

UNITED STATES DISTRICT COURT
CENTRAL DISTRICT OF CALIFORNIA
SOUTHERN DIVISION AT SANTA ANA
HONORABLE JAMES V. SELNA, JUDGE PRESIDING

CERTIFIED TRANSCRIPT

MR TECHNOLOGIES, GMBH,	)	
	)	
Plaintiff and	)	
Counterclaim Defendant,	)	
	)	
vs.	)	SACV NO.
	)	8:22-cv-01599-JVS-DVM
WESTERN DIGITAL TECHNOLOGIES,	)	
INC.,	)	
	)	
Defendant and	)	
Counterclaim Plaintiff.	)	DAY 6, VOLUME II
_____	)	

REPORTER'S TRANSCRIPT OF PROCEEDINGS

JURY TRIAL

SANTA ANA, CALIFORNIA

WEDNESDAY, JULY 24, 2024

1:26 P.M.

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Deborah D. Parker, U.S. Court Reporter

04:01:44 1 MR. LEE: Thank you, Your Honor.

2 DIRECT EXAMINATION

3 BY MR. LEE:

4 Q Good afternoon, Professor Victora.

04:01:49 5 A Good afternoon.

6 Q Would you mind introducing yourself briefly to the
7 jury?

8 A Certainly. My name is Randy Victora. I live in
9 Minnesota. And I'm also a professor at the University of
04:02:00 10 Minnesota.

11 Q And are you married, sir?

12 A I am, with two adult children. My wife's name is Nancy
13 and she is basically at this point retired, but started as a
14 school teacher and later on did tutoring.

04:02:17 15 Q You said you had two adult children. Do they also
16 work?

17 A Yes. Yes. My oldest daughter is a school teacher.
18 She teaches math in a local school district at the high
19 school and middle school level. And my youngest also is a
04:02:34 20 physics Ph.D., and she's currently doing research with an
21 MIT professor in the general area of automics and artificial
22 intelligence.

23 Q So your entire family is in the business, I guess, of
24 academics?

04:02:50 25 A It would seem that way.

Deborah D. Parker, U.S. Court Reporter

04:02:52 1 Q Did you -- do you have some slides prepared to aid you
2 in your testimony today?

3 A I do.

4 MR. LEE: So, Your Honor, we'd like to publish the
04:02:59 5 slides.

6 *(The document was published in open court.)*

7 BY MR. LEE:

8 Q Are these the slides that you were just testifying
9 about? You can look at the monitor to see --

04:03:16 10 A Oh, I see.

11 Yes, they are.

12 Q So let's turn to the first slide. What are we going to
13 start --

14 A Well, I guess I'm first of all going to discuss my
04:03:28 15 education. So I received bachelors' degrees in physics and
16 math from MIT in 1980. And then I went to UC Berkeley to
17 get my Ph.D. in physics, graduating in 1985.

18 Q And what did you do after you got your Ph.D.?

19 A Well, I joined Eastman Kodak Company, and I started as
04:03:50 20 a senior research scientist and I -- eventually ending as
21 the direct -- or the team leader for the Ultra Capacity
22 Optical Disk Project.

23 Q And what is the Ultra Capacity Optical Disk Project?

24 A Well, it was part of a large effort, but we were
04:04:09 25 working on the media. We're working on optical recording

04:04:13 1 media, but mostly magnetic perpendicular media.

2 Q And after Kodak, where did you go?

3 A I went to University of Minnesota. I started as an
4 associate professor, and three years later was promoted to
04:04:29 5 full professor. I am now head of the department of electric
6 and computer engineer, which is a fairly large department
7 with about 300 on the payroll, 50 professors.

8 Q And I see you have something else listed for Minnesota.
9 What is that?

04:04:44 10 A I am the director of the center for Micromagnetics
11 Information Technology, which is an industrially funded
12 group that basically gives money to graduate students to do
13 research in this area.

14 Q And I see you've abbreviated MIT. Is that the same MIT
04:05:02 15 Dr. Desai studied at or worked at?

16 A Same acronym, but different words attached to it and
17 very different university.

18 Q And actually, let me ask you, you also mentioned that
19 it was industry funded.

04:05:14 20 What do you mean by that?

21 A Well, companies in the disk drive industry and also
22 sometimes in the spintronics industry would give money
23 basically, as I said, to fund the graduate students to do
24 research so they could later on hope to hire them.

04:05:30 25 Q And do those industry funders also include hard drive

04:05:35 1 companies?

2 A Yes, they do.

3 Q And what are some of the hard drive companies that have
4 funded that center?

04:05:40 5 A Well, Seagate and Western Digital most notably, but
6 also things like Samsung and such.

7 Q And do you know sort of what percentage of the funding
8 comes from Western Digital?

9 A In recent years, it's been about 20 percent.

04:05:56 10 Q Does the center rely upon the funding from Western
11 Digital to survive?

12 A Well, obviously, no. It's only 20 percent, but we
13 certainly appreciate it.

14 Q Now, you list some other things on -- with regards to
04:06:10 15 your qualifications. And what are those related to?

16 A Well, I spent three years on the scientific advisory
17 board of the Data Storage Institute in Singapore. So that's
18 a government-funded laboratory devoted to research in the
19 general areas of, for example, magnetic recording and
04:06:28 20 spintronics. So it's a paid position where you come over
21 and you listen to their workers, what they've accomplished
22 and give them advice as to where they might want to go next.

23 Also, I was invited to join the external advisory
24 board of Seagate for -- in 2014 and 2015.

04:06:48 25 Q And the advisory board of Seagate, is that -- sorry.

04:06:53 1 Withdrawn.

2 Who invited you to join the Seagate external
3 advisory board?

4 A Mark Re did.

04:07:00 5 Q Is that the same Mark Re that testified earlier in this
6 case?

7 A It is.

8 Q So I want to ask you a little bit more about the center
9 or MIT. Can you just tell us what you're showing us on this
04:07:11 10 slide?

11 A Yes. So on the right we have a picture of some of the
12 students -- actually, most of the students and postdocs that
13 are part of MIT as well as four of the professors. And on
14 the left we show the equipment that we use to make our
04:07:27 15 recording media typically. And this is, in fact, the
16 equipment that we use to make the recording media that
17 you'll hear about today.

18 Q So do you do more than just simply think up and write
19 down ideas and concepts?

04:07:43 20 A Well, that's often where it starts, but in order to
21 convince the company to invest significant resources in an
22 area, it really helps to make the thing too, to fabricate
23 it. And so that is, in fact, where Professor Wang comes in.
24 Professor Wang is my experimental collaborator, and he in
04:08:06 25 this case, for example, made the media.

04:08:13 1 Q Now, in addition to your job and advisory board
2 experiences, what other work have you done?

3 A Well, in terms --

4 Q Sorry. In terms of things like, you know, scholarship.

04:08:30 5 A Oh. In terms -- okay. Well, obviously professors and
6 their graduate students write papers, so I've written 190 of
7 them or more than 190 and over a dozen patents as well.

8 Q And in addition to your articles, your journal --
9 scholar articles and patents, have you received any
04:08:50 10 recognition for the work that you've done, especially in the
11 field of magnetics?

12 A Yes. So I'm a fellow of the American Physical
13 Society -- that's what physicists belong to -- as well as a
14 fellow of IEEE, which is what electrical engineers belong
04:09:06 15 to. I won the University of Minnesota's distinguished
16 teaching award for my work in the magnetism area. And I won
17 the achievement award of the IEEE Magnetic Society, which is
18 the highest award in magnetics.

19 I also won twice the industrial award from what
04:09:22 20 was called NSIC -- it's written NSIC here. That's National
21 Storage Industry Consortium. So that's where all the major
22 disk drive companies belong and then they distribute some
23 money to various universities, as well as they then, you
24 know, want to hear about kind of research that's being done.

04:09:42 25 It later turned to the name NSIC, which is Information

04:09:44 1 Storage Industry Consortium. Same organization, though.

2 And I won their technical achievement award twice.

3 Q And I don't think we have time to talk about
4 everything, but I wanted to ask you a few questions about
04:09:56 5 that. Let's start with the fellowship of the IEEE.

6 Do you know approximately how many people are
7 designated as a fellowship every year?

8 A Yeah. Each year they would say .1 percent, which
9 amounts to one in a thousand people.

04:10:13 10 Q And do you remember when you were designated as a
11 fellow?

12 A You mean what year?

13 Q Yes.

14 A It's about like 2005, but I would have to look it up.
04:10:23 15 It's a matter of record.

16 Q And then I think you mentioned an award from the IEEE
17 Magnetic Society. Can you actually explain? Is magnetics,
18 is that related to the magnetic storage and recording media
19 that we're talking about today?

04:10:39 20 A Well, magnetics encompasses many fields, and about
21 20 percent of it is magnetic recording, like we've been
22 hearing about in this trial.

23 Q And I also want to ask you about -- and actually, with
24 that achievement award, how many people are awarded that
04:10:54 25 achievement award every year?

04:10:58 1 A One, one person.

2 Q And so you were the winner in 2014?

3 A That is true.

4 Q And then I wanted to ask you about those two technical

04:11:07 5 achievement awards. And actually, I believe we have the

6 awards themselves here.

7 MR. LEE: Your Honor, I'd like to have published

8 to the jury only DDX-5 and 6, which are the two awards in

9 question.

04:11:25 10 THE COURT: Any objection?

11 MR. LEDAHL: No objection.

12 MR. LEE: So, Your Honor, if I may approach and

13 provide the...

14 (Pause.)

04:11:41 15 BY MR. LEE:

16 Q So the jurors, of course, are welcome to look at the

17 awards themselves, but I also have here on the screen

18 photographs of the two awards, so maybe we could talk about

19 each award in turn.

04:11:56 20 So what is the first award? When was that

21 awarded?

22 A Well, that's the 2001 award when the National Storage

23 Institute Consortium was the name of the organization. And

24 this is for coming up with a very useful 12-layer media,

04:12:11 25 useful in the context of that time when perpendicular media

Deborah D. Parker, U.S. Court Reporter

04:12:14 1 of high squareness and low noise were unusual.

2 Q Professor Victora, are you okay if they take the awards
3 out and take a look at them?

4 A Oh, yeah, of course.

04:12:27 5 Q I saw that, so just making sure.

6 And I'm sorry, you said this is awarded for
7 multilayer perpendicular magnetic recording media?

8 A It is.

9 Q And that's back in 2001?

04:12:40 10 A That is true.

11 Q And perpendicular magnetic recording media, is that the
12 same thing as PMR media?

13 A It is.

14 Q Okay. So then let's -- I want to know about the second
04:12:50 15 award that you won.

16 So when did you win that award and what was that
17 for?

18 A Well, that's in 2006, and the name had changed to
19 Information Storage Industry Consortium. But it was for
04:13:03 20 exchange coupled composite media, which you, in fact, have
21 heard a few times during this trial already and which we'll
22 talk a little bit about today.

23 Q And exchange coupled composite, according to what
24 you're saying, is that -- that's the ECC media we've been
04:13:17 25 hearing about?

04:13:18 1 A That is correct.

2 MR. LEE: At this time, Your Honor, we'd like to
3 offer Professor Victora as an expert in magnetics and
4 magnetic media systems, including magnetic recording and
04:13:28 5 storage media.

6 MR. LEDAHL: No objection, Your Honor.

7 THE COURT: The Doctor will be received as an
8 expert in those areas. As I indicated previously, it means
9 that I've found that he has at least the minimal
04:13:40 10 qualifications to express opinions in the area. It's for
11 you to decide how much weight to give his opinions.

12 BY MR. LEE:

13 Q So now that we've discussed your background, what is it
14 that we're going to talk about next?

04:13:56 15 A Well, the methodology.

16 Q And what is the methodology that you've used for the
17 opinions you're going to provide today?

18 A Well, I was asked to provide my whether or not MRT
19 patents are obvious, so I did several things. I studied the
04:14:14 20 patents and their claims. I studied the Court's definition
21 of terms. I studied the prior art. And I compared the
22 asserted claims to the prior art and the knowledge of a
23 person of ordinary skill in the art using the Court's
24 constructions.

04:14:32 25 Q And in your analysis, what did you look at?

04:14:35 1 A Well, on the left-hand side, we can see some pretty
2 obvious choices which I looked, of course, at the patents,
3 which we call the '864 patent and the '997 patent. And I
4 also looked at the prior art references, the claim
04:14:50 5 constructions, the technical documents, and the witness
6 deposition testimony which they did in the past, yes.

7 I also considered on the right-hand side there my
8 years of education in the field and my years of research and
9 experience. And then most recently, the MRT's expert
04:15:10 10 reports, the MRT's expert deposition testimony, and trial
11 testimony.

12 Q And have you been here since the beginning of trial?

13 A I have.

14 Q Now, since you've been here, I think you heard both
04:15:26 15 Dr. Re and Dr. Bertero testify about level skill in the art.

16 What's your understanding of the level of skill in
17 the art?

18 A Right. So my definition is that if, for example, you
19 have a bachelor's degree in fields like electrical
04:15:41 20 engineering, physics, or a closely related discipline, and
21 you have six to eight years of practical experience working
22 with or studying --

23 (Court Reporter requests clarification for the
24 record.)

04:15:55 25 THE WITNESS: I'm sorry.

Deborah D. Parker, U.S. Court Reporter

04:15:55 1 -- studying magnetic storage media. If you have
2 higher degree, such as master's degree, you only need the
3 four years of experience. If you have a Ph.D., then you
4 only need two years.

04:16:09 5 BY MR. LEE:

6 Q And did you apply this level of skill in the art in
7 your analysis?

8 A Absolutely.

9 Q Now, I think you've heard, as I said before, both
04:16:18 10 Dr. Bertero's and Dr. Re's definition of level of skill in
11 the art. Would your opinions have changed in any way if you
12 had applied either of those definitions instead?

13 A Dr. Re's is slightly more lenient, but it would not
14 really have changed my positions. It would not have changed
04:16:33 15 my position. I think Dr. Bertero's is identical.

16 Q And what's your understanding of what's required to
17 show that a claim is obvious?

18 A Well, the issue about -- okay. To show a claim
19 invention is obvious is that it has to be obvious to a
04:16:52 20 person of ordinary skill in the art before the effective
21 filing date. The -- yes.

22 Q No, sorry. Go ahead.

23 A I was just going to say there is a more complete
24 definition.

04:17:04 25 Do you want me to read the whole definition or is

04:17:06 1 that good enough?

2 Q I just want your understanding of it, so that's fine.

3 And then do you know which party bears the burden
4 of proving invalidity?

04:17:17 5 A Well, in this case, it is the case that Western Digital
6 needs to prove invalidity using a clear and convincing
7 evidence that that is invalid.

8 Q And I think you mentioned filing date. Do you know
9 what the file date is of the patents?

04:17:34 10 A Yes. It's in June 2006.

11 Q So then what are you showing us on this next slide, 13?

12 A These are the Court claim constructions that I
13 discussed a couple minutes, which is sort of a dictionary of
14 terms. I'm not actually showing the complete set. I'm just
04:17:53 15 showing just the ones that are relevant to what I'll be
16 talking about today.

17 Q And is that -- are those the terms that are relevant to
18 the claims that you'll be discussing?

19 A Yes.

04:18:05 20 Q So then what's the next topic that we're going to be
21 talking about?

22 A Well, the MRT patents that are the subject of today's
23 trial.

24 Q Okay. And actually, before we talk about the patents.

04:18:14 25 Let me ask you, did you know Dr. Suess before you got

involved in this lawsuit?

A Oh, yes. I think I've known him since graduate school --

Q Okay.

A -- since his graduate school.

Q Were you also in graduate school at the same time?

A I'm older than him.

(Laughter.)

BY MR. LEE:

Q Okay. And do you have an opinion of -- a professional opinion of Dr. Seuss?

A Oh, yeah. I have a high opinion of him. He's a respected researcher in this field.

Q What about personally? Do you have an opinion of him personally?

A Yeah. I would -- we have gone out for dinners and such together, and I generally find him very interesting to talk to.

Q Now, on this slide, what are you showing us here at slide 15?

A Well, this is the '864 patent, and it was, as I mentioned before, filed on June 17th, 2006, and then it was ultimately issued in 2018.

Q And then what is this next slide showing us here, slide 16?

Deborah D. Parker, U.S. Court Reporter

1 CERTIFICATE

2 I hereby certify that pursuant to Section 753,
3 Title 28, United States Code, the foregoing is a true and
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6 transcript page format is in conformance with the
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