UNITED STATES PATENT AND TRADEMARK OFFICE

——————————

BEFORE THE PATENT TRIAL AND APPEAL BOARD

——————————

APPLE INC.,
Petitioner,

v.

MASIMO CORPORATION,
Patent Owner.

——————————

IPR2020-01520
Patent 10,258,265 B1

——————————

Before GEORGE R. HOSKINS, ROBERT L. KINDER, and
AMANDA F. WIEKER, *Administrative Patent Judges*.

HOSKINS, *Administrative Patent Judge*.

JUDGMENT
Final Written Decision
Determining All Challenged Claims Unpatentable
35 U.S.C. § 318(a)

I.   INTRODUCTION

Apple Inc. ("Petitioner") filed a Petition (Paper 2, "Pet.") pursuant to 35 U.S.C. §§ 311–319 to institute an *inter partes* review of U.S. Patent No. 10,258,265 B1 ("the '265 patent"), claims 1–4, 6–14, and 16–30. We instituted the petitioned review (Paper 7, "Institution Decision" or "Inst. Dec.").

Masimo Corporation ("Patent Owner") filed a Patent Owner Response (Paper 21, "PO Resp.") to oppose the Petition. Petitioner filed a Reply (Paper 24, "Pet. Reply") to the Patent Owner Response. Patent Owner filed a Sur-reply (Paper 27, "Sur-reply") to the Reply. With prior authorization from the Board, Petitioner filed an Identification of Testimony (Paper 33) in response to the Sur-reply. An oral hearing was held, for which the transcript was entered into the record (Paper 37, "Tr.").

We have jurisdiction under 35 U.S.C. § 6(b)(4) and § 318(a). This Decision is a final written decision under 35 U.S.C. § 318(a) and 37 C.F.R. § 42.73 as to the patentability of claims 1–4, 6–14, and 16–30 of the '265 patent. We determine Petitioner has shown by a preponderance of the evidence that those claims are unpatentable.

II.   BACKGROUND

### A.   *Real Parties-in-Interest and Related Proceedings*

Petitioner identifies itself as the sole real party-in-interest for Petitioner. Pet. 104. Patent Owner identifies itself as the sole real party-in-interest for Patent Owner. Paper 4, 1.

The parties identify one district court litigation as related to this proceeding: *Masimo Corp. et al. v. Apple Inc.*, Civil Action No. 8:20-cv-

00048 (C.D. Cal.). Pet. 105; Paper 4, 1. We are also aware of several other IPR proceedings challenging other patents at issue in that litigation. *See, e.g.*, Pet. 105; Paper 4, 3.

B. The '265 Patent

The '265 patent concerns noninvasive devices for measuring blood analytes such as glucose, or other physiological characteristics such as pulse rate. *See* Ex. 1001, code (57), 2:20–30. Figures 3C and 3E are reproduced below:
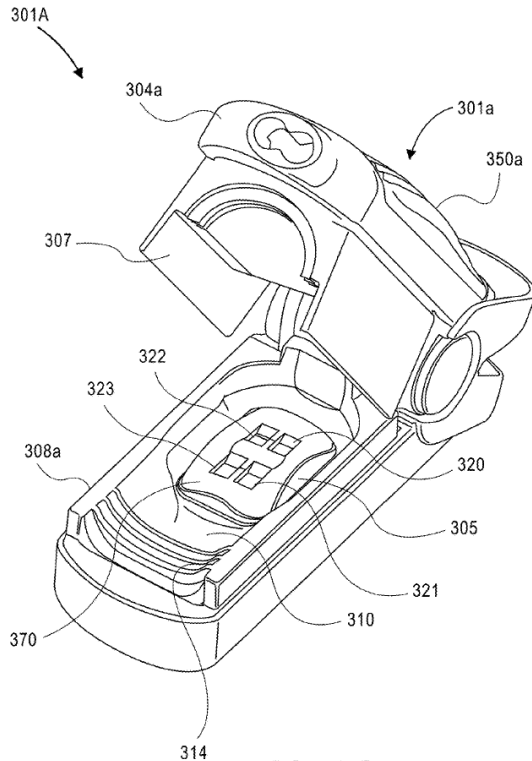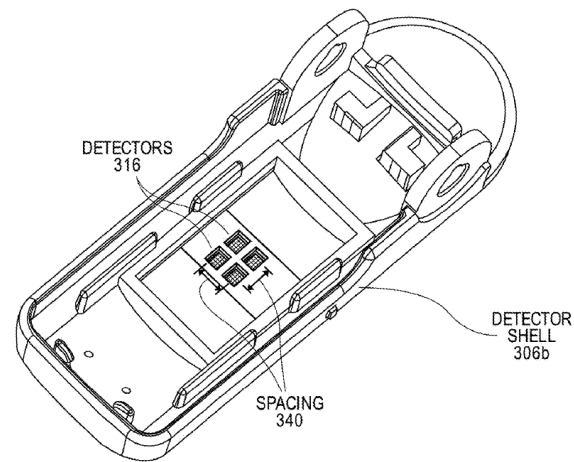
FIG. 3C   **FIG. 3E**

Figure 3C is a perspective view of sensor 301a, comprising upper emitter shell 304a pivotably connected to lower detector shell 306a, to sandwich a person's finger between the shells. *See id.* at 5:52–55, 18:39–51. Figure 3E is a perspective view of detector shell 306b of a different but similar sensor 301b. *See id.* at 5:59–61, 22:21–40 ("The features described with

respect to the detector shell 306b can also be used with the detector shell 306a of the sensor 301a.").

Emitter shell 304a houses emitter components (not shown in Figure 3C) such as LEDs, which emit light of different wavelengths, such as visible light, near infrared light, or infrared light. *See id.* at 5:3–7, 12:3–12, 13:8–15, 18:40–42, 18:62–63.

Detector shell 306a / 306b houses four photodetectors 316, one underneath each window 320–323 within finger bed 310 formed on top of the shell. *See id.* at 19:4–5, 19:13–16, 19:38–48. Finger bed 310 includes "a tissue thickness adjustor or protrusion 305," which may be removed and interchanged with other protrusions 305 to correspond to different finger characteristics. *Id.* at 19:29–37.

Sensor 301a operates in the following manner. A person places a finger on finger bed 310, and upper emitter shell 304a pivots toward lower detector shell 306a / 306b to hold the finger in place, and to shield the interior of sensor 301a from interference by ambient light. *See id.* at 16:52–64, 18:43–51, 18:66–19:20. Then, the emitters housed in emitter shell 304a emit light of different wavelengths, to pass through the person's finger and into windows 320–323 within finger bed 310, to reach photodetectors 316. *See id.* at 19:38–48. Photodetectors 316 capture and measure the light, which has been attenuated by the person's finger tissue, and output responsive signals to a processor that uses the signals to derive a physiological parameter of the person. *See id.* at 2:20–30, 10:30–39, 10:62–11:1, 14:11–19, 15:31–35, 18:39–42.

Another detector subassembly is shown in Figure 14D, reproduced below:
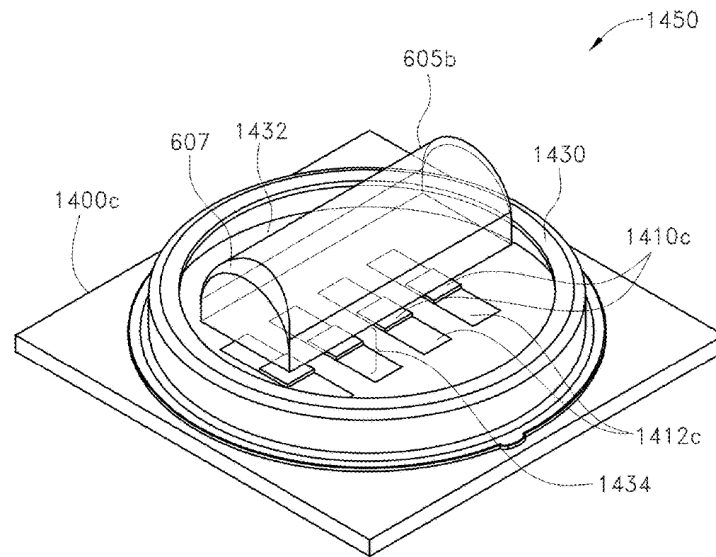
FIG. 14D

Figure 14D shows detector subassembly 1450 including submount 1400c, cylindrical housing 1430, transparent cover 1432 with protrusion 605b disposed on it, and four detectors 1410c. *See id.* at 6:54–55, 36:38–47. The light focusing properties provided by protrusion 605b advantageously reduce the number of detectors, or rows of detectors, that are required. *See id.* at 35:56–36:10; *see also id.* at Fig. 14B, 36:11–30 (illustrating and describing function of a "partially cylindrical protrusion 605 (or alternatively, the protrusion 605b)" to focus light on detector(s) 1410b).

C.   The Claims of the '265 Patent

The '265 patent lists thirty claims, including two independent claims, claims 1 and 26. Ex. 1001, 44:65–47:20. We reproduce illustrative claim 1 here:

DOCKET ALARM

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.

fastcase®
Smarter legal research.