

UNITED STATES PATENT AND TRADEMARK OFFICE

---

BEFORE THE PATENT TRIAL AND APPEAL BOARD

---

VERANCE CORP.,  
Petitioner,

v.

MZ AUDIO SCIENCES, LLC,  
Patent Owner.

---

IPR2022-01544  
Patent 7,289,961 B2

---

Record of Oral Hearing  
Held Virtually: January 25, 2024

---

Before KARL D. EASTHOM, DAVID C. McKONE, and  
IFTIKHAR AHMED, *Administrative Patent Judges*.

IPR2022-01544  
Patent 7,289,961 B2

APPEARANCES:

ON BEHALF OF THE PETITIONER:

Babak Tehranchi  
PERKINS COIE, LLP  
11452 El Camino Real,  
Sand Diego, CA 92130-2080

ON BEHALF OF THE PATENT OWNER:

Sarah E. Spires  
SKIERMONT DERBY, LLP  
1601 Elm Street  
Suite 4400  
Dallas, Texas 75201

The above-entitled matter came on for hearing on Thursday, January 25, 2024, commencing at 10:00 a.m., via video teleconference.

1 P R O C E E D I N G S

2 - - - - -

3 JUDGE EASTHOM: Good morning. This is Judge Easthom. Judge  
4 Ahmed and Judge McKone are on the video hearing with us. This is  
5 Verance Corp. versus MZ Audio Sciences, LLC, IPR 2022-01544, U.S.  
6 Patent 7,289,961 B2, and we'll refer to that as the '961 patent. We  
7 appreciate everyone's willingness to be here. You have the right to be  
8 heard, so if at any time you have a problem hearing anything or the lines  
9 drop, please contact the Board personnel that helped you set this up. When  
10 you're not speaking, please mute yourself and introduce yourself when you  
11 begin speaking, and pause before speaking after we ask a question so the  
12 court reporter creates a good record. Please also briefly pause after you turn  
13 to another slide or location in the record so that everyone can catch up. We  
14 have both parties' demonstratives, and thank you for filing those. They're  
15 helpful for us to resolve this issue, although they're not evidence, as we  
16 know.

17 Petitioner, you have the burden of persuasion. You have 45 minutes.  
18 Patent Owner also has 45 minutes. You can also each reserve rebuttal time.  
19 So, with that Petitioner, why don't you please introduce yourself for the  
20 record and let me know what time you want to reserve for rebuttal, please?

21 MR. TEHRANCHI: Thank you, Judge Eastman. My name is Babak  
22 Tehrani. I'm representing Petitioner Verance Corporation. I'd like to  
23 reserve 30 minutes, and 15 minutes for the rebuttal. So, start with 30  
24 minutes and then reserve 15.

1 JUDGE EASTHOM: Thank you, Mr. Tehranchi. Okay, who do we  
2 have for Patent Owner?

3 MS. SPIRES: This is Sarah Spires from Skiermont Derby. On behalf  
4 of MZ Audio Sciences, LLC.

5 JUDGE EASTHOM: Welcome, Ms. Spires.

6 MS. SPIRES: Thank you.

7 JUDGE EASTHOM: You may begin, Mr. Tehranchi.

8 MR. TEHRANCHI: Thank you, Your Honor, may I share my  
9 demonstratives? I know you have it, but it may be easier to just go on,  
10 follow it.

11 JUDGE EASTHOM: It's totally up to you. We have them, and if you  
12 want to share them, that's fine.

13 MR. TEHRANCHI: Okay, so let me know if you could see them.

14 JUDGE EASTHOM: Yes. Great.

15 MR. TEHRANCHI: Again, thank you for the opportunity to present  
16 this case. In our case, we have three grounds. First ground is based on the  
17 combination of Srinivasan, Cabot, and Kudumakis. The second ground,  
18 we're adding Hobson for some dependent claims. And the third ground is  
19 based on Kudumakis, Tilki, and Cabot. This is on page two of the  
20 demonstratives.

21 On page three, I have reproduced the claim language, claim 1 and  
22 claim 4. What I like to point out is that I think both parties agree there is no  
23 controversy that the actual text that is not in the red box is taught by  
24 Srinivasan, in the Srinivasan combination. And it basically entails getting  
25 the audio signal, dividing it into time frames and frequency components,

1 then taking at least two of those components and altering the face of at least  
2 one of those components.

3 The added limitations that were added during prosecution was about  
4 selecting the fundamental tone and the overtone. And that is where the  
5 combination with Cabot and Kudumakis comes into picture. I'd also like to  
6 note that there are also watermark extraction claims, which more or less are  
7 similar to the encoding. They're decoding the watermark from the  
8 composite signal.

9 On page four of the demonstrative, this is just to show that  
10 Kudumakis basically has these steps. You divide it up into time frames, into  
11 frequency components, and then it selects two components. It calls them F1  
12 and F0. And it changes the phase of one component, and it talks about  
13 changing the component with a lower amplitude; so, it changes the phase of  
14 that with respect to a reference frequency component.

15 On page five of the demonstratives, as you can see, Srinivasan talks  
16 about selecting a frequency range of 4.8 kHz to 6 kHz. And it says you need  
17 to do so because that provides better audibility results. But however,  
18 Srinivasan also recognizes that embedding watermarks in terms of audibility  
19 is not perfect; and in fact, acknowledges in that column 11, that we've  
20 highlighted that says, yes, if you embed watermarks and you are to change  
21 the phase of the component to be zero or 180 degrees, it could result in some  
22 audible artifacts. And it goes on to explain that there is an alternative  
23 method where it actually uses certain neighborhoods as opposed to changing  
24 the phase to be zero or 180. So, there is an acknowledgment that there might  
25 be some audibility issues, and it proposes some methodology to fix that.  
26 And also, we want to point out that the language in Srinivasan about

# Explore Litigation Insights

Docket Alarm provides insights to develop a more informed litigation strategy and the peace of mind of knowing you're on top of things.

## Real-Time Litigation Alerts



Keep your litigation team up-to-date with **real-time alerts** and advanced team management tools built for the enterprise, all while greatly reducing PACER spend.

Our comprehensive service means we can handle Federal, State, and Administrative courts across the country.

## Advanced Docket Research



With over 230 million records, Docket Alarm's cloud-native docket research platform finds what other services can't. Coverage includes Federal, State, plus PTAB, TTAB, ITC and NLRB decisions, all in one place.

Identify arguments that have been successful in the past with full text, pinpoint searching. Link to case law cited within any court document via Fastcase.

## Analytics At Your Fingertips



Learn what happened the last time a particular judge, opposing counsel or company faced cases similar to yours.

Advanced out-of-the-box PTAB and TTAB analytics are always at your fingertips.

## API

Docket Alarm offers a powerful API (application programming interface) to developers that want to integrate case filings into their apps.

## LAW FIRMS

Build custom dashboards for your attorneys and clients with live data direct from the court.

Automate many repetitive legal tasks like conflict checks, document management, and marketing.

## FINANCIAL INSTITUTIONS

Litigation and bankruptcy checks for companies and debtors.

## E-DISCOVERY AND LEGAL VENDORS

Sync your system to PACER to automate legal marketing.