UNITED STATES PATENT AND TRADEMARK OFFICE

_____

BEFORE THE PATENT TRIAL AND APPEAL BOARD

_____

THE NOCO COMPANY, INC.,
Petitioner,

v.

PILOT, INC.,
Patent Owner.

_____

IPR2022-01237
Patent 11,124,077 B2

_____

Before JEFFREY W. ABRAHAM, JULIA HEANEY, and
STEVEN M. AMUNDSON, *Administrative Patent Judges*.

AMUNDSON, *Administrative Patent Judge*.

DECISION
Granting Institution of *Inter Partes* Review
35 U.S.C. § 314

I. INTRODUCTION

The NOCO Company, Inc. ("Petitioner") filed a Petition requesting an *inter partes* review of claims 1–24 in U.S. Patent No. 11,124,077 B2 (Exhibit 1001, "the '077 patent") under 35 U.S.C. §§ 311–319. Paper 1 ("Pet."). Pilot, Inc. ("Patent Owner") did not file a Preliminary Response.

Under 37 C.F.R. § 42.4(a), we have authority to determine whether to institute an *inter partes* review. We may institute an *inter partes* review only if "the information presented in the petition filed under section 311 and any response filed under section 313 shows that there is a reasonable likelihood that the petitioner would prevail with respect to at least 1 of the claims challenged in the petition." 35 U.S.C. § 314(a) (2018). The "reasonable likelihood" standard is "a higher standard than mere notice pleading" but "lower than the 'preponderance' standard to prevail in a final written decision." *Hulu, LLC v. Sound View Innovations, LLC*, IPR2018-01039, Paper 29 at 13 (PTAB Dec. 20, 2019) (precedential).

After considering the Petition and the evidence of record, and for the reasons explained below, we determine that Petitioner has shown that there is a reasonable likelihood that it would prevail with respect to at least one of the challenged claims. Thus, we institute an *inter partes* review of claims 1–24 in the '077 patent on all challenges included in the Petition.

II. BACKGROUND

A. Real Parties in Interest

Petitioner identifies itself as the real party in interest. Pet. 74. Patent Owner identifies itself as the real party in interest. Paper 3, 2. The parties do not raise any issue about real parties in interest.

B. Related Matters

Petitioner and Patent Owner identify the following civil action as a related matter involving the '077 patent: *Pilot, Inc. v. The NOCO Company, Inc.*, No. 2:22-cv-00389-PHX-SRB (D. Ariz. filed Mar. 14, 2022). Pet. 74; Paper 3, 2.

C. The '077 Patent (Exhibit 1001)

The '077 patent, titled "Automobile Charger," issued on September 21, 2021, from an application filed on April 21, 2021. Ex. 1001, codes (22), (45), (54). The patent identifies that application as the latest in a series of continuation applications that began with an application filed on December 12, 2014. *Id.* at 1:5–15, code (63). The patent claims priority to an application filed in China on April 28, 2014. *Id.* at 1:14–16. The patent states that the disclosure "relates to an automobile charging device," in particular, "a novel automobile charger with a safe power supply charging quickly." *Id.* at 1:21–23; *see id.* at code (57).

The '077 patent describes problems with conventional automobile chargers. *See* Ex. 1001, 1:24–34. For instance, the patent states that "current automobile chargers have common problems" because they cannot "automatically detect" the following:

(1)   "whether a load is connected";

(2)   "whether an electrode is connected with an automobile storage battery reversely";

(3)   "whether an automobile engine or the storage battery has a reverse current"; and

(4)   "whether the battery state is suitable for heavy current power generation."

Id. at 1:28–34. The patent purports to address those problems with "a novel automobile charger with the safe power supply charging quickly." *Id.* at 1:34–38, 1:42–45; *see id.* at 2:31–58.

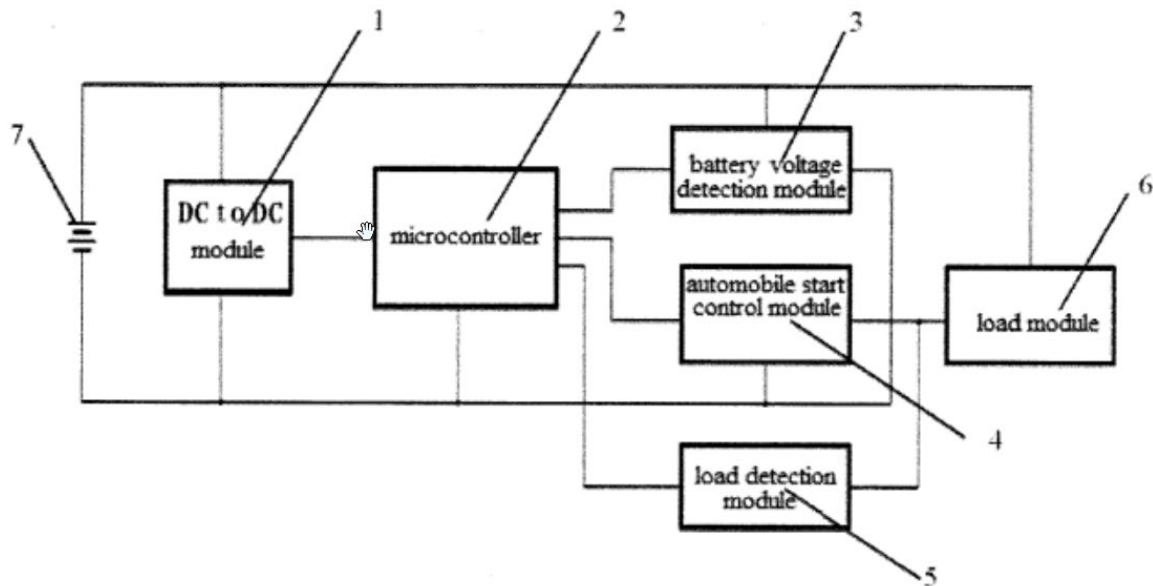The '077 patent's Figure 1 (reproduced below) depicts a block diagram for an automobile charger:

Figure 1

Figure 1 illustrates an automobile charger including the following components:

(1)   DC-to-DC module 1;

(2)   microcontroller 2;

(3)   battery voltage detection module 3;

(4)   automobile start control module 4;

(5)   load detection module 5;

(6)   load module 6; and

(7)   direct current power supply 7.

Ex. 1001, 2:62–63, 2:66–3:2, 3:15–35, Fig. 1.

The DC-to-DC module "provides a stable voltage for the microcontroller." Ex. 1001, 2:1–3, 4:13–14. The microcontroller "collects relevant data to conduct the corresponding control." *Id.* at 2:2–4, 4:14–15. The battery voltage detection module "conducts the measurement of" the power-supply battery's voltage and "provides protection" for the power-supply battery to "prevent damages caused by the discharging of the direct current power supply." *Id.* at 2:4–5, 2:16–19, 4:15–17. The automobile start control module "conducts the power supply or the power outage for the load module" and corresponds to an electronic switch controlled by the microcontroller. *Id.* at 2:5–8, 2:29–30, 4:18–20, 4:42. The load detection module "detects whether the load module is correctly connected" and "prevents improper operations of the user." *Id.* at 2:8–10, 2:20–22, 4:20–22. The load module "comprises the automobile storage battery and the automobile engine." *Id.* at 3:32–34.

Additionally, the microcontroller "determines whether the automobile storage battery is connected with the automobile engine through the load detection module." Ex. 1001, 4:23–25. The automobile start control module is "automatically activated and the battery starts to supply power to the load module when the load is correctly connected." *Id.* at 4:26–28. The automobile start control module is "automatically deactivated and the battery stops supplying power to the load module when assuming that the load is not connected or the positive and negative polarities are reversely connected." *Id.* at 4:28–32.

The automobile charger includes a standby mode where "the microcontroller closes all outputs when the battery voltage is lower than 9V." Ex. 1001, 4:32–34; *see id.* at 2:23–26. The automobile charger

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.