

UNITED STATES PATENT AND TRADEMARK OFFICE

---

BEFORE THE PATENT TRIAL AND APPEAL BOARD

---

APPLE, INC.,  
Petitioner,

v.

UUSI, LLC d/b/a NARTRON,  
Patent Owner.

---

Case IPR2019-00358  
Patent 5,796,183

---

Before BRYAN F. MOORE, MINN CHUNG, and  
NORMAN H. BEAMER, *Administrative Patent Judges*.

CHUNG, *Administrative Patent Judge*.

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

## I. INTRODUCTION

In this *inter partes* review, instituted pursuant to 35 U.S.C. § 314, Apple Inc. (“Petitioner” or “Apple”) challenges the patentability of claims 37–39, 94, 96–99, 101–109, 115, and 116 (the “challenged claims”) of U.S. Patent No. 5,796,183 (Ex. 1001, “the ’183 patent”), owned by UUSI, LLC d/b/a Nartron (“Patent Owner”). This Final Written Decision is entered pursuant to 35 U.S.C. § 318(a) and 37 C.F.R. § 42.73. For the reasons discussed below, we determine Petitioner has shown by a preponderance of the evidence that claims 94, 96, 101–106, 115, and 116 of the ’183 patent are unpatentable, but has not proven by a preponderance of the evidence that claims 37–39, 97–99, and 107–109 of the ’183 patent are unpatentable.

## II. BACKGROUND

### A. Procedural History

On November 29, 2018, Petitioner filed a Petition (Paper 2, “Pet.”) requesting an *inter partes* review of claims 37–39, 94, 96–99, 101–109, and 115–117 the ’183 patent.<sup>1</sup> Patent Owner filed a Preliminary Response (Paper 8, “Prelim. Resp.”) on May 6, 2019.

On August 5, 2019, applying the standard set forth in 35 U.S.C. § 314(a), which requires demonstration of a reasonable likelihood that Petitioner would prevail with respect to at least one challenged claim, we instituted an *inter partes* review of the challenged claims. Paper 12 (“Inst. Dec.”). In the Institution Decision, we determined Petitioner demonstrated a reasonable likelihood that it would prevail as to at least one

---

<sup>1</sup> As discussed below, we agree with Patent Owner that claim 117 is not challenged in this proceeding.

challenged claim, and we instituted trial on all claims and all grounds in the Petition. Inst. Dec. 67–68.

After institution, Patent Owner filed a Patent Owner Response (Paper 16, “PO Resp.”), Petitioner filed a Reply to Patent Owner Response (Paper 19, “Reply”), and Patent Owner filed a Sur-reply (Paper 23, “Sur-reply”). An oral hearing was held on May 7, 2020, and a copy of the hearing transcript has been entered into the record. Paper 25 (“Hearing Tr.”).

### *B. Related Matters*

According to Petitioner, the ’183 patent is the subject of the following district court litigation: *UUSI, LLC v. Apple Inc.*, No. 3-18-cv-04637 (N.D. Cal.); and *UUSI, LLC v. Apple Inc.*, No. 2:17-cv-13798 (E.D. Mich.), which has been transferred to the Northern District of California. Pet. 81. Patent Owner indicates that the ’183 patent is also the subject of *UUSI, LLC v. Samsung Electronics Co.*, No. 1:15-cv-00146 (W.D. Mich.). Paper 3, 2.

The ’183 patent has been subject to two reexaminations: Ex Parte Reexamination Control No. 90/012,439 (“the ’439 Reexamination Proceeding” or “the ’439 Reexamination”), certificate (“Reexam. Cert. C1”) issued April 29, 2013 (Ex. 1006, 1); and Ex Parte Reexamination Control No. 90/013,106 (“the ’106 Reexamination Proceeding” or “the ’106 Reexamination”), certificate (“Reexam. Cert. C2”) issued June 27, 2014 (Ex. 1007, 24). The challenged claims were amended or added during the reexaminations. Ex. 1006, 2–3; Ex. 1007, 27–28.

The ’183 patent is the subject of an earlier-filed *inter partes* review proceeding, *Samsung Electronics Co. v. UUSI, LLC*, IPR2016-00908

(“Samsung IPR”). Pet. 81; Paper 3, 1. On June 18, 2019, the Federal Circuit vacated the final written decision in the Samsung IPR, in which the Board determined that Samsung had not demonstrated unpatentability of any claims, and remanded to the Board for further proceedings. *Samsung Elecs. Co. v. UUSI, LLC*, 775 F. App’x 692, 697 (Fed. Cir. 2019) (“Samsung Appeal Opinion”).

Petitioner has also filed five other petitions challenging claims of the ’183 patent under various grounds in IPR2019-00355, IPR2019-00356, IPR2019-00357, IPR2019-00359, and IPR2019-00360. Paper 3, 1. We denied institution of review in IPR2019-00355, IPR2019-00356, IPR2019-00357, and IPR2019-00360. IPR2019-00355, Paper 14; IPR2019-00356, Paper 14; IPR2019-00357, Paper 12; IPR2019-00360, Paper 12. We instituted trial in IPR2019-00359 on August 5, 2019. IPR2019-00359, Paper 12.

### *C. The ’183 Patent*

The ’183 patent, titled “Capacitive Responsive Electronic Switching Circuit,” was filed January 31, 1996, and issued August 18, 1998. Ex. 1001, codes (22), (45), (54). The ’183 patent has expired. Prelim. Resp. 18.

The ’183 patent relates to a “capacitive responsive electronic switching circuit used to make possible a ‘zero force’ manual electronic switch.” Ex. 1001, 1:6–9. According to the ’183 patent, zero force touch switches have no moving parts and no contact surfaces that directly switch loads. *Id.* at 2:39–41. Instead, such switches detect an operator’s touch and use solid state electronics to switch loads or activate mechanical relays. *Id.* at 2:42–44. “A common solution used to achieve a zero force touch switch

has been to make use of the capacitance of the human operator.” *Id.* at 3:12–14. As background, the ’183 patent describes three methods used by capacitive touch switches to detect an operator’s touch, one of which relies on the change in capacitive coupling between a touch terminal and ground. *Id.* at 3:13–15, 3:44–46. In this method, “[t]he touch of an operator then provides a capacitive short to ground via the operator’s own body capacitance.” *Id.* at 3:52–55. Figure 8, reproduced below, is an example that makes use of this method.

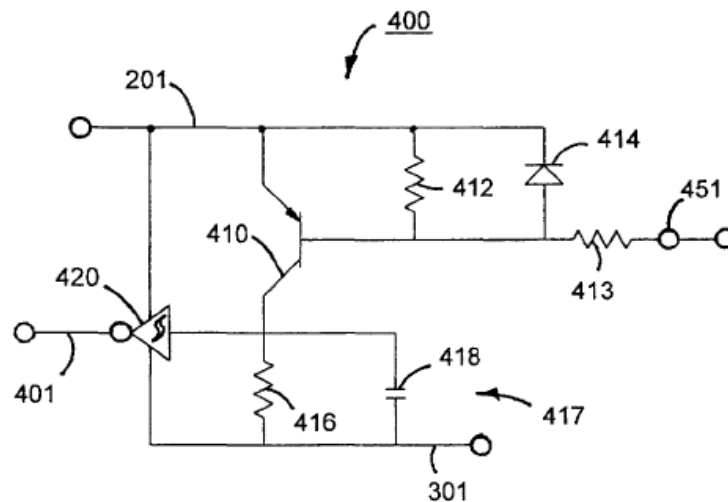


Fig. 8

Figure 8 depicts a “touch circuit” in which, when a pad (not shown) is touched to create a short to ground via terminal 451, transistor 410 turns on and connects a high frequency input at 201 to resistor/capacitor circuit 416/418, thus triggering Schmitt Trigger 420 to provide control output 401. *Id.* at 14:47–52, 15:17–47. Significantly, the operator of a capacitive touch switch using this method need not come in conductive contact with the touch terminal. *Id.* at 3:57–59. Rather, the operator needs only to come into close proximity of the switch. *Id.*

# 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.