

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

MASTERCARD INCORPORATED AND
MASTERCARD INTERNATIONAL INCORPORATED,
Petitioner,

v.

OV LOOP, INC.,
Patent Owner.

IPR2023-01290
Patent 10,032,171 B2

Before LYNNE H. BROWNE, JAMES A. TARTAL, and
BRENT M. DOUGAL, *Administrative Patent Judges*.

TARTAL, *Administrative Patent Judge*.

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

I. INTRODUCTION

Mastercard Incorporated and Mastercard International Incorporated (“Petitioner”)¹ filed a Petition requesting an *inter partes* review of claims 1–33 of U.S. Patent No. 10,032,171 B2 (Ex. 1001, “the ’171 patent”). Paper 1 (“Pet.”). Petitioner concurrently filed a parallel petition in another proceeding also requesting an *inter partes* review of claims 1–33 of the ’171 patent on different asserted grounds. *Mastercard Inc. v. OV Loop, Inc.*, IPR2023-01289 (“the ’289 IPR”), Paper 1. Additionally, Petitioner filed an Explanation of Parallel Petitions (Paper 3, “Exp.”) requesting that we consider whether to institute *inter partes* review based on the petition in the ’289 IPR prior to considering the Petition in this proceeding. Exp. 1.

OV Loop, Inc. (“Patent Owner”)² filed a Preliminary Response. Paper 13. Patent Owner also filed a Response to Petitioner’s Explanation of Parallel Petitions. Paper 14 (“Resp. Exp.”).

We granted the petition in the ’289 IPR and instituted an *inter partes* review of claims 1–33 of the ’171 patent in that proceeding. ’289 IPR, Paper 15 (PTAB March 20, 2024). For the reasons provided below, and based on the circumstances present here, we find Petitioner has not shown in this proceeding that a parallel petition challenging the same claims of the ’171 patent at issue in the ’289 IPR is warranted and we exercise discretion under 35 U.S.C. §314(a) to deny institution of an *inter partes* review of the ’171 patent in this proceeding.

¹ Petitioner identifies no additional real parties in interest. Pet. 13.

² Patent Owner identifies no additional real parties in interest. Paper 4, 1.

II. BACKGROUND

A. *The '171 Patent*

The '171 patent issued July 24, 2018, from Application No. 13/599,647, filed on August 30, 2012 (“the '647 Application”). Ex. 1001, codes (21), (22), (45). The '171 patent refers back to three provisional applications, the earliest of which was filed on August 30, 2011. *Id.* at code (60). The '171 patent is directed to using a mobile device for a secure payment transaction through interrogation with a point-of-sale (“POS”) terminal. *Id.* at 1:25–30, code (57).

The '171 patent seeks to provide “more flexible and convenient systems and methods for authorizing financial transactions,” and so proposes “systems and methods . . . to facilitate transactions at a point-of-sale terminal where it is not necessary for the user (e.g., the purchaser) to have physical possession of a card with a magnetic stripe or possession of a secure element.” *Id.* at 1:61–62, 9:11–15. The '171 patent describes the use of “a remote permanent cryptographic key” stored at a “remote source” away from the mobile device “to calculate an expected cryptogram that is expected to include at least a portion of the digital credential data.” *Id.* at 1:66–2:10. An interrogation between the POS terminal and the mobile device includes sending at least one POS command communication from the POS terminal to the mobile device requesting the digital credential data and at least one device response communication from the mobile device to the POS terminal including the expected cryptogram, such that the financial transaction is authorized. *Id.* at 2:10–21.

B. Illustrative Claim

Petitioner challenges claims 1–33 of the '171 patent. Pet. 17. Claims 1 and 17 are independent claims. Claims 2–16 and 18–33 depend from claims 1 and 17, respectively. Claim 1 is illustrative of the claimed subject matter and is reproduced below with bracketed labels annotated by Petitioner:

1. [1.PRE] A method for secure application-based participation in a payment card transaction authorization process by a mobile device, the method comprising:

[1.A-1] at a mobile device, executing an application in an operating system of the mobile device, [1.A-2a] the application interrogable by an electronic reader, over a first communications channel, [1.A-2b] for digital credential data corresponding to an account [1.A-2c] having a corresponding digital credential and [1.A-3] configured to request, from a remote computer system hosting the corresponding digital credential, over a wireless network that is separate from the first communications channel, data associated with the account and [1.A-4] generate cryptograms requested during interrogations over the first communications channel using the data associated with the account received from the remote computer system, wherein the application does not access a permanent cryptographic key issued for the digital credential during the interrogations;

[1.B] requesting by the application, from the remote computer system, over the wireless network, a first set of data associated with the account;

[1.C] receiving by the application, from the remote computer system, over the wireless network, the first set of data associated with the account, the first set of data associated with the account usable by the application to formulate an application protocol data unit response, the first set of data comprising a first non-permanent cryptographic key associated with the account;

[1.D] locally storing the first non-permanent cryptographic key at the mobile device as a local cryptographic key associated with the account;

[1.E] participating by the application in an interrogation between a point-of-sale (POS) terminal and the mobile device comprising:

[1.E-1] receiving at least one POS command communication sent by the POS terminal over the first communications channel, wherein the at least one POS command communication comprises a request for digital credential data to authorize a transaction against the account, the request for digital credential data including a cryptogram request;

[1.E-2] generating a response cryptogram based on a set of inputs and the local cryptographic key associated with the account, wherein the response cryptogram does not include the local cryptographic key associated with the account used to generate the response cryptogram; and

[1.E-3] responding to the at least one POS command communication, wherein responding to the at least one POS command communication comprises sending at least one device response communication from the mobile device to an electronic reader through the communication channel, the at least one device response communication comprising at least one response application data protocol unit containing the response cryptogram and an account identifier for the account;

[1.F] subsequent to the interrogation, requesting by the application, from the remote computer system, over the wireless network, a second set of data associated with the account;

[1.G] receiving by the application, from the remote computer system, over the wireless network, the second set of data associated with the account, the second set of data comprising a second non-permanent cryptographic key associated with the account; and

[1.H] storing the received second non-permanent cryptographic key as the local cryptographic key associated with the account to change the local cryptographic key associated with the account between at least two interrogations.

Ex. 1001, 50:61–51:65; Pet. 4–5.

C. Asserted Grounds of Unpatentability

Petitioner asserts that claims 1–33 of the ’171 patent are unpatentable based on the following grounds:

Claims Challenged	35 U.S.C. §	References/Basis
1–33	103(a)	White ³ , EMV ⁴
1–33	103(a)	Mellqvist ⁵ , EMV

Pet. 17. Petitioner further relies on the supporting Declaration of Matthew Calman, dated August 12, 2023. Ex. 1008.

D. Related Proceedings

The Parties identify the ’171 patent as a subject of *OV Loop, Inc. v. Mastercard Incorporated*, Case 7:23-cv-01773 (S.D.N.Y.). Pet. 13; Paper 4, 1. Additionally, as noted above, Petitioner filed a parallel petition in IPR2023-01289 seeking *inter partes* review of claims 1–33 of the ’171 patent based on different grounds. ’289 IPR, Paper 1.

³ U.S. Patent No. 8,374,916 B2, issued Feb. 12, 2013 (Ex. 1013, “White”).

⁴ *EMV Contactless Specifications for Payment Systems, Books A–D*, Version 2.1 (Mar. 2011) (Exs. 1023–1029) and *EMV Integrated Circuit Card Specifications for Payment Systems, Books 1–4*, Version 4.2 (June 2008) (Exs. 1019–1022) (collectively, “EMV”).

⁵ U.S. Patent App. Pub. No. 2010/0153721 A1, published June 17, 2010 (Ex. 1014, “Mellqvist”).

III. DISCRETIONARY DENIAL

The Petition seeks *inter partes* review of the same claims of the '171 patent that Petitioner requested review of in the '289 IPR. Exp. 1. At Petitioner's request, we considered the petition filed by Petitioner in the '289 IPR first. *See id.* We instituted an *inter partes* review in the '289 IPR for the reasons discussed in the institution decision in that proceeding. '289 IPR, Paper 16 (PTAB March 20, 2024). We now turn in this proceeding to consider whether Petitioner has shown a parallel petition challenging the same claims of the '171 patent at issue in the '289 IPR is warranted. Specifically, because Petitioner concurrently filed two petitions challenging claims of the same patent, we consider whether we should exercise discretion to deny the parallel petition. *See* 35 U.S.C. § 314(a); *SAS Inst. Inc. v. Iancu*, 138 S. Ct. 1348, 1356 (2018) (explaining that section "314(a) invests the Director with discretion on the question *whether* to institute review"); *Harmonic Inc. v. Avid Tech., Inc.*, 815 F.3d 1356, 1367 (Fed. Cir. 2016) ("[T]he PTO is permitted, but never compelled, to institute an IPR proceeding.").

The Patent Trial and Appeal Board Consolidated Trial Practice Guide (Nov. 2019) ("CTPG")⁶ states that "one petition should be sufficient to challenge the claims of a patent in most situations" and that "multiple petitions by a petitioner are not necessary in the vast majority of cases." CTPG 59. The CTPG further states that "[t]wo or more petitions filed against the same patent at or about the same time (e.g., before the first preliminary response by the patent owner) may place a substantial and

⁶ Available at <https://www.uspto.gov/TrialPracticeGuideConsolidated>.

unnecessary burden on the Board and the patent owner and could raise fairness, timing, and efficiency concerns.” *Id.* (citing 35 U.S.C. § 316(b)).

The CTPG provides the following guidance:

To aid the Board in determining whether more than one petition is necessary, if a petitioner files two or more petitions challenging the same patent, then the petitioner should, in its petitions or in a separate paper filed with the petitions, identify: (1) a ranking of the petitions in the order in which it wishes the Board to consider the merits, if the Board uses its discretion to institute any of the petitions, and (2) a succinct explanation of the differences between the petitions, why the issues addressed by the differences are material, and why the Board should exercise its discretion to institute additional petitions if it identifies one petition that satisfies petitioner’s burden under 35 U.S.C. § 314(a).

Id. at 59–60 (footnote omitted).

According to Petitioner, “both petitions are necessary because there is a dispute regarding the priority date of the challenged claims of the ’171 [p]atent, and the petitions rely on different prior art references.”

Id. at 1. Petitioner argues that Patent Owner “will likely contend that at least one of the provisional applications establishes the priority date of the ’171 [p]atent,” and asserts that, in this proceeding, the Petition is “supported by prior art references before the alleged priority date of the ’171 [p]atent based on the earliest provisional application.” *Id.* at 2. Petitioner contends that White and Mellqvist, relied on in the Petition, “qualify as prior art even under the alleged August 30, 2011[,] priority date.” *Id.* at 3. Petitioner does not identify any other difference in the art relied on in the Petition to show that a parallel petition is warranted.

In response, Patent Owner stipulates that it “will not allege in the IPR2023-01289 proceeding that any of claims 1–33 of the ’171 [p]atent

are entitled to a priority date any earlier than the August 30, 2012[,] filing date of the non-provisional application for the '171 [p]atent.” Resp. Exp. 5. Patent Owner argues that, in light of its stipulation, Petitioner has not shown that a parallel petition is warranted. *Id.* at 5–6. Patent Owner explains that, consistent with the CTPG, “the Board has declined to consider additional petitions where patent owner has stipulated that it will not attempt to antedate a reference subject to a priority date dispute.” *Id.* at 4–5 (citing *Apple Inc. v. Seven Networks, LLC*, IPR2020-00254, Paper 13 (PTAB July 28, 2020)). Patent Owner also argues that Petitioner’s reliance on different prior art does not show a parallel petition is warranted and asserts that the petitions in both proceedings rely, in part, on the same reference. *Id.* at 2–3. According to Patent Owner, “given the lack of justification for multiple petitions, the Board should exercise its discretion to deny institution of the second-ranked IPR2023-01290 petition and only consider IPR2023-01289.” *Id.* at 7.

We agree with Patent Owner that Petitioner has not shown that a parallel petition challenging claims 1–33 of the '171 patent is warranted. The mere fact that different references were asserted in the parallel petition is not justification for a parallel petition under the circumstances presented here. The only reason Petitioner asserted a parallel petition was necessary was because Petitioner anticipated Patent Owner would “likely contend that at least one of the provisional applications establishes the priority date of the '171 [p]atent.” Exp. 2. In light of Patent Owner’s stipulation, however, Petitioner faces no risk of a determination in the '289 IPR that the '171 patent is entitled to an earlier filing date than August 30, 2012, the filing date of the '647 Application. Based on these circumstances, we find that

the reasons provided by Petitioner do not show that a parallel petition is warranted.

IV. CONCLUSION

For the foregoing reasons, we exercise our discretion under § 314(a) and deny the Petition seeking *inter partes* review of the '171 patent in this proceeding.

IV. ORDER

Upon consideration of the record before us, it is:

ORDERED that the Petition is *denied* and no trial is instituted in this proceeding.

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FOR PETITIONER:

Eliot D. Williams
Jennifer Tempesta
BAKER BOTTS LLP
eliot.williams@bakerbotts.com
jennifer.tempesta@bakerbotts.com

FOR PATENT OWNER:

Seth Lindner
Brett Cooper
Robert A. Auchter
Spencer Hosie
Diane S. Rice
Darrell Atkinson
BC LAW GROUP, P.C. slindner@bc-lawgroup.com
bcooper@bc-lawgroup.com
robert@auchterlaw.com
shosie@hosielaw.com
drice@hosielaw.com
datkinson@hosielaw.com