UNITED STATES PATENT AND TRADEMARK OFFICE

———————————

BEFORE THE PATENT TRIAL AND APPEAL BOARD

———————————

CYPRESS SEMICONDUCTOR CORP., and
STMICROELECTRONICS, INC.,
Petitioner,

v.

NEODRON LTD.,
Patent Owner.

———————————

IPR2021-01128
Patent 8,432,173 B2

———————————

Before MIRIAM L. QUINN, PATRICK M. BOUCHER, and
CHRISTOPHER L. OGDEN, *Administrative Patent Judges.*

QUINN, *Administrative Patent Judge.*

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

I. INTRODUCTION

Cypress Semiconductor Corp. and STMicroelectronics, Inc. (collectively "Petitioner") filed a Petition (Paper 2, "Pet.") under 35 U.S.C. §§ 311–319 for *inter partes* review of claims 1–3, 5–12, and 14–19 of U.S. Patent No. 8,432,173 B2 (Ex. 1001, "the '173 patent"). Neodron Ltd. ("Patent Owner") did not file a preliminary response.

At our discretion, we may institute an *inter partes* review when "the information presented in the petition . . . and any response . . . 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). Applying that standard, we institute an *inter partes* review of all asserted grounds and all challenged claims of the '173 patent for the reasons explained below. This is a preliminary decision, and we will base our final written decision on the full trial record, including any timely response by Patent Owner.

II. BACKGROUND

A. REAL PARTIES IN INTEREST

Patent Owner identifies itself as a real party-in-interest (RPI). *See* Paper 3, 1. Petitioner identifies the captioned entities and also, for purposes of this proceeding and to avoid an RPI dispute, identifies related companies. Pet. 74–75.

B. RELATED PROCEEDINGS

The parties identify the following as related matters: *Neodron Ltd. v. STMicroelectronics, Inc.*, 6:20-cv-00560 (W.D. Tex.); *Neodron Ltd. v.*

Renesas Electronics Corp., No., 6:20-cv-00529 (W.D. Tex.); *Neodron Ltd. v.*

Texas Instruments Inc., 2:20-cv-00190 (E.D. Tex.); *Neodron Ltd. v. Cypress*

Semiconductor Corp., 6:20-cv-00523 (W.D. Tex.); and *In re Certain Touch-*

Sensing Systems, Capacitive Touch Sensing Controllers, Microcontrollers

with Capacitive Touch Sensing Functionality, and Components Thereof, Inv.

No. 337-TA-1162 ("related ITC proceeding"). Pet. 3; Paper 3, 2.

C. THE '173 PATENT (EX. 1001)

The '173 patent relates to "capacitive position sensors for detecting

the position of an object around a curved path." Ex. 1001, 1:21–22. The

sensor can operate in two modes. The first mode is shown in Figure 1,
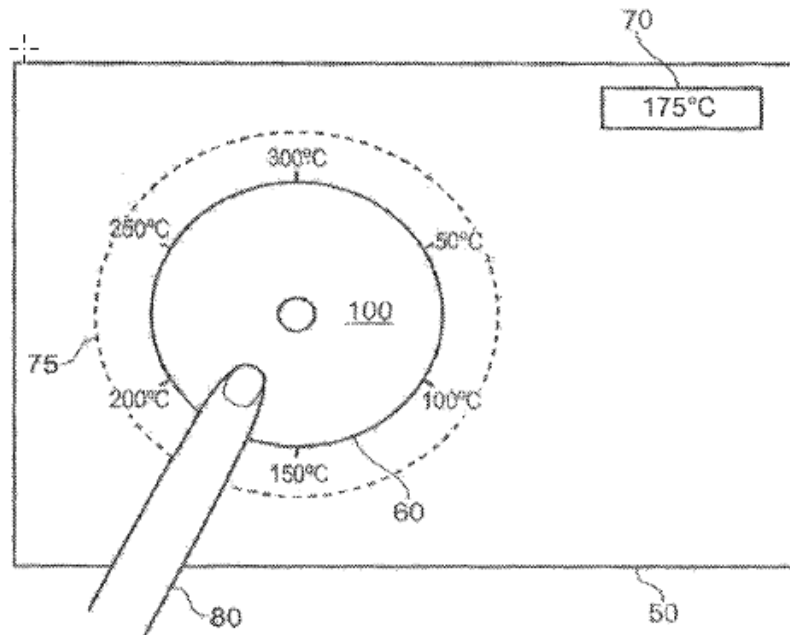
reproduced below:

FIG. 1

Figure 1 shows "part of a control panel 50, having a capacitive sensor 60 and

a digital readout display 70." Ex. 1001, 7:38–39. As shown in the sensor's

first operating mode, "a user's finger is used to select a cooking

temperature." *Id.* at 7:61–63. Finger 80 is near a portion of sensing element 100 corresponding to a temperature of 175 °C, which also appears on readout display 70. *Id.* at 7:63–66.

Because the sensor resolution is limited, the initial temperature selected in the first operating mode may only be an approximation of the intended temperature. *See* Ex. 1001, 7:66–8:8. Therefore, the sensor automatically enters a second mode of operation to allow the user to fine-tune the selected temperature, as shown below in Figure 2A, reproduced below.
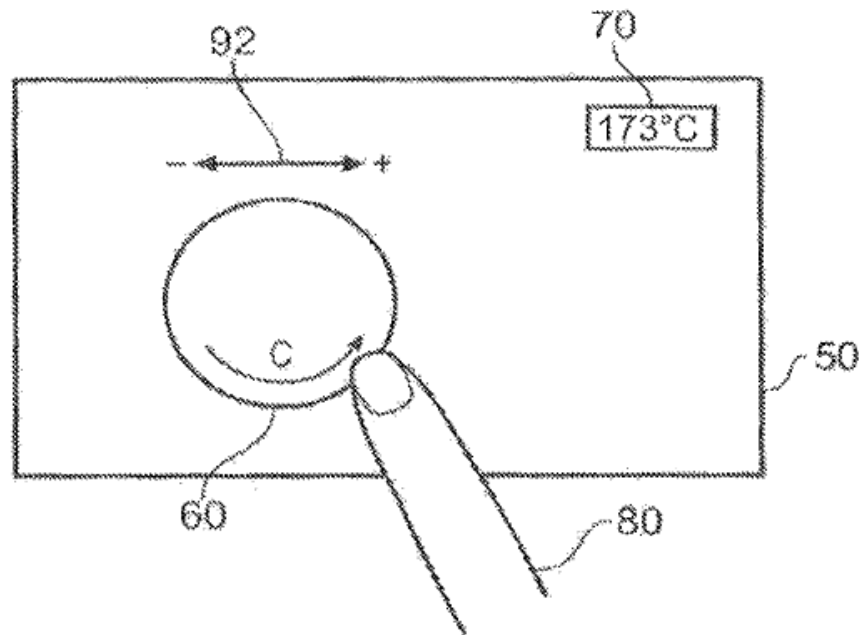

FIG. 2A

Ex. 1001, 8:9–10. Figure 2A depicts capacitive sensor 60 in a second operating mode. *Id.* at 8:10–12. In this mode, "a user is able to increase or decrease the temperature selected in the first mode by a pre-determined increment" by displacing finger 80 "by a pre-determined threshold angle." *Id.* at 8:13–17. In this example, the user has rotated finger 80

counterclockwise, as represented by arrow C, to decrease the temperature from 175 °C to 173 °C, with the updated temperature shown on display 70. *See id.* at 8:21–27.

D.   CHALLENGED CLAIMS AND ASSERTED GROUNDS

Independent claim 1, which exemplifies the other challenged claims, is as follows:

> 1. A method comprising:
> receiving one or more first signals indicating one or more first capacitive couplings of an object with a sensing element that comprises a sensing path that comprises a length, the first capacitive couplings corresponding to the object coming into proximity with the sensing element at a first position along the sensing path of the sensing element
> determining based on one or more of the first signals the first position of the object along the sensing path;
> setting a parameter to an initial value based on the first position of the object along the sensing path, the initial value comprising a particular parameter value and being associated with a range of parameter values, the range of parameter values being associated with the length of the sensing path;
> receiving one or more second signals indicating one or more second capacitive couplings of the object with the sensing element, the second capacitive couplings corresponding to a displacement of the object along the sensing path from the first position; and
> determining based on one or more of the second signals the displacement of the object along the sensing path; and
> adjusting the parameter within the range of parameter values based on the displacement of the object along the sensing path.

Ex. 1001, 9:37–62. Claims 10 (a computer-readable medium claim) and 19 (an apparatus claim) are also independent and recite substantively similar

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.