Sony Mobile, another
5 negotiation would have been done in 2009, and that would
6 be with Wi-LAN, because at that point in time, Wi-LAN
7 owned the patents.

8 Q. But it's -- it's your opinion, isn't it, sir,
9 that the damages period in this case begins in October
10 of 2010?

11 A. Yes. That's the point at which the complaint
12 was issued for each of these four Defendants. So I
13 start damages well after this hypothetical negotiation
14 began, and that's -- that's standard.

15 Q. And why do you do that, sir?

16 A. Because it's by the law. Damages cannot
17 start, in this case, to accrue until that point in time.

18 Q. At the time of the hypothetical negotiation
19 for each of the Defendants, is -- what is your opinion
20 with respect to the form and the length of the -- of the
21 resulting license?

22 A. Based on the evidence that I've seen, the
23 parties would have entered a lump-sum royalty, a single
24 amount, and they would have wanted a lump sum that
25 covered the life of the patent. That's standard for the

1 parties here.

2 Q. But just to clarify, your opinions are that
3 that period should be reduced and beginning in October
4 of 2010?

5 A. Absolutely.

6 Q. So once you've determined who would be at the
7 negotiation, did you follow certain steps in figuring
8 out what the parties would have agreed to in the
9 negotiation?

10 A. I'm sorry. Yes, I did.

11 Q. Sorry. I had a little pause there at the end
12 of my question.

13 A. I'm just so excited. I just can't hold --
14 hold myself constrained here. I think I'm the only one
15 who's excited.

16 Q. What is the first step in determining the
17 appropriate form of the royalty license?

18 A. Well, you determine the form of the license.

19 Q. Okay.

20 A. Would that have been a lump sum or running
21 royalty or something different?

22 Q. What's the second step in the analysis?

23 A. I do what's called a quantitative analysis. I
24 look at hard facts, information from a variety of
25 sources to determine what the data are suggesting would

1 be a fair royalty payment.

2 Q. And then what's the third step in the
3 analysis?

4 A. It's a qualitative assessment. It's at that
5 point at which I pull in the Georgia-Pacific Factors
6 that we saw a few moments ago, and figure out if they
7 provide much guidance in -- in assessing the
8 quantitative data.

9 So there are many factors that are useful.
10 And we economists, even though we love and we're
11 obsessed with data, we also realize negotiations are
12 driven by things that aren't always, at their core, data
13 but are important to a negotiation. So we layer that in
14 on top of the data to figure out what a reasonable
15 royalty should be.

16 Q. Let's talk about the form of the royalty, Mr.
17 Jarosz. What forms can royalty payments take?

18 A. Like I said before, it can be some lump-sum
19 fee or running royalty, the running royalty tied to the
20 precise amount of infringement.

21 Q. And what form of the royalty did you determine
22 to be appropriate in this case?

23 A. Again, as I said, a lump-sum fee would be the
24 appropriate form here.

25 Q. Did you review the prior licensing history of

1 the parties in making that conclusion?

2 A. Yes, I did.

3 Q. So with respect to the licensing history, what
4 did you find with respect to the parties?

5 A. What I found is Wi-LAN, when it's negotiating
6 with large handset or base station manufacturers, it
7 tends to negotiate for a lump-sum royalty.

8 When it's negotiating with smaller companies,
9 those can sometimes be running royalties. But they tend
10 to prefer a lump-sum amount for the large manufacturers.

11 And what we have here is for large
12 manufacturers.

13 As well, I looked at the Defendants' licensing
14 practices, and sometimes they do it on a running royalty
15 basis, and sometimes they do it on a lump-sum basis.

16 So given that the Wi-LAN data and practices
17 favor a lump-sum fee and the Defendants' payments
18 supported that, I came to the conclusion that a lump-sum
19 fee would be appropriate.

20 Q. What do the Defendants say about the form of
21 the appropriate royalty in this case?

22 A. Dr. Becker and Mr. Bakewell, I believe, are in
23 agreement with me, that it should be a single lump-sum
24 payment. So I don't think we're fighting about that
25 issue.

1 Q. You said that you used quantitative approaches
2 to determine the appropriate lump-sum royalty. What did
3 you mean by quantitative?

4 A. Well, there are three types of quantitative
5 approaches that we economists use. They are used in a
6 variety of settings, but they're particularly important
7 in intellectual property pricing.

8 Those are the market approach, the income
9 approach, and the cost approach.

10 I looked up all those kind of data and will
11 present those to the jury to help the jury in its
12 deliberations.

13 Q. What is the market approach?

14 A. The market approach entails looking at other
15 transactions that have some similarity to the
16 hypothetical negotiation to figure out if there are
17 observations that are useful.

18 Q. Did you simply look at the dollar amount of
19 what the parties would have agreed to past -- in the
20 past for similar technology?

21 A. No. We look at that, but we don't stop our
22 investigation there. We economists and damages people
23 are asked to assess that evidence and figure out how
24 it's appropriate to our situation.

25 So in the real estate example, for instance, I

1 can't simply say that the price that my next-door
2 neighbor realized on his or her home is the price that I
3 should get for my home. There are differences.

4 So we economists need to adjust for those
5 differences in the style of the home, the size of the
6 home, to make the selling price of my neighbor's home
7 useful in determining what my selling price should be.

8 MS. ROSS: Jen, may I have 11, please?

9 Q. (By Ms. Ross) Is the market approach what you
10 considered in this case listed on Slide 11?

11 A. Yes. Those are the three forms of evidence
12 that I reviewed.

13 Q. The first evidence is acquisition data. You
14 mentioned earlier that Airspan owned the patents before
15 Wi-LAN?

16 A. Yes, I did.

17 Q. Did Airspan acquire the patents from anyone?

18 A. Yes, they did.

19 Q. And who was that?

20 A. Airspan acquired the patents -- I'm just
21 losing the name right now -- from DSC Communications in
22 1998.

23 Q. And how much did Airspan pay for the patents?

24 A. \$13 million.

25 Q. Did you evaluate how comparable this

1 transaction, the DSC-to-Airspan transaction, was to the
2 hypothetical negotiation?

3 A. Yes, I did.

4 Q. And at the time of the hypothetical
5 negotiation, what business was Airspan in?

6 A. Well, that's not the hypothetical negotiation.

7 Q. I'm sorry. Excuse me.

8 At the time of the transaction. I misspoke.

9 A. Yeah. At the time of the transaction, which,
10 number one, was quite a number of years ago, in 1998,
11 Wi-LAN was in the broadband fixed wireless business, the
12 wireless DSL business. It's a business very different
13 from handsets and base stations that are at issue here.

14 So -- so Airspan was looking to apply that
15 technology in a way that's quite a bit different than
16 we're talking about today.

17 Q. What does the fact that Airspan was operating
18 in a different marketplace than the Defendants imply
19 with respect to the comparability of the transaction on
20 the hypothetical negotiation?

21 A. It means that the transaction is of limited
22 value, both because there wasn't any finding as to the
23 strength of those patents; but, importantly, Airspan was
24 thinking of applying them in ways that are very, very
25 different from Alcatel-Lucent, Ericsson, Sony Mobile,

1 and HTC.

2 Q. Now, the transaction that occurred between DSC
3 to Airspan, were those parties related entities?

4 A. Yes, they were. So it wasn't between -- it
5 wasn't an arm's length negotiation between unrelated
6 parties.

7 Q. And what does arm's length negotiation mean?

8 A. A negotiation between two people that are not
9 connected with one another in which one can make the
10 presumption that there wasn't other consideration going
11 on, a father/son relationship, for instance, or one
12 cousin to a next. Not that there's anything wrong with
13 that. I'm not suggesting that at all.

14 But we typically like to look at negotiations
15 between parties that are unrelated and don't have other
16 consideration and benefits flowing to and from one
17 another.

18 Q. So what did you conclude with respect to the
19 comparability of the DSC/Airspan transfer to the
20 situation here?

21 A. It's of limited comparability. It was worth
22 looking at, but that 13-million-dollar number doesn't
23 provide much guidance here.

24 Q. Did you also consider evidence regarding
25 Wi-LAN's acquisitions of the patents-in-suit from

1 Airspan in 2009?

2 A. Yes, I did.

3 Q. And how much did Wi-LAN pay for the
4 patents-in-suit?

5 A. \$11 million.

6 Q. And in the -- did the purchase of patents
7 include the patents-in-suit?

8 A. Yes, it was a larger bundle. Mr. Parolin
9 talked about that yesterday. But these four
10 patents-in-suit were part of what Wi-LAN paid \$11
11 million for.

12 Q. And how comparable was that transaction to the
13 hypothetical negotiation?

14 A. That has some important differences as well.

15 Again, when that happened, there wasn't a
16 finding by a jury that any of the patents were valid,
17 enforceable, and infringed.

18 Moreover, Wi-LAN intended not to be in the
19 business that these Defendants are in. Wi-LAN intended
20 to be -- to use these patents and licensing out that
21 technology and other technology to others. It wasn't
22 intending to be in the business of manufacturing
23 anything, which is very different from the four
24 Defendants that we have here.

25 Q. At the time of the Airspan transfer to Wi-LAN,

1 did Wi-LAN know whether it would be able to successfully
2 license these patents?

3 A. No. It had no idea.

4 Q. Did --

5 A. It was hoping it would, but there was no
6 evidence that it would be able to license these patents.

7 Q. Did Wi-LAN know at that time whether the
8 patents were valid?

9 A. There was no finding of that. Again, it was
10 hoping that they were, but there was no objective
11 evidence of that.

12 Q. What effect, if any, does this lack of
13 uncertainty on Wi-LAN's part regarding whether it would
14 be successful and whether the patents were valid have on
15 the price that Wi-LAN would have been willing to pay
16 Airspan at the time?

17 A. It moderated the price that they would have
18 paid. It's kind of like buying land. You hope that
19 there's oil under that land; but if you don't know,
20 you're going to moderate your price. If, on the other
21 hand, you know there is oil under that land, you're
22 going to pay a fairly hefty price.

23 At the time that Wi-LAN purchased these
24 patents, it was just land. They didn't know what use or
25 what was under the surface of that land.

1 Q. For the purposes of the hypothetical
2 negotiation, do we know whether the Defendants' products
3 were profitable and successful?

4 A. Yes, we do. As I mentioned earlier, we can
5 use the book of wisdom; and we have here, to determine
6 that the Defendants have used the patented inventions
7 quite extensively, there have been lots of revenues, and
8 they have realized substantial profits as well.

9 Q. Would Wi-LAN and the Defendants have known
10 that the patents were valid?

11 A. No one knew -- in the real world knew about
12 these patents; but in the hypothetical negotiation, when
13 Wi-LAN's talking to each of these four Defendants,
14 everybody would know that these are valid, enforceable,
15 infringed, and successful patents.

16 Q. And so what effect would that have on the
17 parties to the hypothetical negotiation?

18 A. That should necessarily raise the rate versus
19 a situation where there was this cloud of uncertainty.

20 Q. Are you aware, sir, that Wi-LAN itself valued
21 the patents after it purchased them from Airspan in
22 2009?

23 A. I'm aware that it undertook an analysis. Mr.
24 Parolin talked about that. And it undertook an analysis
25 associated with a finding of whether there was impair --

1 impairment or not.

2 Q. Let me show you Slide 12, please.

3 And this is be an excerpt from PX 200 and also
4 DX 60. Is this the memo that you were referring to?

5 A. Yes. This is one of the two memos. This is a
6 later memo from Mr. Houston to Mr. McEwan that
7 summarizes what Wi-LAN's findings were with regard to
8 the transaction.

9 It valued two of the patents here, the '211
10 and the '326, using the royalty rates there at the
11 bottom to assess whether the company had paid too much
12 for the portfolio it obtained from Airspan.

13 Q. So at the time that it happened -- let me go
14 back.

15 So what did you understand from this memo with
16 respect to -- how did -- how did Wi-LAN use this memo?

17 A. It used it to determine, again, whether it had
18 paid too much, whether the \$11 million was too much.
19 And what they concluded in this memo was, no, they did
20 not.

21 These patents, even though there had been no
22 jury finding, were probably worth a fair amount more
23 than \$11 million. So they did not need to make an
24 adjustment in their accounting books.

25 Q. And the rates that we see at the bottom of

1 this memo for base stations and handsets, what do you
2 understand those to represent?

3 A. They -- there's -- the base rates that is -- I
4 think they represent the rates in existing licenses that
5 Wi-LAN entered; and then at the very bottom, those are
6 additional rates that they could get above and beyond
7 the base rates because of the '211 patent, which is the
8 patent associated with the handsets, and the '326
9 patent, which is associated with the base stations.

10 Q. And at this time, did Wi-LAN know whether it
11 would be able to license the patents successfully?

12 A. No, it did not.

13 Q. What did Mr. Bakewell, the expert for
14 Alcatel-Lucent and HTC, say that the royalty payment to
15 Wi-LAN should be here for Alcatel-Lucent and HTC?

16 A. He said it should be clued off only the
17 purchase price that Wi-LAN paid to Airspan. So he said
18 the appropriate royalty that Alcatel-Lucent and HTC
19 should pay is a small portion of that \$11 million with a
20 slight return on top of that.

21 Q. What return did Mr. Bakewell use?

22 A. He used the discount rate that was in this
23 memo that Mr. Parolin talked about that's useful for
24 other reasons.

25 He said the return over, in essence, a

1 seven-year period would be about 26 percent. That's not
2 an approach that I've seen used before in valuing
3 intellectual property, and it gives a number that's just
4 a fraction of the \$11 million.

5 Q. So if we use the example that Wi-LAN spent
6 \$10, what would Mr. Bakewell's rate of return be?

7 A. Well, the rate of return would be that 26 or
8 30 percent. He, in essence, says it should -- \$10 would
9 give you a return of 12 or \$13.

10 Q. Did you hear Mr. Parolin's testimony yesterday
11 that Wi-LAN sought a 10 to 20 times return on its
12 investments for patents that it acquired from Airspan?

13 A. Yes.

14 Q. And can you explain what the 10 to 20 times
15 return on investment means?

16 A. What Wi-LAN was hoping to receive wasn't this
17 20-percent return but a hundred- or 200-percent
18 return -- or actually, a thousand-percent return.

19 So what it was hoping and what it typically
20 invests in, if it invests, \$10, it's hoping, on a
21 successful project, to get a hundred dollars back.

22 That's their business model. That's a common
23 business model for people who own patents.

24 Q. That seems really high to me. How do they get
25 10 to 20 times their investment?

1 A. They realize that they buy pieces of land, and
2 unfortunately, many of those pieces of land have no oil
3 underneath them, but some do.

4 Occasionally, the jury finds -- a jury finds
5 or a negotiating party finds that there are some patents
6 that they own that are very strong, and therefore, it is
7 entitled to a return associated with those.

8 So there are many, many dry pieces of land,
9 but there are some for which there's oil, and they
10 should get the adequate return on the land that has oil
11 under it.

12 Q. Let's go back to Slide 13, the chart that you
13 prepared that lists the comparables.

14 What's the next entry on the chart?

15 A. I looked fairly closely at a number of Wi-LAN
16 licenses.

17 Q. Now, help me understand, sir. You said
18 earlier that three of the Defendants -- or three of the
19 hypothetical negotiations would have occurred with
20 Airspan as opposed to Wi-LAN. So why are the Wi-LAN
21 licenses relevant?

22 A. Well, number one, the four hypothetical
23 involves Wi-LAN, but more importantly, the Wi-LAN
24 licenses give information of how participants in the
25 wireless business are valuing and pricing intellectual

1 property rights. So what have they agreed to?

2 So these Wi-LAN licenses exist over time, and
3 they give me information about what parties often agree
4 to for intellectual property rights that are either
5 similar to what we have here or actually include what we
6 have here.

7 Q. What Wi-LAN licenses did you consider relevant
8 in your analysis?

9 A. I considered the Wi-LAN licenses that included
10 the patents-in-suit and that were with major
11 manufacturers of handsets and base stations. And then
12 for some of the running royalties, they were some of the
13 smaller manufacturers.

14 But I focused on the lump-sum payments from
15 major manufacturers, companies like HTC and Sony Mobile
16 and Ericsson and Alcatel-Lucent.

17 Q. Now, were these licenses that you considered,
18 limited only to the patents-in-suit?

19 A. No. All of those licenses had broader
20 portfolios, so none of them, unfortunately, had just
21 these four patents.

22 Q. And did you take that fact into consideration
23 in your analysis?

24 A. Absolutely.

25 Q. And what did you do?

1 A. I looked at making adjustments for the number
2 of patents that are at issue here and adjustments for
3 the size and nature of the parties that had entered
4 negotiations -- had entered licenses with Wi-LAN.

5 Q. Are you aware that the Defendants' experts
6 contend that many, if not all, of the Wi-LAN licenses
7 you considered are not comparable to the hypothetical
8 negotiation and, therefore, should not be considered at
9 all?

10 A. Yes. In fact, Mr. Bakewell concluded that
11 they're all irrelevant. There's not a single Wi-LAN
12 license that provides any assistance here.

13 Dr. Becker, who's also representing the
14 Defendants, actually disagreed with Mr. Bakewell on that
15 and agrees with me; that is, that there is some value in
16 looking at these Wi-LAN licenses.

17 Q. In your experience, how common is it to find a
18 license that is perfectly comparable to the hypothetical
19 negotiation?

20 A. That almost never happens. Licenses are just
21 different from one another, just like houses are
22 different from one another or people are different from
23 one another. You have to adjust for those differences.

24 If there was something that was a perfect
25 comparable, then I don't think that we'd have a

1 litigation. It would be clear what the payment should
2 be.

3 Q. In your opinion, should the
4 less-than-perfectly-comparable licenses be ignored?

5 A. Absolutely not. One should look at the
6 licenses that are relevant to the situation at hand and
7 adjust them accordingly. That's what we experts are
8 asked to do, to assess those licenses -- licenses and
9 figure out if they're useful and how are they useful.

10 Q. And did you do anything to take into
11 consideration the differences between the Wi-LAN
12 licenses and the hypothetical negotiation?

13 A. Yes, I did.

14 Q. Now, you mentioned Mr. Bakewell a few minutes
15 ago. Excuse me.

16 MS. ROSS: Strike that.

17 Q. (By Ms. Ross) Now, did Mr. Bakewell rely on
18 any transactions involving the patents-in-suit?

19 A. No. As I mentioned a moment before, even
20 though there were Wi-LAN licenses that covered these
21 patents, he said all of those licenses are irrelevant.
22 They are not worth considering here.

23 Q. What about the acquisition? Did he consider
24 the acquisition?

25 A. That's the only thing that he considered; that

1 is, that he used as a base for a damages determination.
2 And by acquisition, we're talking about the
3 Wi-LAN/Airspan acquisition.

4 Q. Do you agree with Mr. Bakewell that the patent
5 purchase agreement between Wi-LAN and Airspan should be
6 considered here?

7 A. Yes, it is worth considering.

8 Q. But is this agreement perfectly comparable to
9 the hypothetical negotiation?

10 A. No. It's different in very important ways
11 that we spoke of before.

12 There was no finding that these rights are
13 valid, enforceable, and infringed. And Wi-LAN was
14 intending to be and has been in a business that's very
15 different from the business of these four Defendants.

16 Q. Well, let's start with the Wi-LAN licenses
17 that involved lump-sum payments.

18 MS. ROSS: If you could pull up Slide 14,
19 please.

20 Thank you.

21 Q. (By Ms. Ross) Does this slide show all of the
22 lump-sum payment -- or payments you found in the Wi-LAN
23 licenses?

24 A. These are the lump-sum payments associated
25 with Wi-LAN licenses with major manufacturers in the

1 wireless business.

2 Mr. Parolin talked about these licenses
3 yesterday. And I've just summarized in the chart what
4 the payments are, associated with those licenses; that
5 is, the lump-sum payments.

6 Q. And can you please summarize the range of the
7 lump-sum payments that were found?

8 A. At the low end, ZTE paid \$1.75 million. At
9 the high end, LG paid \$29 million.

10 Q. So should the jury just accept these numbers
11 and we all go home?

12 A. No. It's not so easy, unfortunately. We need
13 to look at those and figure out how comparable they are
14 to our hypothetical negotiation or how they should be
15 adjusted.

16 MS. ROSS: Let's pull up 17, please.

17 Q. (By Ms. Ross) Does Jarosz 17 show the types of
18 quantitative adjustments that would be necessary in
19 making the existing lump-sum licenses comparable?

20 A. Yes. These are the three most important sets
21 of adjustments that should be made, the three on the
22 slide.

23 MS. ROSS: Actually, let's go back to
24 Slide 14 for just a second, please.

25 Q. (By Ms. Ross) Why did you find that these

1 licensees -- these licenses identified here on Slide 14,
2 that is, ZTE, Sharp, Huawei, Motorola Solutions,
3 Motorola Mobility, and LG, were comparable?

4 A. Because they included the patents-in-suit.
5 Most of these licenses, in fact, specifically call out
6 or mention the patents-in-suit, and they are licenses
7 with major manufacturers of handsets or base stations or
8 both.

9 Q. And did you consider any other licenses that
10 you found comparable with respect to running royalty
11 payments?

12 A. Yes. I found licenses with three other
13 parties, General Mobile, Casio, and Cal-Comp that had
14 running royalties that were useful in assessing what the
15 handset manufacturers should pay here.

16 Q. And why did you find that those were
17 comparable licenses?

18 A. Again, they included the patents-in-suit, just
19 like the ones on the screen do, and they were licenses
20 with companies that were in the handheld business.

21 MS. ROSS: Let's go back to 17 now.

22 Thank you, Jen.

23 Q. (By Ms. Ross) All right. So in our
24 discussion, I'm -- excuse me.

25 So what quantitative adjustments did you --

1 are identified here on this chart?

2 A. Adjusting for the U.S. versus worldwide
3 portion of a license, adjusting for the size of the
4 various licensees, and looking to see how to assess
5 these four patents versus the larger portfolio of
6 patents that were licensed in those other transactions.

7 Q. So I want to skip ahead and talk about that
8 middle one, the relative size of the licenses.

9 How did you determine if the Defendants -- how
10 did you adjust for the relative size of the licensees?

11 A. I looked to see the nature of the licensees,
12 the companies that have entered licenses, and what their
13 shares were in the businesses at issue here.

14 Q. And when you say shares, what are you talking
15 about?

16 A. I'm talking about market share. So in one
17 instance, the market share is as close as I could get to
18 the base station business, and in the other, as close as
19 I could get to the handset business at issue here.

20 Q. And where did you obtain this market
21 information?

22 A. From two different sources. The one is
23 Dell'Oro, which I spoke about before. That gave me
24 information on base station shares. And IDC, I also
25 talked about before, as did Mr. Parolin, gave me useful

1 information on handset market shares.

2 MS. ROSS: Let's pull up 18, please.

3 Q. (By Ms. Ross) Does this summarize the market
4 share comparison you did for the base stations at the
5 point of the negotiation for each of the licensees?

6 A. Yes. What this shows is -- ZTE, Huawei, and
7 Motorola Solutions were in the base station business;
8 and they had entered licenses with Wi-LAN. And you
9 could see at the point they entered the licenses, their
10 shares were modest, 0.1 percent, 2.4 percent, and 2.8
11 percent.

12 At the time of the hypothetical negotiation
13 here, Ericsson's share would be 20.9 percent and
14 Alcatel-Lucent's share would be 39.4 percent. In other
15 words, the two base station Defendants are significantly
16 larger than the three companies in the base station
17 business that have already entered licenses with Wi-LAN.

18 Q. What does the green bar represent?

19 A. The green bar represents the maximum share
20 since negotiation that, over time, Ericsson's share went
21 up and down as did Alcatel-Lucent's share.

22 But at the height, the best that they were
23 doing, I reflected that in the green, the neon green
24 bars. So at its height, Ericsson comprised about
25 48.4 percent of the base station market; and

1 Alcatel-Lucent, at its height, comprised about
2 48.9 percent.

3 Q. And why -- why is the max market share
4 important to this analysis?

5 A. Well, as the book of wisdom allows us to
6 consider how history has unfolded, I wanted to consider
7 how well Ericsson and Alcatel-Lucent have done over
8 time. I also looked at minimums and averages.

9 For this presentation, I've shown kind of the
10 highest they've been, but it certainly has been lower
11 than the green bars at various points in time. But the
12 book of wisdom asks us to consider all of history, from
13 the point in the negotiation through today.

14 Q. And at the hypothetical negotiation, the
15 parties would have been aware of the maximum market
16 share as well; is that true, sir?

17 A. They're presumed to be aware through this book
18 of wisdom.

19 MS. ROSS: Let's pull up 19, please.

20 Thank you.

21 Q. (By Ms. Ross) What does this show?

22 A. This shows a similar analysis for the handset
23 manufacturers, and I've presented the unit shares here.
24 Huawei, Sharp, ZTE, HTC, Sony Mobile, and Motorola and
25 LG have all entered licenses with Wi-LAN. Some of those

1 were fairly small players in the handset business.

2 Others: Sony, Sony Mobile, and LG were fairly
3 large.

4 The handset manufacturers we have here, HTC
5 and Sony Mobile, kind of fall in the middle; so versus
6 the ones on the left, they're doing better versus the
7 ones on the right doing not as well. So I needed to
8 adjust and the jury would need to adjust the lump-sum
9 payments with that in mind.

10 And just like with the other chart, I've
11 provided in the red the share of the two Defendants at
12 the point of negotiation and their maximum share over
13 time.

14 Q. Could you read for me, sir, the shares that
15 you calculated and the market share information that you
16 calculated for the licensees and for the Defendants?

17 A. For the licensees, Huawei was 0.4 percent;
18 Sharp was 0.4 percent; ZTE was 0.5 percent; Motorola
19 Mobility was 7.1 percent; and LG was 18.4 percent.

20 With regard to the hypothetical negotiation,
21 the Defendants at issue here, HTC's share at negotiation
22 was 0.9 percent; and Sony Mobile was 1.2 percent. The
23 maximum share for HTC was 9.2 percent; and for Sony
24 Mobile, was 1.2 percent.

25 Q. Thank you.

1 Let's talk about your third adjustment on
2 Slide 20, please.

3 Did you also consider the value that the
4 patents had to Wi-LAN's wireless portfolio?

5 A. Yes. I looked -- I considered the new
6 number -- we're just talking about the four patents
7 here. And Wi-LAN's other licenses had a larger set of
8 patents. So I needed to adjust for the smaller set of
9 rights here.

10 Q. And how did you adjust for that smaller set of
11 rights?

12 A. Well, I relied on several things, but a very
13 important thing was the analysis that was contained in
14 the Houston/McEwan memo that you put on the screen a few
15 minutes ago that gave breakdowns of the incremental or
16 added value of the '211 patent, which is for the
17 handsets here, and the '326 patent, which is for the
18 base stations here. So I relied heavily on that memo.

19 MS. ROSS: Let's go to Slide 21, please.

20 Q. (By Ms. Ross) Does this summarize the
21 apportionment factors that you obtained from the McEwan
22 memo at PX 20 or DX 60?

23 A. Yes. There were inputs from that memo, and
24 there was a bottom chart in that demonstrative slide
25 that you showed earlier where there were three different

1 kind of base handset rates.

2 And there are these -- are the '211 patent
3 would have an impact on that. It would raise that base
4 rate. So what it would raise the base rate by was from
5 13.2 percent up to 33 percent. That's what you see in
6 the blue bars.

7 On the base station side, there was just one
8 calculation. There was one base -- base station rate.
9 And the added amount associated with the '326 patent
10 was -- represents 28.6 percent.

11 I believe, however, that these are probably
12 somewhat conservative.

13 Q. And these -- these numbers are related to the
14 wireless portfolio in 2009; is that correct?

15 A. That's exactly right.

16 Q. How did you calculate these percentages?

17 A. I simply took the added rate associated with
18 each of the two patents, divided by the rate that
19 existed before these two patents were added to the
20 portfolio.

21 Q. So with respect to the handset, the ranges in
22 the handsets, which factor is the best one to use?

23 A. Well, probably for the jury's consideration is
24 the 33.3 percent. The reason is, in that memo, it said:
25 Now that we've gotten the '211 patent or the '326

1 patent, we're able to add on to our royalties that we're
2 getting in the marketplace.

3 In a hypothetical negotiation, we wouldn't be
4 adding on the '211 or the '326 patent. Those would be
5 the patents. They would be the core patents that would
6 be licensed. And when you add a patent to a portfolio,
7 that has a much smaller effect and it should, than when
8 you just have the patent standing alone. And there's
9 literature that supports this.

10 Q. Let me show you what's on Jarosz 22. Who
11 wrote this article, sir?

12 A. Eric Stasik, who used to be head of property
13 licensing at Ericsson.

14 Q. What does this article show?

15 A. There's a lot in this article, but the most
16 important message is what is underlined in the red. It
17 says: The incremental increase of each additional
18 patent is negligible.

19 In other words, he's pointing to Ericsson's
20 experience and experiences in the industry. When you
21 add a patent to a portfolio, it only adds a little bit,
22 but standing alone, it can be quite valuable.

23 Q. So what does this mean for the hypothetical
24 negotiation here?

25 A. Well, one can consider the factors that I had

1 on the previous slide, but based on our understanding of
2 the value of patents, those numbers are probably a
3 little bit low. If the jury focuses on any particular
4 number for handsets, it should probably be the 33
5 percent as opposed to the 13.2 percent.

6 Q. So are the rates that come -- with respect to
7 the patents that are part of a portfolio that are
8 licensed, is their value linear with respect to the
9 license?

10 A. Absolutely not. And the economic literature
11 and licensing literature is filled with articles on this
12 point, that if you go from, say, four patents to eight
13 patents, that doesn't double a royalty rate from
14 1 percent to 2 percent.

15 It's a concept known as numeric
16 proportionality. That is, when you add on -- each
17 add-on becomes less and less versus the one before, to
18 the point at which some certain number of patents don't
19 increase the price at all, because there's enough of
20 a -- of a core existing already.

21 MS. ROSS: Let's go to Jarosz 23, please.

22 Q. (By Ms. Ross) Does Jarosz 23 summarize the
23 implied lump-sum payments that you calculated for the
24 base stations after your adjustments that we just
25 discussed were made?

1 A. Yes. After adjusting for the size of the
2 various manufacturers and adjusting for the portion of
3 the -- of the portfolio here, you'll see the numbers,
4 the range of numbers reported here for the base station
5 manufacturers.

6 These do not have an adjustment for geography;
7 that is, allowing for the fact what we are talking about
8 here are U.S. patents and not Wi-LAN's worldwide patents
9 that were part of these other licenses.

10 Q. And so this graphic depicts what the parties
11 to the hypothetical negotiation would have considered
12 would be the appropriate range for a fully paid-up
13 lump-sum license; is that correct?

14 A. These are calculations of converting those
15 lump-sum payments to the hypothetical negotiation, and
16 they represent payments over the life of the patents.

17 So these are inputs to consider and they're
18 various alternative ways to make adjustments that are
19 reflected in this chart.

20 Q. Can you explain for the jury what the
21 different ranges that are depicted here represent?

22 A. They're really driven by which manufacturer is
23 adjusted. So there were different lump-sum fees for the
24 different manufacturers. And some suggest, in the case
25 of Alcatel-Lucent, for instance, a number closer to \$9.3

1 million, and some suggest a number closer to \$27.5
2 million. So it depends on the inputs, and there are
3 several different inputs.

4 So rather than just focusing on one party at
5 one time, I looked at all the relevant information.
6 That's why I came up with this range.

7 Q. And on the left-hand side of the column where
8 it says max share, negotiation share, and average share,
9 can you tell us what that means?

10 A. Those were related to the bar charts that we
11 saw before where I had the red bar and the neon green
12 bar. So max share is the maximum share that one of
13 these Defendants had in the period at issue.

14 Negotiations share would be at the point of
15 their hypothetical negotiation, and average share would
16 be during that period.

17 Q. Okay. Can you run the jury through these
18 numbers that you calculated?

19 A. Sure. For Alcatel-Lucent, the range for the
20 max share is 9.3 million to 27.5 million. The
21 negotiation share is 7.5 million to 22.2 million. And
22 the average share is 7.6 million to 22.7 million.

23 For Ericsson, for the maximum share, the range
24 is 9.2 million to 27.2 million. For the negotiation
25 share, the range is 4 million to 11.8 million. And for

1 the average share, the range is 5.6 million to 16.6
2 million.

3 MS. ROSS: Let's pull up 24, please.

4 Q. (By Ms. Ross) Does this summarize the lump-sum
5 payments you calculated for handsets after the
6 adjustments that we discussed before?

7 A. Yes, exactly. This is the same kind of
8 approach. The ranges are similar -- similarly exist for
9 the reasons we talked about before.

10 The one new thing in this chart for the
11 handset manufacturers is the high portfolio adjustment
12 and low portfolio adjustment. Remember in that bar
13 chart, 33.3 percent, the one I think is probably more
14 appropriate, corresponds to the high portfolio
15 adjustment, and the 13.2 percent, I think it was,
16 corresponds to the low portfolio adjustment.

17 So I have a few more numbers because there
18 were a few more inputs.

19 Q. Can I ask you to run through the numbers,
20 please?

21 A. Yes.

22 For Sony Mobile, max share high portfolio is
23 .6 million to 4.6 million. The negotiation share is .6
24 million to 4.6 million. And the average share is .4
25 million to 2.9 million. Those are all for the high

1 portfolio adjustment.

2 For the low portfolio adjustment, the maximum
3 share is .2 million to 1.8 million. The negotiation
4 share is .2 million to 1.8 million. And the average
5 share is .1 million to 1.1 million. Those were for all
6 the Sony Mobile numbers.

7 For HTC, the numbers are larger and the ranges
8 are a little bit broader. For the high portfolio
9 adjustment, the maximum share is 4.4 million to 42
10 million. The negotiation share is .4 million to 5.3
11 million. The average share is 2 million to 20.5
12 million.

13 For the low portfolio adjustments, the number
14 for the maximum share is 1.7 million to 16.6 million.
15 For the negotiation share, it's .5 million to 2.1
16 million. For the average share it's .8 million to 8.1
17 million.

18 Q. Now, with respect to HTC, the disparity is
19 quite large for the max share.

20 A. Yes, it is.

21 Q. Can you explain that, please?

22 A. Yes. It's really driven by the fact that HTC,
23 since negotiation, has been very successful and then
24 less successful. At the time of negotiation, it had a
25 very modest share; and then I think as many of us

1 consumers know, there have been a lot of ads for HTC
2 phones. And they've been successful in the marketplace.

3 Now their success is dwindling some, but in
4 2012, it was a very successful company. So since
5 infringement began, it has gone from being modestly
6 successful to very successful.

7 Q. With respect to the handsets, did you also
8 consider the Wi-LAN licenses that have royalties?

9 A. Yes, I did.

10 Q. And what were the rates for those licenses?

11 A. Basically, they ran from .25 to .5 cents.

12 Q. Okay. And that's cents per unit?

13 A. Cents per unit.

14 Q. Are the --

15 A. I'm going to change that. It's \$.25, which is
16 25 cents per unit. I misspoke. I apologize.

17 Q. Fair enough.

18 A. So it's 25 to 50 cents per unit.

19 Q. Thank you for clarifying.

20 Are the companies that entered running royalty
21 agreements with the Plaintiff the same size as the
22 Defendants?

23 A. No. They're all small companies. General
24 Mobile -- at least in the -- in the handset business,
25 Casio, General Mobile, and -- it might be pronounced

1 General Mobile, and CalAmp are fairly insignificant
2 players in the business.

3 Q. Does it matter to your analysis that some of
4 these licensees paid very little in terms of dollar
5 amounts under the terms of their running royalty rate
6 agreements?

7 A. No. If their success was low, they shouldn't
8 have to pay much in terms of royalty. If their success
9 was high, they would have paid a lot. But they were
10 very modest in their success; and, therefore, I would
11 expect the royalty -- the ultimate royalty payments to
12 Wi-LAN to be low.

13 Q. Let's talk about the running royalties for
14 handsets for a moment.

15 Does a running rate automatically account for
16 the differences in size?

17 A. Yes, it does. So that if a company is very
18 successful, sells lots of units -- if they sell a
19 hundred units, they're going to pay a higher royalty
20 than if they sell ten units. So the size adjustment is
21 already built in.

22 Q. Do you need to make a geographical adjustment
23 for the running royalty licenses?

24 A. Not if you look at U.S. sales or worldwide
25 sales. In this case, we're looking at U.S. sales. So

1 if I just apply those royalty rates to U.S. sales that
2 are at issue here, there's no additional need to adjust
3 for geography.

4 Q. How do you use these running rates to inform
5 your lump-sum payment?

6 A. Well, they were inputs, too, of the lump-sum
7 payments, and they're information that the jury could
8 and should consider in coming to a number here.

9 I did come up with a chart that summarized
10 those, but I don't know that we need to cover that.

11 Q. Oh, I'd like to pull it up.

12 MS. ROSS: Slide 26.

13 Q. (By Ms. Ross) Is this what you're referring
14 to?

15 A. Yes.

16 Q. Could you run the jury through these numbers,
17 please?

18 A. Sure. For Sony Mobile, you see the numbers on
19 the left; for HTC, you will see the numbers on the
20 right.

21 Again, as I did before, I did a high portfolio
22 adjustment and low portfolio adjustment, what we talked
23 about before. And here we don't really know what the
24 sales will be through trial. We don't -- we didn't have
25 full records from the Defendants through trial. So I

1 had to make some assumptions through trial or through
2 life of the patent as to what those numbers would be.

3 And so that's why you see no growth and growth
4 assumptions built in.

5 For Sony Mobile, the numbers are .2 million to
6 .5 million in the no-growth high portfolio adjustment.
7 And then the growth adjustment scenario is .4 million to
8 .7 million. In the low portfolio adjustment scenarios,
9 the no-growth number is .1 million to .2 million. And
10 the growth numbers are .1 million to .3 million.

11 HTC on the right, again, has higher numbers.
12 They've had more success in the business. For the high
13 portfolio adjustment numbers, no growth is 3.9 million
14 to 7.6 million. The growth scenario has 4.8 million to
15 9.4 million. The low portfolio adjustment scenarios for
16 no growth has 1.5 million to 3 million. And the growth
17 scenario, 1.9 million to 3.7 million.

18 Q. Now, you said that you didn't have some actual
19 data for Sony Mobile. How did the sales data for the
20 models produced by Sony Mobile compare to the IDC Sony
21 Mobile sales estimates.

22 A. Yeah. I'm not sure if I said that explicitly.
23 I had pretty good data for HTC. Sony Mobile, it was
24 less good data. They didn't appear to be able to
25 provide information on all the infringing models.

1 What they did provide seemed to be about
2 57 percent of what is in the IDC reports, so I used the
3 IDC data for the sales information.

4 Q. Are you aware that the Defendants contend that
5 there are many components of the accused products that
6 do not use the technology at issue?

7 A. Yes.

8 Q. Do the Wi-LAN licenses here for running
9 royalties that you considered, does that take that fact
10 into consideration?

11 A. Yes, because the royalty rates are just a
12 portion of revenues. It adjusts for the fact -- the
13 rate automatically adjusts for the fact that there are
14 other things that contribute value.

15 And I don't -- certainly don't dispute that
16 here. There are many drivers of value here. HSDPA is
17 important, but there are other things. But the running
18 royalties reflect the significance of some of the
19 inventions to the products at issue.

20 Q. Were the licenses involving the Wi-LAN patents
21 limited to the patents-in-suit only?

22 A. No. They were broader.

23 Q. And did you take this fact into consideration
24 in your analysis?

25 A. Yes. We talked earlier about the

1 Houston/McEwan memo that has adjustments for the
2 wireless portfolio. That's built in the analysis that
3 I've done.

4 Q. And that adjustment is reflected here on this
5 page?

6 A. Yes.

7 Q. And then on the preceding pages where we
8 looked at the lump sum, that fact was taken into
9 account?

10 A. Absolutely.

11 Q. Okay.

12 MS. ROSS: Let's return to Jarosz 27,
13 please.

14 Q. (By Ms. Ross) So the last item on the chart
15 was both the Defendants' licenses. Did you find any of
16 the Defendants' licenses particularly useful?

17 A. I found them somewhat useful, but none of
18 them, of course, covered the patents-in-suit, because
19 that's why we're here. There is no license.

20 There were licenses covering a variety of
21 wireless technologies, and I looked at those. Some had
22 lump sums; some had royalties. I found those useful,
23 but not as useful as the Wi-LAN licenses.

24 Q. Did this make the Defendants' licenses more or
25 less informative than the Wi-LAN licenses?

1 A. Less informative, although those licenses
2 tended to have lump-sum fees and running royalties that
3 were higher than the Wi-LAN licenses. But they were --
4 they were less useful than looking directly at the
5 Wi-LAN licenses.

6 Q. Did you still consider the Defendants'
7 licenses?

8 A. I did, yes.

9 Q. Were all of the Defendants' agreements one in
10 which one party licenses patent rights in exchange for a
11 lump sum or running royalty?

12 A. No. There were a number of license that --
13 that are what are called a cross-licenses; one party
14 gave its entire portfolio to another party; and that
15 second party gave its portfolio back, for instance.

16 Those are called cross-licenses where rights
17 are going both ways. Those are somewhat less relevant.
18 They're just more complicated.

19 There are some licenses in which rights went
20 one way and payment went back the other way. Those are
21 a little bit more helpful.

22 Q. Let's turn now to your other quantitative
23 analysis, which I believe is the income approach. Can
24 you explain what the income approach is?

25 A. The income approach basically looks at the

1 advantages or success realized by the Defendant and
2 figures out what is revealed about the significance of
3 the patents in the success of the Defendants in the
4 marketplace.

5 Q. How did you determine what benefits the
6 Defendants received from using the Wi-LAN patents?

7 A. Well, I sought to see if there were a set of
8 products that practiced the -- that practiced the HSDPA
9 technology versus a set of products that didn't.

10 So that would give me what we call a natural
11 experiment, that I have three products that incorporated
12 HSDPA and three other products that were roughly the
13 same thing, except they didn't have HSDPA.

14 Unfortunately, I didn't have that. I couldn't
15 run that natural experiment.

16 Q. Did you hear Dr. Wells' testimony earlier that
17 the patents-in-suit were essential in order to practice
18 HSDPA?

19 A. Yes.

20 Q. So given Dr. Wells' testimony, would the
21 Defendants' next best alternative have been to remove
22 the technology covered by the patents-in-suit and still
23 sell products that comply with HSDPA functionality?

24 A. They, perhaps, technically could do that; but
25 it wouldn't be sellable in the marketplace. It wouldn't

1 comply with the HSDPA requirements. It would go to a
2 previous generation technology or a different technology
3 if you stripped out these patents.

4 Q. Would customers have purchased products that
5 did not comply with HSDPA standard?

6 A. No. And Dr. Wells talked about that at some
7 length, saying there would have to be a reversion back
8 to previous technology or adoption of a whole new
9 technology platform, and customers wouldn't be agreeable
10 to do that.

11 Q. Did you see, for example, any testimonial
12 evidence that suggested that non-HSDPA products would be
13 acceptable?

14 A. I saw testimony on that point and found that
15 the Defendants here are of the belief and knowledge that
16 HSDPA is critical in the marketplace.

17 Q. All right. Let's run through some of that
18 testimony.

19 MS. ROSS: Let's pull up Jarosz 29,
20 please.

21 Q. (By Ms. Ross) What did you understand
22 Mr. Irving to say?

23 A. Well, he says a lot here, but, in essence,
24 he's saying that operators -- U.S. operators have to
25 have HSDPA to compete and sell base stations in the

1 marketplace.

2 In other words, their base stations,
3 Alcatel-Lucent, have to practice HSDPA.

4 Q. And could you read the last answer for me,
5 please?

6 A. Without -- without 3GPP releases, without
7 following the sequence of 3GPP releases, without
8 developing the functionality that was required by them,
9 we would stop selling base stations.

10 Q. Did you see similar testimony from Ericsson?

11 A. Yes, I did.

12 MS. ROSS: Let's pull up 30, please.

13 Q. (By Ms. Ross) What did Mr. Rylander say?

14 A. In essence, that they would not be able to
15 sell base stations to AT&T and T-Mobile, their two
16 biggest customers, if they were not HSDPA compliant.

17 In other words, AT&T and T-Mobile require
18 HSDPA compliance. If those were stripped out, Ericsson
19 couldn't sell base stations to those.

20 Q. Did you see similar testimony for the handset
21 manufacturers?

22 A. Yes, I did.

23 MS. ROSS: May I have 31, please?

24 Q. (By Ms. Ross) What does this show?

25 A. This is testimony from a Mr. Wu at HD -- HTC

1 in which he talks about the fact that the phones that
2 they provide to AT&T must perform HSDPA. You'll see it
3 in the middle of this section and -- middle of this
4 excerpt and lower down.

5 T-Mobile down below, AT&T above require
6 compliance with HSDPA.

7 Q. So did you understand this to mean that if a
8 phone manufacturer wants to supply AT&T and T-Mobile,
9 they must comply with HSDPA?

10 A. Yes.

11 Q. Are you aware that the Defendants argue that
12 there were existing alternative technologies that the
13 Defendants could have used instead of HSDPA?

14 A. Yes. I think they talked about Release 99,
15 EDGE, and EV-DO, and I think Dr. Wells addressed those
16 alternatives.

17 Q. And what do you understand Dr. Wells to have
18 said about those alternatives?

19 A. He said those alternatives either were older
20 generation and, therefore, don't provide the advantages
21 to the carriers or to the consumers that are needed; or
22 they're a whole technology platform, for example,
23 switching everything to CDMA. And that would be, as I
24 understand it, financially unacceptable to the parties
25 here.

1 Q. Well, let me show you Slide 32, please, which
2 corresponds with DX 145. What does this document show?

3 A. It comes from the Lucent files, which are
4 talking about the HSPDA. We have a typo there. It
5 talks about the business impact.

6 HSDPA met Cingular's critical business needs
7 against their CDMA competitors, and HSDPA became
8 Cingular's number one feature priority.

9 Cingular, of course, became AT&T.

10 Compared with their legacy GSM/GPRS/EDGE,
11 HSDPA provides significant improvement in spectral
12 efficiency and systems throughput.

13 It goes on to say that HSDPA led to Lucent's
14 Cingular trial and contract, which was critical to keep
15 Lucent in the UMTS business.

16 So it says HSDPA was essential for Lucent --
17 which became Alcatel-Lucent -- to comply with the
18 requirements of AT&T; and HSDPA was Cingular, or AT&T's,
19 number-one feature priority.

20 MS. ROSS: Let's pull up 33, please.

21 Q. (By Ms. Ross) What did Mr. Irving say about
22 this as well?

23 A. Mr. Irving of Alcatel-Lucent was asked if they
24 can sell base stations to customers who operate a W-CDMA
25 network in the U.S. if those do not support HSPA. And

1 the answer, no, they have to be compliant.

2 MS. ROSS: Let's turn to 34, please.

3 Q. (By Ms. Ross) Can you read for me what
4 Mr. Zucker said about the feasibility of retreating to
5 EDGE technology?

6 A. Yes. EDGE was the previous technology, and
7 Mr. Zucker of Alcatel-Lucent was asked: Okay. And are
8 you familiar with something called EDGE technology?

9 Answer: Yes, I am.

10 Question: So what I'm trying to explore with
11 you is whether you think any of the older technologies,
12 such as EDGE or GSM, would be regarded as an acceptable
13 alternative to HSDPA by any of your customers since
14 2007?

15 Answer: No.

16 Q. So if these are not good alternatives, how did
17 you then go about doing an income approach analysis for
18 base stations?

19 A. Well, it was really hard to do, because I
20 didn't have a very good next best alternative, because
21 they needed -- they being the base station and --
22 manufacturers -- needed to comply -- needed to practice
23 HSDPA.

24 So what I did is, I focused my attention on
25 just the software sales associated with HSDPA; that is,

1 a base station is hardware and software. I focused my
2 attention just on what the Defendants have agreed is the
3 smallest saleable unit, the software here; and it sought
4 to determine the success of that software in the
5 marketplace.

6 MS. ROSS: Let's pull up Jarosz 35,
7 please.

8 Q. (By Ms. Ross) How much revenue did
9 Alcatel-Lucent earn from selling HSDPA software?

10 A. Just over the period from October 2 -- or --
11 or from -- yes -- October 2010 through April 2013, they
12 made about \$120 million just in HSDPA software sales for
13 their base stations.

14 Q. How did you determine the revenue
15 Alcatel-Lucent earned from selling HSDPA software?

16 A. That came from Alcatel-Lucent records, and it
17 was the information that Mr. Bakewell summarized and
18 used as well.

19 Q. Now, did Alcatel-Lucent provide information
20 regarding profit margins specific to HSDPA software?

21 A. Unfortunately, it did not. It provided profit
22 margins for W-CDMA software generally, so that's the
23 profit margin that I use in the green box.

24 Q. And that's 62 percent.

25 A. That's 62 percent, yes.

1 Q. And -- and just so that I understand, that's a
2 calculation that you performed based on their W-CDMA
3 business?

4 A. Yes. That's from the records that they
5 provided.

6 Q. In your experience, are software profit
7 margins typically higher or lower than W-CDMA profit
8 margins that you used in your calculation here?

9 A. Typically higher. Software margins --
10 software products generate some of the highest margins
11 in any business. It doesn't take much effort to stamp
12 out software and send it. It takes some effort, but
13 it's much less effort than what's required on the
14 hardware side of any business.

15 So 62 percent is probably an underestimate of
16 the software margin appropriate here.

17 Q. Did you provide a similar calculation with
18 respect to Ericsson?

19 A. I was unable to, because I don't have the
20 breakdown of Ericsson's HSDPA software sales.

21 Q. Is all of the profit that is depicted --
22 actually, why don't you just run me through this slide
23 and what this slide says.

24 A. So if you take the \$120 million in revenues
25 that Alcatel-Lucent realized from HSDPA software sales,

1 multiply it by their profit margin of 62 percent, you
2 arrive at profits that Alcatel-Lucent made over this
3 damages period of \$74.4 million.

4 Q. Now, all of this profit that's here, this \$74
5 million, that's not all due to the patents-in-suit, is
6 it, sir?

7 A. No, it's not all due to the patents-in-suit,
8 but if there was no compliance with HSDPA, the software
9 sales wouldn't be made. It's HSDPA software. But there
10 are other features that add value. There's no dispute
11 about that.

12 Q. So then how is this number relevant?

13 A. It suggests that the numbers that were arrived
14 at in the market approach section are reasonable,
15 probably conservative; that is, the profits at issue for
16 Alcatel-Lucent are quite high.

17 I know that number is too high for damages
18 here, but they say the market approach numbers could be
19 fair, perhaps conservative estimates.

20 Q. And now, this calculation focuses on profits
21 associated with HSDPA only. Are there other profits
22 that Alcatel-Lucent and Ericsson might have lost had
23 they decided not to sell HSDPA software?

24 A. Yes. I -- the base station -- the whole base
25 station profits are likely at issue as well, because we

1 saw the testimony from the Defendants that they wouldn't
2 be able to sell base stations if the hardware and
3 software didn't comply with HSDPA.

4 And those base station revenues, the hardware
5 revenues, are much higher than the software revenues.

6 Q. And you come to that conclusion based on the
7 testimony of the Defendants that you heard?

8 A. Yes, and my understanding of the technology
9 and the products offered here.

10 Q. So let's discuss the income approach for the
11 handsets. What alternative handset products could HTC
12 and Sony Mobile have sold if they couldn't offer HSDPA?

13 A. I'm not sure they could offer any. I saw
14 representations that the Defendants believe that maybe
15 you could try Release 99 or EDGE or EV-jDO, earlier
16 generation or other platforms; but that doesn't seem to
17 be feasible for HTC or Sony Mobile.

18 Q. And did you hear Dr. Wells' testimony earlier
19 regarding whether these CDMA-based technologies, such as
20 EV-DO and EDGE would be a good alternative?

21 A. He talked about those and said that would be
22 either -- some of those would be earlier generation, but
23 more importantly, that's a whole different platform.

24 That would be this -- versus W-CDMA or GSM
25 platform, it would be going to a CDMA platform, and that

1 would take substantial effort to convert over to that
2 new platform.

3 Q. So why couldn't a customer who had bought an
4 HSDPA phone from Sony Mobile or HTC just switch to a
5 CDMA carrier like Verizon and buy a CDMA phone from Sony
6 Mobile or HTC instead?

7 A. Studies have shown most of us consumers are
8 pretty bought in and pretty loyal to the networks that
9 we're on. So for a Sprint customer, we stay with
10 Sprint. We may change our handsets over time, but we
11 tend not to change our carriers. Some of us do, but the
12 vast majority of us do not.

13 Q. Let me show you Jarosz 36. What does this
14 document show?

15 A. It shows what I was just describing from Sony
16 Mobile. They have come to the conclusion that U.S.
17 consumers tend to be locked in by networks rather than
18 being actively loyal.

19 In other words, once I'm on a Sprint network,
20 I stay with that Sprint network for a long time or
21 Verizon or AT&T. We tend to stick with our networks and
22 switch within those networks.

23 Q. And this is just based on consumer -- consumer
24 preferences?

25 A. Yes, and consumer behavior.

1 MS. ROSS: Let's pull up 37, please.

2 Q. (By Ms. Ross) Does -- what does Slide 37 say
3 to you?

4 A. It shows that if HTC and Sony Mobile would
5 switch to a different technology -- I can stay on my
6 same network, the Sprint network, for instance, and I
7 have lots of alternatives to handsets.

8 HTC and Sony Mobile only comprise about
9 7 percent of the business over this time. I can go to
10 plenty of other alternatives, Samsung and Apple, and
11 there are a number of alternatives.

12 So I wouldn't need to stick with HTC knowing
13 everything would need to be changed and my prices would
14 go up. I would just go to an alternative that offers a
15 handset on my network of choice.

16 Q. And I believe in your answer, you used
17 Verizon. Did you mean to say AT&T or T-Mobile?

18 A. I meant to identify all of them, yes.

19 Q. So if -- as you've described, if the prior
20 generation phones would not be a good alternative, then
21 how did you use -- how did you approach your income
22 approach?

23 A. Well, I looked at -- I looked at a price
24 comparison of phones that comply with HSDPA versus
25 phones that do not. And fortunately, I had older

1 information that I could compare with the newer
2 information and see the price differences.

3 MS. ROSS: Let's pull up 38, please.

4 Q. (By Ms. Ross) Does this slide show the
5 calculation that you performed?

6 A. Yes. It shows that for handsets, phones, that
7 are HSDPA compliant versus the phones that were not, the
8 price difference is about a hundred dollars.

9 In other words, I pay about a hundred dollars
10 more for an HSDPA-compliant handset. That's what's
11 shown in the blue box.

12 Then I multiply that by the profit margins for
13 the handset manufacturers here, HTC and Sony Mobile, and
14 that's about 20 percent -- so those margins are much
15 lower than software margins -- to arrive at an
16 incremental profit per unit of \$20.

17 In other words, they made, because of their
18 ability to sell HSDPA phones, about \$20 more per phone.

19 Q. Now, is all of that \$20 attributable to the
20 patents-in-suit?

21 A. Absolutely not. There are many other features
22 of a phone. HSDPA is only one set of features.

23 Q. So how does this 20-dollar-per-unit figure
24 compare to the per-unit rates that you found with
25 respect to the Wi-LAN licenses that included the

1 patents-in-suit?

2 A. It's appreciably higher. You'll remember
3 those Wi-LAN patents had running royalty rates that were
4 in the range of 25 to 50 cents, so they're a small
5 fraction of the \$20 here.

6 Q. And the lower rates for the Wi-LAN licenses
7 that you calculated, that takes into account the smaller
8 portion that is required to isolate the patents-in-suit?

9 A. Exactly.

10 Q. So if you wanted to convert this
11 20-dollar-per-unit lump-sum figure so that you could
12 compare it with the lump-sum license agreements, what
13 would you do?

14 A. You'd multiply it by the number of units sold
15 by HTC and Sony Mobile over the period at issue.

16 Q. Okay.

17 MS. ROSS: Let's pull up Slide 39,
18 please.

19 Q. (By Ms. Ross) Did you review documents that
20 were produced by the Defendants that told you how many
21 accused units there were?

22 A. Yes. We talked about this a little bit
23 earlier. I had HTC documents that were fairly reliable.
24 The Sony Mobile documents seemed to be an underestimate,
25 so I relied on the IDC reports for those data.

1 Q. And how many infringing handsets were sold
2 by -- by HTC, for example?

3 A. 13.8 million.

4 Q. Okay. And the 13.8 million, that's from the
5 period beginning in October of 2010 through April of
6 2013?

7 A. Exactly.

8 Q. And the unit sales for Sony Mobile, I believe
9 you said you had to calculate that number?

10 A. Yes.

11 Q. Okay. And you calculated that number to be
12 what?

13 A. 1.4 million units.

14 Q. And, again, that 1.4 million units is
15 beginning in time, in October of 2010 through April of
16 2013; is that true?

17 A. Yes, that's true.

18 Q. So multiplying the 20-dollar figure, what does
19 that equate on a lump-sum basis?

20 A. For AT -- I'm sorry -- for HTC, it results in
21 \$276 million; for Sony Mobile, \$28 million.

22 Q. Okay. So we've talked about the market and
23 income approaches. What was the third approach that you
24 undertook?

25 A. It's called the cost approach.

1 Q. Okay. And what is the cost approach, sir?

2 A. One looks to see how much effort it would take
3 for a company --

4 THE COURT: Before you go into that,
5 we've been going a pretty long time. I think we'll go
6 ahead and take our morning break at this time. We'll be
7 in recess until five minutes after 11:00.

8 COURT SECURITY OFFICER: All rise for the
9 jury.

10 (Jury out.)

11 (Recess.)

12 COURT SECURITY OFFICER: All rise for the
13 jury.

14 (Jury in.)

15 THE COURT: Please be seated.

16 All right. You may proceed.

17 MS. ROSS: Thank you, Your Honor.

18 Q. (By Ms. Ross) So, Mr. Jarosz, when we left
19 off, you were about to tell us what the cost approach
20 method is.

21 A. Yes. It entails considering how much it would
22 cost to design-around or come up with an alternative to
23 the patents. So can you accomplish the same download
24 speed and efficiency that would be required by the
25 operators and consumers but use a different approach.

1 So that is a way to measure or price
2 intellectual property, because I wouldn't pay much money
3 for something that's easy to design-around, but I would
4 pay a lot of money for something that's hard to
5 design-around.

6 MS. ROSS: Let's pull up 40, please.

7 Q. (By Ms. Ross) What technological alternatives,
8 if any, do the Defendants' experts, Mr. Bakewell and Dr.
9 Becker, claim would have been available?

10 A. They're the ones we talked about before the
11 break, Release 99, EDGE, and EV-DO.

12 Q. And would those have been acceptable?

13 A. No. For the reasons we talked about before,
14 largely reliant on Dr. Wells' testimony; but also based
15 on my knowledge of the business place, it appears that
16 those would either be steps backward or retreat in
17 technology or an adoption of a very expensive new
18 platform.

19 Q. So let's jump ahead and talk about your
20 qualitative approach.

21 MS. ROSS: And let's pull up 44, please.

22 Q. (By Ms. Ross) Does this identify the
23 qualitative factors that you considered?

24 A. Yes. These are the same Georgia-Pacific
25 Factors that we talked about earlier. It's a list of 15

1 factors that are useful in assessing a hypothetical
2 negotiation and a hypothetical license. I considered
3 those here.

4 Q. And why do you use or why do you refer to
5 these as qualitative factors?

6 A. Well, most of them are less agreeable to
7 having data with them or observations that economists
8 love, but they're factors that are important in a
9 negotiation nonetheless, things that impact bargaining
10 power.

11 Q. For example, say, No. 5, the commercial
12 relationship between the licensor and the licensee, is
13 that one example?

14 A. Yes. It's hard to pin the dollar amount on
15 the fact that you and I are vigorous competitors, but
16 the fact that we are vigorous competitors says we
17 wouldn't license one another at very agreeable rates.

18 Q. Now, did you evaluate every single factor
19 here?

20 A. Yes, I did.

21 Q. Did you compare the factors here to the
22 quantitative approach you previously performed?

23 A. Yes. I used them to help me assess that
24 quantitative information to help assess when the numbers
25 should be toward the lower end or higher end or how to

1 interpret some of the significance of some of the
2 quantitative data.

3 Q. Can you describe for me which factors you gave
4 little significance to because of the neutral effect of
5 them?

6 A. Well, I gave significance to all of them; but
7 in the quantitative approach, I already addressed a
8 number of them so the jury won't have to sit through me
9 describing several of them. 1, 2, 4, 5, 8, and 14 were
10 already addressed in my earlier testimony, either in
11 implementing the quantitative approach or interpreting
12 that.

13 So there are only a few that are new that the
14 jury hasn't heard as much about.

15 Q. Okay. Let's discuss the first factor that --
16 that did not -- that we're not going to talk about -- or
17 that we are going to talk about. I think it was the
18 nature and scope of the license, Factor 3; is that
19 correct?

20 A. Yes, it is.

21 Q. Okay. How is this relevant to your analysis?

22 A. The hypothetical license here would be over
23 valid, enforceable, and infringed patent rights, if the
24 jury comes to that conclusion.

25 That makes any of the observations from

1 market -- the market approach too low, because in all of
2 those, there were licenses entered when there was a
3 cloud of uncertainty. Here, that cloud of uncertainty
4 would be removed; and a payment must, because of that
5 reason alone, be higher than a real-world payment.

6 Q. I think the next factor that you -- you left
7 off of your list of things that were neutral was No. 6,
8 the convoyed sales.

9 What does that mean?

10 A. It asks the question: Were there additional
11 things that were sold along with the products at issue
12 that benefited the Defendants?

13 In the case of handsets, they were fairly
14 somewhat un-significant: Carrying cases and chargers
15 and batteries and protectors. Those kinds of things HTC
16 and Sony Mobile might have sold some additional, because
17 it sold more phones, but not in a way that mattered
18 much.

19 With regard to the base stations, however, the
20 impact is a little bit more noticeable. And, that is,
21 if we are just focusing on the software sales, as the
22 testimony we've seen suggests, the hardware sales would
23 likely not have been sold as well.

24 In other words, the whole solution provided by
25 Alcatel-Lucent and by Ericsson, the base station

1 solution, had to comply with HSDPA. If it didn't comply
2 with HSDPA, then the carriers wouldn't be buying the
3 base station.

4 So if you consider the royalty base just to be
5 software, you have to consider that there are many more
6 hardware sales that might be tied in.

7 I had an example I used the other day at
8 lunch. I wanted to get a sandwich. I'm a big
9 sandwich-eater. I'm from the Midwest; we eat sandwiches
10 a lot. And I went to Cheddar's and I wanted a sandwich.
11 They had good options, and I ordered one of those
12 options.

13 But if I went to Cheddar's -- Cheddar's and
14 they didn't have sandwiches, or even more specifically,
15 didn't have bread, which is a strange hypothetical, then
16 I wouldn't have bought a sandwich there. I would have
17 moved on to get a sandwich elsewhere.

18 The bread was important. There were other
19 things on my sandwich. I had chicken, I had mayo, I had
20 lettuce, tomatoes. Those things were all important.

21 But if I didn't have the bread, because I
22 wanted a sandwich, I would have moved on to another
23 option because I wanted a sandwich.

24 So that's the way to think about convoyed
25 sales.

1 Q. And so how does this affect your analysis?

2 A. If -- for the base station side, if we're just
3 thinking about the software revenues and profits -- one
4 has to think about those -- do absolutely enhance the
5 sale of base station hardware.

6 Q. So the next factor, I think, is Factor 7, the
7 duration of the patent and the license.

8 A. Yes. The --

9 Q. Did you examine this with respect to the
10 market approach?

11 A. I did. The duration of the license would be
12 about similar to the licenses that I looked at in the
13 market approach. The duration of the patent was and the
14 significance of the patent was worth evaluating in
15 looking at the income data we have talked about.

16 Q. And what did you find?

17 A. What I found was that the -- these HSDPA and
18 these patents appear to be very well-accepted in the
19 marketplace. Their popularity is growing, and that will
20 continue to grow in the future.

21 MS. ROSS: Let's pull up Jarosz 46,
22 please, which is PX 219, which I believe was previously
23 admitted.

24 Q. (By Ms. Ross) What does this document show?

25 A. This is from Ericsson, and it shows that

1 handset HSPA will continue to be the most dominant
2 technology, even in 2016. You see that in this slide,
3 it comprises about 75 percent of the technology three
4 years from now.

5 So Ericsson has very optimistic views on HSPA,
6 which embodies HSDPA.

7 MS. ROSS: Let's pull up 47, which is
8 PX 220, which was previously admitted yesterday as well.

9 Q. (By Ms. Ross) What does this show?

10 A. This is a contract between Ericsson and AT&T
11 in which AT&T, the supplier, wants to continue to
12 receive HSPA-compliant technologies from Ericsson
13 through the end of 2018.

14 MS. ROSS: Next slide, please.

15 Q. (By Ms. Ross) And what does this show?

16 A. And it goes on to say: If AT&T chooses -- I'm
17 sorry -- the supplier was Ericsson. I misspoke before.
18 AT&T was the buyer.

19 Ericsson will make available to AT&T
20 HSPA-compliant products beyond 2018, if AT&T requires
21 it.

22 Q. I believe the next factors that you are going
23 to discuss are Factors 9 and 10, the utility and nature
24 of the patented technology.

25 Did you consider Dr. Wells' testimony that the

1 patented technology and HSDPA provides benefits to
2 network operators?

3 A. Yes.

4 Q. And you heard testimony that it provided
5 benefits to network operators?

6 A. Yes, I did.

7 Q. And that was Defendants' testimony?

8 A. Correct.

9 Q. What effect does this information have on the
10 outcome of the hypothetical negotiation?

11 A. Well, it's already embedded in the market
12 approach, the rates that we see there. But the income
13 approach, the data says: This is really important
14 technology. The faster transmission, more efficient
15 transmission says consider that that has lots of
16 advantages with regard to the income data that we talked
17 about.

18 Q. What evidence did you consider when evaluating
19 Factor 11, the extent of use by the infringer?

20 A. I considered how much or how important these
21 product lines were to the infringers by looking at the
22 sales versus the rest of sales of the company. And it
23 differed by Defendant, anywhere from 5 to 60 percent.
24 So these were relatively important.

25 But as relates to the market approach, this

1 had a downward impact, because in the market approach,
2 there were more technologies that were licensed to those
3 licensees. Here, it's just a subset of the technologies
4 used and the subset of each of the Defendants' revenue
5 bases.

6 Q. And what effect did this -- oh, I think you
7 said that. Excuse me.

8 The next relevant factor is Factor 13, that
9 portion of the profit that should be credited to the
10 invention as opposed to other elements.

11 Can you explain this for me, please?

12 A. Yes. For both handsets and base stations,
13 there are lots of things that contribute value. There
14 are lots of reasons why these products are successful in
15 the marketplace.

16 So in looking at the income data, one would
17 want to go to the lower end, because HSPA and HSDPA,
18 although important, aren't the only value drivers. That
19 information is already accounted for in the market
20 approach, because we have the smaller rates accounting
21 for other value drivers.

22 But one has to consider, in assessing those
23 larger income numbers, that this is just a part of
24 what -- what generates value for handsets and for base
25 stations.

1 Q. What effect does your evaluation of Factor 13
2 have on the outcome of the hypothetical negotiation?

3 A. Again, I don't think it impacts the market
4 approach directly, but the income approach suggests that
5 the number should be to the low end under consideration.

6 Q. The last factor is Factor 15. What is that?

7 A. That's, in essence, the hypothetical
8 negotiation, the hypothetical license. It says, pull
9 all these things together and what do you come up with?

10 Basically -- well, there were factors -- some
11 that suggest a number toward the high end; some suggest
12 a number toward the low end range under consideration.

13 The market approach numbers that you see are
14 pretty good estimates. The income approach number is
15 the larger numbers that I show have to come down. They
16 cannot be that high, because of a variety of reasons
17 that we just talked about.

18 MS. ROSS: Let's pull up Slide 3, please.

19 Q. (By Ms. Ross) Now, Mr. Jarosz, what is your
20 overall conclusion regarding the -- your evaluation of
21 the market approach and the other inputs from the
22 qualitative factors before we get to the geographic
23 adjustment?

24 A. The numbers are, as reflected on the screen,
25 so I have adjusted for size, and I've adjusted for the

1 portfolio, and I've adjusted for time. Everything is in
2 there, except I have not adjusted for the importance of
3 the U.S. assets of Wi-LAN versus its non-U.S. assets.

4 Q. Could you --

5 A. The result is the numbers here. For
6 Alcatel-Lucent of \$3.8 million; for Ericsson of \$6
7 million; for HTC of \$3.4 million; and for Sony Mobile of
8 \$.5 million.

9 Q. And I apologize. I almost interrupted you.

10 Now, to clarify, these numbers are not
11 adjusted for geography, right?

12 A. That's correct.

13 Q. And why is that, sir?

14 A. I don't know exactly how to do that. It was
15 an issue Mr. Parolin talked about in his testimony, but
16 what happened was, when Wi-LAN licenses a variety of
17 companies, they license the worldwide portfolio of
18 assets. And what we have here is just a U.S. portfolio.

19 So we have to somehow gauge the significance
20 of what a license was back then, U.S. versus worldwide.

21 If the jury comes to the conclusion that all
22 or virtually all of the value is associated with the
23 U.S. portfolio, then there wouldn't be an adjustment.

24 If they suggest -- if the jury comes to the
25 conclusion that half the value is in the U.S. portfolio,

1 then you would multiply each of these numbers by 50
2 percent. You would take half those numbers.

3 MS. ROSS: I'm finished. I will pass the
4 witness.

5 Thank you, Mr. Jarosz.

6 THE WITNESS: Thank you.

7 THE COURT: All right.

8 Cross-examination.

9 CROSS-EXAMINATION

10 BY MS. HEFFERNAN:

11 Q. Good morning, Mr. Jarosz.

12 A. Good morning, Ms. Heffernan.

13 Q. Nice to see you again.

14 A. Nice to see you again.

15 Q. Sir, I think I'd like to start with some
16 topics that I think we can all agree on.

17 Now, you're not offering an opinion today on
18 infringement of the patents-in-suit, correct?

19 A. That's correct. I'm a damages expert.

20 Q. And you mentioned Dr. Wells in your direct
21 exam. You're aware that there are other technical
22 experts who are going to testify in this case for the
23 Defendants, right?

24 A. Yes. I'm aware of that.

25 Q. And those experts that we have not yet heard