## UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

APPLE INC., Petitioner,

v.

ZENTIAN LIMITED, Patent Owner.

IPR2023-00037 Patent 10,971,140 B2

Record of Oral Hearing Held: March 11, 2024

Before KEVIN F. TURNER, JEFFREY S. SMITH, and CHRISTOPHER L. OGDEN, *Administrative Patent Judges*.



## **APPEARANCES:**

## ON BEHALF OF THE PETITIONER:

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The above-entitled matter came on for hearing Monday, March 11, 2023, commencing at 2:44 p.m. EDT, via Video-conference.



1	P-R-O-C-E-E-D-I-N-G-S
2	2:44 p.m.
3	COURT REPORTER: On the record.
4	JUDGE OGDEN: Good afternoon. Welcome to the Patent
5	Trial and Appeal Board. This is the hearing for IPR2023-00037, between
6	Petitioner Apple Inc., Amazon Web Services, Inc., and Amazon.com
7	Services LLC, and Patent Owner Zentian Limited, challenging claims in
8	Patent 10,839,798 B2.
9	And I'm Judge Ogden, and with me today on the panel are
10	Judges Turner and Smith. Judge Smith is joining us remotely.
11	So I'd like to go through counsel introductions as we did with
12	the prior case this morning. So who is here on behalf of Petitioner Apple?
13	MS. BAILEY: Thank you, Your Honor. I'm Jennifer Bailey.
14	I'm from the law firm of Erise IP. I have with me my co-counsel, Christina
15	Canino, and in-house counsel for Apple, Jenny Liu.
16	JUDGE OGDEN: Thank you. And on behalf of Patent
17	Owner?
18	MR. NOROOZI: Yes, Your Honor. Your Honor, Kayvan
19	Noroozi from Noroozi PC for Patent Owner, and with me are Peter Knops
20	and Jessica Bernhardt.
21	JUDGE OGDEN: And on behalf of the Amazon Petitioners?
22	MR. CHURNET: Hello, Your Honor. Dargaye Churnet from
23	Fenwick & West on behalf of Amazon.
24	JUDGE OGDEN: Thank you. So today, each side will have a
25	total of 45 minutes to present their arguments, and as usual, parties will have
26	the opportunity to reserve rebuttal or surrebuttal time.



IPR2023-00037 Patent 10,971,140 B2

1	So we'll begin with Petitioner. Ms. Bailey, would you like to
2	reserve rebuttal time?
3	MS. BAILEY: Yes, Your Honor. I'd like to reserve 15 minutes
4	for rebuttal.
5	JUDGE OGDEN: Okay. We'll put 30 minutes on the clock,
6	and you can begin when you're ready.
7	MS. BAILEY: May it please the board. Thank you, Your
8	Honors.
9	Let's turn first to Petitioner's Demonstrative DX-2, and let's
10	quickly go through the claim. Claim 1 recites a basic distance calculation
11	and search steps using a clustered processor architecture. The basic tree
12	search steps are limitations, 1(d) and 1(e). And I note for limitations 1(d)
13	and 1(e), it says the speech recognition circuit is configured to generate both
14	the initial and final scores. The claim does not require any particular
15	processor to generate the scores, but we'll get into that in a little bit.
16	The claim ends with the tree search score generation. I know
17	that in Claim 1, word recognition is not claimed, what happens to the scores
18	after generation is not claimed, how the final scores are compiled, how the
19	pruning is instructed, and how the word is selected are all not claimed.
20	Turning to DX-3, let's go briefly through the combination.
21	Jiang teaches a tree search algorithm that includes distance calculations and
22	tree search scoring. Jiang's tree search algorithm is per the Petition's
23	mapping, replicated across all of the processors of the clusters of Chen's
24	clustered processor architecture. And I'm happy to provide citations as I go
25	if that would be helpful. So each processor in each cluster is performing the
26	lexical tree search recited in Claims 1(d) and 1(e). In other words, the initial
27	and final score generation.



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