EXHIBIT 145



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Transcript of Shawn Shan, Ph.D.

Date: March 3, 2026
Case: Concord Music Group -v- Anthropic

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IN THE UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF CALIFORNIA
SAN JOSE DIVISION

CONCORD MUSIC GROUP, INC., ET AL.,
Plaintiffs,
-vs-
ANTHROPIC PBC,
Defendant.

Case No. 5:24-cv-03811-EKL SVK

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VIDEOTAPED DEPOSITION OF:

SHAWN SHAN, Ph.D.

The videotaped deposition of SHAWN SHAN, Ph.D., called as a witness pursuant to notice and pursuant to the provisions of the Federal Rules of Civil Procedure 30 and the Rules of the United States Supreme Court thereof pertaining to the taking of depositions; taken before ISAIAH ROBERTS, CSR, RPR, a Certified Shorthand Reporter, at Arnold & Porter, 70 West Madison Street, Suite 4200, Chicago, Illinois 60602-4231 on March 3rd, 2026, commencing at 9:00 a.m. Central Time.

APPEARANCES:

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ALSO PRESENT:

MR. IAN CHEN, Anthropic, In-house Counsel

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WITNESS: SHAWN SHAN, Ph.D.
Examination by Ms. Mehta. 5

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THE VIDEOGRAPHER: Here begins Media Number 1 in the videotape deposition of Dr. Shawn Shan in the matter of Concord Music Group, Inc., et al., v. Anthropic PBC in the United States District Court, Northern District of California, San Jose Division, case number 24-cv-03811-EKL-SVK.

Today's date is March 3rd, 2026. The time on the video monitor is 9 a.m. Central. The videographer today is Richard Figueroa representing Planet Depos. This video deposition is taking place at Arnold & Porter, Chicago, Illinois.

Would counsel please voice identify themselves and state whom they represent.

MS. MEHTA: Good morning. Sonah Mehta from WilmerHale on behalf of Anthropic. With me on the Zoom is my colleague Ellen Stephano. And Ian Chen, in-house counsel at Anthropic, is also on the line, on the Zoom.

MR. HOWELL: Keith Howell from Oppenheim + Zebrak on behalf of the music publisher plaintiffs.

THE VIDEOGRAPHER: The court reporter today is Isaiah Roberts, representing Planet Depos. The witness will now be sworn in.

MS. MEHTA: Actually sorry. Just one thing.

Is there anyone else on the Zoom that wasn't announced? I think Tim might be on.

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Claude?
MR. HOWELL: Objection. Form. Vague. Calls for speculation.
THE WITNESS: What do you mean by control?
BY MS. MEHTA:
Q. Well, when you prompt Claude, does Claude tell you what the prompt should be or do you put in your own prompt?
MR. HOWELL: Objection. Form. Vague. Compound.
THE WITNESS: Can you repeat your question, please.
MS. MEHTA: Yes.
BY MS. MEHTA:
Q. My question is: When you prompt Claude, does Claude tell you or prescribe what the prompt should be or do you put in your own prompt?
MR. HOWELL: Objection. Form. Vague. Compound.
THE WITNESS: I believe how Claude works, based on my inspection, especially related to the code of guardrails, users do have some control over the prompting inputs.
However, a company like Claude when they host these closed source LLMs, they can, you know, reject

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prompts as I've seen in the code, they can append additional instructions to Claude, and to the best of my knowledge, these are not controlled by user.
BY MS. MEHTA:
Q. Okay. So let's set aside guardrails then. So I -- I'm not asking about guardrails that are put in place.
In terms of the initial prompt to Claude, that is something that you or the user defines; correct?
MR. HOWELL: Objection. Form. Vague. Calls for speculation.
THE WITNESS: The exact comment, if a user were to were Claude.ai chat interface, it is controlled by the user when typing that exact comment. But what Anthropic does to that prompt, probably uses a guardrail, and there may or may not be other things that Anthropic do. I have no information about that.
However, I have seen literature where LLM host services will tweak or rephrase user prompts, make the model potentially generate better response.
BY MS. MEHTA:
Q. Now, you haven't done an analysis yourself of whether or not Anthropic does that? I think you just said that; right?
MR. HOWELL: Objection. Form. Vague.

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Misstates prior testimony.
THE WITNESS: I have reviewed the source code -- source guard for guardrails, so I understand how specifically prompts show and the CCS were to block or modify responses -- or modify the input prompt.
I have not seen any evidence where Claude will rephrase user's messages, but that is something that can be done do improve the performance so there is a probability that Anthropic uses inputs like that.
BY MS. MEHTA:
Q. Let me break down the question, because I think there's three parts of what you're talking about, and I want to make sure we're being pretty precise.
So let's first start with the actual submission of the prompt. The user and the user alone types in the prompt and actually makes the submission of the prompt to Claude; correct?
MR. HOWELL: Objection. Form. Vague. Calls for speculation.
THE WITNESS: Not always.
BY MS. MEHTA:
Q. Who other than the user would be inputting a prompt into Claude?
MR. HOWELL: Objection. Form. Vague. Calls for speculation.

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THE WITNESS: So LLMs, one of the use case is, as we describe, a user go to Claude.ai or .com to use the service, but if I understand correctly, that is a fraction of how LLMs are used today. And, you know, Claudes have API access, and for most of those API access, the code script control what prompt is being used.
And there are certain automated systems that can guide those prompts, and Claude is also used as a reasoning systems or an agent, where, you know, user ask original task, but Claude will generate command and prompt itself to do a step-by-step educate -- execution of the task.
And in all of the other cases other than if the user just simply go to Claude.ai, I think users oftentimes do not have control over the exact prompts that are being fed into Claude.
BY MS. MEHTA:
Q. So let's focus on the prompts that you made for purposes of your work in this case.
Before you hit submit, the actual typing of the prompt, that you did yourself; correct?
MR. HOWELL: Objection. Form. Vague.
THE WITNESS: So I used both the API and Claude.ai, and for all the Claude.ai prompt, I manually

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typed. What were some of the song names, I may have copy and past from, you know, some main document as part of the exhibits.

And in terms of API, I used a program to control more holistic tests of the AI system when I need to submit multiple inquiries, and it is the computer that control the actual submission of those things.

BY MS. MEHTA:

Q. Okay. So let's then split it up between Claude.ai and the API.

With respect to Claude.ai, you manually typed or copied and pasted in the prompt before it was submitted to Claude; correct?

MR. HOWELL: Objection. Form. Vague.

THE WITNESS: Yes. That is correct. I either typed or copy, paste from, you know, the documents, digitally onto the interface and submitted it to myself.

BY MS. MEHTA:

Q. And you defined what that prompt would be?

MR. HOWELL: Objection. Form.

THE WITNESS: What do you mean by define the prompts?

BY MS. MEHTA:

Q. You made a judgment as to what the text of that prompt should be before you submitted it?

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MR. HOWELL: Objection --

THE WITNESS: Yes.

MR. HOWELL: Form.

THE WITNESS: Yes.

BY MS. MEHTA:

Q. No one else told you what that prompt should say; correct?

MR. HOWELL: Objection. Form.

Caution regarding any attorney-client work product.

THE WITNESS: I was assigned a task on what I test, and depending on different task, of course, I would use different prompts, but the final prompt is -- I can put into the system, I copy and paste myself.

BY MS. MEHTA:

Q. In other words, you had control over what that final prompt was before you put it into the system?

MR. HOWELL: Objection. Form. Vague. Calls for speculation.

THE WITNESS: Can you repeat the question?

MS. MEHTA: Yes.

BY MS. MEHTA:

Q. You yourself had the final control over those prompts before they went into the system for purposes of

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your prompt and output analysis?

MR. HOWELL: Objection. Form. Vague. And calls for speculation.

THE WITNESS: I, you know, go onto Claude.ai, I type it out or copy and paste with my house, and I submit it -- submitted it by pressing enter.

BY MS. MEHTA:

Q. Anthropic didn't control what you could and couldn't put into that prompt; correct?

MR. HOWELL: Objection. Form. Vague. Calls for speculation. Misstates prior testimony.

THE WITNESS: What do you mean by Anthropic control what I --

BY MS. MEHTA:

Q. Anthropic didn't tell you what the prompt should say or limit what your prompt should say, did it?

MR. HOWELL: Objection. Form. Vague. Calls for speculation. Misstates prior testimony.

THE WITNESS: So there are cases where the prompt was blocked --

BY MS. MEHTA:

Q. I'm not asking about -- I'm not asking about after you submitted. I'm asking before you hit the submit.

Before you hit the submit button, Anthropic

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didn't limit what you could or could not type into the prompt and did not tell you the what you had to put into the prompt; isn't that right?

MR. HOWELL: Again, counsel, objection. Form. Vague. Calls for speculation. Misstates prior testimony.

And you have to let the witness finish his responses. That's at least the second time you've cut him off.

Go ahead.

THE WITNESS: Yes, I do not see evidence of Anthropic limit what can be typed into the text box as long as it's English words.

BY MS. MEHTA:

Q. Now, let's go to the API part of this.

So you said you also used the APIs to do some prompting. When you used the APIs to do the prompting, did you define what the commands were in terms of what the API should call for?

MR. HOWELL: Objection. Form. Vague.

THE WITNESS: Define prompts that API used.

BY MS. MEHTA:

Q. Meaning, did you -- did you define -- I'm not sure what other word to use.

Did you prescribe what calls the API should

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other nuances."
Do you see that?
A. Yes.
Q. Is that an accurate statement?
MR. HOWELL: Objection. Form.
THE WITNESS: Again, I believe this is a general statement about how LLMs are trained. I have seen research which talking about how you can achieve more or less the same performance for an LLM by training of smaller and dedicated dataset. But I believe as where we stand at the LLM technology today, this is true.
BY MS. MEHTA:
Q. Okay. Next sentence says, "Training on diverse dataset provides models with more complete and comprehensive probabilities for different token patterns representing data and information in different context which generally lead to more flexible, useful, and coherent outputs."
Do you see that?
A. Yes.
Q. Is that an accurate statement?
A. Again, this is a general statement about how LLMs are trained today. There are cutting-edge research showing potentially you don't need as much data to

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train, but I believe this is correct for the LLMs that we have today.
Q. The next sentence says, "Larger training corpora also help LLMs generalize across date in different training datasets."
Do you see that?
A. Yes, I do.
Q. Is that an accurate statement?
MR. HOWELL: Objection. Form.
THE WITNESS: Again, the same comments where this is generally the case for LLMs we have today, but research have shown that may not be necessary in the future, but this is correct. From the best of my knowledge, that applies to the commercial LLMs that's developed.
BY MS. MEHTA:
Q. And you're not offering -- you're certainly not offering an opinion that the commercial LLMs that are in operation today are being trained on these smaller dataset that are the cutting-edge research?
MR. HOWELL: Objection. Form.
BY MS. MEHTA:
Q. Are you?
A. I do not know.
Q. The next sentence is -- oh, sorry. Just one

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follow-up to that.
And I take it you also don't know whether Claude is being trained on the smaller dataset that you say are cutting-edge research; fair?
MR. HOWELL: Objection. Form. Vague.
THE WITNESS: To the best of my knowledge and based on the source code I've reviewed, I do not think Anthropic's currently doing that. But I believe most of the cutting-edge research coming out are from -- at least today are from big tech companies who train AI models, Anthropic included.
So it's entirely possible that I'm saying that Anthropic and its competitors are testing and may or may not have integrated into perfect model.
BY MS. MEHTA:
Q. Okay. But based on the source code that you've seen, Anthropic is training on large and diverse training corporas, corpuses; correct?
MR. HOWELL: Objection. Form.
THE WITNESS: Based on the data and training -- again, I did not review the training code, but based on the data I have reviewed and the documents telling me which dataset was being used, I believe Anthropic has trained on diverse set of data from source code to non-English to English and different categories of data

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for the models that I inspected, which is, I believe, up to Claude 3.7.
BY MS. MEHTA:
Q. You just said that you looked at the models up to Claude 3.7. Did you look at Claude 4.1?
A. I --
MR. HOWELL: Objection. Form.
THE WITNESS: What do you mean by look at?
BY MS. MEHTA:
Q. Just -- sorry. I'll use your language.
Did you inspect the training data or source code for Claude 4.1?
MR. HOWELL: Objection. Form. Vague. Calls for speculation.
THE WITNESS: I reviewed the source code that's produced to me in the final -- in the inspection environment.
And I was told that my first inspection, the data only goes until Claude 3, if I remember correctly. And then Claude 3.7 data was produced later, in my second or third inspection. And I was not told information about Claude 4.1.
BY MS. MEHTA:
Q. When you say told, told by who?
A. By the data I saw in the inspection

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which author contributed to which section and contribution on the paper, I do not know.

And I believe I do see some names that could be Anthropic leadership, part of those papers, but I've also seen many works in collaboration with other universities. So I have no information about, you know, these founders' specific contribution to the work and to AI.

BY MS. MEHTA:

Q. No information one way or the other?

MR. HOWELL: Objection. Form. Vague. Compound.

THE WITNESS: What do you mean one way or the other?

BY MS. MEHTA:

Q. What I mean is you don't know what their -- you don't what the extent of their contribution to the scientific literature is.

MR. HOWELL: Objection. Form. Vague. Compound.

THE WITNESS: I have no personal interactions. The only thing I saw is a research paper they -- their name could be part of. And based on the papers, I cannot tell definitively what their contribution is.

BY MS. MEHTA:

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Q. Could you turn to paragraph 29 of your opening report, please, page 10.

A. 29? Okay.

Q. Yes. And this is in a section called case background. And at paragraph 29 you say, "Publishers allege that before they filed their original complaint in this case on October 18th, 2023, Anthropic had made little or no effort to prevent the output of publishers' work.

"In particular, publishers allege that before they filed suit, Anthropic had implemented only the most limited and ineffective guardrails in its AI models."

Do you see that?

A. Yes, I see that.

Q. And you cite there to the publishers' complaint in this case; right?

MR. HOWELL: Objection. Form.

THE WITNESS: I do not recall the exact citation, but I can check if you have it for me.

BY MS. MEHTA:

Q. Yeah. I'm just saying that the -- the -- that section of the report, it -- footnote 20 is to paragraph 120, and that's a reference to the first amended complaint as cited in footnote 14.

That's what "in" means; right?

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A. Yes, I believe so. I remember seeing the complaint, but I do not recall the specific paragraph or details of the complaint.

Q. That's fine. My -- my question was: You were not engaged on this matter until summer of 2025; right?

A. That is --

MR. HOWELL: Objection. Form.

THE WITNESS: -- correct.

BY MS. MEHTA:

Q. And I take it then that you don't -- you have not yourself done any testing or empirical research into the effectiveness of Anthropic's guardrails that existed prior to summer of 2025; correct?

MR. HOWELL: Objection. Form. Vague. Misstates testimony.

THE WITNESS: Can you say the dates one more time?

BY MS. MEHTA:

Q. Yeah. So what I'm saying is you didn't do any testing of Anthropic's guardrails for purposes of your work in this case prior to the time that you were engaged in this case; correct?

MR. HOWELL: Objection. Form. Vague. Misstates testimony.

THE WITNESS: I believe I was doing my Ph.D.

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when these large language models started popping up. And, you know, many academia Ph.D. students are interested in exploring these models. So was I. So I have, you know, engaged, looked at these models, looked at their vulnerabilities and potential guardrails.

And I have also reviewed many papers, both as reviewer for conferences and also as attendees to conference who are generally looking at academic literature about AI guardrails in general, during the period of time before.

And based on these analyses and these information, to the best of knowledge -- the best of my knowledge, LLMs safety alignment is a significantly underexplored areas for many years -- for the first couple of years at least when these models are released commercially.

I have seen evidence where it is very easy to, you know, trigger certain vulnerabilities in models, and this is more true for older models compared to the newer ones which presumably have guardrails implemented.

BY MS. MEHTA:

Q. So let's focus on -- I want to break down that answer a little bit.

I'm not asking about the academic research that you summarized in your report. I'm asking about