

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 7, VOLUME II
_____	)	

REPORTER'S TRANSCRIPT OF PROCEEDINGS

JURY TRIAL

SANTA ANA, CALIFORNIA

THURSDAY, JULY 25, 2024

1:29 P.M.

DEBORAH D. PARKER, CSR 10342
OFFICIAL COURT REPORTER
UNITED STATES DISTRICT COURT
411 WEST FOURTH STREET
SUITE 1-053
SANTA ANA, CALIFORNIA 92701
(657) 229-4305
transcripts@ddparker.com

Deborah D. Parker, U.S. Court Reporter

02:51:06 1 in the art would've combined Victora and Hagadorn in the way
2 that Dr. Victora asserted?

3 A I don't think it would've happened, and clearly it
4 didn't, so...

02:51:20 5 Q And can you just briefly summarize the parts of the
6 claims that the Victora and Hagadorn combination don't meet?

7 A Yes. For the '864, basically they don't meet claims
8 1C, 1E, 1F, 1G and 1H. And then for the Claims 10 and 11,
9 the dependent patents, they also don't meet these same
02:51:50 10 criteria.

11 Q And so they don't meet -- that combination doesn't meet
12 any of the limitations related to the nucleation host,
13 for example, right?

14 A Correct.

02:52:00 15 Q And the same goes for the '997 claims?

16 A Yes. For the '997 claims, it also doesn't meet any of
17 the claims that are associated with the nucleation host.

18 Q All right. Let's talk briefly about Berger for
19 Hagadorn. Can you just briefly summarize your opinions on
02:52:16 20 that?

21 A Again, the patent examiner who examined these patents
22 for 12 years was aware of Berger and Hagadorn. There was no
23 modification -- or no motivation to modify Berger. As I
24 mentioned, Hagadorn doesn't qualify as prior art, and
02:52:34 25 Dr. Victora's imaginary contribution -- or combinations

02:52:38 1 relied on hindsight.

2 Q And what was Berger's objective?

3 A Berger was clearly trying to emulate tilted media,
4 which, as I mentioned, could not be practically made at the
02:52:54 5 time.

6 Q Did Berger meet that objective?

7 A He did. So the media that he discusses in the patent
8 behaves like tilted media, but it was able to be fabricated.

9 Q And how did Berger meet that objective?

02:53:10 10 A So Berger put at soft magnetic layer on top of a hard
11 storage layer.

12 Q Any reason anyone would want to add layers to Berger?

13 A No, there's no reason. Again, it's a soft magnetic
14 layer on top and it meets the objectives, so there would be
02:53:31 15 no motivation to add --

16 Q And what would happen if you did?

17 A Actually, the performance would get worse, so the
18 signal-to-noise would go down and thermal stability would
19 also decrease.

02:53:48 20 Q Any other reason why a person skilled in the art
21 wouldn't have added one or more layers to Berger?

22 A So, again, here's -- in his text, in the Berger text,
23 mentioning what I just said, but again, there's really no
24 motivation at all to be adding more layers to this once you
02:54:06 25 already have a soft layer on top.

02:54:09 1 Q Is there other evidence supporting the fact that people
2 thought that the bilayer was the best you could do?

3 A Yes. Again, the conventional wisdom at the time, and
4 shown here again, in the Dobin and Richter paper, was that
5 this hard soft combination two layers had optimal
6 performance.

7 Q And these guys were your employers, right?

8 A Yes, they were.

9 Q Now, Dr. Victora, as with his Victora papers, tries to
02:54:43 10 combine Hagadorn with Berger. What's your opinion on that?

11 A Again, for the same reasons that I gave before, I do
12 not view Hagadorn to be qualified as prior art.

13 Q Can you just briefly describe again the field of
14 endeavor?

02:55:06 15 A Sure. The field of endeavor is perpendicular magnetic
16 recording media. The Hagadorn reference is decades old and
17 in a completely different field.

18 Q All right. And so the -- can you summarize the parts
19 of the claims that the Berger and Hagadorn combination don't
02:55:27 20 meet?

21 A Similar to the Victora-Hagadorn combination wanted,
22 they don't meet the claims related to the nucleation host on
23 the '864 patent, either Claim 1 or of the dependents.

24 Q So the same missing limitation as the Victora and
02:55:46 25 Hagadorn combination?

02:55:47 1 A Correct.

2 Q Let's turn to the Li reference.

3 Did you know Dr. Li?

4 A Yes, I knew Dr. Li and all the other coinventors. They

02:56:03 5 were on my team at Seagate.

6 Q And how did you know them?

7 A Well, yeah, they're on my team --

8 Q Okay.

9 A -- at Seagate.

02:56:09 10 Q Do you know whether the Li invention ever got adopted?

11 A No, the Li invention was not adopted.

12 Q And in all the papers that we've seen, including from

13 Western Digital and other publications, do people cite him

14 as being the guy who invented modern PMR media in the same

02:56:29 15 way they credit Dr. Seuss?

16 A Not to my knowledge. I haven't seen that.

17 Q What path did Seagate follow?

18 A Seagate followed the path that Dr. Seuss put forward in

19 his invention.

02:56:43 20 MR. CHANG: All right. Let's see why that might

21 be.

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

23 BY MR. CHANG:

24 Q Can you give us a brief overview of what the Li patent

02:56:52 25 actually discloses?

Deborah D. Parker, U.S. Court Reporter

02:56:53 1 A Yes. Very clearly, it states that the anisotropy field
2 decreases towards the bottom of the recording media. It
3 also says that the hard storage layer needs to be on top
4 closest to the write head.

02:57:11 5 Q Is that in every embodiment?

6 A Every embodiment.

7 Q And how does that compare -- oh, excuse me.

8 And how does that compare to Dr. Seuss' invention?

9 A It's upside down. Goes in the wrong direction.

02:57:26 10 So Dr. Li is talking about a decreasing HK towards
11 the bottom of the stack, whereas Dr. Seuss speaks of an
12 increasing anisotropy constant towards the hard storage
13 layer on the bottom of the stack.

14 Q What were Li's objectives?

02:57:46 15 A There were -- basically to reduce the head media
16 spacing to minimize that, and to make sure that you could
17 match the HK gradient with your field -- or match the field
18 gradient with the HK gradient.

19 Q And did Li meet those objectives?

02:58:05 20 A He did.

21 Q Okay. Let's talk about the first one.

22 A Okay. So the first one is -- there we go. So this in
23 conventional media where he describes that with a spacing
24 between the bottom of the writer and the top of the media,
02:58:22 25 he gave an example of that being 6 nanometers.

02:58:27 1 Q And what was the HMS for conventional media?

2 A So the HMS is a concept where you go to the middle of

3 the media thickness and then add the write head spacing --

4 write head to media spacing to that middle of the thickness

02:58:43 5 of the conventional layer.

6 Q And what was the HMS at -- in this example?

7 A So this example that he gave with the 6-nanometer write

8 head to media spacing and a 200-nanometer media thickness,

9 it comes out to 16 nanometers.

02:59:01 10 Q And what about using his -- what he actually disclosed

11 has his invention? What was the HMS value?

12 A So it was -- you want to decrease HMS because it would

13 be better for reading and writing purposes. And what Li's

14 invention was putting the hard storage layer on top and --

02:59:28 15 Q So what was that value -- the HMS value?

16 A If you these thinner layers on top so that they're

17 switching incoherently, the HMS value was giving by 6

18 nanometers of that head to the top of the disk spacing and

19 then half of 6, so a total of 8.5 nanometers.

02:59:50 20 Q And so that was -- how would you characterize that

21 improvement in terms of the reduction of head media spacing,

22 which was one of Li's core objectives?

23 A It was a huge reduction. Almost a factor or two.

24 Q Now, what would happen if you tried Dr. Victora's

03:00:07 25 modification?

03:00:07 1 A So Li completely teaches away from this. It's
2 countered at what's in the claims in the patents, the
3 teaching in the patent. So if you did this with the --
4 again, the numbers that were used in the example,

03:00:24 5 Dr. Victora's HMS would be 23.5 nanometers. Again, a
6 substantial increase away from Li's HMS, more than a factor
7 or two.

8 Q And so would someone who's implementing Li, starting
9 with Li have even thought of trying Dr. Victora's imaginary
03:00:44 10 modification?

11 A No. It's completely contrary to what's taught in the
12 patent.

13 Q Did Li meet his second objective of matching the
14 gradients?

03:00:56 15 A Yes. So it's the head field would reduce as it goes
16 through the media. Li wanted the HK to be decreasing as
17 well.

18 Q And so the write-field gradient is the gray triangle
19 background; is that right?

03:01:13 20 A Correct. So the boxes, as we've been using, are the HK
21 in this case, value for the different layers. And the gray
22 background is the representation of the head field.

23 Q And so what Li teaches is that those bars should be
24 within the gray triangle?

03:01:35 25 A Correct.

1 CERTIFICATE

2 I hereby certify that pursuant to Section 753,
3 Title 28, United States Code, the foregoing is a true and
4 correct transcript of the stenographically reported
5 proceedings held in the above-entitled matter and that the
6 transcript page format is in conformance with the
7 regulations of the Judicial Conference of the United States.

8
9 Date: July 26, 2024

10
11
12 /s/DEBORAH D. PARKER
13 DEBORAH D. PARKER, OFFICIAL REPORTER
14
15
16
17
18
19
20
21
22
23
24
25

Deborah D. Parker, U.S. Court Reporter