

In the Matter Of:
Quasar Science vs Colt International Clothing

IPR2023-00611, IPR2023-00613, IPR2023-00614

DAVID HOFFMAN, ESQ.

April 16, 2024



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UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE PATENT TRIAL AND APPEAL BOARD

QUASAR SCIENCE LLC)
)
Petitioner,)
)
v.) Case:
) IPR2023-00611,
COLT INTERNATIONAL CLOTHING,) IPR2023-00613,
INC. d/b/a COLT LED) IPR2023-00614
)
)
Patent Owner.) Pages 1 - 72
)

DEPOSITION OF DAVID HOFFMAN, ESQ.
TUESDAY, APRIL 16, 2024, 12:42 P.M.
1840 CENTURY PARK EAST, SUITE 1900
LOS ANGELES, CALIFORNIA 90067

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REPORTED BY: JENNIFER PORTO, CSR NO. 14098
JOB NO.: J11077923



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INC. d/b/a COLT LED) IPR2023-00614
)
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Patent Owner.)
)
_____)

DEPOSITION OF DAVID HOFFMAN, ESQ., commencing on Tuesday,
April 16, 2024, at 12:42 p.m., located at 1840 Century
Park East, Suite 1900, Los Angeles, California 90067,
before Jennifer Porto, Certified Shorthand Reporter
No. 14098, in and for the State of California.

A P P E A R A N C E S

APPEARING ON BEHALF OF THE PETITIONER:

GREENBERG TRAURIG, LLP
BY: TRENTON WARD, ESQ.
Terminus 200
3333 Piedmont Road NE, Suite 2500
Atlanta, Georgia 30305
678-553-2100
trenton.ward@gtlaw.com

APPEARING ON BEHALF OF THE PATENT HOLDER AND IN PRO PER:

NOLAN HEIMANN, LLP
BY: DAVID L. HOFFMAN, ESQ.
16000 Ventura Boulevard, Suite 1200
Encino, California 91436
818-946-1158
dhoffman@nolanheimann.com

ALSO PRESENT:
(None.)

VIDEOGRAPHER:
(None.)

INTERPRETER:
(None.)



I N D E X

WITNESS: DAVID HOFFMAN, ESQ.

EXAMINATION

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By Mr. Ward

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By Mr. Hoffman

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PREVIOUSLY MARKED EXHIBITS

NUMBER

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(All Exhibits Attached to the Original Transcript)

INFORMATION REQUESTED:

PAGE LINE

(None.)



CENTURY CITY, CALIFORNIA

TUESDAY, APRIL 16, 2024, 12:42 P.M.

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DAVID HOFFMAN, ESQ.

called as a witness, having been first duly sworn, was
examined and testified as follows:

THE WITNESS: I do.

EXAMINATION

BY MR. WARD:

Q Mr. Hoffman, could you please state your name
and address for the record?

A Sure. David Hoffman. 25349 Avenida Ronada,
Valencia, California 91355.

Q My name is Trenton Ward. I am an attorney with
the law firm of Greenberg Traurig, and I represent
petitioner Quasar Sciences. You understand we're here
today for a deposition in the following matters:
IPR2023-611, IPR2023-613, and IPR2023-614; correct?

A Partially correct. The deposition notice for
me only said IPR2023-00613 and IPR2023-00614.

Q Are you objecting to any questions in relation
to IPR2023-00611?

A Yes.

Q Do you understand that you are under oath



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QUASAR SCIENCE LLC EXHIBIT 1044
QUASAR SCIENCE LLC v. COLT INTERNATIONAL CLOTHING, INC.
IPR2023-00613

1 today?

2 A Yes.

3 Q And, David, before we begin, can you let me
4 know if you are represented by any attorneys in this
5 matter?

6 A Well, it's hard to answer yes or no to that. I
7 am, myself, an attorney in this matter, so I do not know
8 how to answer other than that I am, myself, an attorney
9 in this matter, and I will enter objections on behalf of
10 myself.

11 Q Given that you are an attorney, David, I won't
12 bother going over the deposition rules.

13 Curious, David, as to what you did in
14 preparation for today's deposition?

15 A I looked over my declarations in IPR2023-00613
16 and 2023-00614, which are Exhibit 2051 -- no -- yeah,
17 2051 in both IPRs. And exhibits referenced therein,
18 which I believe in IPR2023-00613 are -- include
19 Exhibits 2052 through 2064. And then in IPR2023-00614, I
20 looked over Exhibits 2052 to, I believe, 2065 and that is
21 what I did, that is it.

22 Q David, to help Jennifer with her transcript
23 today, can we agree that if we use the term "'613 IPR,"
24 we are talking about IPR2023-00613?

25 A Yes.



1 Q And if we use the term "'614 IPR," we are
2 talking about IPR2023-00614; correct?

3 A Yes.

4 Q Did you have any conversations with anyone in
5 preparation for today's deposition?

6 A No.

7 Q And other than the documents you identified,
8 did you review anything else?

9 A As best I can recall, that's it. Just the
10 documents I identified.

11 Q David, which of the declarations in this matter
12 did you assist in drafting?

13 A Well, you will have to give me a definition of
14 assist or at least something -- something a little bit
15 more than that, because I had some role in -- some role
16 in all of the depositions -- declarations, I should say,
17 in looking at the declarations and in seeing if the
18 subject matter was appropriate.

19 Q So you assisted in -- one way or the other, in
20 every declaration submitted on behalf of the patent
21 owner?

22 A I think the answer is yes. There are nine
23 declarations so, you know, there are three where my role
24 was very limited.

25 Q And which would those three be?



1 A They are the declarations of Mr. Finn and
2 the -- Mr. Baxter, and the declaration of Mr. Fisher.

3 Q And why was your role more limited with respect
4 to those declarations?

5 A Well, I think to answer that, it would be work
6 product.

7 MR. HOFFMAN: Objection. Work-product
8 privilege, and I am going to instruct myself not to
9 answer.

10 BY MR. WARD:

11 Q The other six declarations, you participated
12 more substantially than the three you identified?

13 A Not necessarily more substantively. Well,
14 certainly, my own, it was -- you know, it was all my
15 substance. And certainly -- but for others, my
16 assistance was in terms of asking questions and probing
17 with follow-up questions to get -- get a kind of full or
18 complete picture, and so that I could write -- if I was
19 writing the declaration. In some cases I didn't write
20 it, but I could know what to write up -- what they told
21 me and then write up what they told me.

22 Q David, which of the declarations did you create
23 a first draft of?

24 A Well, again, the ones where I said my role was
25 very limited, I did not create a first draft in those

1 instances, Mr. Finn, Mr. Fisher, and Mr. Baxter. I don't
2 believe I created a first draft for Mr. Allen, and
3 Mr. Macias, Mr. Wonder- -- well, let me -- Mr. Wonderlick
4 and Mr. Macias, yeah, and Mr. -- let's see -- Mr. Silva.
5 I used portions of their prior declarations and talked to
6 them and created a first draft based on prior
7 declarations and what they told me in our talks.

8 Q And when you say "prior declarations," what are
9 you referring to?

10 A Well, actually, Mr. Silva, I am not sure he had
11 a prior declaration, so I may not be -- I can't recall
12 right now. But from Mr. Wonderlick and Mr. Macias, they
13 had done declarations, at least in some of the reexam
14 proceedings involving related patents to the two patents
15 in issue in the two IPRs, '613 and '614.

16 Q For -- I am interested in which declarants were
17 identified to you, David, and which declarants you
18 identified on your own. Perhaps, can you identify for me
19 those declarants for which you identified on your own?

20 MR. HOFFMAN: Well, I think that is
21 work-product immunity information, so I am going to
22 object on that basis.

23 BY MR. WARD:

24 Q Can you identify which declarants were
25 recommended to you?

1 A Mr. Finn and Mr. Baxter.

2 Q And who recommended them?

3 A Mr. Fisher.

4 Q Is that why you had a less substantive role
5 with Mr. Finn and Mr. Baxter?

6 MR. HOFFMAN: Well, I am going to object to
7 that again on work-product immunity.

8 BY MR. WARD:

9 Q David, can you describe to me your educational
10 background after high school?

11 A Yes. I received a civil engineering degree
12 from MIT. A bachelor of science in 1982. In 1985, I
13 received a law degree, a juris doctorate or JD from the
14 University of Pennsylvania Law School, and that
15 is -- that is the end of my school training.

16 Q David, have you ever done any engineering work
17 in lighting?

18 A No, I have not.

19 Q Do you have any experience in the design of LED
20 lights?

21 A No, I do not.

22 Q And do you have any experience in the design of
23 entertainment lighting systems?

24 A No, I do not. But I need to just limit my
25 answer in terms of experience designing the products, I



1 do not have that. If you are talking about knowledge,
2 that is different from -- I view that as different from
3 experience. So the answer to your question is: No, I
4 have not -- I don't have any experience in the design of
5 products -- of lighting products in that industry.

6 Q David, I know you are familiar, but I am going
7 to read to you the petitioner definition for a person of
8 ordinary skill in the interest -- I'm sorry -- a person
9 of ordinary skill in the arts.

10 Petitioner's definition is this, (Reading:) A
11 person of ordinary skill in the art would have had at
12 least a bachelor of science degree in electrical
13 engineering or a closely related field and two or more
14 years of experience in the design of entertainment
15 lighting systems along with the design and use of LED
16 lights?

17 Do you consider yourself a person of ordinary
18 skill in the art in accordance with that definition?

19 A I only have part of that definition, so I would
20 not consider myself to meet that definition.

21 Q And which part of that definition do you have,
22 David?

23 A Well, I have a four-year engineering degree. I
24 do not know, as I sit here, whether one would consider
25 that closely related since I did have electrical

1 engineering courses during my undergraduate experience.
2 So I'll just say I have at least a portion of that
3 definition.

4 Q Patent owners definition for a person of
5 ordinary skill in the art is as follows, (Reading:)
6 Patent owner proposes that a person of ordinary skill in
7 the art would have had two to four years experience in
8 electrical engineering design of film and television
9 lighting systems, including the design and use of LED
10 lights combined with two to three years of work
11 experience as a set lighting technician and television
12 and/or motion picture industry.

13 Are you a person of ordinary skill in the art
14 in accordance with the patent owner's definition?

15 A No. I would say I am not, other than I have
16 portions in terms of training -- in terms of education.

17 Q And when you say portions in terms of
18 education, can you just maybe describe to me how that
19 relates?

20 A Yes. Can you reread the definition to me,
21 please?

22 Q Certainly. (Reading:) Patent owner proposes
23 that a person of ordinary skill in the art would have two
24 to four years experience in electrical engineering design
25 of film and television lighting systems.

1 A Oh, okay. No, you are talking design. No, I
2 don't have that experience.

3 Q But if I understood you correctly earlier, you
4 are saying that in accordance with petitioner's
5 definition, which says, (Reading:) That a person of
6 ordinary skill in the art would have had at least a
7 bachelor of science degree in electrical engineering,
8 that you believe you have a portion of that due to your
9 civil engineering studies?

10 A I have a -- since I have a bachelor of science
11 in civil engineering and it is -- there is some overlap
12 in coursework with electrical engineering, I either meet
13 that portion of the definition or I am close to it.

14 Q But you would agree that the second portion of
15 the definition, which says, (Reading:) Along with at
16 least two years of experience in the design of
17 entertainment lighting systems.

18 That you do not meet that portion of the
19 definition; correct?

20 A Correct.

21 Q David, which parties and/or individuals have
22 retained you in relation to these IPR proceedings?

23 A Well, I can only -- I can only answer in terms
24 of Colt International Clothing, Inc. D/B/A Colt LED and
25 Mr. Fernando Silva. And for others, I -- that -- if they

1 did retain me, it is not public and I can't answer one
2 way or the other.

3 Q So you are unable to identify the parties that
4 have retained you?

5 A Well, let me take a step back. I have
6 identified Colt, which we understand is Colt
7 International Clothing, Inc., Colt LED, and Mr. Silva who
8 has retained me. Well, I think it is fair to say I --
9 since I am not counsel for -- no one else has retained me
10 for these proceedings.

11 Q Has Mr. Macias retained you in his personal
12 capacity?

13 MR. HOFFMAN: I am going to object to that
14 based on attorney-client privilege and also based on
15 scope.

16 BY MR. WARD:

17 Q So you are not willing to confirm whether or
18 not Mr. Macias has retained you in his personal capacity?

19 A Correct.

20 Q Is your law firm -- better put.

21 Has your law firm been retained by Colt
22 International Clothing?

23 A Yes.

24 Q And has your law firm been retained by
25 Mr. Silva?

1 A Yes.

2 Q Has your law firm been retained by any other
3 entities or individuals in connection with these IPR
4 proceedings?

5 A Well, I will tell you, my hesitation is I have
6 not reviewed the retainer agreement with Colt, and
7 whether or not it covers Mr. Macias, both, or whether it
8 is just Colt. And so I -- as I sit here, I am -- I am
9 not sure.

10 Q Understood.

11 Any other individuals, other than Colt,
12 potentially Mr. Macias and Mr. Silva -- have they been
13 retained by -- has your law firm, Nolan Heimann been
14 retained for any other entities other than the three
15 you've identified?

16 A For purposes of these IPRs, no.

17 Q When did you first represent Colt?

18 A I don't recall the exact year, but it was
19 either late 2011 or early 2012.

20 Q And how were you introduced to Colt?

21 A Colt -- I believe that a friend of Mr. Macias,
22 who was also an attorney, contacted me first to ask if I
23 could do a patent application for Colt or for Mr. Macias,
24 and so I -- and then I met with the attorney and
25 Mr. Macias.



1 Q And that was in 2011?

2 A I would -- well, I am not sure at this stage
3 that I have a record of that date, but I believe just
4 based on my recollection that I filed his provisional
5 patent application in May of 2012. I believe it was May.
6 Let me just look at my -- I am just going to look at the
7 '582 patent to look for the provisional filing date.

8 Q I can provide you a copy of that.

9 A Oh, okay.

10 Q No problem.

11 MR. WARD: Showing the witness now what is
12 marked as Exhibit 1001 to the '613 IPR; it is the '582
13 patent.

14 (Reporter Clarification.)

15 (Petitioner's Exhibit 1001 was
16 marked for identification by the
17 court reporter and is attached
18 hereto.)

19 THE WITNESS: Yeah, so based on the provisional
20 application being filed on May 17, 2012 for the '582
21 patent, Exhibit 1001 in IPR2023-00613, I believe, it was
22 either late 2011 or early 2012 that this contact from
23 Mr. Macias and his attorney friend was.

24 BY MR. WARD:

25 Q And who is the attorney friend, David?

1 A I know who it is, but I am blanking on his name
2 right now -- Brad Brunon, B-R-U-N-O-N.

3 Q And was he counsel for Colt at the time?

4 A Mr. Brunon, I couldn't say if he was counsel
5 for Colt at that time, I did not ask.

6 Q The first project where you represented Colt
7 was in the filing of the provisional application for what
8 became the '582 patent; correct?

9 A I believe that is correct, yes.

10 Q So you drafted -- looking at the '582 patent,
11 page 2, provisional application number 61648554 filed on
12 May 17, 2012.

13 A Are you asking if I drafted that provisional?

14 Q Yes.

15 A Okay. My associate at the time in my law firm,
16 Albert Wu, drafted it. I reviewed the draft. I don't
17 recall to what extent I made changes, and then we filed
18 it after Mr. Macias reviewed it.

19 Q And the '582 patent lists a number of
20 continuation applications prior to the filing that became
21 the '582 patent, did -- did you also prosecute each of
22 those continuation applications?

23 MR. HOFFMAN: Objection. Foundation.

24 THE WITNESS: But I did.

25 Answer: I did prosecute in one form or another



1 either fully or at least partially all of those
2 applications.

3 BY MR. WARD:

4 Q And how many total applications have you
5 prosecuted for Colt?

6 A I don't recall the exact number, and I can't
7 tell you about any pending applications because those
8 would be attorney-client privilege. But I can tell you
9 it is at least seven or eight.

10 Q Did you draft the '895 patent that is one of
11 the patents in dispute here?

12 A Well, the '895 patent is a continuation of
13 earlier patents, and those earlier patents were
14 initially -- the first patent that was drafted -- the
15 first, which is the '642 patent, i.e., patent
16 No. 9719642, that was initially drafted by Mr. Wu, and
17 then I was involved in revisions. And then the remaining
18 patents -- and listed were copies of these -- of the bulk
19 of the patent and then the claims are different, and I
20 drafted the claims for those continuation applications.

21 Q Did you or an associate under your direction
22 draft what became the '224 patent?

23 MR. HOFFMAN: Well, objection. Scope. And --

24 THE WITNESS: Yes. The answer is yes.

25 ///



1 BY MR. WARD:

2 Q Are you aware of Colt having any other patent
3 prosecution counsel other than you and your associates
4 since you first began working with them in 2011?

5 A Yes, yes.

6 Q And which law firm is that?

7 A Well, it would be listed in the -- in
8 the -- there were -- that is Diederiks & Whitelaw,
9 D-I-E-D-E-R-I-K-S, ampersand, Whitelaw, W-H-I-T-E-L-A-W.

10 Q Any other law firms?

11 A Are we also talking about reexaminations?

12 Q Yes.

13 MR. HOFFMAN: Well, I have to object to that
14 based on work-product immunity, and so I am not going to
15 answer.

16 BY MR. WARD:

17 Q So you are unwilling to identify whether or not
18 you represented Colt in reexamination proceedings?

19 A That is a miss- --

20 MR. HOFFMAN: Objection. Mischaracterization.

21 THE WITNESS: I have represented Colt in all
22 four of -- its reexamination proceedings. I had
23 assistance of someone -- I believe who was an unnamed
24 counsel, whom I had contacted on my own under a referral
25 from another counsel who had substantial reexamination

1 experience.

2 BY MR. WARD:

3 Q But you are unable to identify that counsel?

4 A Well, I could tell you that I -- I don't recall
5 his name. I only know he was in the Bay Area, San
6 Francisco Bay Area, and I don't recall his name because
7 his role was somewhat limited in one of the
8 reexaminations.

9 Q Have you represented Colt in any other IPRs
10 outside of the ones we are here to discuss today?

11 A Well, I am not sure if you are including within
12 here to discuss today the IPR2023-00611. But other than
13 the '611, '613, and '614 IPRs, to my knowledge, Colt has
14 not had any other IPRs and I have not represented Colt in
15 any other IPRs.

16 Q Have you represented Colt in any patent
17 litigation outside of '611, '613, and '614 IPRs?

18 A No, I have not.

19 Q So you are not retained as counsel for the
20 district court matter?

21 A That is --

22 MR. HOFFMAN: I believe that would be
23 attorney-client privilege and work product.

24 THE WITNESS: But I am not of record in any
25 other litigation, I can tell you that.



1 BY MR. WARD:

2 Q You have not been of record for Colt in any
3 litigation other than the '611, '613, and '614 IPRs;
4 correct?

5 A That is correct. I have not been of record in
6 anything other than those IPRs, correct.

7 Q But you are unwilling to identify whether you
8 have been retained for other matters?

9 A That's correct. I don't know that I have
10 Colt's permission to reveal it one way or the other.

11 Q David, are you being compensated for your
12 representation of Colt in these IPRs?

13 A Yes.

14 Q Have you received payment for your
15 representation up to this point?

16 MR. HOFFMAN: I am going to object based on
17 attorney-client privilege.

18 BY MR. WARD:

19 Q So you're unwilling to identify whether or not
20 you have received payment for your representation?

21 A Well, I have received -- well, let me go back a
22 step.

23 MR. HOFFMAN: I am going to object based on
24 attorney-client privilege. I will answer the question as
25 best I can if you agree that I don't waive any privilege

1 merely by answering the question.

2 MR. WARD: Agreed.

3 THE WITNESS: So I have been paid some money by
4 Colt, which I believe -- although I am not in charge of
5 accounting so I can't really say what it has truly gone
6 for, which -- but I believe that I have been paid some
7 money by Colt for representation in these IPRs. I can
8 also say that I am billing for my time in these IPRs.

9 BY MR. WARD:

10 Q So you are charging an hourly rate for these
11 cases?

12 A Yes.

13 Q Can you identify what that rate is?

14 A Yes, \$300 per hour.

15 Q Okay.

16 A My normal rate currently is \$675 per hour.

17 Q And is a discount applied for all of your
18 representation of Colt or just these IPRs?

19 A Only part. It certainly applies for these
20 IPRs.

21 Q And is the payor Colt International Clothing,
22 Incorporated?

23 A I can't --

24 MR. HOFFMAN: That is attorney-client
25 privilege, I believe, so I can't answer that.

1 BY MR. WARD:

2 Q You are not willing to identify the payor?

3 A Correct.

4 Q Have you previously been compensated by Colt
5 for other representation in patent prosecution or
6 reexaminations, et cetera?

7 A Yes.

8 Q And is it the same entity that's compensated
9 you for that work that has now compensated you for the
10 IPRs?

11 A I can't answer that.

12 MR. HOFFMAN: Attorney-client privilege and
13 work-product immunity.

14 BY MR. WARD:

15 Q So you're asserting that it's privileged who
16 the payor is?

17 A Yes. It is -- who the payor is, is nonpublic
18 information.

19 Q And you would say -- believe it to be
20 privileged and confidential?

21 A I do. And I -- but I would only say that my
22 answer does not preclude it being Colt and does not
23 preclude it being a third party.

24 Q If we agree to your answer being confidential
25 with respect to the protective order in this case, are

1 you able to identify the payor?

2 A No, I still couldn't do it. I don't have
3 Colt's permission to do so.

4 Q Are you working on a contingency fee matter,
5 David?

6 A I can't respond to -- in this IPR or anything
7 related to Colt?

8 Q Anything related to Colt?

9 A I identified my hourly rate, but I do not have
10 a contingency interest in anything related to Colt.

11 Q So you have -- you and nor your firm have any
12 contingency interest in these IPRs proceedings?

13 A Correct.

14 Q Do you have any partial contingency basis in
15 these IPR proceedings?

16 A I do not.

17 Q How about a success bonus for the IPR
18 proceedings?

19 A I do not.

20 Q Has your firm represented Colt in the past on a
21 contingency basis?

22 A No, it has not.

23 Q So no one -- no other members of your law firm
24 have represented Colt on a contingency basis in the past?

25 A That's correct to the best of my knowledge,

1 yes.

2 Q Is Diederiks & Whitelaw representing Colt on a
3 contingency basis?

4 A I am going to have to decline to answer that
5 based on attorney-client privilege.

6 Q Have you represented Mr. Macias in any
7 non-patent matters?

8 MR. HOFFMAN: I'm going to object based on
9 attorney-client privilege.

10 THE WITNESS: And I am not going to answer.
11 BY MR. WARD:

12 Q So you are not willing to identify whether you
13 represented Mr. Macias in non-patent litigation or other
14 representation?

15 A Other than patent prosecution of the patents
16 and related patents in issue in this IPR?

17 Q Yes.

18 A I can identify that I represented him in a
19 couple of patent applications on webbing or ladders for
20 supporting the lights to -- and actually there were also
21 two design patent applications on the -- the webbing, I
22 believe, for the lights -- the ladders that support or
23 hold the lights.

24 Q Have you represented Mr. Macias in relation to
25 any clothing-related patent applications?

1 A I can't answer based on attorney-client
2 privilege.

3 Q Which of the individuals involved in these
4 IPRs, including the declarants, did you know prior to the
5 filing of the IPRs?

6 A Can you ask me that again?

7 Q Sure.

8 Which of the individuals involved with these
9 IPRs, including the declarants, did you know prior to the
10 filing of the IPRs?

11 A Well, I am --

12 MR. HOFFMAN: Objection. Form.

13 THE WITNESS: I will answer in that I knew Ken
14 Fisher, I knew Mr. Macias, I knew Mr. Silva, barely. I
15 knew Mr. Wonderlick, barely, but just by virtue of having
16 done his prior declaration and reexamination or more.

17 I knew -- I knew Mr. Brunon. And I did forget,
18 he did a very short declaration. You have not identified
19 him for a deposition so I forgot that he did a
20 declaration, so. I talked to him and then draft for him.

21 I knew Mr. Csernecky also barely, but in
22 connection with him having done a prior declaration.

23 BY MR. WARD:

24 Q And was that declaration for one of the
25 reexams?

1 A I believe so, yes.

2 And I knew Mr. Allen -- or I should say
3 Dr. Allen. It's Dr. Gary Allen.

4 And I knew Bruce Finn. I had drafted a patent
5 application for him many, many years ago when I was at
6 Cislo & Thomas on one of his lighting inventions.

7 And for others, I am not sure what you mean by
8 "involved," or do you mean, like, somehow connected to
9 Quasar? I knew some -- of some individuals who were
10 somehow connected to Quasar, either old Quasar -- yeah,
11 old Quasar.

12 So if you want to give me specific names, I
13 could -- possibly answer those.

14 Q So I just wanted to go back. You said you knew
15 Ken Fisher, how did you know Ken Fisher prior to the
16 IPRs?

17 A Ken Fisher had done declarations for
18 reexaminations for Colt, and also I believe he had done
19 at least one for prosecution of applications -- a patent
20 application for Colt.

21 Q How were you introduced to Ken Fisher?

22 A Well, I believe that would be work product. I
23 would have to decline to answer on the basis of work
24 product.

25 Q And you said that you had -- you were

1 acquainted with Mr. Silva prior to the IPRs?

2 A Yes. I can't -- well, I can't recall -- I had
3 certainly never met him personally. I cannot recall if I
4 had spoken with him prior to the IPRs. I know I had
5 heard his name prior to the IPRs.

6 Q And who did you hear his name from?

7 MR. HOFFMAN: If I answer, would you agree that
8 that does not waive attorney-client privilege?

9 MR. WARD: Yes.

10 THE WITNESS: I heard his name from Guillermo
11 Macias whom I know as Memo.

12 BY MR. WARD:

13 Q And Mr. Macias recommended him as a declarant?

14 MR. HOFFMAN: I can answer if I don't waive
15 work-product immunity or attorney-client privilege.

16 MR. WARD: Yes. And I would agree to that
17 generally for our deposition here today.

18 THE WITNESS: Okay. So I do not recall if
19 Mr. Macias recommended him as a declarant. I think -- it
20 may have come up in some questions that I asked
21 Mr. Macias, but I don't recall him actually recommending
22 him as a declarant.

23 BY MR. WARD:

24 Q And how about Dr. Allen, how did you know
25 Dr. Allen?

1 A I found Dr. Allen through my own searching.
2 And I can say for Mr. Fisher, I found him through my own
3 searching.

4 Q So Mr. Fisher -- you are looking for an
5 individual with his expertise?

6 A I was looking for an individual with expertise
7 applicable to the issues that I thought were important in
8 the patent prosecution.

9 Q And you said that you are aware of some of the
10 individuals associated with Quasar Science; correct?

11 A Prior to the IPRs, I had certainly heard the
12 names of some of the individuals of old Quasar Science.
13 "Old" meaning prior to addendums, acquisition of Quasar
14 Science in 2021. Yes.

15 Q And who are those individuals?

16 A As best as I can recall, it is Steven Strong,
17 Ray Gonzales, Jay Yowler. And I believe there is a
18 fourth who I cannot recall -- well, a fourth or fifth,
19 Andy Lau, and there may be one other. I think there is
20 one other. I can't recall his name.

21 Q Have you ever met any of those individuals?

22 A Yes. I met Steven Strong in connection with
23 district court litigation, which I believe was in 2017.
24 I did not -- I was not counsel of record, but there was
25 a -- there was a settlement conference, and I believe I

1 met him in connection with that or in connection with a
2 summary judgment hearing in one of Colt's patent
3 litigation matters.

4 MR. WARD: Okay. I want to introduce to the
5 witness now what has been marked as Exhibit 2051.

6 (Petitioner's Exhibit 2051 was
7 marked for identification by the
8 court reporter and is attached
9 hereto.)

10 BY MR. WARD:

11 Q This is Exhibit 2051, an IPR2023-00613. Do you
12 recognize this document, David?

13 A Yes. This is my declaration in the IPR you
14 just identified.

15 Q Did you draft this document?

16 A Yes, I did.

17 Q David, have you ever worked in the TV/film
18 industry?

19 A No.

20 Q How about the lighting industry?

21 A No.

22 Q Have you ever used Colt's products for a
23 TV/film production?

24 A No.

25 Q How about Quasar's products, have you ever used

1 them for a TV/film production?

2 A No.

3 Q Are you familiar with the competitive landscape
4 for LED lighting?

5 A Well, I am not sure what you mean by the word
6 "familiar" and "landscape." I kind of know colloquially
7 what you might be getting at, but I am not sure how you
8 are using it here.

9 Q Are you aware of which companies offer LED
10 lighting products for the TV/film industry?

11 A I am aware of some companies that offer
12 lighting for the film and TV industry.

13 Q And which companies are those?

14 A Colt, Quasar Science, Litepanels,
15 L-I-T-E-P-A-N-E-L-S, Astera, Sourcemaker, a company
16 called MacTech, which I understand no longer exists. B&M
17 Lighting. I think Chimera, C-H-I-M-E-R-A, because I
18 recall seeing those lights on websites and also on set
19 when I did the patent application for Bruce Finn. And
20 there may be others, but I can't recall as I sit here.

21 Q David, are you familiar with which lighting
22 products are thought of to be high-quality among those
23 you just identified and which are not thought of to be
24 high-quality?

25 A I do not necessarily know how you are using the

1 term "high-quality." But I could say that my
2 understanding is MacTech's products were not very good.
3 And as far as the others, I -- I am unsure -- I would say
4 I certainly could not opine on their quality other than
5 to say that I am -- Quasar, I have heard some bad things
6 about, but I have not -- on the others, I haven't heard
7 any bad things.

8 Q Do you follow sales demand for LED lighting
9 products?

10 A No.

11 Q So you are not aware of which LED lighting
12 products are in high demand and which are not?

13 A Well, I have some knowledge of -- I don't
14 follow it. I have some knowledge from what I may
15 understand from my client and/or others I have spoken
16 with and/or some things I have read about that issue, but
17 I do not -- I certainly don't follow it.

18 Q Paragraph 4 of your declaration, Exhibit 2051,
19 David, you say, (Reading:) One purpose of this
20 declaration is to provide evidence of commercial success
21 of the claimed invention.

22 During what years do you allege that Colt's
23 bicolor LED tube was a commercial success?

24 A Well, I am -- if we're talking about my
25 declaration, paragraph 4, your question doesn't

1 necessarily make sense to me -- the purpose. The way
2 that I was using support for a commercial success was
3 because my declaration meets -- was intended to meet some
4 of the legal requirements to show commercial success, but
5 not necessarily all of the legal requirements
6 specifically in terms of the actual sales or any of that
7 stuff, but just to show that -- which products are -- are
8 covered by patent claims.

9 Q And paragraph 4 states, (Reading:) One purpose
10 of this declaration is to provide evidence of commercial
11 success of the claimed invention.

12 So what years do you allege that this evidence
13 provides commercial success of the claimed invention?

14 A Well, it would be relevant to the years since
15 the issuance of the patent. It could be relevant to the
16 issuance of the '582 patent. So from the date of
17 issuance of the '582 patent to the present -- and it may
18 also apply to -- prior to that date. But at least from
19 the date of issuance of the '582, which I see is
20 September 10, 2019 to the present. And to the extent the
21 law may allow, it would be relevant to a prior success as
22 well.

23 Q You identify a number of exhibits in your
24 declaration, and you allege that these exhibits provide
25 evidence of commercial success of the claimed invention;

1 correct?

2 A Some of -- some of those exhibits may be
3 relevant to that. I would have to reread my declaration
4 to identify which exhibits and what -- what aspects may
5 be relevant, and then I would have to reread our brief
6 which would also explain our patent owner response in the
7 IPR '613 in order to refresh my memory about which
8 particular exhibits show what.

9 Q Which exhibits show the percentage of sales in
10 the TV/film lighting industry for Colt's bicolor LED
11 tube?

12 A I don't recall any in relation to my
13 declaration of Colt's tubes -- Colt sales. Colt sales
14 would be set forth in the declaration of Mr. Macias.

15 Q And does that declaration identify a percentage
16 of the TV/film lighting industry that Colt's bicolor LED
17 tubes occupy?

18 A Well, for that, I think you would have to
19 look -- for a percentage, you would have to potentially
20 look at Mr. Csernecky's declaration and look at
21 Mr. Wonderlick's declaration, and I think -- and then
22 Mr. Macias'. And collectively, I think you may be able
23 to draw an inference as to what percentage or what amount
24 of the industry.

25 Q Other than drawing an inference, is there any

1 direct evidence of the percentage of the industry?

2 A I am not aware of a -- of the direct evidence
3 of a specific percentage of the industry that is a Colt
4 product other than if you define the industry as bicolor
5 lighting of LED tube lights, then Colt was at the time, I
6 believe 100 percent of the industry since there were no
7 others until Quasar. And then Colt or Quasar for -- I
8 think for several years, to my knowledge and my
9 understanding, were the -- were the only bicolor players
10 and then others came in later.

11 Q And when did those others come in later, are
12 you aware?

13 A I don't recall exactly when. But, for example,
14 Sourcemaker and -- I can't recall right now the other
15 bicolor LED lighting tubes for the industry.

16 Q So you would agree that there is multiple
17 providers of bicolor LED tubes currently; correct?

18 A Well, I would agree that there are at least
19 three that I know of, Colt, Quasar, and Sourcemaker. And
20 that -- there may be others. I just -- and I may have
21 seen -- I should say I may have heard of others recently,
22 but as I sit here I do not recall others.

23 Q But there is no evidence in the record of the
24 percentage of market share for each of those currently?

25 A For the current market share percentage, I

1 don't recall that I provided any evidence in my
2 declaration.

3 MR. HOFFMAN: And I think characterizing the
4 record as a whole is beyond the scope of this proceeding.

5 BY MR. WARD:

6 Q You said in paragraph 4 that --

7 MR. HOFFMAN: And work-product potentially.

8 BY MR. WARD:

9 Q You said in paragraph 4 that, (Reading:) One
10 purpose of this declaration is to provide evidence of
11 commercial success of the claimed invention.

12 So if I understood you correctly earlier,
13 David, you said that the exhibits that you provided are
14 exhibits that you allege provide evidence of commercial
15 success of the claimed invention; correct?

16 A They are portions -- at least some of them
17 provide evidence -- direct evidence of that, such
18 as -- well, let me take a step back.

19 My characterizations of the record are work
20 product. To the extent they are already set forth in our
21 brief, our patent owner response, I would have to reread
22 that. But what I can tell you is that there are exhibits
23 that are direct evidence of sales and of portion of the
24 market, and they may not be specific to the portion of
25 the market, other than this period of time where it was

1 100 percent. And that my -- and other exhibits are --
2 collectively, may provide and support commercial success
3 arguments.

4 Q You would agree that you, yourself, are not in
5 a position to evaluate whether or not Colt's bicolor LED
6 tube is a commercial success; correct?

7 A As a lawyer, I can evaluate it based on
8 evidence that I've seen. But in terms of as a -- someone
9 who might be following the industry and have firsthand
10 knowledge of it, I do not think I could do that.

11 MR. WARD: Let's go off the record. Take a
12 quick break.

13 (Brief Recess.)

14 MR. WARD: David, let's take a look at
15 Exhibit 2052.

16 (Petitioner's Exhibit 2052 was
17 marked for identification by the
18 court reporter and is attached
19 hereto.)

20 BY MR. WARD:

21 Q Do you recognize this document?

22 A Yes.

23 Q What are we looking at here, David?

24 A We are looking at Exhibit 2052, and I believe
25 it is the same exhibit in both of the '613 and '614 IPRs,

1 and this is -- this is photos of Colt's bicolor LED
2 tubular lights.

3 Q And who took these photos?

4 A I did.

5 Q Well, first, I guess, where did you obtain the
6 Colt bicolor LED tube light?

7 A From Colt.

8 Q And do you know which year this product was
9 made?

10 A As I sit here, I do not. But I can -- I --
11 there may be a marking on the product itself that would
12 identify the year.

13 Q Was this product working?

14 A Was it working?

15 Q Did it work?

16 A Oh. Well, before I took it apart?

17 Q Yes.

18 A Yes, it did. Yeah, I can also say -- I should
19 say with regard to your question about what year it's
20 from --

21 Q Okay.

22 A -- my understanding is that functionally the
23 Colt product that is in this picture is the same as -- at
24 least as early as 2019 when the patent issued, and I
25 believe even earlier back to 2013.

1 Q You are the one that disassembled the product?

2 A Yes.

3 Q And how did you determine what it is that you
4 are looking at? Is that based on your own personal
5 knowledge?

6 A I am not sure I understand your question. I
7 determined it based on -- I mean, I am looking at what I
8 am looking at.

9 Q Okay.

10 A And when I took apart the product, I saw these
11 portions of the product.

12 Q In the middle photograph on the left-hand
13 column, what is photograph -- what is shown there?

14 A Oh, okay. So you can see three wires,
15 white -- I believe that is a red wire but this is -- I am
16 color blind -- and a blue one. And then there is a --
17 three LEDs, and then there is a connector of the LEDs to
18 the circuit board.

19 MR. WARD: David, I want to show to you --

20 THE WITNESS: I'm sorry -- a connector of the
21 wires, I should say, to the circuit board.

22 MR. WARD: I want to show to you now what's
23 marked as Exhibit 2053.

24 THE WITNESS: Okay.

25 (Petitioner's Exhibit 2053 was

1 marked for identification by the
2 court reporter and is attached
3 hereto.)

4 BY MR. WARD:

5 Q Can you tell us what this is, David?

6 A This is a -- well, actually, let me go back a
7 step. It is a -- okay. I will leave that alone.
8 2053 is a claim chart I put together, and I
9 believe this is for the '613 IPR. Let me just take a
10 look. It may also be for the '614.

11 Q And this is a printout of Exhibit 2053 from the
12 '613 IPR, David.

13 A Okay.

14 Q Does that tell you which patent is identified
15 in the claims on the left-hand column?

16 A Yes. That is -- the U.S. patent 10411582 or
17 what we have referred to as the '582 patent.

18 Q How did you go about developing this claim
19 chart?

20 A I started with the claim chart that Colt's
21 litigation counsel had prepared for the district court
22 litigation proceeding that is concurrent with the current
23 IPRs. And then I took apart the Colt product that you
24 see in Exhibit 2052. And then I -- where I thought the
25 chart needed to be updated, I -- or possibly

1 improved -- I made some changes and came up with this
2 chart.

3 Q Did the previous chart that you relied upon
4 from litigation have any analysis of Colt's product in
5 the right-hand column?

6 A I am not sure what you mean by analysis?

7 Q Was there any text in the right-hand column of
8 this chart?

9 A Oh, well, actually, I take a step back. I am
10 not sure there was any chart on Colt's product. No, it
11 was Quasar's product. I was confused there for a second.
12 I drafted this chart myself.

13 Q So on the left-hand side are the claim
14 limitations from certain claims of the '582 patent;
15 correct?

16 A Yes.

17 Q And on the right-hand side is your analysis of
18 how the claim limitations correspond to Colt's bicolor
19 LED tube; correct?

20 A Yes.

21 Q So looking -- for example, just looking at the
22 very first row on the first page, what is provided on the
23 left-hand side is the preamble for claim 1 of the '582
24 patent; correct?

25 A Correct.

1 Q And for purposes of your claim or product
2 comparison, did you consider the preamble limiting?

3 A I didn't make a determination one way or the
4 other, except that since I put -- I showed product on the
5 right column, you know. Had I not considered it
6 limiting -- well, it -- I did not make a determination
7 one way or the other, other than to assume that it was
8 limiting for purposes of this chart because that was the
9 most narrow case. So if it was not limiting, then one
10 might say it is more likely that Colt's product meets
11 that limitation because there's -- of the preamble
12 because it is not limiting. So I would say that I
13 assumed that the preamble was limiting for purposes of
14 this chart.

15 Q And, David, how did you construe the term
16 "broad-spectrum white light" for purposes of your product
17 comparison?

18 A I construed it in terms of my understanding of
19 the term that I had gleaned from reading other patents
20 and from my interactions with experts in the past
21 upon -- on LED lighting for the entertainment industry
22 and in general.

23 Q And what was that definition, David?

24 A What was the specific definition?

25 Q Yes.

1 A I am not sure I could give you a detailed claim
2 interpretation definition of it other than that, I
3 believe I applied what I thought would be plain meaning
4 or -- yes, plain meaning. Which is that -- my
5 understanding of the term is that it is -- is that there
6 is light from each. There is a substantial amount of
7 light of each of the wavelengths of the visible spectrum,
8 as opposed to being -- and that is the type of light that
9 comes from a phosphor-based LED. And that the -- as
10 opposed to the type of white light you might get from an
11 RGB, or red, green, blue LED, which would not have a
12 broad or a wide spectrum of visible light, it would be
13 more narrow spectrum of visible light.

14 Q So you looked to see whether or not Colt's
15 product provided light that was in a substantially -- all
16 of each of the wavelengths of the visible spectrum;
17 correct?

18 A Well, I didn't personally do that kind of
19 analysis. I understood it from the fact that it is used
20 widely in the industry and that is what I was told by --
21 I had that understanding from Mr. Macias, that it was
22 broad spectrum and from -- and from others.

23 Q So for purposes of your claim chart, you can't
24 say with certainty that the Colt bicolor LED tube
25 satisfies the providing broad-spectrum white light

1 limitation?

2 A I am not sure why I am not saying it with
3 certainty, I am based on the information provided from
4 others.

5 Q And that information comports with your
6 definition of broad-spectrum white light?

7 A Yes, because I understand that these are
8 phosphor-based LEDs in the light.

9 Q And, David, how did you construe commercial
10 image recording for purposes of your product comparison?

11 A Well, I con- -- in terms of -- I knew that the
12 product was used in the commercial image recording
13 industry, and I knew from the fact that I -- or from my
14 understanding that it was phosphor-based LEDs. And my
15 understanding as to what the CRI and the green level and
16 the -- just a moment -- CRI green level and brightness
17 level, lumen output, that it was suitable for commercial
18 image recording. And I understood it didn't have
19 flicker, and when I have used the light I have not see
20 any flicker.

21 Q But for purposes of this claim chart
22 preparation, you were looking at the LED tube in your
23 office presumably; correct?

24 A Correct.

25 Q So you have no idea whether or not it would be



1 suitable for commercial image recording?

2 A Well, I already answered the question.

3 Q So your understanding that the Colt bicolor LED
4 tube would be suitable for commercial image recording is
5 based upon representations by others?

6 A It is based upon what I just said. It was in
7 part representations from others, in part my own
8 experience with the light, and in part -- yeah, did I
9 personally experience it used in the industry? No. But
10 I understand it is used widely in the industry for many,
11 many years, so I thought that is a very reasonable
12 conclusion.

13 Q So if it is used in the industry, is that
14 sufficient to satisfy the claim term commercial
15 industry -- commercial image recording?

16 A Well, I think anything could be used in the
17 industry once, but it is -- the question I think would
18 be: Is it suitable for use in the industry on an ongoing
19 basis? And I think the answer is yes; it has withstood
20 the test of time.

21 Q So you construe commercial image recording to
22 mean can be used repeatedly in the industry for
23 commercial image purposes?

24 A I construe -- no. Because you could use it
25 once in the industry and it could still be suitable for

1 the industry. Suitable is a more -- well, I do not want
2 to get into things in my -- that I am thinking on the
3 fly. I just would say that I considered it suitable for
4 the industry because of its long-term use and because of
5 what I understood from others about its output and
6 because of what I had personally experienced having used
7 the light for a long time.

8 Q So it is your understanding that it must have
9 long-term use in order to satisfy the commercial image
10 recording limitation?

11 A No. I am not -- I am not saying that at all.
12 That could be just one factor in determining whether it
13 is suitable for commercial image recording.

14 Q So if it was only used once in the industry,
15 you are saying that could be sufficient for commercial
16 image recording?

17 A Well, you would have to look at what the --
18 that is only part of why I draw the conclusion that it is
19 suitable. It is not the only being. It is -- you are
20 asking me -- if something is used only once in the
21 industry, I would not be able to, just from that fact,
22 draw the conclusion that it is suitable for commercial
23 image recording. That is all I can say about what you
24 have posed.

25 Q So how do we know if a particular LED tube is

1 suitable for commercial image recording?

2 A Well, again, it's got the -- the elements
3 of -- where is the patent? So there are specific
4 elements that I think I mentioned in response to your
5 earlier question in, for example, claim 1, paragraph J,
6 elements of small Roman numeral (i) through small Roman
7 numeral (iii) that set forth, at least, part of the
8 definition of suitable for commercial image recording.

9 Q So as long as the product practices J, little
10 (i) through (iii), it is suitable for commercial image
11 recording?

12 A Well, that would be a minimum of what it has to
13 do. I also understand that it needs to be flicker-free.

14 Q And what is that based on?

15 A That is based on Mr. Fisher's statements, I
16 believe, and Mr. Baxter and Mr. Macias --

17 Q And any other --

18 A -- to my understanding from Mr. Macias.

19 Q And any other features required for commercial
20 image recording?

21 A That it needs to consistently meet -- it can't
22 just for a few seconds or a few minutes meet the standard
23 of commercial image recording, because -- that
24 won't -- that won't work for -- if it is on set for hours
25 and hours. So those requirements of J or (i) would need

1 to continue to meet that rather than just, you know,
2 temporarily meet it, for example, on -- for a minute of
3 use.

4 Q Did you use the Colt bicolor LED tube for an
5 extensive period in preparing this chart?

6 A I have one in my office that I have on all day
7 for eight to ten hours or more, sometimes I put in more
8 than ten hours in a day, and I have never noticed any
9 flicker.

10 Q How long have you had it, David?

11 A I have had it for years. I have used it in my
12 office as my primary lighting for over three years.

13 Q So are there -- you looked to things outside of
14 what is recited in the left-hand column of your claim
15 chart to determine whether it is suitable for commercial
16 image recording?

17 A I am not sure what you mean by outside of.

18 Q Well, you identified that -- where in the claim
19 itself -- claim limitation J(i) through (iii),
20 limitations associated with being suitable for commercial
21 image recording; correct?

22 A Correct.

23 Q And you said that in addition to those, it
24 would also need to be flicker-free; correct?

25 A Correct.

1 Q But that is not recited in the claim; correct?

2 A The specific wording "flicker-free"?

3 Q Yes.

4 A That is correct.

5 Q Are there any other requirements or features
6 that are not listed in the claim that are required to
7 meet the suitable for a commercial image recording
8 limitation?

9 A Just, like, what I had said which -- that I
10 recall, that I applied in interpreting the -- in applying
11 the term. That, you know, it needs to meet the
12 requirements of J(i) through (iii) more than just for a
13 minute or so. I am not sure I could put a finger on the
14 exact time, but consistently meet those requirements.

15 Q And be flicker-free?

16 A And be flicker-free.

17 Q David, how did you construe the term "form
18 factor of a fluorescent light tube lamp" for your claim
19 chart here?

20 A So form factor for a fluorescent tube, that is
21 in F -- oh, in a form factor of a fluorescent tube, yeah.

22 So looks like a fluorescent tube is either a --
23 looks like a T8 or a T12 type tube.

24 Q And how did you verify that for the bolt like
25 on an LED?

1 A Well, a T8 is a 1 inch diameter. A T12 is a
2 one-and-a-half inch diameter. And then the -- it is
3 tubular in appearance and so that is how I determined it.

4 Q Doesn't the -- those form factors, T8 and T12,
5 also require that the prongs be of certain size and
6 dimensions?

7 A It may. But I was not focused on that part of
8 the T8 and T12. I don't think it is required to be a
9 fluorescent -- to look like a fluorescent tube light.

10 Q So in order to meet the claim limitation in the
11 preamble, a form factor of a fluorescent light tube lamp,
12 it just nearly needs to be a cylinder of 1 inch or
13 one-and-a-half inches?

14 A In a tube form, it does not necessarily need to
15 be a cylinder, but a cylinder certainly meets that
16 requirement.

17 Q But that form factor doesn't require a certain
18 size and spacing for the electrical prongs that provide
19 the power connection?

20 A Well, as a strict interpretation of T8 and T12,
21 I don't recall. But we do not necessarily have a
22 strict -- we don't have a T8 or a T12 recited in this
23 particular claim. So in this particular claim, I applied
24 it in terms of a -- as -- as I previously stated, that it
25 didn't necessarily have to have the prongs. It could

1 have the prongs, but it doesn't have to.

2 Q And did this particular product, do you believe
3 it to have the standard prongs?

4 A I believe the Colt product that I examined, the
5 photos does -- the photos in Exhibit 2052 do show prongs
6 at least on one end. The other end, I -- well, this
7 is -- and this is the switch end, and it looks like that
8 plastic cover.

9 In Exhibit 2052, a white plastic cover on the
10 photo down at the bottom center is covering two prongs,
11 and so it has the prongs on each end. So it --
12 certainly, if one were to adopt a more narrow definition
13 of fluorescent form factor, then that had to include
14 these prongs, then the Colt product would meet that.
15 But, again, I don't think it has to have that to be a
16 fluorescent tube factor.

17 Q Looking at the second row of your claim chart,
18 the claim 1A limitation is housing having ends. And how
19 did you construe that on the claim phrase, "housing
20 having ends" in your comparison here?

21 A I just took kind of the plain meaning of end,
22 which is at one end or the other of the tube, and the
23 tube does have ends, it doesn't extend forever so it has
24 ends.

25 Q But isn't it that the housing has to have an

1 end, not the tube?

2 A Well, okay, the housing doesn't extend forever
3 either. The housing is part of what makes up the tube.

4 Q And the next limitation is in the third row.
5 It says, (Reading:) Including a support structure in a
6 form of an elongated narrow surface having a top side and
7 a bottom side.

8 And how did you construe the term "support
9 structure" for your comparison?

10 A Well, I focused on the elongated and narrow
11 surface portion of it and having a top and bottom, so it
12 is that white area, which -- that is a -- the white area
13 is a -- I believe a ribbon that adheres to a -- what is
14 connected or part of the housing, which is a long
15 aluminum flat surface and supporting that ribbon with
16 LEDs on it.

17 Q And does that ribbon provide any purpose or
18 function as far as the -- does it function as the
19 motherboard for the components or the circuit board for
20 the components?

21 A I don't know about the term "motherboard." I
22 don't think -- I don't know if I would use that. But I
23 would say the ribbon just -- the ribbon does provide
24 support for the components and provides -- and has the
25 connections for the components on it, and so that could

1 be considered and I considered it as part of the board,
2 but that -- so I wouldn't say it's the motherboard, no.

3 Q The next page of Exhibit 2053, page 2, the
4 first row provides claim element 1B, which states
5 (Reading:) A plurality of first LEDs mounted on the top
6 side of the support structure and configured to emit
7 broad-spectrum white light in a first predetermined
8 Kelvin temperature range of cool white light.

9 So, David, how did you construe the "configured
10 to" phrase for purposes of your comparison here?

11 A I didn't make necessarily a conscious -- a
12 decision to configuration to. But in terms of the --
13 other than that, it produced the result of emitting
14 broad-spectrum white light.

15 And, again, using the way I determined broad
16 spectrum as previously mentioned, I -- that is how I
17 construed the term to be met.

18 Q And the claim requires that it emit
19 broad-spectrum white light in a first predetermined
20 Kelvin temperature range of cool white light, so how did
21 you determine whether that was satisfied?

22 A So that -- well, I knew the device -- the light
23 produced daylight white light and Tungsten white light.

24 Q How do you know that, David?

25 A I knew that from my understanding from

1 basically everyone I have ever talked to in connection
2 with the product and the product literature I have seen.
3 And I believe, also, I had met with a gaffer many years
4 ago when I first -- or during some prosecution of some
5 patent applications for Colt, and we had done some
6 testing on the Colt product and I believe also on Quasar
7 product. And -- but anyway, the Kelvin scale covers all
8 of the white light. So the product produces a white
9 light which looks a little -- a little dimmer kind of and
10 softer and a white light that looks stronger and
11 brighter. And so that meets, you know, the -- they are
12 different Kelvin temperatures, and so the -- obviously
13 the white light that came out on one setting had a first
14 predetermined Kelvin temperature range, and the white
15 light that came out on the other setting had a second
16 predetermined Kelvin temperature range. The switch on
17 the product says D and T, which I understood from
18 Mr. Macias that that's Daylight and Tungsten, and from
19 product literature that I had read. And so that's how I
20 determined that it met the requirements.

21 Q You did not use a meter or other instrument to
22 measure the Kelvin temperature of the light emitted from
23 the Colt bicolor LED tube light?

24 A No, I did not. Not at that time, anyway. As I
25 mentioned, I had met with a gaffer years ago, and I

1 had -- he had measured the white light and the green bias
2 and -- at my office.

3 Q But you didn't necessarily rely upon that for
4 purposes of this claim chart comparison; correct?

5 A Did I specifically rely on it? Well, I can
6 only say that, you know, it was a factor in my mind had I
7 had any reason to think that Colt -- the Colt product was
8 not putting out daylight or Tungsten. It was something
9 that made it -- it was consistent with my conclusion, so
10 I don't know that I could say it was or wasn't in my mind
11 in terms of when I was writing this.

12 Q And element C has a similar recitation. It
13 says, (Reading:) A plurality of second LEDs mounted on
14 the top side of the support structure and configured to
15 emit broad-spectrum white light in a second predetermined
16 Kelvin temperature range of warm white light.

17 I am Imagining I am going to hear a similar
18 answer from you, but -- so how did you construe the claim
19 phrase "configured to emit broad-spectrum white light in
20 a second predetermined Kelvin temperature range of warm
21 white light"?

22 A Yeah. In the same way I construed the term for
23 B. And, you know, it was -- and in addition, it was very
24 clear from my personal observation that it was a
25 different type of light. The -- one light was very

1 bright and the other was a softer white light.

2 Q And do you understand that there is a range of
3 Kelvin temperatures that would satisfy the claim term
4 "warm white light"?

5 A Yes.

6 Q And what do you understand that range to be?

7 A I understand that range to be 3,500 Kelvin and
8 less.

9 Q And how did you come to that understanding?

10 A From the research I did online and from talking
11 to experts.

12 Q And what about with respect to the earlier
13 recitation of a Kelvin temperature range of cool white
14 light would you understand the range of Kelvin
15 temperatures to be for that?

16 A From that, I understood it could be 5,000K and
17 above and -- based on the same thing from my research
18 online and talking to experts.

19 Q If you flip back to page 8 of Exhibit 2053.

20 A Go back. Okay.

21 Q You see claim 3 states, (Reading:) Configured
22 to emit light was a peculiar temperature between 5,000K
23 and 5,800K, and the second LEDs configured to emit light
24 with a color temperature between 2,800K and 3,300K.

25 Do those ranges differ from your understanding



1 of the Kelvin temperature range for cool white light and
2 Tungsten light?

3 A Yes. Before I answer that, I also want to say
4 that I also relied -- in terms of interpreting the Kelvin
5 temperature ranges for warm and cool for claims 1,
6 element B and -- claim 1, element B and C on statements
7 in the Colt patent -- '582 patent. And that would be --
8 that will take me a moment to dig up, but that would be
9 that -- the statement at column 1, line 47 -- beginning
10 at line 47 through line 50, (Reading:) Color
11 temperatures over 5,000K are considered cool in colors
12 bluish-white. While 5,000K -- while -- I'm
13 sorry -- while lower color temperatures are considered
14 warm colors, yellowish-white through red.

15 And then I did research on what would be
16 yellowish-white through red, and that was 3,500K and
17 below.

18 Q Thanks.

19 And moving back to page 3 of Exhibit 2053.

20 A Okay.

21 Q Claim 1D states, (Reading:) Electronic
22 circuitry mounted to the support structure.

23 So how did you construe circuitry -- electronic
24 circuitry mounted to the support structure for this
25 comparison?

1 A So "mounted to," I construed kind with the
2 plain and ordinary meaning of "mounted to," which I
3 considered to include connected to. And there is -- I
4 considered the connections of the -- so if you look at
5 the circuit board there in the picture on the right.

6 Q Uh-huh.

7 A The wire connections are not only electrically
8 connected to the connectors shown on the left by wires,
9 but also they're connected through -- and also it was
10 mounted to -- I considered because part of the circuitry,
11 including the connector itself, that is shown in the
12 image on the left side of the right column of element D,
13 was mounted to the support structure. And that the
14 portion of the board, if -- that has the LEDs on it was
15 on top or on the support structure, connected to it,
16 fixed to it. So for all of those reasons, which I
17 thought, you know, each was -- in itself met the
18 requirement.

19 MR. WARD: David, I want to show you now what's
20 marked as Exhibit 2054 for the '613 IPR.

21 THE WITNESS: Okay.

22 (Petitioner's Exhibit 2054 was
23 marked for identification by the
24 court reporter and is attached
25 hereto.)

1 BY MR. WARD:

2 Q Do you recognize this document?

3 A Yes.

4 Q And you represented in your declaration that
5 this was a web page on old Quasar's website as of
6 November 2016; correct?

7 A Correct.

8 Q And how did you verify that?

9 A I obtained this from an Internet website at the
10 address shown at the top, but also it is -- the main site
11 is www.archive.org, sometimes called the Wayback
12 Machine -- Wayback, one word. And I have used that site
13 often, and I have noticed others using it often and
14 it -- my understanding is that it crawls the Internet and
15 stores copies of web pages with the date that it made the
16 crawl. And so this document I downloaded from the
17 Internet archive/Wayback Machine at archive.org, and it
18 was the crawl and archive of quasarscience.com's
19 web page.

20 Q Did you obtain a declaration from archive.org
21 in support of this document?

22 A No, I did not.

23 Q Did you have an opportunity to physically
24 inspect the Quasar Science products that are identified
25 in Exhibit 2054?

1 A I did. At the time, 2016, or now in connection
2 with my declaration?

3 Q At any time.

4 A Yes, I did.

5 Q And what specific products did you physically
6 inspect from Quasar Science?

7 A So let me -- that would be reflected -- that
8 would be reflected here in my declaration. So I looked
9 at the -- what old Quasar called the S-switch product
10 that I had. It was -- which was a bicolor LED tube
11 light.

12 Q How did you obtain that product, David?

13 A I had it for a while, so I don't recall exactly
14 but I -- I believe it was from Colt, but I don't recall
15 for sure.

16 Q So Colt provided you with Quasar Science
17 products?

18 A Colt gave me a Quasar Science product to look
19 at, yes.

20 Q And was that for purposes of this proceeding?

21 A No, I don't believe it was for -- not that I
22 recall. What I recall is it was in connection -- well,
23 it was -- what I recall is it was years back, to look at
24 for purposes of infringement, I believe.

25 MR. WARD: David, I want to show you now what

1 is Exhibit 2057.

2 THE WITNESS: Okay.

3 (Petitioner's Exhibit 2057 was
4 marked for identification by the
5 court reporter and is attached
6 hereto.)

7 BY MR. WARD:

8 Q Do you recognize this?

9 A Yes.

10 Q Is this the product that you were just
11 referencing, the Quasar Science product that was provided
12 to you by Colt?

13 A I believe this is the product. I did order
14 some Quasar product online in connection with this IPR.
15 I -- I don't recall if I had this specific product from
16 2016 or if it was a product that I ordered online. Some
17 of the product I ordered online was used, an older
18 product. And my understanding is that new Quasar doesn't
19 make the S2 product, so I can't -- I can't tell you
20 100 percent that it was a product that I got in 2016 or
21 that I got it actually in connection with this IPR. But
22 I can tell you that it is the S2 model because that is
23 what is on it and that that was a switch product.

24 Q And did this product function, to your
25 knowledge, when you received it?

1 A Yes.

2 Q Does it still function?

3 A I believe I took it apart so it does not
4 function, no.

5 Q And you weren't able to reconfigure?

6 A I did not attempt to reconfigure any of the
7 product that I took apart.

8 MR. WARD: So, David, I want to show you now
9 Exhibit 2059.

10 THE WITNESS: Okay.

11 (Petitioner's Exhibit 2059 was
12 marked for identification by the
13 court reporter and is attached
14 hereto.)

15 BY MR. WARD:

16 Q This is a copy of a claim chart that you
17 labeled as "U.S. patent No. 582 versus S-switch lights";
18 correct?

19 A Correct.

20 Q And what does this claim chart provide, David?

21 A This claim chart provides an analysis of the
22 claims, I believe of the '582 patent. And against the
23 Quasar product -- the Quasar switch product that switches
24 between color temperatures. And I believe that's
25 the -- I just have to see this -- that is the S2 product,

1 the Q50S2 that was in Exhibit 2057. Let me just
2 double-check that. I am going to refer back to my
3 Exhibit 2051 to refresh my memory. Yes.

4 Q So, David, in the middle of page 1 of
5 Exhibit 2059, it provides a list of Quasar S-switch
6 products; correct?

7 A In the -- sorry.

8 Q No problem. Exhibit 2059.

9 A 2059. Okay.

10 Q Uh-huh.

11 A 2059.

12 Q Sure.

13 A Oh, yes. Yeah. Okay.

14 Q Here?

15 A Yeah. Okay.

16 Q You provide a list of Quasar S-switch products;
17 correct?

18 A Correct. I don't know that that's an exclusive
19 list, but that's a list of the ones that I considered to
20 be within claim 1 of the '582 patent. Or within claim --
21 I'm sorry -- within the identified claims of the
22 '582 patent.

23 Q And which of these identified S-switch products
24 did you inspect in person?

25 A In person would be the one that I photographed

1 in Exhibit 2057.

2 Q And which one is that one in the list --

3 A Oh, which one is that in the list? I believe
4 that is a 4 foot, so that would be the Q50- -- so the
5 Q50W3056S2 -- yeah, I believe that is the Q50W3056S2,
6 yes, that is the one.

7 Q So even though you only physically inspected
8 one product, you are asserting that all of these listed
9 S-switch models practice the '582 claims identified?

10 A Yes.

11 Q And page 2 of Exhibit 2059 for claim limitation
12 1A, housing having ends. In the right-hand column, you
13 identified two different exhibits, Exhibit 2055 (2016
14 Q-line), and Exhibit 2057 (S-switch photos). And your
15 claim chart alleges that these accused products have a
16 housing with ends (red arrows).

17 So you have identified two specific products
18 here; correct? The 2016 Q-line, and then the physically
19 inspected S-switch product for which you just identified
20 the model number; correct?

21 A Correct.

22 Q How is it that you are aware that all of the
23 other listed model numbers satisfied this particular
24 claim limitation?

25 A They all -- from the images that I've seen



1 online and they -- and just logic, they are all -- they
2 all have ends.

3 Q And is that the method you used with respect to
4 your claim chart comparison for all of these models for
5 all claim limitations identified?

6 A I don't know. I think we would have to go
7 through one by one to make that statement. But certainly
8 for housing having ends, yes. For the others, it would
9 be either observation from seeing product literature
10 online, and from the model numbers being treated online
11 as -- from what I could tell, it is just simply different
12 sizes of the same model -- different lengths of the same
13 model, so that the operation would be the same and other
14 structure would all be the same.

15 And to the extent I needed to, I would either
16 consult with Mr. Macias to the extent I needed to. I am
17 not sure I -- I know of one instance where I think I
18 referenced his declaration. And Mr. Fisher where I
19 referenced his declaration. But, you know, I would have
20 to go through each term to be sure of what -- everything
21 I relied on would be with relation to that and then --
22 even then I am not sure I would be sure as I sit here.

23 Q So just, for example, turning to the next page,
24 page 3 of Exhibit 2059 claim limitation for (Reading:)
25 Configured to emit broad-spectrum white light in a first

1 predetermined Kelvin temperature range of cool white
2 light.

3 How did you go about identifying for all of the
4 Quasar models listed on page 1 of Exhibit 2059 that they
5 practiced this claim limitation?

6 A Okay. So I determined it with respect to the
7 S-switch product shown in Exhibit 2057. I also then
8 viewed and looked at the product literature, such as
9 Exhibit 2056. And I determined, based on the product
10 literature, which came from Quasar and/or third parties
11 marketing their product, I relied on their statements as
12 being either true or close to true and logic. If they
13 produced the exact same temperature range for two
14 different switches, they would not be very useful and
15 they would not be used in the field very long. So that
16 was part of the logic.

17 And if they didn't produce Tungsten and
18 Daylight, which they marketed, they would also not be
19 used in the field very long. So I concluded from that as
20 well as my review of the one product -- my personal
21 observation from having taken apart the one product and
22 my review of the product literature.

23 MR. WARD: I have no further questions, David.

24 MR. HOFFMAN: Okay. Cool.

25 I am not sure I have redirect. Just give me a

1 moment. Let's go off the record, if we may.

2 MR. WARD: Off the record.

3 (Brief Recess.)

4 MR. HOFFMAN: I just have one question on
5 redirect for myself.

6 EXAMINATION

7 BY MR. HOFFMAN:

8 Q So I'm just going to say, Mr. Hoffman, my
9 question is, do you have any other qualifications than
10 what is shown on your CV or what you already mentioned
11 today during the deposition for purposes of understanding
12 the technology and interpreting the claims regarding the
13 technology and applying the claims regarding the
14 technology?

15 A My answer: Yes, I have been practicing patent
16 law for 38 years. And as part of that, I look at -- I
17 have looked at a lot of patents, maybe in the thousands,
18 and I would say at least many hundreds. Some of those
19 have involved patents with LEDs, some of those have
20 involved patents with circuit boards, some of those have
21 involved patents with switches, some of those have
22 involved patents that are electromechanical, some have
23 involved satellite orientation, some have involved --
24 that is -- that is going pretty high in the universe, and
25 some have involved going pretty low, including oil

1 drilling.

2 And I have interpreted claims in -- in my work
3 in doing noninfringement opinions or infringement
4 opinions and validity opinions and non- -- and invalidity
5 opinions for those 38 years. And so -- and I have spoken
6 with experts on and off and people in the field. And I
7 looked at -- any time I didn't understand a specific
8 component or a part of an invention, I looked at -- I did
9 research either through patents or through Wikipedia or
10 through other sources, and educated myself such as the
11 way -- a book or a series called "The Way Things Work"
12 and other resources to educate myself.

13 MR. HOFFMAN: That is it.

14 STENOGRAPHIC REPORTER: Off the record,
15 Counsel?

16 MR. WARD: Off the record.

17 (Off-the-Record Discussion.)

18 MR. HOFFMAN: Oh, I am reserving reading and
19 signing, yeah.

20 (Ending time: 2:54 p.m.)
21
22
23
24
25

OUR ASSIGNMENT NO.: J11077923

CASE CAPTION: QUASAR SCIENCE LLC V COLT
INTERNATIONAL CLOTHING, INC. D/B/A COLT LED

DECLARATION UNDER PENALTY OF PERJURY

I, the undersigned, declare under penalty of perjury that I have read the entire foregoing transcript of my deposition or the same has been read to me, and the same is true and accurate, save and except for changes, corrections, additions or deletions indicated by me on the DEPOSITION ERRATA SHEET hereof, with the understanding that I offer these changes as if still under oath.

Signed on the _____ day of _____,
2024, at _____, _____.
(City) (State)

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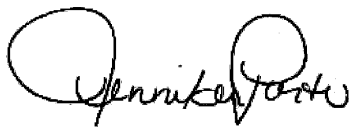
1 I, JENNIFER PORTO, CSR No. 14098, certify:
2 That the foregoing proceedings were taken before me at
3 the time and place herein set forth; at which time the
4 witness was duly sworn; and that the transcript is a true
5 record of the testimony so given to the best of my
6 ability.

7
8 Witness review, correction and signature was
9 () by code. (x) requested.
10 () waived. () not requested.
11 () not handled by the deposition officer due to party
12 stipulation.

13
14 The dismantling, unsealing or unbinding of the
15 original transcript will render the reporter's
16 certificate null and void.

17 I further certify that I am not financially
18 interested in the action, and I am not a relative or
19 employee of any attorney of the parties, nor of
20 any of the parties.

21 Dated this 29th day of April, 2024.

22 
23 _____
24 JENNIFER PORTO, CSR 14098

25

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