

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

APPLE INC.,
Petitioner,

v.

MASIMO CORPORATION,
Patent Owner.

IPR2020-01523
Patent 8,457,703 B2

Record of Oral Hearing
Held: January 19, 2022

Before JOSIAH C. COCKS, ROBERT L. KINDER, and
AMANDA F. WIEKER, *Administrative Patent Judges*.

IPR2020-01523
Patent 8,457,703 B2

APPEARANCES:

ON BEHALF OF THE PETITIONER:

WALTER KARL RENNER, ESQUIRE
DAN SMITH, ESQUIRE
KIM LEUNG, ESQUIRE
Fish & Richardson
1000 Maine Avenue, S.W.
Washington, D.C. 20024

ON BEHALF OF PATENT OWNER:

JOSH STOWELL, ESQUIRE
Knobbe, Martens, Olson & Bear, LLP
2040 Main Street
Irvine, CA 92614

The above-entitled matter came on for hearing on Wednesday, January 19, 2022, commencing at 12:39 p.m., EDT, at the U.S. Patent and Trademark Office, by video/by telephone, before Chris Hofer, Notary Public.

PROCEEDINGS

1 - - - - -

2 JUDGE COCKS: Welcome back everyone. This is the second
3 session of our marathon oral hearing session today. I am Judge Cocks and
4 again I'm joined by Judge Wieker and Judge Kinder. This oral argument
5 session pertains to IPR2020-01523 involving patent 8,457,703. Would
6 counsel for Petitioner who will be arguing their side today, will they please
7 introduce themselves?

8 MR. RENNER: Yes, Your Honor. This is Karl Renner. I am joined
9 today by Dan Smith and Kim Leung and I'll be presenting primarily. Thank
10 you.

11 JUDGE COCKS: Thank you, Mr. Renner, and will counsel for Patent
12 Owner who will be arguing in this session please identify themselves.

13 MR. STOWELL: Hello, Your Honor. This is Josh Stowell from
14 Knobbe, Martens and I will be arguing on behalf of the Patent Owner,
15 Masimo.

16 JUDGE COCKS: All right. Thank you, Mr. Stowell. So, we had
17 provided for this session 40 minutes per side. Again, Petitioner will go first
18 and may reserve rebuttal time. Patent Owner will then argue their
19 opposition to Petitioner's case and may reserve surrebuttal time, and then
20 Petitioner will use their rebuttal time and we will conclude with Patent
21 Owner arguing their surrebuttal. So, with that said, Mr. Renner, you may
22 begin whenever you are ready.

23 MR. RENNER: Thank you, Your Honor, and I'll reserve ten minutes
24 if I may.

1 JUDGE COCKS: Yes. Thank you.

2 MR. RENNER: You're welcome. Well, good afternoon, Your
3 Honors. I'm Karl Renner as I mentioned and I'm here on behalf of Apple.
4 May it please the Court. Today we plan to address the Diab-based grounds
5 first. We're going to defer the conversation of the construction of
6 predetermined characteristics until addressing the Amano grounds given the
7 relevance of that construction to the Amano grounds.

8 If I could go to slide 4, please. On slide 4 we show the claims 1 and
9 9, the independent claims 1 and 9, which are largely redundant of one
10 another and I'll just talk to them briefly to orient us at the outset here. The
11 preamble indicates a focus on managing power consumption during a patient
12 monitoring and the first two steps implicate driving light sources to emit
13 light into tissue and receiving signals attenuated by that tissue as impacted.
14 Then the claim goes on to talk about transitioning from a lower power
15 consumption level to a higher consumption level when processing
16 characteristics are said to pass a predetermined threshold. Claims 9 and 1
17 defer in one specific area and that has to do with what happens in the lower
18 power consumption level and that is in claim 1 it calls for reduced sensor
19 activation but claim 9 speaks instead of signal processor processing.

20 Go to slide 12, please, we'll turn into the Diab reference and speak to
21 the combination by doing so. Diab is similar to the claims of '703 device as
22 it emits light into tissue and it detects the lights attenuated from that tissue
23 and it uses that detector attenuation of light to deduce physiological
24 measurements for a specific patient (phonetic). Diab addresses two kinds of
25 unhelpful artifacts, noise, that may be present in the detected light. The first

1 is described as an artifact resulting from, for instance, respiration. It's a low
2 frequency type of an artifact. It's not relevant to our claim's mapping.

3 The second is where we spend the time in the record and that's where
4 we focus because it's an artifact that's introduced by patient movement, said
5 to be erratic unlike that low frequency that's done with the respiration and
6 the difference between these two noises or artifacts is yielded in the
7 treatment that they get that's different in Diab.

8 If we look at slide 13, please, we'll see at the bottom figure 20 is
9 annotated and shows how Diab addresses these kinds of noises. The low
10 frequency artifact, those unrelated to motion, are shown as the signal passes
11 with the green line in the top part of this figure. It's an infrared light type
12 noise or artifact and it's processed along this path and it's processed along
13 this path with a DC bandpass filter in a spectral estimation module.

14 The erratic motion artifacts, those ones that have to do with motion,
15 these are characteristics that appear in the red and the ultrared light and
16 they're otherwise addressed in the processing path that's shown in purple at
17 the bottom and kind of throughout. Most notoriously though, this includes
18 the namesake element, the motion artifact suppression module 580 that's
19 going to get a lot of conversation today. But it also includes corresponding
20 spectral estimation module 588 and there doesn't seem to be controversy at
21 this level of detail. Where the controversy comes in is when examining that
22 purple path and assessing what Diab does in the absence of motion. Does
23 Diab continue to process motion artifacts and suppress them? Does it do the
24 processes that are otherwise called for by its namesake in doing that in the
25 absence of motion or does it continue?

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.