
the other fellow, but I don't know that -- that l've entered an appearance just yet.

MS. HEALY GALLAGHER: Okay.
MR. SNUFFER: All right.
MR. MORAN: And I'm Christopher Moran
appearing on behalf of the United States.
And with us on the phone is Erin Hines, back in our office in Washington, D.C.

MS. HEALY GALLAGHER: And also in the room
is Ms. Glenda Johnson.
Q. All right. This deposition will be
governed by the Federal Rules of Civil Procedure and
the local rules of the District of Utah.
I believe for today all exhibits will be
marked and kept by the court reporter.
MR. MORAN: Yes.
MS. HEALY GALLAGHER: Any other
stipulations we will address as the need arises.
Q. Mr. Johnson, we've met before. As l've
just said, my name is Erin Healy Gallagher, and I
will be taking your deposition today.
You've given four depositions so far in this case, but I'm going to go over the ground rules again just so we're all on the same page.
A. Okay.
recorded by the court reporter sitting here. So
please speak loudly enough for her to hear you, and
answer my questions verbally.
Will you do those things?
A. Yes.
Q. She cannot record a nod or a shake of your
head. And words like "uh-huh" are not clear on the transcript that will be created.
A. Okay.
Q. So if we have any of those situations, I will stop and make sure the record is clear. Okay?
A. Fine. I almost said "uh-huh." I'm just kidding.
Q. Also, we have a tendency in casual
conversation to sometimes speak over one another, to answer a question before it's finished being asked.
Here, please wait until I am finished asking my question before you start your answer, because the court reporter cannot take down the words of more than one person talking at the same time.

Do you understand?
A. Okay. Yes.
Q. When I do finish asking each question,
your task for today is to give full and complete answers.

Do you understand that obligation?
A. Yes.
Q. Now, it's my obligation to ask
understandable questions to you. So if you don't
understand a question for any reason, please let me know. Will you do that?
A. Yes.
Q. Sometimes it will happen that you will give an answer as completely as you can but then later in the deposition you may remember additional information or be able to clarify something about your previous answer. When that occurs, if it occurs, please tell me that there is something you would like to add or clarify about an earlier answer and we will take care of that right away.

Will you do that?
A. Yes. Thank you.
Q. I'll try to take -- I'll try to remember to take a break every 90 minutes or so, but if you need a break at any time, please let me know. Will you do that?
A. Yes.
Q. If there is a question pending, though, I
will ask that you complete your answer first and then
we can take a break. Okay?
A. Okay.
Q. Similarly, if you want to talk to your
attorney, Mr. Snuffer, that's fine; however, if there
is a question pending or if you're in the middle of
an answer, you will need to finish the answer or give
it in the first place before you confer with him.
Do you understand?
A. Yes.
Q. So we're here to get as accurate a record as we can of the facts of the case as you remember them. So I have to ask, is there anything that would prevent you from understanding and answering my questions with the full capacity of your
recollection?
A. No.
Q. Are you taking medications or drugs of any kind that might interfere with your memory?
A. No.
Q. Have you had anything alcoholic to drink in the past eight hours?
A. No.
Q. Are you currently under a doctor's care
for any illness that may interfere with recollection

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Page 11
or comprehension?
A. No.

3 Q. Is there any other reason you can think of why you might not be able to answer my questions fully and accurately today?
6 A. No.
7 Q. All right, Mr. Johnson. Would you please face the court reporter?
9 A. You bet. Thank you.
10 Q. Thank you.
11 We're here today because you have
submitted an expert report in this case.
Do you understand that?
A. Yes. Uh-huh.
Q. Okay. So as part of your expert report you attached -- well, here, I can just hand it to you. We'll just do it right now.
(EXHIBIT643 WASMARKED.)
Q. Mr. Johnson, you've been handed what's been marked Plaintiff's Exhibit643.
A. Okay.
Q. Do you recognize Plaintiff's Exhibit 643?
A. I do.
Q. Is this the expert report of

Neldon Johnson that you submitted to the United

## States in this case?

A. I did.

3 Q. If you look at page 26 of 26 of the report --
A. Okay.

6 Q. -- your signature appears about a third of the way down the page, correct?
A. Correct.
Q. Then we have a page that says

Qualifications, correct?
A. Yes. Yes.
Q. And then what follows after Qualifications
is a listing out of various patents on your
inventions; is that right?
A. Which page?
Q. The page that follows Qualifications.
A. Okay. It lists out some patents. Okay.

Okay, yes.
Q. Okay. So, Mr. Johnson, the patents that follow the page marked Qualifications, those are the only documents that you identified as supporting your expert witness report.
A. Okay.
Q. Is that right?
A. Yes. Uh-huh. Yes.
A. Okay.
Q. The second sentence at the start of the

Qualifications page is, "Mr. Johnson is the primary
inventor of the Self-Check system, AFIM, and the DWM technologies."
8 Did I read that correctly?
A. That's correct.
Q. Okay. What, if anything, does the
self-check system have to do with the solar energy
technology at issue in this case?
A. Well, there's lots of programing
available, and there's a lot of technology that is
associated with the various ways that -- that
interact with computer systems.
Q. Well, let's start with this. What is the self-check system?
19 A. You've seen those self-checkouts in
20 Walmart where you check your own self out.
21 Q. Sure. So you're talking about --
22 A. Those are my patents.
23 Q. At grocery stores there is the option to
4 go in a traditional check-out line with a cashier
25 that totals up your purchase, correct?
A. That's correct, yeah.
Q. And then there is the option to do self-checkout --
A. That's correct.
Q. -- where you scan your own items and total up your own purchase?
A. That's correct.
Q. Okay. So the self-check system is that
A. That's correct.
Q. So I'm just not clear, Mr. Johnson, on how the self-checkout system relates to the solar energy technology at issue in this case.
A. Well, in order -- in order to do a lot of the patents and a lot of the items that we use, we --
we -- we use a lot of -- a lot of computers, you
know, for various applications.
Q. Okay. Aside from general use of computers in both, what relationship is there?
A. Well, it's not just that because we were

We also -- we also were the first ones to Microsoft, where you have -- what do you call them?

Page 13
I can't remember the name. Where they -- where you can have multiple screens.
Q. All right. You know what, Mr. Johnson?

I'm going stop you there, actually.
5 A. And so that's -- anyway, that's what we did.
7 Q. Thanks. Please turn to the first page of your report.
9 A. Okay.
10 Q. The first sentence of the second
paragraph.
A. Second what?
Q. Actually, let's start with the first
sentence of your report.
"I have prepared this expert report to
explain the several components to the energy
production system designed and operated by
18 International Automated Systems, Inc. (hereafter 'IAS System')."
20 Did I read that portion of the sentence correct?
A. Correct.
Q. Okay. So, Mr. Johnson, in broad strokes, what is the IAS system?
A. I'm not sure I know. I -- I -- I'm not

Page 14
sure in what context the IAS is -- we have 35 patents -- 28 patents and 35 patent pendings.
Q. Mr. Johnson, you wrote this sentence --
A. Right.
Q. -- so I want to know what you mean by "the
energy production system designed and operated by
A.
A. Okay. So this is the several components to the energy production system designed and operated

1 2 referring to the limited system that is developed 3 around the solar energy-capturing system, along with
4 the -- some of the components that are used in
5 conjunction in the operation of the solar -- solar 6 system.
7 However, we don't mean it to mean that this is the only system that the lenses in particular could be used for. This is just a subset of the things -- of the items that we use at this particular time, but it's not limited to only just that --
this -- this system. So the solar energy system can
3 be used in -- by various technologies, including a
14 traditional turbine see, so we're --
15 Q. I'm going to stop you there. Thank you, 6 sir.
A. Okay.
Q. What I would like to know is what components are a part of the IAS system that you identify in this first sentence of your report.
A. Okay. That's what -- I'm trying to explain that to you because what -- what I'm saying is the IAS system could include --
Q. No, no, no, sir.
A. -- all of the systems. of the answer.
A. Okay.
Q. I'm not interested in what could be a part of the system. I'm not interested in what you might imagine could someday be part of the system. What components are a part of the system of this IAS system that you identify in the first sentence of your report? Are, sir. Not could.
A. Yeah. Well, this -- this system is
basically -- the system that we're talking about is
basically a response to the Mancini report, and so
we're basically --
Q. Stop. I object to the responsiveness of the answer.
A. Okay. I'm not sure exactly what we're
going to get out of this because I don't know what you're talking about.
Q. Sir, I think the problem is nobody knows what you're talking about.
A. Well --
Q. So we're going to read back the question
one more time. Listen to it carefully and answer the question.
A. The IAS --
Q. No. Listen to the question.

THE WITNESS: Okay, I'm sorry.
(Record was read as follows: "What I
would like to know is what components are a part of the IAS system that you identify in this first sentence of your report.")
A. Okay. From -- from my -- from my perspective, okay, the IAS system is the total system of all the components that are possibly available to us to use in producing energy, including the limited system that we use -- are currently in the process of using, but not limited to those items. The system itself includes all of the products that are available and have been produced or in patent pendings.

And so from my standpoint, when we're
Page 18
1 talking about the energy system, that would include
2 the lenses, all of the components that describe the
3 lenses, all of the components that comprise where the
4 system is located, including the towers, the metal
5 structures, including the piping, including the
hydraulic system, but not limited to the hydraulic
system. That system can change according to the
things that we may have available to us later -- at
some later time that we identify in some of our patent pendings.

Also, we have a turbine system that we have developed, but it's not limited to the use of the turbine system. Other systems can be used, such as the systems to reconcentrate sulfuric acid or reconcentrate some other -- some other item to -- to heat or -- or -- or use the system to heat a structure such as a greenhouse. A system that could operate the -- with -- within all the confines of heat -- relative to heat or any kind of other energy production, including we have two patent pendings -three patent pendings in the area of nuclear fu -fissure reactors and one or two patent pendings in the form of -- of fusion reactors. All of these components are part of the International Automated Systems.

1 2 critique or -- the report of Mancini, not to have -not to identify the total system, but only those portion of the system that were relative to the report in the system that Mancini reported upon.

## Does that help?

Q. Mr. Johnson, your expert report in this case is intended solely to rebut Dr. Mancini's report; is that correct?
10 A. That is correct.
Q. And in Dr. Mancini's report he talked
about -- he described a system that he saw on a
couple of site visits to Delta, Utah; isn't that right?
A. He saw some of the components of the system that is developed down in the Delta, Utah, area; that is correct.
Q. Right, and thank you for clarifying that.

He saw components of the system, correct?
A. Correct.
Q. He didn't see a whole system working, correct?
A. No, he saw the whole system working as far as the -- the solar energy production system. He has not seen this -- there's two different components.

There's the solar energy system, and then there's the solar energy -- then there's the energy IAS system.
He has seen --
Q. I'm going to --
A. He has seen the entire -- he has saw the solar energy system working, both producing electricity and producing heat.
Q. And let me -- let me be clear. So what he
saw -- and, in fact, let's just mark his -- we'll go
next.
(EXHIBIT 644 WASMARKED.)
Q. Mr. Johnson, you've been handed

Plaintiff's Exhibit 644. Do you recognize
Plaintiff's Exhibit 644?
A. I do.
Q. It is the expert report of Dr. Thomas Mancini, correct?
A. Correct.
Q. So in Dr. Mancini's report, among the components he saw were solar Fresnel lenses, correct?
A. That's correct.
Q. They were installed in towers, correct?
A. That's correct.
Q. And, Mr. Johnson, it's your position that when solar radiation passes through a lens and

Page 20
concentrates that heat, that is a system, correct?
A. Correct.
Q. So it is your position, sir, that that concentrated heat does not need to go anywhere in order for that to be a system.
A. Correct.
Q. And it's your position, sir, that that
concentrated heat does not have to do anything to create a system.
A. It depends -- it depends on the term "system." What -- a system can be a component of -of a system, such as this computer is a system, but without other components it will not operate this system. So when you add this system to this system, it creates a different system.
Q. Mr. Johnson, I'm going to object to the responsiveness of the answer.
A. Well, then define what you mean by the word "system" so I can know what you are talking about.
Q. You know what, sir? I'm trying to understand what you are talking about. So --
A. Well, we lack a lot of information because of our different knowledges and technologies. And so I'm dealing with a -- I'm dealing with a cross

Page 22
section of what your knowledge is and what knowledge
is it that you are going to present from this
point -- point of an attorney, and so I have to make
sure that the system is defined across -- across the
two -- the two areas of -- of -- of our -- of what
we've learned. So the term "system" in the terms of
what an attorney would refer to a system and what a system of technology is pretty hard to define. And so to make sure that the word makes sense to both of us, I need to know exactly what you're defining as a system.

Are you saying that the system that we're talking about, for example, a mirror in -- in --
Q. Mr. Johnson, stop. I'm going to object to the responsiveness of the answer. Sir, this deposition is to get your understanding of what a system is. And I have other things I'm going to ask you in this deposition. So I'm going to make a
recommendation here, just answer my questions. And if you need to clarify, I may give you an
opportunity, but answer my questions. That's why we're here.

I want to know, sir, is it your
position -- actually, l'll withdraw that. We're going to move on.

1

Mr. Johnson, in looking through your report I believe I have found a few opinions that you purport to offer the court. Can you tell me what your opinions are in this case?
A. What are you referring to?
Q. Have you formed any opinions in this matter that you would like to share with the court?
A. These are -- these are not -- are these not opinions; these are facts in this report.
Q. Well, Mr. Johnson, typically expert
witnesses testify to their opinions. And we can go
through the report, and I can try to pick out opinions that l've identified that you state.
A. -- then, fine, we can address those opinions.
Q. Well, I'd like you to tell me at the outset what your opinions are that you would like to share with the court in this case.
A. From -- from what I -- what I feel like this report is, is mainly just a rebuttal against
Mancini's, which is -- which is a fact -- a fact
issue. And from that -- from my understanding this isn't my -- this isn't my opinion; these are these facts in response to Mancini's report.

Now, I -- I -- I may express some opinions
Page 24
on -- on -- on some things, but this isn't what this report was designed to do.
Q. Okay. So with this report, Mr. Johnson, you are not attempting to explain to the court how the IAS system works?
A. No.
Q. Okay.
A. I mean, there are elements in there discussing those, but that's not the primary reason for the addressing of these particular items. We're not -- not for that reason. If I were to go into an in-depth explanation of this, it would be several hours.
Q. Okay. Let's flip back to your qualifications, please. All right. What is the AFIM that you identify in the second sentence of your qualifications?
A. That's an automatic figure -- well, it's just -- it's an automatic fingerprint identification system or body biometric -- body. We were the first ones to develop the automated way of determining fingerprints, facial recognition, iris scanning. And I have a patent on that. And we were the first one to actually automated that -- automate that system.
Q. What is the DWM technology?

1 A. That is a new kind of modulation system. 2 It's -- it's a -- it's -- it's around electromagnetic spectrum modulation. It's a new -- it's a different -- you have the AFIM, and now we have DWM
5 systems there. We have several patents issued on 6 that project.
7 Q. What, if anything, does the DWM technology 8 have to do with the purported solar energy technology 9 IAS has put out?
10 A. I don't know that it has anything directly
1 to do but indirectly it explains my capability to cross the whole spectrum of the technologies that we -- exist today.
Q. What, if anything, does the AFIM technology have to do with the purported solar energy technology that the IAS has put out?
A. It doesn't have anything directly to -- to have to do with anything with the solar energy technology. It just, again, identifies my abilities to cross all the technologies and understand and comprehend all the technologies that exist around us and that I have been involved in -- in developing new and ex -- new technologies around all of these various technologies that exist in our society.
Q. In the first sentence of paragraph two,

Page 26
Mr. -- it says, "Mr. Johnson has taken training courses and has taught courses in electronics programing, microwave and wave switch programs." Did I read that correctly?
A. Correct.
Q. What courses in electronics programing have you taken?
A. I was probably the first -- the first actually programer in the state of Utah and I -- I took a -- a home study class from the university on programing in 1966, I believe. And that was when computers were -- were -- very first started to be used. And it was in conjunction with my work with AT\&T in -- in developing a way to eliminate -- help eliminate the use of operators in long distance calling rather than using the computer systems. So I was involved in learning -- learning about that -that system, and it's somewhat to do with my work.
Q. Real quick, what is electronics programing? What does that mean?
A. Well, it's just computer programing. It's

22 the same thing but it's not -- but back then it
23 was -- wasn't defined as computer programing so much
24 as using discrete components of electronics to
25 program different applications. So it's -- it

1 evolved from -- from these segments of -- of
2 programing electronics into what we call integrated 3 circuits today.
4 Q. And what, if any, other courses besides 5 the home study course you took in 1966 have you taken 6 in electronics programing?
7 A. I believe -- I believe I've taken some in
8 college from Brigham Young University, so -- I can't
9 remember any of them -- specifically the name, but it
0 seemed like it was a COBOL programing course.
11 Q. Any other courses that you have taken in 2 electronics programing?
13 A. Not that I'm aware of.
14 Q. Okay. What, if any, courses have you
5 taught in electronics programing?
A. We've just taught those that I --
Q. No, sir, not "we." Who is "we"?
A. Myself. I taught to the various employees that I've had. It -- so that they could be programers themselves. And so I taught mostly just my employees.
Q. Did you follow any curriculum from any outside source in teaching your employees?
A. I did.
Q. What curriculum did you follow?

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1 A. We followed --
2 Q. Sir, we or I?
3 A. I -- followed the curriculum of -- I'm
4 trying to think of the name. C, C++, C Sharp. The
older -- the older ones are -- l'm trying to think of
the name. It's Delphi, I think. Delphi. And some of those others.
Q. Mr. Johnson, the things you've just listed off are computer languages, correct?
A. Correct.
Q. And what I asked you about was following a curriculum to teach your employees, meaning a set course of study as prescribed by some outside entity other than yourself. Did you follow any curriculum in teaching your employees?
A. Yes, we followed the curriculum that was given -- that I bought in all those different programing languages.
Q. What entity provided that curriculum?
A. I think there were several companies at that time that were involved in programing. I
think -- but I don't know the names. I don't
remember the names. But Delphi is a specific form of programing that was developed by a company that was, at that time, before Microsoft got involved with the
languages.
2 And then we did some of the languages that were developed by Microsoft, which would be the -the C Sharp. And then the C++ were developed by
several different companies. And I'm not familiar
with -- I don't remember the names of the various
companies that developed the curriculum.
8 Q. Mr. Johnson --
9 A. But that's what I did.
10 Q. -- have you taught any other courses in electronics programing other than to your employees?
A. No, I have not.
Q. For any of the companies whose curriculum you purchased, did you have to obtain any credentials in order to teach on behalf of those companies?
A. No, I don't.
Q. Did you ever submit any lesson plans to these companies?
A. No, I have not.
Q. Did you ever submit any -- any work by your student employees to any of these companies for grading or review?
A. No, I have not. However, there is one clarification you may want. In 1979, in the process of developing the self-service checkout system, I

Page 30
developed my own language for that particular computer system, including the compilers and the language and the various language components of that system. So I did write my own language. I did write my own software programing system, because there wasn't anything available at that time in -- in that area of -- on that particular computer that was available to be used in the programing. And so I developed the very first compilers for some of these systems myself before these other -- other companies developed their systems.
Q. Mr. Johnson, did you ever submit any curriculum to any accrediting entity for this language that you came up with?
A. No.
Q. Mr. Johnson, what training courses have you taken in microwave and wave switch programs?
A. When I worked for AT\&T they were -- I have a -- I received a license in -- from -- from -- the federal government was -- was allowing people to test out at that particular time --
Q. Mr. Johnson, I'm going to stop you.
A. -- and so I --
Q. No. Stop. Stop. I asked you what training courses you have taken in microwave and wave

1 switch programs, and that's the answer that I want.
2 A. I -- | took several courses with AT\&T on their microwave. That's what I did. I was in RF engineering. I was an RF electrical engineer at 19 years.
6 Q. Mr. Johnson, stop.
$7 \quad$ A. I took all these classes, and I took the 8 classes that were provided by the company to learn
9 their particular microwave systems.
10 Q. How many classes did you take regarding microwave and wave switch programs?
12 A. Well, there were some we took when I went 13 to school --
14 Q. Sir. No, stop.
15 A. -- UVU --
16 Q. Stop. Stop.

1 A. I don't know. I really don't know. It's a long time ago.
Q. When did you take these microwave and wave switch?
A. Between 1965 and 1974.

6 Q. What is -- what was the end result of these classes in microwave and wave switch programs? What were you able to do after you were done?
A. I was working for AT\&T and so what happened was is -- actually, what happened is, is I had gone to several classes and -- and I had already demonstrated that I had the capacity to understand them before I went, and so they decided that I wasn't -- I wasn't needed to go to all the class, that I was qualified.
6 Q. My question was not clear, so I'm going to 7 stop you there.
18 A. Okay.
19 Q. So what was the skill that you acquired as 20 a result of the microwave and wave switch program 21 courses that you took?
22 A. I had already acquired them by studying 23 the material before I ever went. And so I had -- I
24 had qualified myself -- I am probably the only one at 25 AT\&T that had qualified themselves on every product
that AT\&T had. And I qualified myself by taking
their books home and reading them and studying them on my own.

I then -- then they sent me to some
classes. They found out that I didn't need to go to
those classes in order to work on their equipment.
They decided that I was qualified on all their
equipment and I could work on all their equipment. I
was in the top ten engineers in the whole country at
AT\&T.
Q. Let me finish my question before you answer.
A. Okay. I'm sorry.
Q. How many times did you teach that course?
A. I don't know. There were lots of times,
because I -- I had an assignment to teach new
Page 34
employees how to develop -- how to -- how to work on particular equipment. I knew all the equipment. And so they assigned me to teach on almost all their equipment to various applications.
Q. Sir, I'm going stop you there.

Was the curriculum for these courses in microwave and wave switch programs -- was that submitted to any accrediting entity?
A. It was AT\&T's programs that I taught.
Q. Object to the responsiveness of the
answer.
A. Okay.
Q. Was the curriculum that you taught for the microwave and wave switch programs submitted to any accrediting agency?
A. AT\&T, I imagine they did. I don't know.
Q. So you don't know?
A. I imagine AT\&T would have had --
developed -- developed the A -- the microwave systems. And all of the curriculum being taught in all the colleges would have had -- probably been some application that AT\&T developed. I do not know for myself by personal knowledge how many universities actually taught those courses.
Q. Object to the responsiveness of the

1 answer.
2 Mr. Johnson, the answer is you don't know whether any curriculum that you taught about 4 microwave and wave switch programs was submitted to 5 any accrediting agency.
6 A. It wouldn't be my responsibility, so I
7 would not know.
8 Q. And you don't know?
A. No, I don't.
Q. And, Mr. Johnson, your tenure at AT\&T
ended in 1968, correct?
A. I don't remember, but it seemed like it was right around there.
14 Q. Well, that's what your qualifications say.
15 A. Well, okay. It's probably true, then. I don't know. I didn't look them up.
17 Q. So the last course you taught for AT\&T
8 would have been in 1968, right?
A. Probably.
Q. Mr. Johnson, what, if anything, does microwave and wave switch programing have to do with anything involved in solar energy technology that IAS has put out?
A. It's the same. It's just to demonstrate that I have the capacity to go beyond various
technologies, and I understand and comprehend those technologies.
Q. Mr. Johnson, is there any direct link
between the microwave and wave switch programing and
5 the purported solar energy knowledge that IAS has put
6 out?
7 A. We probably have some -- some crossover,
8 because we use the same components.
Q. What components?
A. Transistors, integrated circuits and a
variety of different things that I would understand
through one system and then could be used in other
systems.
Q. So we're talking about general
electronics, correct?
A. That's correct, yes.
Q. Other than teaching new AT\&T employees,

8 have you taught any other courses involved in
microwave and wave switch programs?
A. No, I haven't. No.
Q. Mr. Johnson, your qualifications page says
from 1965 to 1968 you served as an engineer at AT\&T.
A. Correct.
Q. What were your job tasks as an engineer at 5 AT\&T?
3 new equipment, checking out what new equipment's been
4 available, helping develop a few new concepts on
5 various equipment. Just normally what an engineer
6 does.

7 Q. What equipment did you maintain?
8 A. From -- I actually maintained all of it, 9 from crossbar to the local switching offices, to all
the way up to all of the modulation systems that are
developed before you hit the microwave side,
including FM, AM, modulation systems, multiplex
systems.
Then microwave modulation is including the
-- including the latest. And the last one that was
developed was -- I'm trying to think of the name.
Anyway, it was a -- it was a new system, just out,
and I was probably the first one to install it and
maintain it and put one online.
Q. And we're talking about telephone systems, correct?
A. Well, the communication systems, but it
goes -- yeah, it goes way beyond -- way beyond telephones.
Q. What else besides telephones did the
communication system involve in 1965 to 1968 ?
A. All the communications, including
broadband communications of -- of your televisions.
We even got involved in some areas of --
of new technologies such as sensing when -- when a
6 communication wire was active and not active in order
to share communications and to create a denser
communication system by taking out the pauses in a
person's sentences to develop a system to utilize
long lines in a way that we could put more
information over, including microwave.
MS. HEALY GALLAGHER: Off the record, please.
(Discussion off the record.)
MS. HEALY GALLAGHER: Back on, please.
Q. Mr. Johnson, all the technology you just described has to do with communications, correct?
A. That is correct, yes.
Q. What, if anything, does it have to do with the purported solar energy technology that IAS has put out in this case?
A. Well, when you want to reference something, we do it through a communication link that -- so that we can see what's going on from a distance. We don't have to be there. It helps

1 automate the use of the energy systems in a way that
2 we can reduce employees to monitor the -- the way
3 that different components are acting and if they're
4 acting properly, or if they need to be maintained for
5 any particular reason.
6 Q. What, if anything, does the communications
7 technology that you worked on at AT\&T from 1965 to
81968 have to do with how solar radiation purportedly
9 may move through any system to generate electricity?
10 A. Oh, just to monitor the movements, making sure that they're tracking properly and -- and tracking the sun properly.
(Discussion off the record.)
Q. Mr. Johnson, from 1965 to 1968 at AT\&T, what, if any, time did you spend on solar energy technology?
A. We -- we -- we helped -- we were
working -- and it's part of the education system --
Q. Sir, stop right there. We or I?
A. I. I. I'm sorry. I.
Q. I.
A. I -- I was involved in some of the
technology that developed the -- actually, the solar cells.
Q. What solar cells?

1 A. The solar cells that capture solar energy.
2 Q. So your testimony, sir, is that from 1965 to 1968 AT\&T was developing solar cells to capture, what, solar radiation?
A. That's part of it, but we were using it -using it for other reasons. That's the first time we were -- we were beginning to use a light for communication.
And part of the solar cell system was developed through AT\&T's work on developing this type of communication. And I had -- I got in -- I got to where I was just briefly involved in some of the area that -- that indicated how the system would -- how solar cells would work and how solid state physics actually create the ability for a -- a solar panel to -- to change light to electricity.

And from that we were able, then, to communicate changing -- by changing light to electricity which -- which is the forefront -forerunner of today's communication where we use light -- well, I call them light waves; they call them something else, but we called them light waves back then.
Q. Are you talking about a predecessor to photovoltaic?
damaging equipment.
14 Q. (BY MS. HEALY GALLAGHER) Mr. Johnson, in
15 your three years at AT\&T, imagine that as a whole pie
16 of 100 percent, about how much time of that pie did
17 you spend on anything to do with solar energy
18 technology?
19 A. Other than what I just told you, I don't
20 know. It would be just a small alternative.
21 Q. Ten percent?
percent.
Q. Five percent?
A. Probably one or two percent.
what were you doing between 1968 and 1975?
A. Yeah. Yes. I -- I had an opportunity to
go to work with the early distant warning system that
was put up in Alaska along the Arctic Circle for
protection against nuclear attacks by Russia,
particularly.
Q. Is there any reason you didn't include that in your report?
A. I didn't find it relevant.
Q. So, Mr. Johnson, from your position, your time working on the early distant warning system is not relevant to the content of your report in this case?
A. It was mostly microwave rad --
Q. Sir, that's not my question. Stop.

Object to the responsiveness.
Please read back my question.
A. Sorry. I didn't understand what you were saying.
(Record was read as follows: "So,
Mr. Johnson, from your position, your time

1
2
3
4
5
6
7
8
9
10 years that you were working on the early distant warning system in Alaska?
A. I only -- I only worked -- I only worked there for about seven months, eight months.
Q. All right. Well, Mr. Johnson, I asked you about the gap from 1968 to 1975 and you identified the early distant warning system.
A. Right. We only got started. That's...
Q. Uh-huh. Okay. What else is in that gap between 1968 and 1975?
A. Well, mainly I was developing my own -- my

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1 own businesses. Let's see. What did I do? I
2 attended some classes at Brigham Young University, I
3 believe in physics. There may have been some -- some
4 additional higher-level mathematics above calculus.
5 We had taken some calculus before that.
6 And so that was -- and some mathematical
7 -- mathematics on Einstein's physics.
8 Let's see. What other class did I take?
9 Just -- just mostly -- mostly classes in upper
0 division. I took some chemistry classes, I believe.
I took some -- mostly it was mathematics that I was
interested in at that time to develop my -- my -- to
expand my mathematical capabilities and -- and
Lanzoid [sic] physics. So that's probably the two areas I spent most of my time in. And chemistry. I enjoyed chemistry.
Q. Anything else in the gap between 1968 and 1975?
A. Oh, mainly I -- I developed, like I said, several businesses that -- that we did, I think. And then I think we was involved in the grocery store business and something like that, so...
Q. All right. Let's talk about -- you said
seven months at the Distant Early Warning system?
A. Correct, I believe about that.

1 Q. What were your job tasks?
2 A. Mine was probably to oversee the
3 installation of some of the microwave systems and the
4 maintenance. And mostly teaching other people how to
5 maintain those equipment -- that equipment. So
6 that's my tasks.
7 Q. When you say "microwave systems," what do 8 you mean by that?
9 A. Well, when -- when we had -- we had a big
10 radar system, okay, that overlooked Russia from an
11 island on Shemya and around -- the installations
12 around the Arctic Circle, from Canada, clear -- clear
across the -- Alaska, and then out to the Aleutian island chain.
15 And from the Aleutian island chain we had 16 a huge -- the biggest radar system was on the
17 Aleutian island chain. We could see from -- from the
18 islands clear into Moscow above the -- anything could
19 be tracked above the mountains. Anything that came
20 above the height of the mountains we could track from
21 the islands -- the Aleutian island chain.
22 And from that, then we would send that
23 information to, I think, NORAD down in -- most of it
went to the Denver mountain in -- in Denver, to be able to track all of the planes and -- if there was a

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missile to be launched, that we tracked as well. And
so we -- mostly in communications and radar systems.
So that's what I did.
Q. So, Mr. Johnson, you were installing,
maintaining and training on radar equipment?
A. That's correct, yes. Radar and
communication systems.
Q. Were you a government employee?
A. No. I worked for a -- a contractor for

10 the government.
Q. Do you recall what that contractor's name was?
A. I'm not sure. It's been a long time ago.
Q. Mr. Johnson, what, if anything, did your
work regarding radar equipment have to do with solar energy technology?
A. Mainly just to show that I have the
ability to cross -- cross to -- and comprehend across technologies.
Q. Is there any other connection?
A. I don't believe so.
Q. And exactly when were you working on the

Distant Early Warning system?
A. Right after I left AT\&T, so it would be between ' 68 and ' 69 , I think. I believe that -- the

1 dates are -- I don't remember. You can't get me on the exact dates. It's been a long time ago.
Q. All right. We'll talk about your classes 4 in a moment, but you said that between 1968 and 1975 5 you developed businesses, right?
6 A. Right. Right. Yeah.
7 Q. What businesses were those?
A. There was electronics -- there was
electronic businesses that I got involved with. And
there were some work that I did on some patents -- or
patent pendings that I was getting involved with.
One of those was a -- a voice-recognition lie detector that I was developing and marketing and -- and utilizing in various applications. And we developed a new voice lie detector system. And then I got involved in using that for some oil companies to monitor their employees at various locations across the country.
Q. Between 1968 and 1975 did you develop any other businesses besides this electronics business and a business regarding the voice recognition-lie detector?
A. Oh, we could have got involved in some insurance -- health insurance companies or -- and we did -- and I could have got involved with some real

Page 48 estate.
Q. Stop.
A. But I don't know.
Q. I don't know -- I don't want to know what you could have gotten involved with.
A. I can't remember.
Q. I want to -- sir, stop. What I want to know is what businesses you developed between 1968 and 1975.
A. I developed a cattle-feeding -- feeding company, and I made -- I lucked out and got involved right -- I'm not going to give you that, but I made a lot of money off of that. And that's what kind of -the cattle company that I developed funded some other companies that I got involved with.
Q. So we've got an electronics business, a

7 voice recognition, lie detector business, something
18 to do with health insurance, a cattle-feeding
19 business. Any other businesses?
20 A. No, I think that covers it.
21 Q. Okay. What did you do with your
22 electronics business?
23 A. Sold it.
24 Q. No, no, no. What was the business purpose 25 of the electronics business?
consumer equipment. It was a variety of technologies
that we maintained for other people.

8 Q. What, if anything, about your electronics 9 business has a direct relationship with any of the solar energy technologies that IAS purports to put out in this case?
A. Well, I think there is some knowledge base. Like I said, the base that the system uses electricity, electronics and -- in the controlling of the circuits, including the -- the voltage control board, the -- the patents on new photovoltaics.
17 Q. Sir, other than the fact -- other than the
18 fact that both involve the use of electricity, is
19 there any other direct connection between your
20 electronics business and the purported solar energy
21 technology that IAS has put out in this case?
22 A. See, that's a -- that's kind of a -- kind
23 of a weird kind of a question, because this computer
24 system over here doesn't use anything different than 25 a radio.

4 use electricity, is there any other direct
5 relationship between your electronics business and
5 relationship between your electronics business and
6 the solar energy technology that IAS purports to have in this case?
A. Well, that's -- like I said, that's a question that -- because you're an attorney and
10 asking me questions and I'm a technician asking [sic]
11 a question -- from that standpoint, I would say they
12 have a direct correlation between the two because 13 they use the same components.
Q. What components?
A. And the components are related in how they 6 go to operate in both those systems. In other words,
17 a capacitor is going to operate as a capacitor no
18 matter what technology that we use it in, including
19 transistors, integrated circuits. They work the same
20 in a computer system or a new circuit that I just got
21 a patent on. But the primary -- the primary -- the
22 primary technology isn't -- doesn't change. It's
23 just how the -- how the system is -- is developed and
24 the different programs -- or the different methods
25 that these circuits actually work in and actually
Q. Object to responsiveness of the answer.
A. So is that related?
Q. Mr. Johnson, other than the fact that both
business and operating IAS and utilizing all the business skills that l've learned, they have a direct connection on the profitability of the company.
Q. So the answer is no direct connection on the technology?
A. No, direct connection to the technology.
Q. What, if any, direct connection does the
cattle-feeding business have with the purported solar energy technology IAS holds out in this case?
A. Well, it's just the same as the technology
that you learn in -- in learning how to make proper
choices at the proper times in ordered to maximize
profits. And I have --
Q. Mr. Johnson, stop.
A. -- unique skill in doing that.
Q. I object to the response. Stop.
A. Sorry.
Q. I object to the responsiveness of the answer.
A. Okay.
Q. Please read back my question.

Mr. Johnson, listen carefully --
A. Okay.
Q. -- and then answer what I actually ask.
A. Okay.

5 A. Well, I think directly it -- it -- it --
6 it introduced me to the ability to get -- to create a
situation where I can utilize capital to create a business --
9 Q. Mr. Johnson --
10 A. -- and from that capital I was able then to develop the technology.
Q. Object to the responsiveness of the answer.
A. Okay. I don't know what you are looking for. I'm sorry.
Q. Well, you've managed to figure it out for my prior question, so try hard this time.
A. Okay, l'll try.
Q. I'm talking about the solar energy technology that IAS purports to have in this case.
And that technology, Mr. Johnson, am I correct, purports to convert solar radiation from the sun into some useable end product, correct?
A. Correct.
Q. Okay. So, what, if any, direct connection

1 is there between the cattle-feeding business that you
2 had and the purported solar energy technology that
3 IAS holds out in this case?
4 A. See, that's a -- see, your question, then, 5 is -- is -- is hard to explain from a -- a person
6 like -- like l'm inventor, okay?
7 Q. Stop. Object to the responsiveness.
8 A. You don't even know what I was going to ask [sic] the question yet. You can object after I 0 answer.
11 Q. I object to the responsiveness of your answer.
13 What, if anything, did your cattle-feeding 14 business have to do with solar energy technology?
15 A. I draw on all of my experiences and all 16 the knowledge --
17 Q. Stop. No. Mr. Johnson --
18 A. -- that I have to develop new
technologies.
Q. Stop.
A. So from that standpoint it does create a link to all of the information that I acquired in any
of my life experiences in order to develop new
technologies. Inventions are not -- are not isolated things. They utilize the whole creative process. My
whole creative process of learning how to work the cattle feed are the same creative process that I used in developing the new technologies, including solar 4 energy technologies.
5 Q. Any other direct connection, sir?
6 A. No.
7 Q. Okay. All right. You say that from 1975
to 1990 you were employed at Ream's grocery store, correct?
A. Yeah, kind of. Yeah.
Q. Yes or no?
A. Yes. Yes.
Q. Who owned Ream's grocery store?
A. J.R. Jolley.
Q. Excuse me?
A. J.R. Jolley.
Q. J.R. Jolley was your former father-in-law, correct?
A. Yeah, that's correct. Yes.
Q. In broad strokes, what were your tasks at Ream's grocery store?
A. I don't know. Making sure it made money, I guess. I guess that's basically what my job was.
Q. What concrete tasks did you perform for Ream's grocery store?

1 A. I don't know. Mostly management, I guess.
2 They -- I-- if you want a long -- you want a long 3 answer or the short answer? You tell me.
4 Q. Did you manage people?
5 A. I did.
6 Q. Did you manage product?
7 A. I did.
8 Q. Did you do anything else at Ream's grocery 9 store?
A. Yes.
Q. What else?
A. You want the long answer, I can see that.

Okay. We are going to be here all day. That's fine.
14 It doesn't have anything to do with -- it had nothing
15 to do with the solar energy project.
It has to do with the -- it has to do -- I
used that -- that -- that area to develop my -- my
self-service checkout lanes. I also owned a video
store, and I owned some other -- other stuff that I owned at the same time. So I just didn't put that down because I didn't think it was relevant.
22 Q. Okay. And, Mr. Johnson, you just said
23 that your employment at Ream's grocery store does not
24 have anything to do with the solar energy technology
25 in this case.
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1 A. Other than just giving me the experience 2 to draw on from an inventing point of view.
3 Q. Any other connection?
4 A. No.
5 Q. Mr. Johnson, are you familiar with the name Walter J. Hoyt?
7 A. No. I don't think so.
8 Q. Ever heard that name in the course of your cattle-feeding business?
10 A. I don't know. I could have heard it. I don't remember names that well. So it sounds familiar, but I don't know. I can't think of the name. I can't think of the relationship.
14 Q. Mr. Johnson, in your cattle-feeding 15 business, what, if anything, did you have to do with 16 any tax benefits relating to those cattle?
17 A. None that I know of.
18 Q. Did you ever tell anyone that there were
19 tax benefits that may be allowable to them as a
20 result of any connection with your cattle-feeding business?
A. No.
Q. Do you know if anybody else did?
A. Not that I know of. I don't know. I didn't use any -- I didn't use any tax benefits for

1 my cattle-feeding business. I actually made money.
2 Q. Mr. Johnson, in your qualifications you
say you have real estate holdings, one of which was a
4 supermarket of approximately 285,000 square feet in
5 Salem, Utah.
6 Correct?
A. That's correct, yes.

8 Q. What, if anything, do your real estate holdings have to do with the purported solar energy
technology that AIS holds out in this case?
A. Other than just the experiences of using
cross -- to cross boundaries in -- in -- being an
inventor, there isn't any.
Q. So there is no direct connection?
A. No, there is no direct correction, probably.
Q. Please remember to speak up, sir.
A. I'm sorry. I get lazy. I'm sorry.
Q. Mr. Johnson, you identify that the
supermarket was called U-Check, correct?
A. Correct.

22 Q. And you used the self-check system that we talked about a few minutes ago?
A. Correct.
Q. Mr. Johnson, in your qualifications you

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say that you graduated from Utah Technical College's
electronics technology program in 1964, correct?
3 A. Yeah, that's a mistake then. I didn't graduate. We can cross that out.
5 Q. Mr. Johnson, did you write your
6 qualifications page or did someone else write it?
7 A. Somebody else wrote it.
8 Q. Who wrote it?
9 A. I don't know. Somebody wrote it and put
10 it on the Internet. But that's a mistake.
11 Q. Somebody wrote your qualifications page 2 and put it on the Internet?
13 A. I didn't do it. I don't do that kind of 4 stuff.
Q. You don't know who did?
A. I don't. I can't remember who did, but somebody researched it out and they put down some stuff that they felt was interesting. But that's a mistake.
Q. Did you read your qualifications page?
A. Oh, I probably read it, but there's --
there's always something that you can't read --
Q. All right, Mr. Johnson. Hang on. Stop.

I need to you stop. Put the pen down --
A. Oh, sorry.

1 Q. -- because you will not mark on this exhibit. Do you understand?
A. Oh, sorry. Okay. Yes.

4 Q. Mr. Johnson, who gave you this qualifications for your review?
A. Well, I wrote them and then -- and then these -- I didn't write these, but I think Denver or one of his attorneys -- one of the attorneys in his office gave me that stuff to review. I never -- but I never read this part of it. I only read -- I only read this part.
Q. You're gesturing to Plaintiff's Exhibit 643 --
A. Yeah, I only went over this part. I really didn't -- I didn't pay any attention to this part. I didn't -- l've never even looked at it.
Q. Okay. Stop for a second, please.
A. Okay.
Q. We're going to slow this down. You were holding Plaintiff's Exhibit 643 and you were holding the chunk of pages that's numbered page 1 through 26, correct?
A. That's correct.
Q. And you said that you reviewed pages 1 through 26 ?

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A. That's correct.

2 Q. But then pointing to the page that starts with "qualifications" --

## A. Right.

5 Q. -- you said you did not read this page before submitting your report. Is that right?
7 A. That's correct. I assumed they got that from the things that the attorneys had or something that was on the Internet that's -- and I didn't
10 realize there was a mistake. So l'll have to correct that.
Q. So, Mr. Johnson, do you know where the content in this qualifications page came from?
A. No, I do not. I think it came from the Internet, but I don't know.
Q. Why do you think it came from the Internet?
A. I don't know. I never read that either so I don't know. I really don't know. I don't know where it came from.
Q. So just focusing on the qualifications page right now --
A. Correct.
Q. -- who is it that gave you this qualifications page?

1 A. I don't know. I think I wrote it. There was a bit -- I think it was written -- part of it had been written since 1987, and from various -- various translations -- or various people rewriting it, I think that there's -- there's -- introduced a mistake 6 in -- in the original document that was put out in '87.
8 Q. Object to the responsiveness of the 9 answer.
10 A. Okay.
11 Q. Mr. Johnson, I know you don't know who 2 wrote this qualifications page. I got it.
A. Okay.
Q. I want to know who gave this to you.
A. This particular document was given to me by Denver or Denver's office.
Q. And are you talking about the entirety of Plaintiff's Exhibit 643?
A. That's his, correct.
Q. Who at Mr. Snuffer's office, do you know?
A. It was either Denver or Dan or Steven Paul.
Q. So Denver --
A. I think it was Steven. Was it Steven? Yeah, I think it was -- Steven Paul I think is the

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one who gave it to me.
2 Q. So you think Steven Paul gave you Plaintiff's Exhibit 643?
Q. When was that meeting?
A. Last week. I can't remember the day.

Friday, I believe. Friday. Yeah, I think it was Friday.
Q. So, Mr. Johnson, I'm going to -- is that the first time they gave you Plaintiff's Exhibit 643?
A. Yes, I think so.

3 Q. Had you ever seen pages 1 through 26 of Plaintiff's Exhibit 643 before last week?
A. I wrote the draft of this. And it was originally, like, a hundred pages.

And so they went through it and made it --
18 took out the things that they didn't think was
19 relevant and -- and then they prepared this document
20 from the draft that I wrote. So the original draft
1 is much longer than this here is. And so then they
gave me the draft, and I looked it over, and it
looked like it was adequate, so I didn't feel like
there needed to be any changes made.
Q. When did you provide them your draft?


1 Q. -- did anyone at Mr. Snuffer's office give 2 you facts or data to consider?
3 A. No.
4 Q. Did anyone at Mr. Snuffer's office give
5 you any assumptions to rely upon in drafting your
6 response to Dr. Mancini's report?
7 A. No.
8 Q. Okay. Let's return, please, to Utah 9 Technical College.
A. Okay.
Q. Did you attend Utah Technical College?
A. I did.
Q. At what time?
A. 19 -- May of 1964 .
Q. For one month you attended Utah Technical College?
A. No, it was -- no, it was longer than that, but that's when I started.
Q. From May of 1964 to when?
A. I think it was January of -- the first of ' 65 , I think, right around that date.
Q. Did you get any degree from Utah Technical College?
A. No, I did not.
Q. What -- is there such a thing as the

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electronics technology program at Utah Technical College?
A. I don't know; that was a long time ago.

I'm not sure what they called it. It was either
electrical engineering or electronic engineering or something like that.
7 Q. What classes did you take at Utah
8 Technical College?
9
10 state theory, the mat -- electrical engineering
1 mathematics, the mathematics -- various mathematics
classes, various physics classes, various
technologies in -- in communication -- electrical
communicat -- RF communications.
They let -- the class were half over, okay
when, I started and so I talked them into letting me
come in and I could catch up --
Q. Mr. Johnson --
A. -- so --
Q. -- I'm going to stop you there.
A. So the classes --
Q. No, stop.
A. -- I'm trying to figure out --
Q. Sir, stop. Stop.
A. Okay.
purported solar energy technology that IAS has in
this case and the classes that you took at Utah
Technical College?
A. Well, the physics classes obviously were in optics. We had a lot of optics classes in physics. And, yes, I guess that is a direct correlation between the optics that we developed for those lenses. And so in physics we studied Fres -Fres -- Fresnel lenses and op -- various optics. And so from that standpoint, yes.
Q. Okay. So the optics have specifically to do with the lenses, correct?

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A. Correct, yes, ma'am.
Q. Did the optics classes have anything else to do with the purported solar energy technology at issue in this case?
A. No.
Q. All right. Other than the optics, was
there any other direct link from the classes that you took at Utah Technical College to the purported solar energy technology in this case?
A. Well, not as far as the optics go, no.
Q. I said other than the optics, sir.
A. Oh, yeah. Various -- various mathematical courses in -- including some physics and mechanical engineering courses that would have designed the relationships to mechanical structures and the mathematics that are required to build those. There wasn't any direct connection that I know of.
Q. What, if anything, did you learn at Utah

Technical College regarding the engineering stages of technology development?
A. The mathematics that designed the -- the
various optics, including -- and the various
mechanical structures that -- that are employed at the site.
Q. Would you take a look, please, at

1 Plaintiff's Exhibit 644? That's Dr. Mancini's report.
3 A. Okay.
4 Q. And take a look, please, at page 9.
5 A. Okay.
6 Q. All right. There Dr. Mancini lays out the
7 stages of engineering technology development.
Do you see that?
A. Uh-huh (affirmative).
Q. Yes?
A. Right.
Q. Did you ever learn these stages or something like this at Utah Technical College?
A. Either that or in -- in BYU, some of the studies there, yes.
Q. Okay. So you learned that the first stage has to do with research? Yes?
A. Well, the first stages have to do with developing your abilities in -- and he's left that out. The first stages have to -- developing yourself in the various technology curriculums or knowledge of the -- of the various technologies. And that's the first stages of developing a new technology.
Q. Well, sir, we're talking about specific --
A. He left it out. That's specific in the --
that's specific. He's left that out.
2 Q. Okay. What's the next step, in your mind?
3 A. Well, obviously, he doesn't know it
4 because he's never developed a new technology.
5 Q. So what's the next step in developing a 6 new technology?
$7 \quad$ A. The next step that I employ?
8 Q. What's the next step?
9 A. Well, it depends on the product. When I
10 developed the tills, for example, the automatic
11 front-end system, we evaluated a need. We evaluated
12 the -- the possibility that there was a better way
13 of -- of producing front-end scanning that was going
14 to be less labor-intensive and more automatic.
15 And we evaluated -- then from there we 16 evaluated how the -- the product would be impacted.
17 We also then took studies -- we also 18 employed -- employed groups to study the possibility 19 of -- of how this thing would be regarded, how the 20 people would -- the customers would take it, how 21 would it impact my -- the grocery store itself, and 22 what would be the best way to market the product if
23 it would become suitable arrangements, what kind of
24 markets that we could compare that to. For example, 25 we compared automatic -- utilizing -- we -- we -- we
took the idea of --
2 Q. All right, stop. No, sir, I'm going to stop you there. Stop.
4 A. Well, then you can't answer the question. 5 If you're not going to let me answer, you can't ask 6 the question.
Q. I object to the responsiveness.

Mr. Johnson, you testified a moment ago that you learned the stages of engineering technology development at either Utah Technical College or at BYU, right? That's what you said.
A. I said I learned these items, not the idea -- not the ability to -- you can't teach it.
You don't -- there are no classes in teaching inventing. I said --
Q. Stop, stop.
A. -- these are the things that are taught.
Q. Stop, sir.
A. And he left out one.
Q. Stop. You were pointing specifically to engineering tools on Dr. Mancini's chart. Is that what you mean you learned at Utah Technical College and/or BYU?
A. In reference to your question -- you want to read the question on that particular issue back

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again?
A. Yes.
Q. Okay. So are you saying that you learned the items in the engineering tools column at Utah Technical College and/or BYU? Is that what you are saying?
A. Well, yeah, they -- specifically on a project that you're given -- you're given -- you're 6 given an assignment. And any assignment in the labs,
17 you are given a procedure to follow in order to
18 accomplish the -- the lab requirements. And in that
19 system you were taught how to take the notes, how to
20 write down the things that you're -- that are all
21 right here and to -- and to demonstrate.
22 However, all of these are not fully --
23 fully done in the business side of it. So the
24 business side has to do with the whole concept. This
25 is just merely suggesting that you have a concept
that you're going to evaluate. This isn't -- this isn't designed to develop new products. This is designed to develop a product mainly that's already been done. And that's all he's ever done.
5 And you can't teach what I do in --
6 inventing you can't teach in a college. Otherwise
7 you would have a whole bunch more people doing 8 exactly what I do, and they don't do it.
9 Q. Mr. Johnson --
10 A. Nobody has. Well, you wanted the answer. That's the answer. These are simple things that you are given to -- in classes 101. This is nothing new.
This -- you are put in a lab -- you go to a lab, you say here -- they give you an assignment. Here is some pages to fill out. Okay, you are following these particular things.

And then we want to go on and say, Can we now develop this into a product? That's silly.
Q. So, Mr. Johnson, the stages of engineering technology development, that's in early classes, right?
A. Correct. Yeah. That's base -- one of your first lab classes.
Q. That's basic engineering 101.
A. Right. There is nothing there new,

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nothing simple. Anybody who had gone to college has got to learn that. The same thing you do when you go
to -- go to -- the first thing you learn in your
attorney's classes is how to fill out the plaintiff's
forms. It's just no different. It's not -- it's
not -- it's not rocket science. It's filling out a form.
Q. All right, Mr. Johnson. Let's talk about what it says here on your qualifications page, that you studied physics and mathematics at Brigham Young, correct?
A. Correct.
Q. How long were you at Brigham Young?
A. Maybe a year. Maybe two. I don't know.
Q. From when to when?
A. I don't even know. I can't even tell you that.
18 Q. Well, you talked about it initially in the 9 gap between 1968 and 1975. Does that ring a bell?
A. Probably, yeah. I probably spent some time there. I didn't go to school to -- to -- to -2 to gain a -- a degree to go out and get a job, where most people do. I was making more money than engineers make when I went to school. I didn't need to go to school to develop my skills of making a

1 living, like most people do. I went there to learn
2 something. The reason why I went to school was
3 because I wanted to learn. That's different than 4 going to school and getting a degree and just
5 memorizing everything there.
6 I wanted to learn what the concepts were, how they were developed, how the mathematics were actually defined, how the proofs were working, how to develop a proof.
10 I went back east and they -- I -- | had -they -- I went back in -- to -- to -- they invited me back to Washington, D.C.
13 Q. Stop, Mr. Johnson. No. We're talking about Brigham Young. That's it.
15 A. Well, that's why I went to school. I didn't go there to get a degree. I went there to learn.
Q. Okay.
A. So I took classes.
Q. What classes did you take?
A. I took physics classes. I didn't take -I didn't take basket weaving and -- and all this stuff. I took --
Q. Mr. Johnson, I'm not interested in what class -- stop, stop. Mr. Johnson, stop. I'm not
interested in what classes you didn't take. I'm interested in classes you did take. So you said physics. What else?
4 A. Well, I took English. I took basic skills
5 writing and developing my writing skills, my
6 communication skills. I felt those were very
7 important in dealing with people and dealing with
8 business relationships.
9 I took mathematics to make sure that I
10 understood the mathematical principles upon which the sciences were based.
12 I then took the various sciences which
13 applied those mathematics in those various forms,
14 such as physics, electrical engineering classes,
15 programing classes. And whatever classes were in the
16 technical field, I utilized those mathematical skills
17 to -- to work in -- to learn all these various
18 technologies. That's why I went to school. I didn't
19 go for the purpose of getting a degree. I didn't
20 need one.
21 Q. Okay. You say you were at Brigham Young 22 for only a year, but you've just listed off a whole 23 lot of classes that you took.
24 A. Well, I took a lot of hours. And I worked 25 full-time when I took those hours. I did the same
thing at Utah Technical school; I did a lot of hours. So I did a lot of classes. But the classes were easy for me. I didn't have to worry about it. I didn't have to study. I never studied in my whole life. Never had to.
Q. So other than what we've already talked about with the electronics connection to the purported solar energy technology, what, if any, aspect of your courses at Brigham Young have a direct
10 impact on the purported solar energy technology that IAS holds out in this case?
A. Well, mathematics, obviously, and some of the optics classes and physics. Some of the electronics classes and so all of the mechanical engineering classes. So all the class that we took had some bearing, and we draw from all of those to develop a -- a new concept or a new invention.
Q. And, Mr. Johnson, you did not receive a degree from Brigham Young, correct?
A. No. I didn't want one. Didn't care.

Wasn't interested in it. I could get one today. I could probably go over there, and they would probably give me one. I don't know.
Q. What on earth is your basis for that, Mr. Johnson?

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A. No.
Q. Are there any answers to my questions that you would like to change or modify at this time?
A. Not -- no.

MR. SNUFFER: Do you need to leave?
MRS. JOHNSON: I just have a question.
The last time we were here we went to lunch at 11:30.
MR. SNUFFER: Oh, yeah.
MRS. JOHNSON: And I don't know if she wants to do the same thing.

MR. SNUFFER: Yeah, we beat the noon rush.
MS. HEALY GALLAGHER: Off the record, please.
(Discussion off the record.)
MS. HEALY GALLAGHER: Back on, please.

1 Q. All right, Mr. Johnson. We will turn to the purported solar energy technology that IAS has
held out in just a moment, but I want to hear from
you. For all the background and experience and
5 qualifications that we've talked about so far, has
6 there ever been a time that you have worked
7 specifically with generating electricity from solar 8 radiation?
9 A. Other than my own company?
10 Q. Correct.
11 A. No, I haven't. No.
12 Q. Okay. So your only experience with that is through IAS?
A. That is correct, yes.
Q. Other than your experience with IAS, have you had any experience generating heat from solar radiation?
A. Not for -- not for a commercial application, no.
Q. For any other application?
A. Well, just for fun maybe. You know, we were probably exploring some other things when I was young --
Q. Like what?
A. -- just for fun, you know.

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1 Well, I was on my own at 14 and so I-- I
was on the streets a lot, and there were times when I
thought that I could use a solar thing to create some
heat that would help out in my living -- living
spaces that I -- that I lived. So, you know, it's a
different experience; you probably wouldn't understand that, but...
Q. What kinds of things did you experiment with at that time, Mr. Johnson?
A. Oh, plastics and different things that I could find in a junkyard, you know, just -- I
couldn't afford anything. I just lived in -- close to a junkyard where I could get things and play with them and do what I wanted with them.

Some of those were developed areas where you could heat things and extend some growing seasons and various applications and stuff, so -- that was just to try to make my life a little easier, so...
19 Q. So around the time that you were 14 -- I want to understand, like, what you were doing. So were you using materials to amplify the sun's light for warmth?
A. We were doing -- yeah, I did -- I did various -- various experiments with ways to increase the concentration of the sun in order to create an
environment that would -- would heat some objects
that would last through the -- through the evening a
little bit, and stuff like that. To make my life a
little bit more comfortable, yes.
Q. And you used that for your living space?
A. I used it -- mostly just placed it -- lay
down sometimes and get a lead sometime in the wintertime. It gets cold back then in this area. It was cold so, yeah.
Q. You mentioned amplifying the sun's heat to extend a growing season. Were you growing things to eat or for any other reason at this time?
A. Yeah, I tried to experiment on things that I could maybe utilize and extend, like I said, the growing season.

Here it used to -- it used to freeze in the first part of September, and so you wouldn't get any, you know, fresh vegetables past that particular time. And so we just -- l just looked at ways of extending that and using some water as a -- as a -as a heat seek, and rocks at the bases of the water, and hopefully to extend the -- by the evaporation of the water into creating a more dense -- a dense air atmosphere that holds the heat longer.

I learned back then that -- we live in a
very dry climate and so the cold penetrates deeper.
So by adding water and rocks and things during the day into a confined space, what you get is a warm --
warmer atmosphere that lasts a lot longer than it
does if you don't have that exper -- have that same
experience. I used -- I used all the knowledge that
I had capable of using that -- to -- you know, to create a better living place. So we did. And extending the growing seasons and stuff, it helped several times, you know.

And in the springtime you could get an
extra, you know, springtime dew. I used to eat dandelions for the Vitamin C components and -because they were the first plants to come out. And if you put a warm environment around them, you would then gain a few months and increase your Vitamin C intake, so...
Q. So do you mean sort of like a greenhouse?
A. That, but it was more -- more than that.

It was -- it was -- it was just some kind of a way to help evaporate the water and -- using some kind of application where you could develop some kind of heating source for us.
Q. Did you do anything else, any other sorts of experiments with solar --

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Q. Mr. Johnson, now l'd like to walk through your report a little bit more. So we're turning back to Plaintiff's Exhibit 643.
A. Okay.
Q. The first sentence of this third paragraph is fairly lengthy, so we're going to take it in parts.
A. Okay.
Q. Part of that sentence says, "I have formed an opinion, based on practical trials, engineering and research and development."

## Do you see that?

A. That's correct.
Q. All right. I'd like to ask you about the practical trials part of that.

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A. Okay.
Q. -- you're talking solely about the Fresnel lenses; is that right?
A. In this statement it looks like that I'm talking about the Fresnel lenses, yes.
Q. Okay. So I'm confining my questions right now to questions to do with the Fresnel lenses in this sentence, okay?
A. Okay.
Q. Can you tell me about the practical trials that the Fresnel lenses have undergone?
A. Well, if you're going to start, it's -it's the practical trials and engineering and research development that evolved into the development of the Fresnel lens. It's more complicated than just what we did on the testing. So if that's not what you want, then l'm not going to go there.

1 Q. Well, this sentence says "practical trials."
3 A. Okay. The practical trials that led me to 4 develop the Fresnel lens is what this is referring 5 to.
6 Q. So when were they?
7 A. From 2003 to 2005 or '06.
8 Q. And how many practical trials did you have between '03 and '05?
A. Well, the -- I don't know how -- how to evaluate those because it was an ongoing, everyday
thing, but -- but the -- that's not -- that's not how the Fresnel lens evolved into what it is today.
The -- the first things that we started with was the idea and concept of developing an alternative energy than coal, natural gas or any --
Q. Mr. Johnson --
A. -- and fuels.
Q. -- I want to stop you there.

This sentence says "practical trials."
A. Right. That's what I'm trying -- that's
what I'm trying to tell you, what the practical trials existed of and what they are -- the purpose of those trials were.
Q. Okay. What specifically were you testing
for in the practical trials?
2 A. We were looking for an alternative to -3 to other energy -- other energy other than the
4 traditional energy sources that are available today.
5 Q. What did you do in these practical trials?
6 A. Well, the first thing that we did is we
went out and evaluated what was already in existence
8 for an alternative. So we went to places like --
9 that are out by Barstow. They are not in Barstow but
0 they --
11 Q. Mr. Johnson, I'm actually going to stop 2 you. So I want to make sure I understand.

So when this sentence says the Fresnel
lens, okay -- it says the Fresnel lens that are sold by RaPower3.
A. Right.
Q. Okay. So I'm talking about those. I'm not talking about any Fresnel lenses that are not sold by RaPower3. So for the Fresnel --
A. Well, no, you're talking -- you're talking about how I formed my opinion based on the practical
2 trials and engineering and research and the
3 development, that the Fresnel lens that are sold by
24 RaPower and are specifically designed were basically
25 brought into -- brought into fruition.

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A. That's -- that's -- but that's the sentence.
9 Q. Let's start a new question.
A. Well, the final product we evaluated that's -- if you're talking about the final -- what product -- are you talking about the development --
Q. Sir --
A. -- the concept or the final product?
Q. Stop.
A. Well, you have to identify which one you're talking about.
Q. I already have.
A. You didn't.
Q. It's the Fresnel lenses that are sold by RaPower3. And I want to know --
A. But what --
Q. Stop.
A. -- part of the development are you talking about; the initial part, the middle part, the end part? What are you -- what are you -- what are you trying to get at? I'm not -- I mean, I'm trying to help you. I'm not -- I'm not trying to be
belligerent; I'm not trying to be evasive. I'm
trying to make sure that I understand exactly what you're looking for.
Q. Let's shift to this.
A. Okay.
Q. Okay. What, if any, data do you have from
any testing that any Fresnel lens has been subject to?
3 A. I've got probably thousands of books. The 4 problem is is nobody can read them but me and so --
5 Q. Mr. Johnson --
6 A. -- but they're fine; I -- I can read them.
7 Q. Where are those books?
8 A. You have them. You have all the data.
9 You just probably won't know how to read them. And I
0 probably couldn't go back and read them after I --
after I did them. They weren't designed -- other --
they weren't designed to -- for any other engineering
firm or any other company. They were designed specifically for my research and development. I don't have any way of keeping things secret. I don't have a huge staff that has high security on all of this data. I do not write any of my patents down and keep track of them in a way that anybody else could read them or do any research from them.

And I give those to my patent attorney and he holds them in his patent office that relate to the patents. But I personally do not keep any data on any of the research that I do for the purpose of, I do not -- people have stolen my patents. The federal government has stolen one of my patents. The AFIM
unit was stolen by the federal government. And they took that and gave that to Boeing to develop around my system. After I showed it to them, after they came out and visited with me, spending hours with me, offering me to come back there and tell me how it worked, and then they went around me and took millions of dollars --
Q. Mr. Johnson, you mentioned books. Did you hand write data?
A. Yes, I did, but not in a way that anybody could read it.
Q. So, Mr. Johnson, can you describe the tests that you did on the Fresnel lenses?

1 fact. And I could go for hours and tell you why, and I'm not going to.
A. Okay.
A. Yes.
Q. What did you do?
A. The first thing we did is we analyzed what was going to be necessary to create a -- Fresnel lenses that weren't -- that were going to compete and be cost effective in developing energy. It wasn't -we didn't go out there to make a project so that we could steal government -- money from the government. We actually were out there developing a new project
to make a profitable -- an alternative energy source
that we could live on. This is before we had any --
any -- any -- any kind of tax credits at all.
So what we did is we analyzed what was going to be required to make that. And we found out that the only way -- the traditional way of making large lenses was using granite -- granite tops and casting these lenses. They were very expensive. other kind of energy.

So what we did is took that data and we decided to go to a Fresnel lens, because we studied mirrors, and mirrors were the same problem. Mirrors cannot be mass produced for a solar energy project. And I know you don't understand that, but that's a

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Q. So are you saying that no one could re-create the testing that you did on the Fresnel lenses?
A. No, everybody can -- everybody can do it now, but they couldn't do it at the time, because the problem wasn't the Fresnel lens; it never was. The Fresnel lens has been around since 1600.
Q. But, Mr. Johnson, no one can replicate your testing with the lenses using your data, correct?
A. No, they were never designed to. I didn't want anybody to. That wasn't what it was designed for. It was designed for internal work. Just like if -- if you were making an atomic bomb, you wouldn't share that information with the Korean people, if you were smart, which we did anyway, but, I mean -- but
normally you wouldn't do that, no. And most -- most companies don't reveal what they are doing outside of the company. Mancini has never worked for a company That's his problem.
5 Q. Mr. Johnson, did you ever publish any of 6 the data from your tests on the Fresnel lens?
A. Of course not. You don't want anybody to be able to duplicate your stuff and then have -- they have more money, and then they go around and steal it from you. No, you don't do that. It's silly.
Q. Mr. Johnson, I'd actually like you to take a look back at your Qualifications page in your report here.
A. Okay.
Q. Under the heading Publications, about halfway down the page, it says, "Mr. Johnson has not been published in the previous ten years."

Did I read that correctly?
A. That's correct.
Q. Have any of your writings ever been published?
A. No, I wouldn't do it. I wouldn't -- I don't want people stealing my stuff. It would be silly. My purpose of writing this stuff -- or developing this stuff wasn't to make myself look good

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in the academic world. It has no value to me, how I look in the ac -- the academic world. There is no -there is no profit to it.
Q. All right. When we take a look at the heading that says Other Expert Testimony, it says, "Mr. Johnson has not given testimony as an expert at trial or by deposition in the previous four years."

## Is that right?

A. That is correct.
Q. Have you ever given expert testimony?
A. No, this is a new experience for me.
Q. All right. Mr. Johnson, I'm going to turn your attention to page 8 of 26 of your report.
A. Okay.
Q. I'm looking at the first paragraph --
A. Okay.
Q. -- the first few sentences, which I'm going to read.
A. Okay.
Q. "The solar process heat generated in solar array using the Fresnel lenses can be captured and the resulting heat energy, in the form of BTUs generated by the solar lenses, can be regulated by the rate at which the heat source fluid is pumped through the solar receiver system."

1 A. Okay.
2 Q. "This heat is then transferred into the power generation system to heat the working fluid, normally water, that will be used to turn the turbine."
A. Okay.

7 Q. "The solar process heat raises the temperature of the working fluid and drives the turbine, providing for the generation of electricity."
A. Okay.
Q. "These two components (turbine and solar lens arrays) have been working for some time, and we have been using them for research and development to make sure all the systems function adequately."
A. Okay.
Q. Did I read those sentences correctly?
A. Okay.
Q. All right, Mr. Johnson. For the first sentence --
A. Okay.
Q. -- what are the facts that you are relying on to write that first sentence?
A. "The solar process heat generated in solar arrays using" --

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1 Q. Please don't reread it.
2 A. Yeah. I just want to make sure that -okay, then I won't reread it.

Okay. The solar lenses produce heat in
the form of -- in the British thermal units, is BTUs.
We could have used other sources -- names for energy --
Q. Sir, stop, stop. I asked you for the
facts that you have to support that first sentence.
A. The fact -- the fact is is the British
thermal units were developed by British people to
measure heat sources. And they used the British thermal unit for so much energy developed by the sun.

The metric system uses a different form of
energy measurement, which is called --
Q. Stop, sir.
A. -- joules or kilowatts.
Q. I'm going to stop you there.

Other than information about what a BTU is, what facts do you have to support that sentence?
A. The fact is that the solar energy -- the solar lens produces heat. You saw that.
Q. All right. Well, then what I'm going to 4 ask you, then, sir, is what, if any, data have you
25 collected to support this first sentence.

| Page 101 | Page 103 |
| :---: | :---: |
| 1 A. We use a -- I use a -- a -- a light | 1 About how many times would you say you |
| 2 measuring meter that measures the light | 2 engaged in this testing? |
| 3 concentrations. And from that we are -- develop the | 3 A. Thousands of hours. |
| 4 BTU content that comes from the light that's | 4 Q. Who else was present as you did this |
| 5 concentrated. | 5 testing? |
| 6 Q. Is any of this data written down? | 6 A. My employees at times. |
| 7 A. Yeah, it's -- it's written down for me, | 7 Q. Anyone else? |
| 8 but not for anybody else | 8 A. No. Well, there was maybe friends, but I |
| 9 Q. Where is this data written down? | 9 didn't ever keep track of them. |
| 10 A. I don't know. It's probably in -- in one | 10 Q. What, if any, error rate did you account |
| 11 of my patents in -- in Dave's office. I don't keep | 11 for in this testing? |
| 12 anything like that where anybody can get at it. | 12 A. What do you mean by "error rate"? |
| 13 Again, I don't -- I don't hold that stuff around so | 13 Q. Do you know what error rate means? |
| 14 people can look at it. It's not against the law to | 14 A. I know what error rate means. What are |
| 15 do that, by the way. | 15 you talking about? |
| 16 Q. How did you perform the testing to | 16 Q. Tell me what error rate means. |
| 17 establish this data? | 17 A. It depends on what you're talking about. |
| 18 A. I used a light meter. And we also then | 18 If you are talking about it from an attorney's |
| 19 used -- we also then used a measurement device -- | 19 perspective or a technology -- |
| 20 Q. We or I? | 20 Q. Mr. Johnson -- |
| 21 A. I used a measurement device that would -- | 21 A. -- perspective. |
| 22 we could measure how fast the heat would -- would | 22 Q. -- I want to know what you consider an |
| 23 heat, say, a fluid, to determine the rate on which | 23 error rate. |
| 24 energy is transferred from the solar energy | 24 A. The error rate was -- in order to develop |
| 25 concentrated into a fluid. And determine that rate | 25 the lenses we had to determine what was already out |
| Page 102 | Page 104 |
| 1 would determine how many BTUs per second or a minute | 1 there, what kind of errors we were going to |
| 2 or an hour that the BTUs would be transferred from | 2 experience if we use mirrors. |
| 3 the light source into a fluid and transferred. | 3 For example, a mirror system has an error |
| 4 Q. Where did you do these tests? | 4 rate of almost 90 percent when it gets dirty. And so |
| 5 A. We did it down in Delta. | 5 the error rate of a mirror is 90 percent. And so we |
| 6 Q. So on site at the R \& $D$ site? | 6 didn't want to -- we didn't want to have that error |
| 7 A. We did them in Delta. We did them in | 7 rate in -- because that creates more labor in |
| 8 Mesquite. We did them in Salem. We did -- most of | 8 developing solar energy. So we wanted to reduce the |
| 9 the original data was developed in Salem. | 9 cost of solar energy by reducing the error rate in |
| 10 Q. Was that next to the grocery store? | 10 the system that we were developing. And so we |
| 11 A. Yes, it was. | 11 analyzed the error rates from all the different |
| 12 Q. So these are all real-world conditions? | 12 varieties of ways to generate concentrated solar |
| 13 A. That's right. | 13 energy. Mirrors are the worst. It took -- do you |
| 14 Q. Do you ever do any computer modeling? | 14 want me to tell you why? |
| 15 A. Yes, we did. | 15 Q. No. |
| 16 Q. Okay. Where is the data from that? | 16 A. Okay. I just want to make sure. |
| 17 A. Same place. I don't keep it. I don't | 17 Q. Mr. Johnson, is it possible for anyone to |
| 18 store it. But I do the data from the modeling before | 18 re-create the testing you did to support this first |
| 19 we ever started the project. That's what I tried to | 19 sentence with the data you collected? |
| 20 tell you. In order to develop a Fresnel lens and to | 20 A. Yeah. You can do down and do it any time |
| 21 make sure that it was going to operate, the first | 21 you want to. |
| 22 thing we did was -- is we -- we tried to identify | 22 Q. With the data collected? |
| 23 what heat source would be the best way to do that. | 23 A. No. But if anybody did it, they would get |
| 24 We started with mirrors. | 24 to the same conclusions -- |
| 25 Q. That's fine. | 25 Q. And -- |

1 A. -- that the solar energy project creates concentrated heat.
3 Q. Mr. Johnson, you don't know where the data 4 is, correct?
5 A. Well, we had an evaluation -- now
6 you're -- if you're talking about --
7 Q. Stop.
8 A. -- an external evaluation --
9 Q. Stop, Mr. Johnson.
10 Your data from the tests you ran to
1 support this first sentence on page 8 of 26 , where is that data?
A. It's probably in Dave -- Dave -- Dave's office.
Q. Dave Nelson?
A. Dave Nelson's office.
Q. Why do you think that?
A. Because I don't have it. I gave it to him to write the patent, so that's where it would be at. I don't keep stuff like that. I never have.
Q. All right, Mr. Johnson. Turning to the next sentence, which is the heat. Let me start that again.

So the next sentence says, "This heat is then transferred into the power generation system to
heat the working fluid, normally water, that will be used to turn the turbine."

Did I read that correctly?
A. Correct.
Q. All right. So this heat refers back to the heat that is generated by the Fresnel lenses, correct?
A. Correct. temperature and the specific heat we can determine how many BTUs that fluid handles. We then can transfer that -- that -- heat from that fluid to another fluid using heat exchangers.
Q. I'm only talking the first transfer of heat.
reproduce that data. I can re -- I can re -- I can
produce that data any time I choose. And the heat
rate there is there.

And then we have an independent study on 4 the Fresnel lenses in our white papers.
5 (Discussion off the record.)
Q. How many times, Mr. Johnson, did you test, under real-world conditions, whether heat was being transferred from the Fresnel lens array into a working fluid?
A. Thousands of times.
Q. Thousands of times, did you say?
A. We started -- we started with an original Fresnel lens built by someone else. Okay. And we determined --
A. Okay.
Q. Okay. So -- so, Mr. Johnson, what data do
A. You are kidding me, right? I just told
produce that data any time I choose. And the heat rate there is there.
13

## Q. Stop.

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A. -- the same thing. And then we tested our system and compared the two.
Q. Mr. Johnson --
A. Okay.
Q. -- you said you had tested that transfer of heat from the Fresnel lens array to the working fluid under real-world conditions thousands of times.
A. Thousands of times. At least that, yes.
Q. And what I would like to know is, did you keep any data from those thousands of times?
A. No. I had an outside -- I had an outside source come in and evaluate that, and that's in our white papers.
Q. Object to responsiveness of the answer. Would you please read back the question?
A. Okay. I didn't. No, I didn't. I gave them to Dave. Dave probably has them. I don't know where they are. I don't keep that kind of -- I don't need to. I'm not looking for an academic pat on the shoulder or pat on the head, so I don't keep them. I don't like to do that because I like to keep things secret because people steal new technologies.
Q. Please read back my question.
A. I'm trying to help you out the best I can.
Q. Mr. Johnson, what will help me out is if
A. No.
Q. Mr. Johnson, you mentioned an independent review, someone having come in. Did that independent reviewer evaluate the transfer of heat from a Fresnel lens array into a working fluid?
A. Yeah, I think they did. They wrote a report on it. And I wasn't there when they did it.
So I assume that they wrote the report based upon
some factual information that they -- that they developed.
Q. Who performed --
A. The reason why I wasn't there is because I
didn't want to influence anything in their -- in their report.
Q. Who performed this independent review?
A. I don't know. It's in there. Their names are in the white paper. I don't know who they are.
Q. Mr. Johnson, there are no names in the white paper. before.
Q. When did this independent review happen?
A. Right around 2005, 2006. I don't know exactly.
Q. All right. Let's turn, please, to the next sentence which says, "The solar process heat raises the temperature of the working fluid and drives the turbine, providing for the generation of electricity."

Did I read that correctly?
A. That's correct, yes.
Q. Mr. Johnson, how many times have you

4 tested a Fresnel lens array heating a working fluid
25 that is then sent to a turbine?
A. Thousands.
Q. Thousands.
A. I did one just last week.
Q. Have you kept any data from these
A. I take some pictures. I don't think I've kept any data. Is data pictures? Pictures are data, aren't they? I don't know. I guess they are.
9 Q. Have you kept any other records of such tests?
A. No, I haven't. Just pictures, I think.
Q. Have these tests been performed in the laboratory, under real-world conditions? How?
A. Both. We've also made it simulated by computer program, mathematics, to see just how -- how close we came to the -- the actual mathematics compared with what the real data was.
18 Q. Do you have any record of the mathematics modeling?
A. No, I don't.
Q. Please face the court reporter so she can be sure to hear you.
A. No, I don't.
Q. In which laboratories was this tested?
A. In IAS's laboratories.

Page 111 2 testing

4 A. Just the people that did the report. We
have -- we've had several expert witnesses that we've hired to come and evaluate the system.
Q. Who are they?

8 A. I don't know. You would have to talk to
Dave about that. I don't know their names. Dave is
the -- Dave is usually the one that arranges all of
my expert witnesses. I don't really even keep track of them, nor am I there when they do it.
Q. How many expert witnesses do you think you have retained in any fashion?
A. I don't know. Three, five. Three to 6 five.
17 Q. Okay. Why aren't any of them testifying 8 in this case?
19 A. Didn't feel like I needed to.
20 Q. Any other reason?
A. Nope. No. Sorry.
Q. The next sentence says, "These two components, turbine and solar lens arrays, have been working for some time."
25 That's the start of that sentence,

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## correct?

A. Where are you at? Oh, okay, l've got it.

Okay. I'm there. Okay.
Q. All right, Mr. Johnson. What data do you
have to support that part of the sentence?
A. Pictures.
Q. Anything else?
A. Other people. You could probably get
affidavits from a lot of other people. I think we
have 30, I think, we -- we gave to Dave or -- I don't know. I thought --
Q. Who are those people?
A. I don't know. I didn't -- I didn't get
them. I asked for somebody to go find me all the people, and he got 30 of them. There is more than that, but there's -- we have 30 .
Q. Other than pictures and other people, what data do you have to support that first part of that sentence?
A. I don't have any.
Q. Mr. Johnson, did you say you have affidavits from 30 people?
A. I don't have. The people that I asked to get them, I think they gave them -- they told me they gave them to -- they didn't give them to me; they
gave them to, I think, Denver's office. I -- and I
don't know whether they did get to him or not, but
that's where they were -- I was told that they were sent, so -- that's all I know.
5 Q. And did you provide the names of people who could provide affidavits?
A. No, I did not.
Q. Do you know who did?
A. I think Greg Shepard did. I'm not
positive, but I think him or his son, Matt. Probably
Matt. Matt did. Yeah, Matt was the one who got the data.
Q. Do you happen to know how Mr. Shepard selected these 30 names for affidavits?
A. I don't know. I didn't ask him.
Q. So aside, Mr. Johnson, from pictures and potentially other people, what, if any, data do you
have to support the idea that the turbine and solar lens arrays have been working for some time?
A. Well, like I said, the expert witnesses.

Did you include those? I mean, the other ex -- I
mean, the other people that I would classify expert
in their fields evaluated the system independently
and collectively. Besides that, no.
Q. Mr. Johnson, please turn to page 6 of 26.

I'm looking at the first sentence of the second paragraph -- the second full paragraph.
A. Six of 26? And what paragraph?
Q. Second full paragraph, the first sentence.
A. Okay.
Q. It says: --
A. "The Johnson turbine"?
Q. I will read it.
"The Johnson turbine uses superheated
steam or superheated water, but does not necessarily require a boiler."

Did I read that correctly?
A. That's correct.
Q. Okay. What data do you have to support that sentence?
A. We have the three NASA -- the people that work, I think, for -- related to -- somehow to a NASA -- the NASA group. Rocket scientists, I guess.
Q. Who are they?
A. I don't have their names.
Q. When did they provide any input to you?
A. Oh, way back in -- before, I think, 2000 -- I don't know exactly.
Q. Did they provide you anything in writing?
A. Yes, they did, and you have it.

1 Q. Do you have any other support for that sentence?
3 A. Not that l've kept. I did my own
4 evaluation, obviously. And I did my own evaluation
5 into create the -- the turbine in order to -- before
6 I built it, I developed all the mathematics that
7 developed that turbine. And then I built the turbine
8 from that mathematical model.
9 Q. Do you still have the information
10 generated by that mathematical model?
11 A. I do not.
12 Q. Do you have --
13 A. But I have the turbine.
14 Q. Do you have any data supporting your own evaluation?
A. No, I do not. Other than the patents.

There is, I think, three or four patents on that turbine. So that data would be there. That's permanently there. That's available to you.
20 Q. Any other data to support that sentence?
22 Q. Then I would like you to turn to page 9 of
23 26, please. I'm looking at a sentence in the middle
24 of the first full paragraph --
25
A. Okay.

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1 2 not need a cooling process as part of the turbine." Do you see that sentence?
A. Correct.
Q. What, if any, data do you have to support that sentence?
A. I don't have any data. I just did my own
testing, and we don't -- it isn't required. But
there's been several experts in the field that have
came to the same conclusions.
Q. Who are those experts?
A. Well, the NASA scientists. And then

13 there -- the people that developed -- there is a guy
14 that was in Pennsylvania that was the -- he taught
15 thermo -- turbine technology. And he wrote a book on
16 turbine technology.
17 And the fact is we have a -- he had a
18 contract with him to develop a project in Hawaii.
19 And I think he might have said something in his
20 writings, but I don't -- I never kept them. But I
21 think somebody did. I don't know who. But he -- he
22 determined my -- he evaluated my turbine against the
23 fin-type turbine and evaluated mine superior in every
24 way.
25 Q. Mr. Johnson, you identified your own
testing, information from experts, one in NASA, one from Pennsylvania --
A. Right.
Q. -- as data that you have to support this sentence that your turbine does not need a cooling process as part of the turbine.
7 A. Correct.
8 Q. What, if any, data did -- have you kept from your own testing?
10 A. I haven't kept any other than what would be involved in the patents.
Q. What, if any, data did the NASA scientists provide?
A. They finished a -- a report, which you have.
Q. What was the name of the NASA scientist?
A. I don't know.
Q. When did that person purportedly provide a report?
A. I don't know the date -- the dates either. I didn't keep track of those.
Q. The person from Pennsylvania, what, if
any, data do you have in support of that person's
analysis?
A. I don't have any, but I -- I do believe

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somebody does have some, but I don't know who. I am trying to figure out who had that.
Q. Why do you think that someone else would have it?
A. Because someone else would keep a lot of things that I wouldn't keep.
Q. Who?
A. Oh, I don't know. One of my sons could have kept some. I don't know. But I'm not sure he did. I'm just assuming that he might have done.
Q. All right, Mr. Johnson. Do you have any other source for information that the Johnson turbine does not need a cooling process?
A. I've never used a cooling process on a -and it's -- it has run for thousands of hours. Is that a correct word?
Q. Stop.
(Discussion off the record.)
A. I'm sorry.
Q. Mr. Johnson, I understand that you believe you have run it for hours and it does not require a cooling process?
A. Yeah.
Q. And what I'm asking you is what data you have to support --
A. That's true.
Q. Do you have any support for that sentence
that is different than the support that you have for the prior sentence?
A. Do you want me to tell you the difference between the two -- the two sentences?
Q. Well, I'll withdraw that question.

Mr. Johnson, what, if any, support -factual support do you have for the sentence that the discharge from the rocket nozzles can be collected and merely subjected to a typical heat exchange condenser to recover and recycle the water?
A. Probably every -- every scientific book that's been out -- that's been published on condensing steam.
Q. Have you ever tested the turbine with any system to recover and recycle the water, as you describe here? Page 122
A. Yes, we've done it in several ways. One, we use traditional heat exchangers.

But the -- the secondary is we had
developed our own heat exchanges, which we have now
patented, which is much more efficient and much
smaller and a lot cheaper and -- and requires less maintenance.

And that also, then, works as a heat
exchanger to -- to condense steam back to an electric form of water.
Q. Okay. What, if any, data have you kept from testing the turbine with traditional heating exchangers?
A. We haven't kept any data. I haven't kept any data. Excuse me.
Q. To your knowledge, has anyone other than you ever tested your turbine with traditional heat exchangers?
A. Well, my employees test it and -- and -and, you know -- yes. So, yeah. I mean yes. Excuse
Q. Anyone other than your employees?
A. I don't know. We've had a lot of people or not, I'm not sure. But I'm sure they were, but
A. I don't have any. I don't keep it.
Q. Please take a look at the next sentence which says, "The discharge from the rocket nozzles can be collected and merely subjected to a typical

1 I -- I just don't remember.
2 Q. If any third party has tested your turbine
with a traditional heat exchanger, have you kept any data?
5 A. No, I haven't. No.
6 Q. From the tests of your turbine with your
7 own heat exchanger, have you kept any of the data
8 resulting from those tests?
9 A. Other than what's in my patents and what 0 is in the office of Dave's -- Nelson's, I haven't.
11 Q. Is it possible for someone to re-create your tests with your data?
13 A. No. But they can with the actual
14 equipment.
15 Q. Has anyone ever done that?
16 A. Yes.
17 Q. Who?
18 A. My employees.
19 Q. Anyone else?
20 A. I don't think so. Not the new heat
21 exchangers; I kept that kind of a secret. I didn't
22 want somebody stealing it from me.
Q. Have you kept any of the data from any
testing by your employees of your turbine with your
own heat exchanger?
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1 A. They never -- I never allowed them to write data down.
Q. So the answer is no?
A. No.
Q. Mr. Johnson, I'm looking at the last
sentence of that section on page 9, which says, "We
expect to get many times the useful life expected in
8 the Rankine cycle from the Johnson turbine."
$9 \quad$ Did I read that correctly?
10
11
12
A. Where are you, on page 9 ?
Q. Yes. Above the second heading -- above the heading.
A. Okay.
Q. "We expect to get many times the useful
life expected in the Rankine cycle from the Johnson
turbine."
A. Okay.
Q. Did I read that correctly?
A. Right.
Q. What, if any, data do you have to support that statement?
A. Well, you have all the -- all the books
that require you to look at a boiler and to see what
24 kind of fluid that is asked to go through it, what
25 kind of chemicals that you have to add to that fluid
in order to maintain the integrity of the boiler, and
2 the rate at which the boiler expires due to the fluid passing through it, including -- including the fact that if you use fluid that is dirty in any respect, 5 you can expect to have so much damage done to the
6 boiler in basically the dirt and stuff that comes out
7 of that water and goes into the boiler.
8 If you were to use water that I use in my 9 turbine, you would last three days in a Rankine cycle boiler.
11 Q. Do you have any other sources of data to 2 support that sentence?
A. No, but it's all in the books. It's all

14 in your -- it's all in your technology books. It's 15 available to you.
16 Q. Which books?
A. All your textbooks on -- on -- on all
the -- on all of the -- all the books that describe
the Rankine cycle boiler system and -- and the qualifications required to operate one.
Q. So what, Mr. Johnson, data do you have to support your assertion that the Johnson turbine will exceed a typical useful life?
A. Same -- same thing. When you take a -take a fluid and you don't evaporate the fluid into a
steam, then you don't -- the particulates in the solvent -- in the fluid solvent do not precipitate out. In so doing they don't create a -- damage to your piping. And so the fluid, when it's dirty and
5 it's already saturated will go to the point where it
evaporates into a steam, which only happens at the nozzle after it's -- after it's passed through the entire engine, which -- which leaves no residue inside the piping or the engine. Therefore, that --
10 and that is -- that is recognized in all the data
11 that you want -- chemistry data. You'll find that
12 all through the chemistry books that tell you when
13 the saturation points of liquid will change, causing
14 the saturation of the material in the fluid to
15 precipitate out.
16 Q. Can you point me to any specific sources?
17 A. No, but you can go look it up yourself.
18 There is plenty of them. Every book that talks about evaporation will tell you that.
Q. Aside from general theories of evaporation, do you have any other support for that statement?
A. I don't think there needs to be any
others, but, no. Other than we tested it ourselves, 5 and it does work.

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A. Okay.
Q. -- which says, "Temperature into the
finless Johnson turbine does not need to exceed 450 degrees Fahrenheit and 90 PSI.

Do you see that?
A. Yes, Ido.
Q. What, if any, support do you have for that statement?
A. We tested this at BYU, first of all, with dry steam from a Rankine cycle boiler system, and the temperature was 300 degrees Fahrenheit at 90 PSI.

We then tested the same turbine at Sulphurdale, in Utah, which is a geothermal plant, using geothermal to generate electricity. We used the water directly from the well. It was 90 PSI pressure, to keep the water at liquid at 300 degrees.

And we turned that in -- we drove that into our -- our turbine. And so we operated the turbine at 300 degrees, 90 PSI.

We also tested the nozzles then independently. We then tested the different thrusts
of the nozzles using the dry steam and the -- the nozzles using the saturated liquid.
6 less -- producing less thrust than the water directly
from the well.
8 Q. All right. I'm going to stop you there,
Mr. Johnson --
A. Okay.
Q. -- because I asked you what data.
A. I didn't keep any data.
Q. Okay.
A. But we have pictures.
Q. Do you have anything other than pictures?
A. No.
Q. When was the test at BYU?
A. 2002,1 think.
Q. What was the name of the professor?
A. I don't know.
Q. Did anyone at BYU provide you anything in writing after that test?
A. No.
Q. When was the test at Sulphurdale?
A. 2002.

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A. No, they did not, no.
Q. So what, if any, data have you kept to support the idea that the Johnson turbine works at 300 degrees Fahrenheit and 90 PSI?
A. Well, then we took it to Milford --
Q. Sir, stop.
A. I don't have any data. I don't keep data on that, but I did take it to Milford and did the same thing.

And there with the Rocky Mountain eng --
Rocky Mountain electrical engineer who worked for
Rocky Mountain Power, he was there.
Q. What's his name?
A. I don't know a name, but it was -happened in 2002.

1 Q. Please remember to speak up so that the 2 court reporter can hear you.
3 A. I'm sorry.
4 Q. Did that person who you believe worked for 5 Rocky Mountain Power in Milford provide you with 6 anything in writing after any test at Milford?
7 A. They actually wanted a contract with me to 8 buy power from me --
9 Q. Sir --
10 A. -- with my -- and I think that there is a writing -- there is a paper that they produced that 2 someone might still have. I don't know.
13 Q. What's that --
14 A. I don't know.
15 Q. What is that writing?
16 A. I don't know, but some kind of a contract
7 that they wanted to buy electricity using my turbine,
if I would set it all up for them. And the price of
the electricity I -- I didn't want to do it at that price. But that was -- that was a long time ago.
Q. Before or after 2000?
A. It was after 2000, but it was right around 2002, 2003.
24 Q. Okay. But you never signed that contract, correct?

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1 A. I don't know if I did or not. There was a 2 dispute on something. I may have signed it, and 3 there was dispute and I backed away from the --
4 the -- what we agreed to. I didn't think we agreed
5 to what they agreed to. So I think I -- either I
6 backed away from it or something happened with it, 7 but I didn't go through with it.
8 Q. Have you ever sold power to Rocky Mountain 9 Power?

13 (A break was taken from 12:29 p.m. to
14 1:31 p.m.)
15 MS. HEALY GALLAGHER: Back on the record,
16 please.
17 Q. Mr. Johnson, we're back on the record 18 after a lunch break.
19 A. Thank you.
20 Q. Did you speak with anyone about the facts
21 of this case on the lunch break?
22 A. I don't know. We might have made
23 something -- said something, and then he says, "Don't
24 tell them this question I'm going to ask."
25
I said, "Okay, I'll wait until you ask."
A. Nope. Nope, I haven't.
Q. Are there any answers to my questions that you wish to clarify or amplify?
A. Not at this time.
Q. Mr. Johnson, let's take a look back,
please, at page 8 of your report.
A. Okay.
Q. The first sentence. It starts with the
phrase, "The solar process heat."
Mr. Johnson, what's your understanding of
solar process heat?
A. Well, what I understand it to be, it's any
heat that can be used for a commercial or a home heat
that will -- will heat -- will -- will -- will
substitute for any other heat generated by any other
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source, such as -- if a -- if you use solar energy to
heat your home with and you can replace a certain
amount of that heat with -- that was generated by a
natural gas, say, or a carbon heat source, then that
would qualify, then, for the tax credit. So process
heat would be something that would replace any amount
of -- of other types of -- other types of heat
source, whether it be bio -- biometrics -- not
biometrics -- bi -- anyway. Coal or -- or -- or wood
or -- or any kind of heat used for the purpose of
doing anything with. So the definition would be that, from my point of view.
Q. Any other aspect of your understanding of solar process heat, or was that it?
A. Well, I think it's pretty clear that any time you replace any other source of generating heat with solar, that would be classified as process heat,
18 whether it's for residential or for a commercial application.
Q. Turn, please, to page 10. The last full
sentence on page 10 says, "The customer leases their Fresnel lens to a leasing company, LTB O\&M, LLC, or other appropriate entity -- entities yet to be formed. "

Do you see that?

1 A. Uh-huh (affirmative).
Q. Yes?
A. Yes. Uh-huh.
Q. Mr. Johnson, do you recall testifying on

July 1st of this year?
A. Uh-huh (affirmative).
Q. Yes?
A. Uh-huh (affirmative).
Q. Yes?
A. Yes. Oh, excuse me. Pardon me.
Q. You testified on July 1st, or around then,
that LTB O\&M, LLC, had never undertaken any activity. Do you recall that?
A. Yes, I do.
Q. From July 1st to the present date has LTB

O\&M, LLC, undertaken any activity?
A. I don't know if they have or not. There
has been discussion of -- of -- with the accountants
to see if there is an appropriate requirement that I
have to disburse some -- some funds, whether it's
from LTB or some other company. So I don't know
whether that's -- we haven't done any yet, but I
think they are anticipating doing something like
that.
Q. And, Mr. Johnson, you are the manager for

## LTB O\&M, LLC, correct?

A. Yes, lam.
Q. So if LTB O\&M was going to undertake any activity, you would either do it or know about it, correct?
A. That is correct, yes.

7 Q. So other than conversations with
8 accountants, has LTB O\&M undertaken any activity
9 since July 1st?
A. I don't believe so, no.
Q. Has the entity LTB1, LLC, undertaken any activity since July 1st?
A. No, they haven't.
Q. Has the entity LTB, LLC, undertaken any activity since July 1st?
A. No, they have not.
Q. The first sentence of the last paragraph on page 10 starts with, "The primary purpose of the solar field is to produce BTUs that are sold for the purpose of heating water or other working fluid that goes to the turbines."

Did I read that portion of the sentence
correctly?
A. Correct.
Q. Mr. Johnson, have any BTU's from the solar
field been sold for the purpose of heating water or other working fluid that goes to the turbines?
A. No.
Q. Then that first sentence goes on to say -and I'm paraphrasing a little bit, but let me know if you disagree -- the primary purpose of the solar
7 field is to produce concentrated solar radiation that
8 is sold for irradiating concentrated photovoltaic 9 receivers.
10 Do you see that?
development in developing much of the patents that
we've developed.

They have had an increase in their potential profitability because of the patents that have been issued by the research and development of the system, making it much more profitable -potentially profitable than it would be without that kind of research and development.

And so what we've done is created a bonus program that they can participant in the -- in the gross sales of AIS, but they're -- the actual money -- the bonus program is based upon the amount of money that I -- that I participate in. And I share that with my customers. And I do the research and development separate -- from a separate position than International Automated Systems.
Q. Mr. Johnson, what, if any, money has changed hands from you to any other person for the sale of concentrated solar radiation?
A. We haven't, but the contracts have --
Q. Stop.
A. Just the RaPower or any other customer that's bought -- bought equipment in the bonus program. And what it is, is I use that for development in developing much of the patents that we've developed.
A. Yes.
Q. Has any concentrated solar radiation actually been sold for irradiating concentrated photovoltaic receivers?
A. Yes. Not by LTB, though.
Q. Who or what entity has sold concentrated solar radiation?
A. Myself.
Q. Neldon Johnson?
A. Uh-huh (affirmative).
Q. Yes?
A. Yes.
Q. To whom did you sell it?
A. To the -- to my customers.
Q. Who are they?

1
2
Q. So the answer, Mr. Johnson, is that no money has changed hands between you and any other person for the sale of concentrated solar radiation, correct?
A. Correct.
(Discussion off the record.)
Q. With respect to the solar field --

Mr. Johnson, are you awake?
A. I'm awake. Go ahead.
Q. With respect to the solar field that you referred to at the beginning of this sentence, has any money changed hands between any person or any entity for concentrated solar radiation?
A. Yes. I --
Q. Who is that?
A. I have paid money to International Automated Systems for their participation in the development process of some of my patents. And in doing so, the money that was the -- the solar radiation that was being generated by all of the panels that had been -- been -- had been in production for the research and development -- and I have then paid International Automated Systems -hired them to participate in some of the research and

Page 140 development of the solar panels.
Q. Mr. Johnson, did you pay IAS for the heat that was produced?
A. Yes.
Q. How much did you pay IAS?
A. Millions of dollars or something like -total -- total, probably 10 or $\$ 15,000,000$ so far.
8 Q. Did you pay the owner of any lens any money for their lens having contributed to the production of concentrated solar radiation?
A. Not at this time.
Q. So, Mr. Johnson, what, if any, data do you have to support the idea that the solar field will produce BTUs for the purpose of heating water or other working fluid that will go to the turbine?
A. From the -- from the sciences that have been developed over the years. And from those sciences and the books that have been published there 9 are many articles and many calculations, many scientific proofs that a Fresnel lens will, in fact, produce electricity, or produce heat, or produce a hot fluid, or produce other heat sources that will replace any other heat source. All these are reproducible. All these -- all these actions are provable. They have been proved by scientific
research for the last 400 years.
because it is a Fresnel lens, the proof --
mathematical proof is that if you can prove that it
is a Fresnel lens, then every other test ever made on
a Fresnel lens is applicable to my Fresnel lens --
Q. Mr. Johnson --
A. -- period.
Q. -- who is the expert witness?
A. Me.
Q. Anyone else?
A. No. I'm -- in this case, I'm the only
expert witness. But the fact of the matter is that
every -- every test that I have purported in here is
reproducible by any independent individual if they --
if this Fresnel lens -- if this is a Fresnel lens,
which it is, then all the tests that I have performed
are reproducible by any other expert in their field
and it will, in fact, produce it.
And we have documented that fact by the
18 fact is that all of the -- all of the information in
fact is that technical datas that have shown that a Fresnel
lens does work, and it works under these conditions,
then our Fresnel -- because our lens is a Fresnel
lens, will, in fact, then, reproduce all of the same
characteristics as every other Fresnel lens. And
it's been proven by independent people, and one of
was produced and is -- is factual in its mathematical
conception of a Fresnel lens. And we have duplicated
that mathematically. And anybody can go down with
the proper training and proper books and proper test
equipment and prove that this is a Fresnel lens. And
Q. Can you give me anything specific?
A. -- it has produced heat, and it can be proven scientifically by anybody independent of me choosing to go down and do the proper tests to make sure that it works the same exact way that every other solar Fresnel lens will work.

In fact, we have an expert witness that was produced and is -- is factual in its mathematical conception of a Fresnel lens. And we have duplicated that mathematically. And anybody can go down with the proper training and proper books and proper test equipment and prove that this is a Fresnel lens. And
those has, in fact, wrote down exactly what it is.
Q. And who is that?

3 A. I don't know, but it's in your daughter --
4 it's in your data. I don't know.
5 Q. Who are these independent people?
6 A. I don't know. They're -- they're -- the
textbooks are from -- from the French, and that's why
it's called Fresnel, because of -- Fresnel is a
Frenchman who developed it. And he developed that
and -- and the mathematical formulas that he has
developed have not changed in 400 or 500 years.
Q. Mr. Johnson, you testified this morning 3 that you tested components and components connected 14 to one another thousands of times.
15 A. I have.
Q. Do you remember the testing conditions for each of those thousands of tests?
A. I do not. But I do know this, that if the sun comes up and there's not a cloud covering the sun, and if the Fresnel lens is in the -- is in a 90-degree angle to the sun, that that Fresnel lens will concentrate the light into a focal point that anybody can reproduce. And it is mathematically certain.
Q. Are the testing conditions for these

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thousands of times you claim to have tested these
things -- are the testing conditions in the data that you may have recorded?
A. Yes, they are. They all have made it clear that the sun is out and it has a certain angle to the Fresnel lens, and it does -- after you -- if you produce this angle of the Fresnel lens, you will get a focal point based upon the optics of the material being used to get the right angle. And that angle, then, will give you the proper focal point, which is reproducible.
Q. So I want to make sure, Mr. Johnson. I'm asking you now about not just the Fresnel lenses but the tests that you said you've done thousands of times with respect to many different components of this purported system.
A. It's not this sys -- you're not saying -I'm not saying of this system. I will not say that it's a separate system which have been placed together to -- to perform a -- a new system, but the Fresnel lens by itself is a system.

And you can take that -- and if you took that home and you put one of those little tubes that I showed you, and you put it in a place and you put your Fresnel lens that you brought from me and you
made your own little stand, you'll heat that water in
that little tube and that will then heat -- that will
be a higher temperature by 300 times what you'll get
out of a standalone. So, yeah, 300 to 1. And you
can take that home and use that in your home to heat
your hot water for your domestic hot water, where the
thing on its own will not, but the thing on its own already qualifies.
And so you -- the Fresnel lens does, in
fact, concentrate those sunlight, and it's
reproducible and you can take it home and you can use
2 it by yourself. So it's --
Q. Mr. Johnson, I'm going to stop you --
A. -- an independent system.
Q. I'm going to stop you there. I understand your testimony, that you believe a Fresnel lens is an independent system.
A. It is.
Q. I understand that you believe that.
A. Well, I don't care whether you do or not.

It's a fact, because it -- it's independent --
Q. We're going to --
A. -- because it's independent --
Q. We are going to move on. We are going to move on.

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A. I don't keep that data, and I don't keep it for a particular reason. And the reason is is because I do not want people stealing my data and
A. Yes.
Q. Okay. Did you write them down anywhere?
A. Yes.
Q. Is that with the data that you claim to
avoids jerky or sudden movements that might misalign
0 or damage the solar array."
Did I read those two sentences correctly?
A. Yes.
Q. What, if any, data do you have to support
those two sentences?
A. Again, we've had a lot of data on that
particular issue. And I did that -- the math -- I
did it mathematically to start with and to prove that
if you take a hydraulic cylinder and -- and you
have -- you have oil on one side of the pressure --
Q. Mr. Johnson, I'm going to stop you here.
I'm going to stop you here because I asked you what,
if any, data you have to support this -- these
sentences?
A. I don't keep that data and I -- for the
reasons I told you, because we don't want people to
Page 148
duplicate our -- our equipment.
2 Q. Okay. So at first you said you have lots
of data --
A. I do.
Q. -- and now you're saying you have no data.
A. Well, I don't have any that -- I don't
have in -- in -- at Dave Nelson's possession. There
is a patent pending on that particular thing, or a
patent issued. I don't know.
Q. Mr. Johnson, your testimony is that if any
data supporting these two sentences exist, Mr. David
Nelson has that data?
or damage the solar array."
Did I read those two sentences correctly?
A. Yes.
Q. What, if any, data do you have to support 4 those two sentences?
15 A. Again, we've had a lot of data on that 6 particular issue. And I did that -- the math -- I did it mathematically to start with and to prove that if you take a hydraulic cylinder and -- and you
have -- you have oil on one side of the pressure --
Q. Mr. Johnson, I'm going to stop you here.

I'm going to stop you here because I asked you what,
if any, data you have to support this -- these sentences?
A. I don't keep that data and I -- for the reasons I told you, because we don't want people to

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duplicate our -- our equipment. of data --
A. Ido.
Q. -- and now you're saying you have no data.
A. Well, I don't have any that -- I don't
have in -- in -- at Dave Nelson's possession. There
is a patent pending on that particular thing, or a patent issued. I don't know.
Q. Mr. Johnson, your testimony is that if any data supporting these two sentences exist, Mr. David 2 Nelson has that data?
A. That's correct.
Q. You mentioned math. With respect to this
data, did you engage in mathematical modeling for
this?
A. Yes, and anybody that would dupli -- do
the same mathematics will come up with the same
21 you put a -- a hydraulic cylinder with -- you have --
22 Q. Stop.
23
24
25
A. That's correct.
Q. You mentioned math. With respect to this 16 this?
Q. Stop.
A. -- pressure on both sides, it does work.
Q. Stop. Stop.
A. Sorry.

2 mathematical modeling, did you do to get the data 3 that supports those two sentences?
A. We built then -- we built a -- a model

5 that would reproduce the characteristics that we are
6 involved in making a commercial -- the commercial
that would reproduce the characteristics that we are
involved in making a commercial -- the commercial
application.
Q. Where is that model?

9 A. It's in the off -- you saw it down there 0 in the -- in the Oasis building. You saw it work. It had a little -- it had a cylinder this big, and it had a cylinder this big on top. And it had all the hydraulic system right there. It had the computer system right there. It had all the references and all the -- all the technology that referenced it. We hooked it up and made it work for you.
Q. Mr. Johnson, are you talking about the moment on our site tour where one of the Fresnel arrays moved at the top of a tower?
A. No, that was after that. It was in the office. When we walked through the office, you walked through it. You wanted to look at everything. We showed you that. And we showed you how the -- how the hydraulic systems turned the mechanisms, making it very accurate.

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Q. What, if any, other testing, besides

You even have a -- if you go back on your cameras, you should be able to find it.
Q. And if it's not on our site visit video
then it may not have happened on our visit; isn't that right?
A. Well, it may not, but I don't know that he got everything there, but we showed it to you. It was right at -- right in -- you had to see it as you walked through the door. It was right there. You couldn't even miss it. But I would have showed you that, as well as when I showed you the new -- the other turbine and the other -- the mechanisms around there.
Q. So what, if any, testing did you do with this model that you described?
A. We then tested it, and we made sure that mathematically it was accurate with the mathematics that we had designed.

We then designed a computer program that would automatically track the sun.
Q. Does "we" mean you, Mr. Johnson?
A. My son wrote the program for the --
Q. Who is your son?
A. -- actual tacking.

Randy. Randale Johnson.

1 Q. Okay. And was this model ever connected 2 to any other component in model form?
3 A. We didn't need to on the -- on the -- on
the -- on the Oasis plant. It was designed to
demonstrate that, in fact, the system does work. It does track the sun.
7 Q. Okay. And, Mr. Johnson, what, if any, 8 data do you have from any testing on the model of the 9 tracking system?
10 A. Again, I do not keep any of the data.
11 Q. All right. You talked about mathematical modeling and a physical model.
A. Right.

14
Q. Have you done any other testing that provided data that supports these two sentences?
A. All of the -- all the towers out in the
field have that mechanism on it, and they do operate.
And you saw one of them operating there while you were there.
Q. And what, if any, data do you have from the actual towers out on the R\&D site that supports these two sentences?
A. We don't have any actual data, but we -anybody can reproduce those.
25
(Discussion off the record.)

1 I don't -- I don't have any data, no. But
2 we -- but it's reproducible by anybody that deals --
that's trained in the field of hydraulics and would
understand the principle of hydraulics -- would
5 understand that the data that we -- that we could, in
fact, use can be reproduced by anybody trained and an expert in the field of hydraulics.
8 Q. Sir, do you recall the testing conditions for any of the tests that you did on the towers out 10 in the field?
11
12 conditions; some under wind loads as high as 35, 40 13 miles an hour, and some -- some without any wind,
14 some with the lenses in any particular configuration
15 so that we could tell what kind of pressures and what
16 kind of damage we could expect from any kind of wind
17 load. And when we want to move the lenses away from
18 the wind load to see what the damages would come and
19 what kind of a preparation we would have to do in
20 order to anticipate a windstorm coming through and
21 when to put the lenses in a position where they
22 wouldn't be damaged by the wind.
23 And so, yes, there is a -- there is a --
24 there's lots of things that we tested those things
25 for. And they are reproducible by anyone.

1
Q. Let's turn, please, to page 16. We are still on Plaintiff's Exhibit 643. In this section, Mr. Johnson, you're talking about solar receivers, correct?
tower and transferring that energy to a heat source
fluid."
Did I read that correctly?
A. Right, but the theory -- but you left out the first sentence.
Q. Okay, but the sentence I read talks about solar receivers, correct?
A. Right, but you talked about the whole paragraph. The whole paragraph does not exclusively talk about the receivers.
Q. Okay. Let's move on. All right. So
we're talking about solar receivers. That same paragraph also says -- I'm sorry. Actually,
returning to the sentence that I read.
A. Okay.
Q. So, Mr. Johnson, you have not decided
which solar receiver to use? Is that the case?
A. Well, whether we have or whether we haven't isn't the issue.
Q. That's my question to you, sir. Have you decided which to use?
A. Yes, we have. Yes.
Q. Which one?
A. We are using the -- the one that has the coils of copper with -- sandwiched in the glass. And we've decided that probably is going to be the most efficient and cost-effective system.

And, again, the heat source is -- the heat source that heats that solar collector is developed by the process heat developed by the solar collector, which is the process heat that you could also use -if you wanted to, you could use a fire of any kind and heat the same -- the same thing using hydrocarbons.
Q. So are you talking about the vacuum tube system that you describe in the next paragraph on that page?
A. No.
A. Yeah, which -- which place?
Q. On this page generally.
A. No. Not ex -- not exactly, no. Huh-uh.
Q. Okay. So the second sentence of the first
paragraph says, "Accordingly, the Johnson turbine
version of the IAS system may utilize a variety of
solar receivers that are capable of receiving the
tower and transferring that energy to a heat source
fluid."
Did I read that correctly?
which solar receiver to use? Is that the case?
haven't isn't the issue.
Q. That's my question to you, sir. Have you
decided which to use?
end
And, again, the heat source is -- the heat
collectors --
4 A. No.
5 Q. -- in the consequent paragraph?
6 A. No.
7 Q. No.
8 A. Those would all work. They're not as cost
-effective as the one that we later developed. We
were anticipating using one of these, but we decided
that from a cost standpoint it was better to utilize
something different.
Q. Okay. So, Mr. Johnson, what, if any, data
do you have that reflects the testing you did with
the vacuum tube system?
A. We gave that to you, I believe. That --
that information was given -- we purchased that and
we gave that information over to you.
Q. Mr. Johnson, I object to the
responsiveness of the answer.
Please read back my question.
(Record was read as follows: "So,
Mr. Johnson, what, if any, data do you have that
reflects the testing you did with the vacuum
tube system?")

1 temperature that the pressure on the -- on the oil 2 broke the glass tube.

3

We then decided that we would use a molten salt, which does not have any vapor pressure. And then we used a collector system to put oil through the -- the -- the molten salt to collect the heat.
And that worked very well. And the -- that's been over the past six months. But since that time we've decided that I wanted to change into a more economical way of producing a receiver for the -- for the solar conduct -- concentrated system.
Q. Mr. Johnson, you said that you had collected data for the past six months?
A. Yes.
Q. Did you have any data for testing of the vacuum system before the past six months?
A. Only what we had online. And we validated that their -- that their equipment was accurate.
Q. What do you mean, "online"?
A. It was a company that made those. We validated that their system did, in fact, produce -we weren't sure of the temperature that their -- they didn't indicate what temperatures their glass tubes -- or what kinds of pressures that their glass tubes would encase. And so we had to re -- we had to

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make our own determination of whether or not we could use their glass tubes or we would have to develop our own glass tubes using a better glass than what they had, because their temperatures were only between 124 degrees and 154 degrees. And so we needed to know whether or not that glass would -- would take the temperatures and operate within the temperature limits of our system.

And it didn't. And so what happened is, is even though the second demonstration, using molten salt, did, in fact, work, it -- the -- the -- the actual glass become plastic, because of the temperatures reached, and we felt like -- that it would be dangerous then to have something like that in operation where it may become plastic and then slip out of its -- its proper place and maybe cause some harm.

So that was the biggest reason why we decided that probably that wouldn't be the best system. In fact, that's when we decided that we would move toward the other system that we had available to us. This system we had available to us has been in operation for over five years.
Q. Stop. Stop, stop, stop.
A. Okay.

1 Q. When did you first start testing the 2 vacuum tube system?
3 A. About six months ago. Six to eight months ago.
5 Q. So the only testing that you've done with 6 the vacuum tube system has been in the past six to eight months?
8 A. That's correct.
9 Q. What about the solar receiver similar to
0 the type used with parabolic lens collectors, when
did you start testing that receiver?
A. About two or three years ago.
Q. And where, if at all, is the data that you kept from those tests?
A. I did not keep any.
Q. When you say you didn't keep any, do you
mean you sent the data to Mr. Nelson?
A. No, I don't think I even kept any. We decided that it was not practical.
Q. How long did you test the second type of solar receiver before you decided it was not practical?
A. Oh, a period of maybe three months.
Q. What was wrong with this one?
A. The biggest concern we had was because of

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the way the piping had to be placed, there was a gap between the actual light and the receivers, and it was creating a problem for us to get the efficiencies from the system. The same -- the same thing applies to the system being used in the -- in the parabolic mirror system, where you have a -- a problem with the
7 light coming on an angle that's different from a
890 -degree angle. The -- the glass itself becomes
9 a -- a refractory -- creates a retractive angle and 10 moves the energy around the pipe rather than through it. And that's the biggest problem that the -- the 2 parabolic mirrors have, is that same system. And 13 we've decided that because of the gap that was required and the angles that the light could penetrate into the receiver would -- would actually refract around the system and not produce the -- not deliver the energy in the proper place.
Q. So, Mr. Johnson, around when did you reject the second type of solar receiver for use in your system?
A. It was -- it was several years ago. We just had it around for this length of time. We wanted to show it, but we never anticipated using it.
Q. Did you say several years ago?
A. Yeah. Yes. Excuse.

## Is that right?

A. Correct.
Q. And when did you start testing with this third type of solar receiver?
A. These -- this variety of system that was -- has been in the development process for over
eight -- eight or nine years, this is the first one we used. We used a variety -- we used a -- a similar system in Mesquite in 2005.
Q. Mr. Johnson, where, if at all, is the data that was generated by testing this third type of solar receiver?
A. Again, I don't keep the data. If I feel like there is a patent that might be applicable to it, we -- then I turn it over to Dave. If not, I just -- I just get rid of it. I usually put it through a -- what do you call it? Anyway, I destroy the data.

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1
2 th
Q. For the testing you performed on this third type of solar receiver, was it only out in
21 third type of solar receiver, was it only out in
22 real-world conditions or what were the testing conditions?
A. No, we could -- we -- we originally did all the testing in -- inside, over a similar -- not
Q. Do you believe you've sent any data from the testing of this third type of solar receiver to Mr. Nelson?
A. I don't believe I have, but I don't really know. We do have pictures of it, though. We have -we have pictures of it being in use.
Q. Mr. Johnson, how many of these third type of heat exchangers do you currently have?
A. Right now, the final version we only -- we only produced one to get the final test of. But the actual -- the actual product is ready to be mass produced. And all of the drawings are complete and -- and will be sent to China to have them made in -- in the quantities that we will -- we need, other than the small quantities we'll use out in our Delta site. But the drawings are all complete.
Q. Mr. Johnson, currently you have one of

23
this exact exchanger, but similar. The ones we've been testing for the past ten years or --
Q. Sir, I'm asking about this. In your
report, this third type of solar receiver.
A. No, it's been tested in -- it was firstly, like I said, doing mathematical models.
7 Secondly, then it was tested in the inside 8 to make sure that the heat -- the transfer fluid 9 would transfer through the system economically, with
0 the -- with the least amount of restrictions placed
1 upon it, to use the least amount of energy and still get the same heat transfer.

We were using a different heat source other than the solar heat source to -- to heat the system to see what kind of heat exchange would take place within the piping, the size, the area, the space of the total area of the heat exchangers. And then by doing that we were able then to create the heat exchanger in the proper dimensions and the proper sizing of the pipe in order to get the least amount of restrictions.

Then we -- then we placed the glass over the heat exchangers, and then we determined how the heat loss was from the -- from the manufacturer's heat specs on their -- on their new glass that they

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gave us, and we figured those from -- mathematically using the trans -- what do you call it? The trans --
heat transfer coefficients and see whether those heat transfer coefficients were accurate, and then what kind of insulations we could use around that that 6 would substitute for that and get --
7 Q. Mr. Johnson --
8 A. -- the same kind of heat.
9
Q. -- I'm going to stop you. I'm not asking for a litany of everything you have ever done with the heat exchanger.
A. Sorry.
Q. Where are the mathematical models that you generated to test out this receiver?
A. Again, I don't keep those.
Q. You don't have them?
A. I don't keep them, no.
Q. Where did you test this third type of solar receiver indoors?
A. At my Oasis building there, in one of the rooms there that we have available for that very purpose.
Q. What was the heat source that you used?
A. High-intensity light.
Q. Have you ever tested this third type of

## Page 165

solar receiver out on a tower?
A. Yes.

3 Q. When?
4 A. Two weeks ago we placed it in the tower
5 and -- we have a video of it. And it has, in fact,
6 produced the same amount of efficiencies that we --
7 that we gain in our -- in our mathematical models as
8 well as the -- the actual testing using the high
9 temperature, high -- high temperature light and --
and so we -- we did that.
11 And we also showed --
12 Q. Okay, stop, stop.
Had you ever, before two weeks ago, tested
this third type of solar receiver on a tower?
A. We had tested similar models --
Q. Sir --
A. -- but not this exact.
Q. -- listen to my question --
A. Okay.
Q. -- and answer my question.
A. Okay.
Q. Please read it back.
(Record was read as follows: "Had you
ever, before two weeks ago, tested this third type of solar receiver on a tower?")

1 A. The only difference between this tower --
2 Q. Sir --
3 A. -- and the last tower is --
4 Q. Yes or no?
5 A. Okay. No. We haven't tested this one
6 because we only got the glass -- the special glass
7 to -- to mai -- to maintain the temperature. And
8 that was the reason why we went to this, is we
9 finally found a glass that would operate --
10 Q. Stop, sir.
11 A. -- with the temperatures.
12 Q. Stop.
13 A. But similar -- we did the glass -- we have 4 used glass --
15 Q. Mr. Johnson --
16 A. -- glass panes in the --
17 Q. -- stop. I'm not -- I'm not interested
8 in --
A. -- but not this glass pane.
Q. -- in the glass.
A. Okay. Well, that's the only difference.
Q. Okay.
A. Okay.
Q. This third type of solar receiver --
A. Okay.
Q. -- that you describe in your report --
A. Right.
Q. -- the first time you tested it was two
weeks ago, correct?
A. If you count that as the -- if the -- if
the difference is -- is glass, yes. We have tested it with glass but not this type of glass.
8 Q. What, if any, data did you generate from the test two weeks ago?
Q. Any other data?
A. -- in the process.

No.
Q. In the course of the testing two weeks ago, was the receiver then connected to any tubes or other piping to move the heat transfer fluid anywhere other than the receiver?
A. No. Well, it came out of the receiver, obviously, and went into a heat exchanger too so we could measure the temperatures of the fluid. But, no, it didn't get to the turbine, if that's what
you're saying. It got to a different -- a different place. We were able to transfer heat from that fluid into another fluid. If that's what you are saying, then, yeah, we did that.
1 solar energy fields.
Q. Who produces it?
A. I think Exxon does. I'm not positive,
though. I think it's an Exxon product.
Q. Do you know the brand name?
A. No, I don't. It's -- it's on the -- it's on the container that it came in, though.
Q. Do you keep track of what the temperature of the oil was inside the receiver?
A. Yes, we did.
Q. How did you do that?
A. With a thermometer.
Q. You had a thermometer inside the receiver?
A. Yes.
Q. What was the temperature?
A. It was right around $800-800$ to

900 degrees, at which time we got out of the way. We
don't know how high the temperature went after that,
because it blew all of the oil out of it.

## 1 Q. Sir, say again.

2 A. It blew all the -- it got so hot that it 3 blew all the oil out of it, evaporated it. Caused it 4 to go into a vapor.
5 Q. Doesn't sound like a very successful test 6 to me.
7 A. Sounds like a perfect test to me.
8 Q. So it's successful when components blow 9 up?
10 A. Well, all we were doing is just testing
11 where the point is of how fast you have to maintain
12 the fluid in order to keep the fluid below that
13 critical temperature point. We wanted to see what
14 temperatures it would reach, and then we can
15 calculate from that how fast the fluid has to go, the
16 specific heat of the oil and how -- and how fast the
17 fluid has to be transported. And then if something
18 breaks, what is required to have a -- have a position18
19 where it would flash and -- and the vapor pressure
20 would expand into a safe area without causing any damages.
22 Q. Mr. Johnson, what's the aperture size of 23 the solar receiver?
24 A. About six inches, something like that. 25 Six to eight inches.
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1 Q. Six inches square?

2 A. No, it's round. Six to eight inches.
$3 \quad$ Oh, the -- the size of the receiver?
4 Q. The size of the aperture in the receiver.
5 A. Well, that's two feet by two feet.
6 Q. The aperture of the receiver, so that's a 7 square?
8 A. Uh-huh (affirmative).
9 Q. Yes?
10 A. Yes.
11 Q. So what is six to eight inches in 2 diameter?
13 A. That's the focal point of the -- the focal
14 point where the major light -- the energy is -- is
15 concentrated at is the focal point. That -- that
16 would be the aperture of the lens itself.
17 Q. Well, sir, I believe what you are describing is the solar image.
A. Exactly.
Q. Yes, so the solar image --
A. About six inches.

22 Q. -- of the concentrated solar radiation
23 from the Fresnel lens array is six to eight inches?
24 A. Correct.
25 Q. And that, right, hits the solar
receiver --
2 A. Correct.
3 Q. -- in the receiver's aperture, which is
4 two feet by two feet?
5 A. Correct.
6 Q. How big is the receiver itself? What are its dimensions?
$8 \quad$ A. It's two feet by two feet.
9 Q. Turn your attention, please, to
0 Plaintiff's Exhibit644, Dr. Mancini's report on page 24. Is the receiver that we've been talking
about the picture that we see in image 5(c)?
A. No, it's 5(a). It's the -- it's the coils.
Q. Take a look at 5(c), please.
A. 5(c) is the vacuum tubes -- the evacuated tubes.
Q. So where do those go?
A. They were just used for testing. I don't use them.
Q. Oh. So those vacuum tubes in 5(c) are the vacuum tube system that we discussed as your first option for a solar receiver?
A. Well, actually, it was the first one. We just -- we were looking for a better -- a better

Page 172
glass --
Q. Stop, Mr. Johnson. I just want to
understand what we're looking for. And if you look back at your report on page 16. Page 16 --
A. Okay.
Q. -- of Plaintiff's Exhibit 643.
A. Okay.
Q. You say here, "The first is a vacuum tube system."

Do you see that?
A. That was just a reference to that first -what I'm going to explain.
Q. I understand that.
A. It isn't the first one I'm using.
Q. I understand that, sir. But is the vacuum tube system that you identify on page 16 of 26 of your report the same thing that we see in 5(c) of Dr. Mancini's report?
A. Correct, but that's not the one you're alking about.
Q. I understand that.
A. Okay.
Q. I understand that.
A. All right.
Q. Okay. So now, Mr. Johnson, your testimony

1 is that the image in $5(\mathrm{a})$ of Dr. Mancini's report,
2 Plaintiff's Exhibit 644, is the third type of solar receiver that you address in your report.
$4 \quad$ A. Except for the type of glass we use.
5 Q. Mr. Johnson, please take a look at page 18 of your report, which is Plaintiff's Exhibit 643.
7 A. Okay.
8 Q. The -- there is a paragraph that started
9 on the previous page and continues on this page.
10 Do you see that?
11 A. Okay.
12 Q. The last two sentences -- oh, and let me check this with you first. This paragraph is still talking about the third type of solar receiver in your report, right?
16 A. Correct.
17 Q. The last two sentences of this paragraph say, "This system is approximately 95 percent heat absorbent."

## A. Okay.

Q. "It retains between 95 to 98 of the
heat" -- excuse me -- "95 to 98 percent of the heat put into the system and loses a minimal amount of heat."
25

4 the first sentence, that the solar receiver is
5 approximately 95 percent heat absorbent?
6 A. That's -- that's mathematically provable
by the -- by the -- by the material that we used and
the heat condition -- heat trans -- heat transfer
co -- coefficients to define those characteristics.
So that this, when it was done
mathematically, to start with, to demonstrate that
the -- that the material itself was capable of -- of retaining at least that much, and possibly more,
because of the heat transfer character coefficients.
The second tests were done by an actual measurement of the device for a period of, say, one hour, and it retained its heat between 95 and
90 percent of the system. So that would make it so it would be possible, even if the system moves slightly, and even got out of -- out of focus --
Q. Stop, sir.
A. -- it would still retain --
Q. Stop.
A. -- the heat.
Q. That's okay. You talked about math as one
Q. Did I read those sentences correctly?
A. Yes.
Q. What, if any, data do you have to support18

1 Q. Where does that wire end so that you can read the temperature?
3 A. Just goes to the -- to a place where I can
4 stand and watch it. If we need to move on it, we
5 have a lift that we can get up to where the receiver
6 is and -- and measure the temperatures right there at the lift.
Q. So is the readout of the temperature somewhere installed on the outside of the receiver itself?
11 A. It's installed where I can hold it so I can look at it.
Q. And what I want to understand is where is that, like, in physical space.
A. Just wherever I happen to be with -- with 6 the device. And if I use a lift, I use a lift to get 7 up to the point where the -- where the length of the
18 wires are such that I can -- I can watch the
19 temperature and still maintain a safe distance
20 between me and the heat source. It's called a man 1 lift.
22 Q. So, Mr. Johnson, you testified about a 3 thermal insulated wire --
A. Uh-huh (affirmative).

25 Q. -- that is inside the receiver.

1 A. Well, I stick it up the tube. It goes up
2 the tube, and I can cap it off and then put oil into
3 it , and I can get a temperature reading on it.
4 Q. Yeah. How do you maintain the integrity
5 of the system if you are sticking a probe into a tube 6 in the receiver?
7 A. Well, the tube has to come out somewhere
8 in order to transfer the heat to the fluid somewhere
9 else. And where that comes out, that's where I put
10 the probe.
11 Q. So if you put a probe in where the heat 2 transfer fluid would come out --
A. Right.
Q. -- then when you're doing the temperature readings inside the receiver --
A. Right.
Q. -- it's not connected to anything
elsewhere where it would send the heat transfer fluid, correct?
A. No. You put a little T in it and you put

21 the -- your measuring device through the T and then
22 the fluid comes out. I mean that's --
23 Q. Speak up, sir, please. She needs to hear 4 you.
25 A. I'm sorry. My voice is getting wore out.

1 2 temperature measuring device in the $T$. That's fairly common. I don't think that's a -- I don't think 4 that's an issue. I think that's the silliest thing 5 I've ever heard.
6 Q. Have you -- have you kept track of the 7 various temperatures you've recorded inside the solar 8 receiver?
9 A. Not pertinent. I -- I use it for my own 0 information, but I keep those things where no one else can see them.
12 (Discussion off the record.)
13 Q. How do you know, Mr. Johnson, that the receiver loses a minimal amount of heat only?
A. Well, you can measure the temperature when you're -- when you're fully -- when the system is fully heated. And then you cap it all off and you don't have any transfer fluid moving. And then the heat that's captured in that area then will stay -stay there. And as long as your insulation factor on your -- on your piping is -- is such that it -- they have minimal heat loss on your piping structure, the rest of your heat loss then would come from the degradation of the heat leaving the area of the -- of the system. And it doesn't.
Q. No, sir.
Q. No. Mr. Johnson --
A. It has 60 percent less --
Q. Mr. Johnson, stop.
said no, and you said why.
Q. Sir --
A. -- the system down in Ivanpah --
A. Now, you asked the question.
A. Ivanpah does not have any insulation --
Q. I object to the responsiveness of the

THE REPORTER: Hold on. I can't -- stop.
I can't get you both at the same time.
(Discussion off the record.)
A. You said was it relevant to the IRS, and I
A. And I said the reason why is because you
allow the -- the -- the tax credits to be given to Ivanpah, which they have no way of insulating that heat source, and they lost 70 percent of what they predicted they were going to get.
5 Q. Object to the responsiveness of the answer.
insulating around their -- their piping at all that
receives their heat.
Q. Object to the responsiveness of the
answer. was involved in doing it. bathroom break. a break, Mr. Snuffer. issue again, go ahead.

2:51 p.m.)
A. And that's why it's not efficient.
Q. Stop talking about Ivanpah, Mr. Johnson.
A. I am not going to stop talking about
vanpah. I'm going to talk about it until I die.
That's the stupidest thing I ever heard, and this guy
MR. SNUFFER: We've been going a little over an hour and a half. Why don't we take a

MS. HEALY GALLAGHER: By all means.
THE WITNESS: Okay. All right. No, I will not stop talking about something that you people have done and have never corrected it, and it is costing the public thousands and millions and hundreds of millions of dollars. And it's still costing the government. And me, personally, my tax dollars is going to fund that still.

MS. GALLAGHER: Please take your client on
THE WITNESS: So you want to bring up that
(A break was taken from 2:44 p.m. to
MS. HEALY GALLAGHER: Back on the record
cavity into the atmosphere.
11 The piping then is totally insulated from
2 the environment which is inside the cavity.

And so when heat is not being introduced to the system through the solar energy, the heat will still maintain a -- will still stay into the -- into the cavity because of the insulative capacities of the material used to isolate the coils -- heat coils or heat pipes from the outside environment.

At . 064 you would get less than one
percent out of that. So this is -- this is --
we're -- we're obviously a little bit higher. But --
so we -- we have approximately said 95 percent, which is actually -- it is a -- retains even a higher
amount than 95 percent.
Q. And, Mr. Johnson, what, if any data, have

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you kept to track the ways that you have decreased heat loss from the solar receiver?
A. Again, because this is proprietary
information, we do not share that, and it's
proprietary the way we do things. We do not share
this information. And so we keep it separate. And
I -- and I do not have to -- I do not keep it,
because we do not have the security necessary to keep
my information from being taken or given out to the
other people, so -- therefore, I -- I usually destroy that information.

However, it is reproducible, both mathematically and experimentally, by anybody that -that has the capacity to understand the system.
Q. So, Mr. Johnson, you do not keep data on what you've done to minimize the heat losses from the receiver, correct?
A. No, because I can -- I can -- I know what it is and I can reproduce it.
Q. So you do not keep data regarding the efforts that you've taken to reduce heat losses from the solar receiver, correct?
A. No, because it's not necessary.
Q. Is my statement correct?
A. Yes, your statement is correct.

1 Q. Let's take a look, please, towards the bottom of page 18 of 26 of your report.
A. Okay.

4 Q. In the midst of the first sentence is the
5 phrase, "IAS is in the final stage of developing a
6 converter system of concentrated thermal solar energy
7 using the Fresnel lens system for a concentrated
8 photovoltaic system (CPV system)."
9 Do you see that?
10 A. Right.
11 Q. What, if any, data do you have regarding 2 the CPV system?
13 A. It's in the patents, I think, that have 14 just been issued.
15 Q. Mr. Johnson, what, if any, data do you
16 have regarding the CPV system?
17 A. Well, I have the patents.
18 Q. So your answer is the only data you have
19 is the patents?
20 A. That's the only thing necessary. I have 21 the patents.
22 Q. Okay. So other than the patents, what, if 23 any, data do you have from testing of the CPV system?
24 A. I think the patent has quite a bit of data 25 associated with it. In order to get the patent, it

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had to work.
2 Q. Object to the responsiveness of the question -- of the answer.

Would you please read back my question?
(Record was read as follows: "So other
than the patents, what, if any, data do you have from testing of the CPV system?")
A. I don't actually keep any data on hand. If I have any data it's in Dave's -- Nelson's hands, and he keeps that for me if I need it to refer to it all.
Q. So, Mr. Johnson...

13 A. Oh -- excuse me. There is one other thing 14 that I might add to this.
15 We do have a report -- an expert report, a
16 white paper you might call it, from BYU, that has
17 validated the -- the CPV system and the voltage
18 control board. So you have that.
19
20 paper regarding your CPV system?
A. It was the dean of the electrical
engineering department, but I don't know his name.
Q. When did this person provide you the white paper?
A. Probably two years ago or so. I don't

that this is a very unique and new way of performing whatever it is you're getting the patent about, and they have -- and no one else has been able to do that.
5 Q. Do you believe that the patent office has made sure that that technology works?
A. In most cases it does. It doesn't allow you to patent something that doesn't work. These are very intelligent people and they are -- they are specialists in their field. And so when they -- when they evaluate the circuit they would understand just how the circuit would work.
13 And when I defy that -- because they would
14 have to know because they -- they have to know how
15 the thing works in order to evaluate it and compare
16 it with other systems or products in the same -- in
17 the same area of expertise. And so, yes, they
18 would -- they would definitely know whether it would work or not.
20 Q. Why do you think the Patent and Trademark
21 Office would try to figure out whether a technology 22 would work?
23 A. They would have to know whether the 24 technology works or not in order to make sure that it
25 wasn't -- it wasn't -- it wasn't creating some kind

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1 of an infringement on someone else's technology or 2 patents. They have to know that.
3 Q. Why do you think that?
4 A. Because I get the reports on my product.
5 And they tell me what -- what -- what other products
6 are close to it and describe their functions and
7 applications, and see whether or not mine -- my
8 applications or functions are within the realms of
9 theirs. And so they would have to understand the
difference. If they couldn't, they could not have
evaluated whether or not my patent would infringe on theirs.
Q. Do you think, Mr. Johnson, that the Patent 4 and Trademark Office engages in testing of the 5 technology that you submit for patents?
A. In some aspects you have to -- you have to give them information of what -- what you've done and how you've developed the product and what information is required to make the thing operational.
Q. Object to the --
A. And from that they would have to then understand how the thing would work.
Q. Object to the responsiveness -- stop, Mr. Johnson.
A. I'm not -- I'm not going to argue with you
about the damn patent office.
2 Q. Mr. Johnson --
3 A. If you want to go argue, go argue with the patent office.
Q. Object to the responsiveness of the answer.
$7 \quad$ Would you please read back my question?
A. You asked me what I believed and you want an argument. I told you what I believed, and now you want to say that I don't.
Q. Mr. Johnson, we need to give the court reporter a moment to look back at my question so that she can read it to you again.
A. You said, "Do you" -- "do you believe," and I said, "Yes."
Q. Sir --
A. And I described why I believed that. And now you want to say that -- that isn't the way it is. If you want to be over on my side, then you come over and answer the questions. I gave you the response that you asked for, and now you're telling me I'm full of shit, and I'm not. And that's exactly what it is.

Now, if you want to believe something else about the patent office, that's your prerogative.

1 What I believe about the patent office is my prerogative. And l've had a lot of experience with it. And that has been my experience. And I just demonstrated why I believe what I believe.
5 Now, if you have some other belief, keep
it to yourself, because it doesn't bother me. Otherwise, get over here.
8 Q. Sir, please stop talking so the court 9 reporter --
10 A. Okay.
11 Q. -- can read back my question.
12 A. Go ahead.
(Record was read as follows: "Do you
think, Mr. Johnson, that the Patent and
Trademark Office engages in testing of the technology that you submit for patents?")
17 A. Yes, they do. Did you know that a -- a mathematical formula is considered a test on a product?
Q. Object to responsiveness of the answer.
A. Well, you asked me what I believed and why, and I just answered that question, so don't be crossing it out. That was exactly the question you just asked.
Q. Object to the responsiveness --

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Q. So what makes you believe, sir, that the Patent and Trademark Office itself is reproducing the technology -- stop -- that you submit for a patent?
A. Because -- because engineering and

1 electronics is a highly developed skill and -- and
2 technology, and the mathematics that it represents is
3 full and highly developed, and it can be reproduced
4 mathematically. And from the mathematics, that
5 circuit works. And if it works mathematically, it
6 works. And there isn't any question about the fact
7 if it works mathematically that it will work
8 according to the mathematics that you put together on 9 it.
10 And the patent office understands that principle. And so if I developed a circuit that claims to do certain things and I explain the mathematics behind that circuit, that circuit will function exactly like the mathematics it defines. And that's how everything in this country is -everything in electronics and engineering is built, from the mathematics.
Q. Do you have any --
A. It's perfect models.
Q. Do you have any other reason to be believe that the Patent and Trademark Office is reproducing your technology that you submit for a patent and determining that the technology works?
A. Look, l've answered that question enough, and I'm not going to get into whether the patent

Page 196
office are smart people or not. I understand that the government employees -- and government employees -- you understand what government employees' level of intelligence is, then you determine what their intelligence is. I think
they're highly intelligent people or they wouldn't be doing what they are doing. If you choose to believe whatever you want to about them, I don't care.
Q. Mr. Johnson, if, in fact, the Patent and Trademark Office does not make sure that technology is submitted in support of patents work, does that do
12 anything to your --
A. It would invalidate the patent.
Q. Stop.

Does that do anything to your belief that, in fact, your technology works?
A. I never based my technology working on my patents. I never said that I did. I said that they,
19 themselves -- if you -- if you have a piece of
20 equipment that I can prove will not function
21 according to the demonstrations that you've defined 22 in your patent, and I cannot reproduce that system 23 using that information gained in that patent, your 24 patent is invalid. And that's a fact, and it says 25 right in the regs that's a fact.
Q. Mr. Johnson, you also just said that if an electronics idea works mathematically, then it works in the real world.
A. That's correct.
Q. Do you believe the same is true for principles underlying the transfer of solar radiation from the sun through a system to a turbine to produce electricity?
A. Yes. It's a mathematical certainty.

There is no question about it. We've -- we've
operated our whole -- our whole intellectual property rights on that very foundation.
Q. Is there any circumstance where real-world conditions might interfere with that perfect mathematical precision and operation?
A. It depends on the technology that has been fully developed. But there is no question about the fact that Fresnel lenses -- the mathematics on Fresnel lenses have fully worked.

None of them have been challenged in any kind of a physics potential and said anything that they don't work. Neither has anybody else been able to challenge the Fresnel lens laws of physics, that there are certain laws that will bend light. If that light bends, they -- the prism -- the prism effect on
lenses have been well documented throughout history. They've never been challenged, never been disproven, and the mathematics that define those have never been shown that they are without any -- without any way of saying that they don't work.

If you make a model that represents that Fresnel lens with the mathematics that it defines, it will work, and that my system does work. And it has been proven it works. And -- and so we could go back and say, yeah, we proved it -- we proved that Fresnel was accurate. If that's what you want to hear, fine, I don't care, but that's a fact.
Q. Mr. Johnson, please turn to page 23 of 26 of your report, Plaintiffs Exhibit 423.
A. Okay.
Q. Let's see. I'm looking at the last full paragraph on this page. And the first sentence starts, "The IAS system has been selling for several years."

## Do you see that?

A. Yes.
Q. By "IAS system," do you mean your Fresnel lens -- lenses?
A. Yes.
Q. Has IAS been selling anything else for

1 several years?
2 A. No.
3 Q. Turn, please, to page 24 of 26 . The last 4 paragraph on this page starts -- or is completely,
5 "Lastly, RaPower3 has been selling its system in the 6 open market for many years."
$7 \quad$ Did I read that correctly?
A. Correct.

9 Q. In this sentence, "system" also means lens, correct?
11 A. Correct.
12 Q. Mr. Johnson, why use system in these two places when what you mean is lens?
A. Because the lenses are a system. They are a system to concentrate solar energy. And by that definition they are a complete system. The lens angles on every curve is a component of the -- of the lens and the -- and the total -- the total curves on that real lens system makes up the total system. There are millions -- there is thousands of components in a Fresnel lens system, and those components are derived from a mathematical formula that spaces them differently as they go toward the outer curvature of the lens itself. That creates a system of components built into a system called a

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1 Fresnel lens. Those lenses are prisms. And they
2 follow the same laws of physics that every other 3 prism system does. And if you can define the prism 4 system and the coefficient that's based upon the
5 material which it goes through, you can then predict
6 the curvature and how much -- how much that will
7 curve that lens array as it passes through that
8 particular -- particular system -- that particular --
9 what do you call it? I'm getting tired. I am
10 forgetting what I'm talking about.
11 The prism. And it's -- it's mathe -- it's
12 a mathematical certainty that the lens -- the light
13 waves at that particular frequency will curve at this
4 angle, and they will spread mathematically according
5 to the wave length of each -- of the light source
16 that goes through it, and that's where you get a
17 spread in a prism. And that prism then creates a
18 small -- if you design it properly, you will get,
19 then, a small portion of the lens to scatter down at
20 the focal point based upon the coefficients of -- of
21 the system itself. So that creates a system.
(EXHIBIT 645 WAS MARKED.)
Q. Mr. Johnson, you've been handed what's been marked as Plaintiff's Exhibit 645. It's actually got two pages, so make sure you see both.


| Page 205 | Page 207 |
| :---: | :---: |
| 1 Q. And below that is a check to | 1 family limited partnership probably did something for |
| 2 Glenda Johnson dated January 26th, 2005, correct? | 2 them, so they got paid. It's in the -- it's a public |
| 3 A. Yes. | 3 company, and there's public accounting records of it. |
| 4 Q. From International Automated Systems? | 4 I do not know what it is, but I'm sure there's a -- |
| 5 A. Correct | 5 there's a receipt for it somewhere. I wouldn't know |
| 6 Q. LaGrand Johnson is your son? | 6 where it is, but that's what it would be. |
| 7 A. Correct | 7 I'm sure if we did anything illegal, I'm |
| 8 Q. Do you know, Mr. Johnson, what other | 8 sure that we would have been caught by now. We |
| 9 source of income LaGrand Johnson had in 2005? | 9 don't -- we don't break the law. Never have. |
| 10 A. In 2005? | 10 (EXHIBIT 649 WAS MARKED.) |
| 11 Q. Yes. | 11 Q. I'm handing you what's been marked |
| 12 A. Well, he's a doctor too, and so he could | 12 Plaintiff's Exhibit 649, Bates number WF-001470. |
| 13 be practicing some medicine at that time. But I | 13 A. Uh-huh (affirmative). |
| 14 think that he did get paid from International | 14 Q. Mr. Johnson, Plaintiff's Exhibit 649 is a |
| 15 Automated Systems for keeping track of the books and | 15 check from Cobblestone Center to the Howard County |
| 16 things. | 16 Tax Office. |
| 17 Q. Uh-huh. is LaGrand Johnson a practicing | 17 Do you see that? |
| 18 doctor now? | 18 A. Sure. |
| 19 A. He does when he wants to. He does it when | 19 Q. And the memo has some numbers in there. |
| 20 he wants to, so. | 20 And then it says, "For Johnson NP Family Limited |
| 21 Q. Does he have an office -- a | 21 Partner." |
| 22 office? | 22 Do you see that? |
| 23 A. No, not right now, | 23 A. Uh-huh (affirmative). |
| 24 Q. When is the last time he had a medical | 24 Q. Yes? |
| 25 office? | 25 A. Right. |
| Page 206 | Page 208 |
| 1 A. Well, the last time he -- I don't know -- | 1 Q. Why was Cobblestone Center paying |
| 2 I don't know. I have no idea, but he's a licensed | 2 something for the NP Johnson Family Limited |
| 3 doctor so he makes -- he can make money -- he worked | 3 Partnership? |
| 4 for the government one time. The government hired | 4 MR. SNUFFER: You know, I -- |
| 5 him for -- to be a -- some kind of a doctor for them. | 5 THE WITNESS: Without going -- |
| 6 Q. What, if any, employment does | 6 MR. SNUFFER: Hold on, hold on. I've been |
| 7 Randy Johnson have currently? | 7 patient, and I'm trying to get this over with, but I |
| 8 A. None. | 8 don't see how any of this relates to the expert |
| 9 Q. None? | 9 report, expert opinion. I think this is the sort of |
| 10 A. He works for the company. He works -- he | 10 thing that ought to have been asked before, during |
| 11 did work for International Automated Systems. | 11 one of the prior depositions. |
| 12 Q. When is the last time Randy Johnson had | 12 You can answer this question if you know. |
| 13 any employment outside of one of your businesses? | 13 THE WITNESS: No, I'm not going to answer |
| 14 A. I don't think he ever has. He has a | 14 the question. It's not required. |
| 15 degree in programing, though. He could have if he | 15 MR. SNUFFER: But I object. I think it's |
| 16 wanted to. | 16 beyond the scope of the purpose that we are here |
| 17 Q. To your knowledge, are your businesses | 17 today. |
| 18 Randy Johnson's only source of income? | 18 THE WITNESS: This isn't -- this isn't |
| 19 A. Yes. It doesn't mean he does anything. I | 19 part of my expert testimony. |
| 20 mean -- I shouldn't say that. I'm just kidding. | 20 MS. HEALY GALLAGHER: So, Mr. Snuffer, you |
| 21 That's a joke. | 21 agree, don't you, that bias is a fair area of inquiry |
| 22 Q. Going back to Plaintiff's Exhibit 647, do | 22 for any expert witness? |
| 23 you have any idea why IAS would have been paying your | r23 THE WITNESS: You already know my bias. |
| 24 family limited partnership? | 24 You already know that it's not -- you don't even have |
| 25 A. Yeah, they probably owed it -- they -- the | 25 to go into it. You know that I'm the president of |

1 IAS.
2 3 asked me a question.
4 THE WITNESS: I'm sorry. I didn't -- I
5 didn't mean to interrupt.
MR. SNUFFER: Yeah. And -- and that's why I thought it was a fair question when you asked
him -- it was back here -- when you asked him about
his ownership. He owns part of IAS, and he's
acknowledged that IAS has paid a little, but not a
lot, to him. And I even thought it was fair to use
Exhibit 646. But we're now into something called
Cobblestone Center, and we're talking about a tax office, and I don't know how that shows bias.
15 MS. HEALY GALLAGHER: Well, you are
16 welcome to make relevance objections. I would like
17 an answer to my question from Mr. Johnson.
18 MR. SNUFFER: My objection is not to
19 relevance; it's to the scope of the deposition for
20 which we've produced this witness here today to talk
21 about his report, and I can see no connection. I can
22 see no probable connection at all between Cobblestone
23 paying a tax bill and bias.
24 If you want to impeach his testimony in his expert report because he has an ownership

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1 interest in AIS, I think that's fair.
2
3 know how Cobblestone Center is involved in this whole 4 situation?
5 MR. SNUFFER: No clue.
6 MS. HEALY GALLAGHER: Okay. Well, I
7 happen to know that it is involved, and I happen to
8 know from Mr. Johnson's testimony earlier this year
9 that he has at least an indirect ownership of
10 Cobblestone and supposedly it's the entity that's installing all these towers.
Q. So it is a fair question, and I will have an answer to it, Mr. Johnson.
A. You can ask me if I have an ownership in 15 Cobblestone, and I do have. Whether or not that 16 check has any bearing on whether or not I have an 17 ownership in Cobblestone, that check doesn't prove
18 one thing to ownership of my company. So this is,
19 again, irrelevant to your question of showing 20 ownership.
21 If you want to show ownership, ask me and 22 I'll tell you. I do own -- I do have a relationship
23 with Cobblestone Center. I do not know what it is,
24 but I do know that there is -- is some way that I own 25 a little, small piece of it.

1 Q. And, Mr. Johnson --
A. So there you go.
Q. -- my question is, why is Cobblestone

Center making a payment to a county tax office that has anything to do with the NP Johnson Family Limited Partnership?
A. That has nothing to do with me owning or bias. All it has to do with, whether or not I have the right to write a check. I have the right to
write a check to whoever I choose to because of my
position as manager of Cobblestone Center.
I do not have to account to that check to
you unless you can show a relevance to my being biased or something to do with my expert testimony.
15 Q. Objection to the responsiveness of the 6 answer.
$17 \quad$ Would you please read it back?
A. The fact is I don't know what the check is
for. I'd -- I'd have to go back and look anyway. I don't know what that is for. It might be that we --
Q. Stop.
A. We have a little --
Q. Stop. Stop. Stop. Please let the court reporter search back in this transcript.
A. I think I do know what that's for. I

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1 don't know for sure, but I --
2 MR. HEALY GALLAGHER: Mr. Snuffer, you're 3 the one who wants to get out of here.

MR. SNUFFER: Yeah, I am.
5 THE WITNESS: I don't care. I can sleep 6 here as well as I can at home.
7 MR. SNUFFER: Yeah, but every time you
8 talk she is writing it down when she is trying to go
9 back and reread a question.
10 THE WITNESS: Oh, I'm sorry. Excuse me.
1 I apologize. That's very -- that's not very nice of
2 me. I apologize for that.
There is --
MS. HEALY GALLAGHER: Stop.
THE WITNESS: I'm just trying to finish off the question.

MR. SNUFFER: Look, if you want to be polite, say nothing. Let her do the research.

THE WITNESS: All right. I'm sorry. I'm
19 THE WITNESS: All right. Im sorry. 21 little mouthy.
22 MR. SNUFFER: I'm serious.
23 THE WITNESS: Okay.
(Record was read as follows: "My question
is, why is Cobblestone Center making a payment today.

If you know an answer and you're certain
of it and you think it relates to your bias, you can answer.
Q. Mr. Johnson, answer the question.
A. I don't know the answer to it. I have not a clue. I don't even know what the -- I've never seen the check before. So I don't even know what it is. Whether it's relevant or whether it's not relevant, I wouldn't know.

I have accounting people that take care of all of that nonsense for me.

Did I say the same thing about the judge?
Where does the judge get his paycheck from?
MR. SNUFFER: There is no pending question.

THE WITNESS: Oh. I'm just asking. If you are looking at bias --

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## been marked Plaintiff's Exhibit 650. 650 is

WF-001219. This exhibit is a check from Cobblestone Center to Randy Johnson, correct?
A. Yes.
Q. For $\$ 30,000$ ?
A. Correct.
Q. And the memo says, "Commission for July 1,

2014, to December 31, 2014," correct?
MR. SNUFFER: Objection. I don't think
this is related to the scope of the deposition, nor

1 do I think that a payment to Randy Johnson for
2 commission or anything has any reflection of bias
3 related to an expert report for which today's
4 deposition was scheduled.
5 Q. (BY MS. HEALY GALLAGHER) Mr. Johnson, 6 what is this commission for from Cobblestone Center?
7 A. I don't know that. You would have to go
8 to my accountants for all of that. I -- you'd have
9 to see the -- what the background is on it. I don't 0 have it.
11 Q. Well, is Cobblestone Center a sales 2 entity?
13 A. I don't have it. They are -- I -- what
14 Cobblestone does or doesn't do is Cobblestone's 5 prerogative, according to the bylaws, and it can sell product if it chooses to.
17 Q. And, Mr. Johnson, you are the manager for 8 Cobblestone Center; isn't that right?
19 A. That is correct.
20 Q. So what, if anything, does Cobblestone center sell?

MR. SNUFFER: I'm objecting because he's not in here today in his capacity as a manager of Cobblestone to be deposed about anything related to the business of Cobblestone. He's here today to

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1 testify about an expert report that he prepared.
2 THE WITNESS: They sell pipe.
3 Q. (BY MS. HEALY GALLAGHER) I'm sorry, what 4 did you say?
5 A. They could have sold pipe. I don't know. MRS. JOHNSON: Neldon, stop. THE WITNESS: He knows. I asked -- he
asked -- I have to answer the question. Anyway. But
9 I do not know what it's about. I don't know what
0 it's for. I would -- I would have to go to the
11 accountants and find out. If it's pertinent to the 2 case, I will; if it's not, I won't.
Q. (BY MS. HEALY GALLAGHER) $\$ 30,000$ is a big 4 check, sir. You don't know what that's for?
A. $\$ 30,000$ to an employee of his quality 6 isn't very much, according to other people. Your -7 your wages are much probably higher than his. So if 18 you want to go by that, then -- I don't know how you 19 would do that. So your wages is a big check, so, 20 okay. So how he gets paid and what he gets paid for 21 is not part of the case.
22 Q. But you don't know what that check's for?
23 A. Near a hundred thousand dollars a month
24 probably goes out of that account. I -- I do not
25 keep track of it. I don't write the checks. I have
accounting firms that go over it, make sure that everything is being taken care of appropriately and sometimes, you know, they make mistakes. We -- and sometimes accounting firms make mistakes. In fact, 5 they did at IAS, and it cost me a lot of money, okay?
6 Q. What mistakes --
7 properly accounted for.
Q. What mistakes did the accountants make with IAS's books?
A. I don't know. It's been a long time ago. They have made mistakes, and we've had to correct them on our accounting. And that is expensive. To make that correction is expensive.
Q. Mr. Johnson, RaPower3 pays members of your family as well, correct?
A. It's fine. It's legally, do it. If it's -- if you have a problem with it, then take it

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up with someone else.
Q. That's correct, isn't it?
A. It's correct, yes.
Q. RaPower3 writes checks to Glenda Johnson, right?
A. Yes. She works -- she does all the booking. You see her -- you see her signatures on the bottom of those checks.
Q. And RaPower3 pays LaGrand Johnson.
A. I'm entitled to pay him. I could pay him a million dollars a year. What difference does it make? There's not -- nothing illegal about what I pay certain people to work for me. What's the -- so what's the point?
Q. RaPower3 pays Randy Johnson also, right?
A. What's the point?
Q. Is that correct?
A. That's correct. What's the point?
Q. In fact, another company that you have ownership and manage is XSun Energy, correct?
A. Yes.
Q. And XSun Energy writes checks to your family members too.
A. I'm sure that Google writes the checks to his son and kids and wifes and grandkids and all
kinds of things.
Q. Object to the responsiveness of the answer.
$4 \quad$ Would you please read back my question?
5 (Record was read as follows: "And XSun
Energy writes checks to your family members
too.")
THE WITNESS: Will you object to that again?
10 MR. SNUFFER: Well, yeah. It's not related to the purpose we're here for a deposition today, the ex -- the expert report prepared by Neldon Johnson.

Can you anchor it somewhere in the report, somewhere in what he's written? Because I don't see the connection. We will stipulate that members of the Neldon Johnson family get paid to do work for IAS, RaPower, XSun Energy, Cobblestone Center. There's no question the family works and incurs costs and gets paid for their work and gets reimbursed for their costs. And -- and that's -- that's unrelated to his report.
Q. (BY MS. HEALY GALLAGHER) And, in fact, Mr. Johnson, if this injunction case is successful and shuts down the sale of lenses from RaPower3, your

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1 family will be cut off from a major income source,
2 won't it?
3 A. No, that's -- it hasn't been profitable.
4 I can make money other places. We have a lot of
5 patents. So I don't think we're -- we're not too
6 afraid of whether or not you win or whether you lose.
7 We have sales overseas and other products that we
8 have. And we're making deals all the time with other
9 products and patents we own. Those patents and
10 those -- the last patent is very valuable. So your
11 -- your statement is un -- un -- un -- is -- it's not
12 even reliable. I mean, the voltage control board is
13 worth billions of dollars. I can't -- it's worth
14 more than Tesla Motors. We just haven't tried to
15 develop it with anybody yet, but we are going to. We
16 are doing that now.
17 (Discussion off the record.)
18 Q. (BY MS. HEALY GALLAGHER) Mr. Johnson,
19 how, if at all, has any of your behavior with respect
20 to the sale of solar lenses changed since our last
21 set of depositions?
22 A. Well, we changed one -- two -- two areas.
23 We changed one, the way we were marketing the solar
24 lenses and -- and, secondly, we introduced another
25 product line that we're just starting to produce now.

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| :---: | :---: |
| 1 Q. How did you change the marketing of the | 1 the public without having been convicted of anything. |
| 2 solar lenses? | 2 But it still -- it still interrupts my way of selling |
| 3 MR. SNUFFER: Objection. It's not related | 3 the product. We've had to adjust, and we have. We |
| 4 to your expert opinion. | 4 are making less money. Well, we're making more |
| 5 THE WITNESS: That's right; it's not | 5 money, actually. I didn't make any money on the |
| 6 related. | 6 other way. So it helped. So good. I'm glad. I'm |
| 7 MR. SNUFFER: But go ahead and answer | 7 glad you did what you did. |
| 8 you can. | 8 Q. And what did you change the price to? |
| 9 THE WITNESS: I don't know. I just | 9 A. Six -- we changed it from a down payment |
| 10 decided to change. I just thought it was a better | 10 of 1,050 down to 650. |
| 11 business model and would create a better way to | 11 Q. Okay. But the total price still, sir, is |
| 12 market the product. | 12 \$3,500, correct? |
| 13 Q. (BY MS. HEALY GALLAGHER) Are you talking | 13 A. That's correct. We haven't changed that. |
| 14 about no longer promoting depreciation as part of the | 14 Q. Okay. So you changed the amount of the |
| 15 package? | 15 down payment? |
| 16 A. I never did promote depreciation as part | 16 A. Correct. Which is a considerable amount |
| 17 of the package. | 17 of money loss to me, personally. |
| 18 Q. So you think you changed the marketing but | 18 Q. Did you change anything else about how you |
| 19 you don't know how? | 19 market the lenses? |
| 20 A. People can still take depreciation if they | 20 A. We don't do the bonus program anymore. |
| 21 buy it correctly. | 21 That was -- that was just to do the -- to do -- |
| 22 Q. Sir -- | 22 something to do with the -- so I could -- so I could |
| 23 A. It's nothing to do with me. | 23 get the R\&D done. So that's all that was for. |
| 24 Q. Object to the responsiveness. | 24 Q. Any other changes? |
| 25 Please read back my question. | 25 A. I don't know. I -- there might be some |
| Page 222 | Page 224 |
| 1 A. Well, you accuse me of floating a | 1 minor things in there, but I don't know what they |
| 2 depreciation, and I'm saying I never did. The | 2 would be. |
| 3 statement was a statement. It wasn't a question. It | 3 Q. Between our -- |
| 4 was saying, did you promote depreciation, and I said | 4 A. Without having the contract here, I don't |
| 5 I never did. | 5 know. |
| 6 Q. Okay. Stop talking. She is going to | 6 MS. HEALY GALLAGHER: Let's take a |
| 7 review the question and read it back. | 7 five-minute break, please. |
| 8 A. Okay. Read it back. | 8 (A break was taken from 3:47 p.m. to |
| 9 (Record was read as follows: "So you | 9 3:49 p.m.) |
| 10 think you changed the marketing but you don't | 10 MS. HEALY GALLAGHER: All right. We're |
| 11 know how?") | 11 back on the record after a quick break. |
| 12 Q. Is that correct? | 12 Q. Mr. Johnson, did you talk to anybody about |
| 13 A. No, that was -- I says I -- I know I -- we | 13 the facts of this case on that break? |
| 14 changed it because we felt like this was a better -- | 14 A. Yes, I did, and I said that I am not going |
| 15 a better model. | 15 to talk -- I am here as Neldon Johnson. I am not |
| 16 Q. And I asked you how you changed it. | 16 here as the manager of Cobblestone. I'm not here as |
| 17 A. We changed the price -- the price schedule | 17 the manager of RaPower. I'm not here as the CEO of |
| 18 on it. | 18 any other company. And I will not answer any other |
| 19 Q. How did you change the price schedule? | 19 questions that have to do with the operation of those |
| 20 A. We reduced the price, because -- the | 20 companies. I am here has an expert witness, and that |
| 21 reason why we reduced the price is because you people | 21 is entirely the dilemma of this conversation and the |
| 22 are causing me trouble in the marketplace and you are | 22 limit of this hearing -- or this meeting that |
| 23 creating a bad image for me, and so l've had to make | 23 we're -- or deposition, and I will not answer any |
| 24 some changes in the way I market the product because | 24 questions. |
| 25 of how you are -- or how you are representing me in | 25 If you want to get the judge on line, I'll |

appeal it, and we will be here for two more years, and I don't really care.
Q. Mr. Johnson, since July 1st, which was our last deposition, have you been arrested at all?
5 MR. SNUFFER: That's a fair question
6 because it goes to impeachment. An impeachment is
true -- relevant even in an expert witness --
8 THE WITNESS: Most -- most of the time I'm
9 pretty easy to get along with, and I try to be very
10 nice. And I hardly ever yell at a police officer.
11 MR. SNUFFER: But you haven't been
2 arrested since then?
THE WITNESS: No, I haven't been arrested.
Q. (BY MS. HEALY GALLAGHER) Since July 1st of this year have you been convicted of any crimes?
A. No.

MS. HEALY GALLAGHER: At this time I will pass the witness.

## EXAMINATION

BY MR. SNUFFER:
Q. I just want to clarify a couple of points.

You may have covered this with statements that you made, but I wanted to make sure.

Could Mr. Mancini have performed tests and determined what the heat transfer performance of the

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IAS system was?
A. If he was qualified in his area of expertise he could have -- if he was a qualified
person and an expert in his particular field that
would qualify him in rocket science or -- or photovoltaics --
Q. I'm only asking about the heat transfers. Just let me take it one bite at a time.
9 A. I'm sorry.
10 Q. On the heat transfer, could he measure the system the same way you measure the system?
A. If he underst -- if he has the expert opinion -- if he's able to do that in his expertise, yes.
Q. So the answer is yes?
A. Yes.
Q. Would he get the same results that you get by performing the same tests that you did?
A. He would, yes.

MS. HEALY GALLAGHER: Objection. Leading.
Q. (BY MR. SNUFFER) Could he have measured

2 the lens -- the Fresnel lens's ability to produce
heat the same way you did?
A. Yes.

MS. HEALY GALLAGHER: Objection. Leading.
3 need to stop and let me make my objection so that the
court reporter is not taking two people at once.

THE WITNESS: Sorry.
Q. (BY MR. SNUFFER) Could anyone measure the Fresnel lens's ability to produce heat?

MS. HEALY GALLAGHER: Objection. Leading. THE WITNESS: Yes.
Q. (BY MR. SNUFFER) If they made the measurement of the lens's ability to produce heat,
would they achieve the same result -- or get the same
result as you did?
MS. HEALY GALLAGHER: Objection. Leading. THE WITNESS: Yes.
Q. (BY MR. SNUFFER) Can anyone measure the flow rate?

MS. HEALY GALLAGHER: Objection. Leading. THE WITNESS: Yes.
Q. (BY MR. SNUFFER) If they measured it,
would they get the same result as you got?
MS. HEALY GALLAGHER: Objection. Leading. THE WITNESS: Yes.
Q. (BY MR. SNUFFER) Can anyone read the fluid specifications?

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1 MS. HEALY GALLAGHER: Objection. Leading. 2 THE WITNESS: Yes.
3 Q. (BY MR. SNUFFER) Does the manufacturer 4 provide the fluid specifications?
5 MS. HEALY GALLAGHER: Objection. Leading. THE WITNESS: Yes.
Q. (BY MR. SNUFFER) Can anyone measure the heat exchanger's capacity?
9 MS. HEALY GALLAGHER: Objection. Leading. THE WITNESS: Yes.
Q. (BY MR. SNUFFER) If they measured it, would they reach the same result as you did?

MS. HEALY GALLAGHER: Objection. Leading. THE WITNESS: Yes.
Q. (BY MR. SNUFFER) Can anyone test and measure the turbine out -- your turbine output?

MS. HEALY GALLAGHER: Objection. Leading. THE WITNESS: Yes.
Q. (BY MR. SNUFFER) If they measured it, will they achieve the same result as you achieved?

MS. HEALY GALLAGHER: Objection. Leading. THE WITNESS: Yes.
Q. (BY MR. SNUFFER) Can anyone measure the electrical output of the turbine?

MS. HEALY GALLAGHER: Objection. Leading.

| 1 Page 229 | 1 REPORTER'S CERTIFICATE Page 231 |
| :---: | :---: |
| 1 THE WITNESS: Yes. | $\begin{aligned} & 1 \quad \text { REPORTER'S CERTIFICATE } \\ & 2 \text { STATE OF UTAH , } \end{aligned}$ |
| 2 Q. (BY MR. SNUFFER) Did Mr. Mancini ask to | 3 ) ss. |
| 3 perform any of those tests on your system? | 4 COUNTY OF SALT LAKE ) |
| 4 MS. HEALY GALLAGHER: Objection. Leading. | $5$ <br> $6 \quad$ I, Dawn M. Perry, Certified Shorthand |
| 5 THE WITNESS: No. | 7 Reporter and Notary Public in and for the State of |
| 6 Q. (BY MR. SNUFFER) As far as you know, did | 8 Utah, do hereby certify: |
| 7 Mr . Mancini perform any of the tests on your system? | 10 That prior to being examined, the witness, |
| 8 MS. HEALY GALLAGHER: Objection. Leading. | 11 NELDON JOHNSON, was by me duly sworn to tell the |
| 9 THE WITNESS: No. | 12 truth, the whole truth, and nothing but the truth; 13 |
| 10 Q. (BY MR. SNUFFER) You testified that -- | 14 That said deposition was taken down by me |
| 11 that you had not paid any money to anyone for the use | 14 in stenotype on October 3, 2017, at the place therein named, and was thereafter transcribed and that a true |
| 12 of the IAS system. Do you recall that? | 15 and correct transcription of said testimony is set |
| 13 A. Yes. | forth in the preceding pages. |
| 14 Q. With respect to the Salem U-Check store | 16 I further certify that, in accordance with |
| 15 use for three months of the generator to power the | 17 Rule 30(e), a request having been made to review the |
| 16 store, was anything paid? | 18 transcript, a reading copy was sent to Denver C. |
| 17 A. Yes. | 18 Snuffer, Attorney at Law, for the witness to read and sign under penalty of perjury and then return to me |
| 18 Q. Did you forget that when you testified | 19 for filing with Erin Healy Gallagher, Attorney at |
| 19 earlier? | $20^{\text {Law. }}$ |
| 20 MS. HEALY GALLAGHER: Objection. Leading. | 20 I further certify that I am not kin or |
| 21 THE WITNESS: No, I -- I'm here on behalf | 21 otherwise associated with any of the parties to said cause of action and that I am not interested in the |
| 22 of myself, and I personally did not pay anybody. As | 22 outcome thereof. |
| 23 a manager of one of the companies or the CEO of one | WITNESS MY HAND this 16th day of October, 232017. |
| 24 of the companies, there was money paid, but not as | $232017 .$ <br> 24 <br> Dawn M. Perry, CSR |
| 25 myself personally, as referenced in this deposition | 25 |
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| 1 that I -- at the beginning of the deposition I made | 1 ACKNOWLEDGMENT OF DEPONENT |
| 2 it clear that I was only going to answer questions or | 2 |
| 3 be responsible for things that I have personally done | 3 I , 3 , do hereby |
| 4 as an expert in these fields. | 4 acknowledge that I have read and examined the |
| 5 MR. SNUFFER: Okay. With that | 5 foregoing testimony, and the same is a true, correct |
| 6 clarification, I don't have any other questions. | 6 and complete transcription of the testimony given by |
| 7 MS. HEALY GALLAGHER: No further questions | 7 me , and any corrections appear on the attached Errata |
| 8 from us. We're off the record. | 8 Sheet signed by me. |
| 9 Actually, first off, we'd like to ask that | 9 |
| 10 the witness read and sign. And with that, we are off | 10 |
| 11 the record. | 11 |
| 12 (Deposition concluded at 3:54 p.m.) | 12 |
| 13 *** | 13 |
| 14 | 14 |
| 15 | 15 (DATE) NELDON JOHNSON |
| 16 | 16 |
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