

UNITED STATES PATENT AND TRADEMARK OFFICE

---

BEFORE THE PATENT TRIAL AND APPEAL BOARD

---

SAMSUNG ELECTRONICS CO., LTD., SAMSUNG ELECTRONICS  
AMERICA, INC., SAMSUNG RESEARCH AMERICA, INC.,  
Petitioner,

v.

DYNAMICS INC.,  
Patent Owner.

---

IPR2020-00499  
Patent 8,827,153

---

Before TREVOR M. JEFFERSON, GEORGIANNA W. BRADEN, and  
JON M. JURGOVAN, *Administrative Patent Judges*.

BRADEN, *Administrative Patent Judge*.

DECISION  
Institution of *Inter Partes* Review  
37 C.F.R. § 314(a)

## I. INTRODUCTION

Samsung Electronics Co., Ltd., Samsung Electronics America, Inc., and Samsung Research America, Inc.<sup>1</sup> (collectively “Petitioner”) filed a Petition requesting an *inter partes* review of claims 1 and 5–8 of U.S. Patent No. 8, 827,153 B2 (Ex. 1001, “the ’153 patent”). Paper 1 (“Pet.”). Dynamics Inc.<sup>2</sup> (“Patent Owner”) filed a Preliminary Response. Paper 8 (“Prelim. Resp.”).

Under the statute, an *inter partes* review may not be instituted unless the information presented in the petition and the preliminary response shows “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). Moreover, the Supreme Court has held that a decision under § 314 may not institute review on fewer than all claims challenged in the petition. *SAS Inst., Inc. v. Iancu*, 138 S. Ct. 1348, 1355–56 (2018); *see also PGS Geophysical AS v. Iancu*, 891 F.3d 1354, 1360 (Fed. Cir. 2018) (interpreting the statute to require “a simple yes-or-no institution choice respecting a petition, embracing all challenges included in the petition”).

After considering the Petition, the Preliminary Response, and associated evidence, we determine Petitioner has satisfied the threshold requirement set forth in 35 U.S.C. § 314(a). Thus, based on the information

---

<sup>1</sup> Petitioner identifies itself (Samsung Electronics Co., Ltd., Samsung Electronics America, Inc., and Samsung Research America, Inc.) as the real parties-in-interest pursuant to 37 C.F.R. § 42.8. Pet. 62.

<sup>2</sup> Patent Owner identifies only itself as the real party-in-interest pursuant to 37 C.F.R. § 42.8. Paper 6, 1.

presented, and under *SAS* and *PGS Geophysical AS*, we institute an *inter partes* review of claims 1 and 5–8 of the '153 patent.

## II. BACKGROUND

### A. *Related Proceedings*

Petitioner informs us of one pending district court proceedings based on the '153 patent that involves Petitioner, *Dynamics Inc. v. Samsung Elecs. Co., Ltd. et al.*, Case No. 1:19-cv-6479 (S.D.N.Y.), filed July 12, 2019, which was stayed on September 4, 2019. Pet. 62. Petitioner also informs us of one proceeding pending before the International Trade Commission (“ITC”), *In re Certain Mobile Devices With Multifunction Emulators*, Inv. No. 337-TA-1170 (U.S.I.T.C.), filed July 12, 2019. *Id.* According to Petitioner, an initial determination in the ITC case is expected on or around August 14, 2020. *Id.* Petitioner further informs us it is concurrently filing IPR petitions for three other patents asserted in the above-referenced District Court and ITC cases. *Id.*

Patent Owner informs us of the same pending proceedings listed above. Paper 6 (Patent Owner’s Mandatory Notices), 2–3.

### B. *Background of Technology and the '153 Patent*

The '153 patent was filed on July 17, 2012, issued on September 9, 2014, and is titled “Systems and Methods for Waveform Generation for Dynamic Magnetic Stripe Communications Devices.” Ex. 1001, codes (22), (45), (54). The '153 patent relates to “[d]ynamic magnetic stripe communications devices” capable of communicating with payment terminals for carrying out purchase transactions without having to be in physical contact with the payment terminals through the use of magnetic emulation, rather than using data found on the magnetic stripe of payment cards.

Ex. 1001, Abstract. According to the '153 patent, a dynamic magnetic communication device includes two main components: (a) a magnetic emulator; and (b) a waveform generator. *Id.* at claim 1.

The '153 patent discloses that a magnetic emulator is a device that emulates the magnetic stripe of a traditional payment card. Ex. 1001, 1:22–37. By “emulating” a magnetic stripe, the magnetic stripe emulator is capable of interfacing with a magnetic stripe reader of a payment terminal. *Id.* According to the '153 patent, the magnetic stripe emulator can be “an inductor (e.g., a coil)” that “[c]urrent may be provided through . . . to create an electromagnetic field operable to communicate with the read-head of a magnetic stripe reader.” *Id.*, 2:14–18.

The '153 patent describes one embodiment of a card with a magnetic strip emulator, which is illustrated in Figure 1, reproduced below.

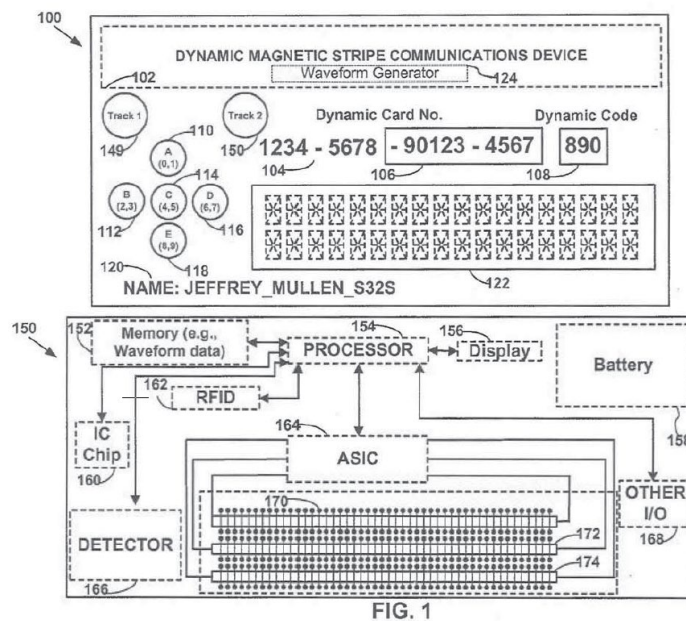


Figure 1 “is an illustration of a card constructed in accordance with the principles of the present invention.” Ex. 1001, 4:40–41. The '153 patent discloses that card **100** may include button **149**. *Id.* at 5:46. According to

the '153 patent, button **149** may be used, to communicate a waveform via waveform generator **124** through dynamic magnetic stripe communications device **102** indicative of a user's desire to communicate a single track of magnetic stripe information. Ex. 1001, 5:46–50.

The '153 patent describes another embodiment of a card with a magnetic strip emulator, which is illustrated in Figure 2, reproduced below.

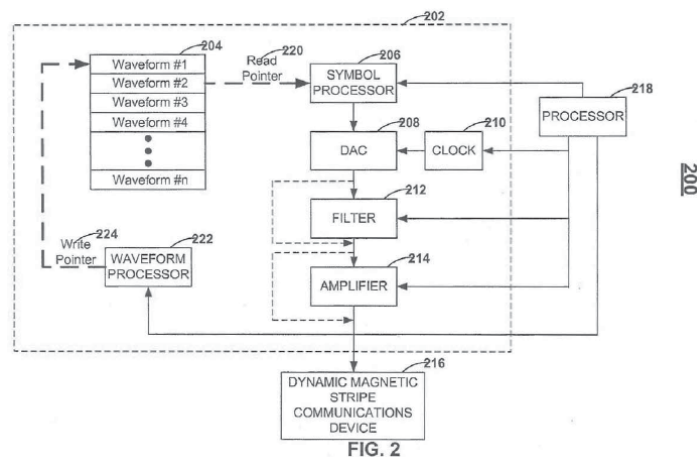


Figure. 2 is an illustration of a card, which may include component **202** (e.g., an ASIC, a mixed-signal FPGA, a data acquisition microcontroller or system on a chip), processor **218**, and dynamic magnetic stripe communications device **216**. *Id.* at 8:21–24. Component **202** may include, for example, memory **204**, symbol processor **206**, DAC **208**, clock generator **210**, filter **212**, amplifier **214**, and waveform processor **222**. *Id.* at 8:24–27.

The '153 patent further discloses that waveform generator **222** retrieves data from memory and allows the device to generate waveforms from the retrieved data to be communicated by the magnetic stripe emulator and received by a magnetic strip reader. *Id.* at Abstract, 2:18–22. The '153 patent discloses that the format of that retrieved data is similar to the format of data that is stored in a traditional payment card (e.g., “at least one track of

# 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.