

UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE PATENT TRIAL AND APPEAL BOARD

FIFTH THIRD BANK, N.A.

Petitioner,

v.

UNITED SERVICES AUTOMOBILE ASSOCIATION,

Patent Owner.

Case No. IPR2026-00279

U.S. Patent No. 12,159,310

PATENT OWNER REQUEST FOR DISCRETIONARY DENIAL

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PATENT OWNER'S EXHIBIT LIST

EXHIBIT LIST	
2001	Joint Second Motion to Stay All Deadlines and Notice of Settlement
2002	Docket Report for <i>United Services Auto Ass'n v. Fifth Third Bank, N.A.</i> , No. 2:26-cv-00595-JRG (E.D. Tex.) (July 21, 2026)
2003	U.S. Pat. No. 10,380,562 (Prasad)
2004	Complaint in <i>United Services Auto Ass'n v. Fifth Third Bank, N.A.</i> , No. 2:26-cv-00595-JRG (E.D. Tex.) (Dkt. 1) (July 21, 2026)
2005	Second Amended Complaint in <i>United Services Auto Ass'n v. Regions Bank</i> , No. 2:25-cv-00082-JRG (E.D. Tex.) (Dkt. 41) (June 23, 2025)
2006	U.S. Pat. No. 12,505,414 (Bueche)
2007	White Paper: <i>Check 21 – Controlling Image Quality at the Point of Capture</i> (Harvey Spencer, 2004)
2008	<i>Image Quality and Usability Assurance- Phase I</i> (Jaffe, et al., 2004)
2009	<i>Bank Will Allow Customers to Deposit Checks by iPhone</i> (New York Times, Aug. 9, 2009)
2010	Trial Transcript, <i>USAA v Wells Fargo Bank, N.A.</i> , Case No. 2:18-cv-00245, (E.D. Tex., Oct. 30, 2019) (excerpts)
2011	National Judicial Caseload Profile (June 30, 2026)
2012	LegalMetric Report EDTX 2019-2024

I. INTRODUCTION

Patent Owner United Services Automobile Association (“USAA”) respectfully requests that the Director exercise discretion to deny institution of Fifth Third Bank, N.A.’s (“Fifth Third”) Petition for *inter partes* review of U.S. Pat. No. 12,159,310 (“the ’310 Patent”). As explained further herein, there are multiple reasons why this Petition should be denied.

II. THE INVENTION OF THE ’310 PATENT: MOBILE REMOTE DEPOSIT WITH AUTO-CAPTURE

Research and Development Leading to the Invention

USAA has been proudly serving members of the military across the globe since 1922. Ex. 2004, ¶¶ 13-16; Ex. 2005, ¶¶ 8-11. In serving the military community, USAA has worked to innovate to serve the needs of its members, who may not be able to get to a bank branch, particularly if they are out to sea or deployed outside the country. USAA employs more than 38,000 people focusing on helping over 14 million members of these military families achieve financial security. Ex. 2004, ¶¶ 13-16; Ex. 2005, ¶¶ 8-11.

In about 2004, USAA invested substantial research and development resources into developing systems and methods that would provide USAA’s members with a real-time capability to deposit a financial instrument from nearly anywhere. Ex. 2004, ¶ 16; Ex. 2005, ¶ 11. This effort resulted in a prototype in 2005 and the launch in 2006 of a system known as Deposit@Home®, which

allowed for the remote deposit of checks from a member's home. Ex. 2004, ¶ 16; Ex. 2005, ¶ 11.

In 2009, USAA continued its innovation with the development and launch of the Deposit@Mobile® application, which allowed for the remote deposit of checks using a mobile phone. USAA's inventors further innovated Deposit@Mobile® to provide for the "auto-capture" of check images based on real-time analysis of monitoring criteria to ensure a high quality check image is captured. This further innovation resulted in a significant reduction in the percentage of rejected check deposits. Ex. 2004, ¶ 16; Ex. 2005, ¶ 11. See Ex. 2010, 97:2-10 (pdf page 9).

The '310 Patent emerged from the technical innovation USAA achieved with its revolutionary Deposit@Mobile® product. Today, millions of customers use the patented invention worldwide on devices such as iPhones, iPads, and Android-based mobile devices.

The Technological Challenge Addressed by the Invention

Prior to USAA's invention, it was known that in theory a check image could be captured by a mobile device and sent to a bank for deposit. '310 Patent, 1:27-34. The problem was that humans could not reliably take pictures of sufficient quality for automated processing by the back-end banking system. '310 Patent, 1:34-39. The need for reliable "detection and extraction of information" from a

check image (*id.*) captured by a user became an even bigger technical challenge with the passage of the Check 21 Act that set standards requiring that a substitute check image “accurately represent[] all of the information on the front and back of the original check.” 12 U.S.C. § 5003(2)(A); 12 C.F.R. § 229.51(a)(1).

The significance of this technological challenge was underscored by articles published by others in the field. For example, the Financial Services Technology Consortium (“FSTC”), a prominent industry consortium made up of leading financial institutions and technology companies, published a report entitled “*Image Quality and Usability Assurance*” that identified sixteen different types of defects in check images that could lead to deposit failures when processed by a back-end banking system. Ex. 2008, 11.

As explained in the ’310 Patent, the problem was that human users of mobile devices could not reliably and consistently take pictures of checks of sufficient quality for processing by the back-end banking system. ’310 Patent, 1:34-39. This problem was illustrated in the white paper “*Check 21: Controlling Image Quality at the Point of Capture*” by Harvey Spencer, a recognized expert in check image processing, which indicated that the human eye did not have the ability to distinguish between a check image that would meet digital processing criteria in

the back-end banking system and one that would not. Ex. 2007, 4 (Fig. 3); Ex. 2008, 6 (Fig. 2).

The '310 Patent provided a solution to this problem. At the time, other financial institutions were initially skeptical, and industry observers predicted that “many banks might pass on the idea.” Ex. 2004 (Complaint in *USAA v. Fifth Third Bank*, 9-10 (¶ 29)); Ex. 2005 (Complaint in *USAA v. Regions Bank*, 7 (¶ 22)). However, USAA’s Deposit@Mobile® product successfully implemented the invention and went on to receive widespread industry recognition and praise. Ex. 2004, 7-8 (¶¶ 29-31); Ex. 2005, 7-8 (¶¶ 22-24).

The feature in the '310 Patent that a video frame of a check must meet specified quality parameters (monitoring criteria) before it is automatically captured leads to a significant reduction in the number of failed check deposits—as

much as 50% or more.¹ This significant technological improvement² benefits customers and the various banking systems (e.g., payee's bank, intermediary bank, Federal Reserve bank, payor's bank) involved in remote check deposit processing.

III. THE DIRECTOR SHOULD DENY INSTITUTION PURSUANT TO *FINTIV*.

Patent Owner filed suit for patent infringement of the '310 Patent and other patents on July 21, 2026, in *United States Automotive Association v. Fifth Third Bankcorp, et al.*, Case No. 2:26-cv-00595-JRG (E.D. Tex.) (the "EDTX Litigation").

Petitioner seeks a parallel proceeding with this Petition that has been accorded a filing date of July 13, 2026. The projected due date for a Final Written

¹ For example, the check deposit failure rate for USAA in November 2014 was reduced by more than 50% when the invention was implemented. See Ex. 2010 (Trial Transcript, inventor Michael Beuche, Jr.), 97:2-10 (pdf page 9).

² Throughout its Petition, Fifth Third refers to various prior IPR decisions involving different patents, different families, different claims, and different grounds. Those decisions have no bearing on the grounds presented in this Petition against the '310 Patent.

Decision (“FWD”) in this IPR would be January 13, 2028.

In evaluating whether it is an efficient and appropriate use of Office resources to litigate validity in an IPR in addition to district court, the Director considers various factors. *Apple Inc. v. Fintiv, Inc.*, IPR2020-00019, Paper 11 (PTAB Mar. 20, 2020) (precedential). In this case, the *Fintiv* factors strongly weigh in favor of discretionary denial.

Fintiv Factor 2 and Factor 4 considered together weigh in favor of discretionary denial. Applying the median time-to-trial statistic from the National Judicial Caseload Profile (see Ex. 2011, 35), the projected trial date for the EDTX Litigation would be late July 2028. During the recent scheduling conference held on September 30, 2026, Judge Gilstrap assigned the EDTX Litigation a trial date of October 2, 2028.

However, Factor 2 is more than offset by Factor 4’s consideration of the potential overlap between the proceedings. Specifically, Fifth Third’s *Notice of Sotera Stipulation* (Paper 18) filed on August 17, 2026 (“*Sotera Stipulation*”) only promises that Petitioner will not raise in district court “(1) the specific grounds asserted in the Petition [], or (2) any other ground that could reasonably have been raised before the Board.”

The Director has repeatedly explained that this kind of standard *Sotera*

stipulation that does not preclude the submission of overlapping and duplicative system art in district court is to be given little weight and in most cases should lead to denial of institution. *Cisco Systems, Inc. v. Wsou Investments LLC*, IPR2025-00188, Paper 14, at 2-4 (Director Aug. 22, 2025) (vacating institution because “Petitioner’s *Sotera* stipulation ... does not relinquish any rights or opportunities to challenge the [] claims on any other ground” including “combinations of the prior art asserted in this proceeding with unpublished system prior art.”); *Motorola Solutions, Inc. v. Stellar, LLC*, IPR2024-01205, Paper 19, at 3 (Director Mar. 28, 2025).

Petitioner’s standard *Sotera* stipulation does not preclude Petitioner from reusing the same prior art with minor modifications, such as by adding in system art or recharacterizing IPR references as system art and invoking the *Ingenico* rule. *Ingenico Inc. v. IOENGINE, LLC*, 136 F.4th 1354, 1365 (Fed. Cir. 2025). As the Director stated in *Cisco*, Petitioner Fifth Third’s stipulation “does not ensure that this proceeding would be a true alternative to the district court proceeding.” *Cisco Systems*, IPR2025-00188, Paper 14, at 3.

Petitioner could have stipulated that it would not present overlapping or cumulative invalidity theories in district court—but Fifth Third chose not to. Petitioner’s narrow stipulation demonstrates that it seeks IPR not as a true

alternative to district court litigation, but “to gain a litigation advantage” by preserving a second opportunity to litigate substantially overlapping invalidity issues—an approach inconsistent with the AIA’s purpose of providing an efficient substitute for duplicative litigation. *Magnolia Medical Technologies, Inc. v. Kurin, Inc.*, Paper 17, IPR2026-00097, at 3-4 (Director May 14, 2026) (precedential).

Fintiv Factor 1, which considers whether a stay exists or is likely to be granted if an IPR is instituted, also weighs heavily in favor of denial. Petitioner has not filed a motion to stay based on the IPR petitions it has filed. Even if an IPR was instituted, this district court judge is unlikely to stay the case. Ex. 2012 (LegalMetric report), 3 (15% win rate on contested motions to stay pending IPRs), 85 (8% win rate on contested motion to stay before Judge Gilstrap).

Fintiv Factor 6 also strongly weighs in favor of discretionary denial. As discussed in Section V below, the Petition is based on the improper submission of testimony of a first expert (John Hart, Ex. 1074) making a ***single-sentence incorporation by reference*** of the opinions contained in a 225-page declaration from a third party expert who is not engaged by Petitioner (Daniel Lopresti, Ex. 1002). This IPR2026-00279 proposed by Fifth Third is no longer in a joinder posture because IPR2025-01326 initiated by Regions Bank was terminated. Accordingly, Fifth Third’s Petition and its expert Dr. Hart’s declaration—***standing***

on their own—must demonstrate that institution is warranted. That is not possible when Fifth Third’s expert Dr. Hart provided no opinions of his own.

As a whole, *Fintiv* favors discretionary denial of the Petition.

IV. THE DIRECTOR SHOULD DENY INSTITUTION PURSUANT TO SECTION 325(D).

A. The ’414 Child Patent With Claims Encompassing the Claims of the ’310 Patent Was Issued Over All References of Grounds 1 and 3 Including Meier and Goyal.

Grounds 1 and 3 challenge all independent claims of the ’310 Patent. Pet., 7.

Ground 1 is based on the combination of Garcia, Luo, Meier, and Cohen. *Id.*

Petitioner acknowledges that Garcia, Luo, and Cohen were of record and considered by the Examiner during prosecution of the ’310 Patent. Pet., 5-6.

Ground 3 challenges the independent claims based on the combination of Garcia, Luo, Goyal, and Cohen. Petitioner acknowledges that all references of Ground 3 except Goyal were of record and considered by the Examiner. Pet., 5-6.

In sum, for the grounds challenging the independent claims, all references were considered during prosecution of the ’310 Patent except for Meier and Goyal.

U.S. Pat. No. 12,505,414 (“the ’414 Patent”) was filed as a continuation application of the ’310 Patent. Ex. 2006 (cover, field 63). Claim 1 of the ’414 Patent corresponds to Claim 1 of the ’310 Patent, except the former is broader because it does not recite limitations 1(m)-1(o) for providing feedback to the user

when a video frame does not meet the monitoring criteria. *Compare* Cl. 1, '414 Patent, *with* Cl. 1, '310 Patent. Claim 1 of the '414 Patent thus encompasses Claim 1 of the '310 Patent.³

During the prosecution of the '414 Patent, the Examiner considered all four Ground 1 references (Garcia, Luo, Meier, and Cohen) and found Claim 1 to be patentable over them. '414 Patent, References Cited, 5 (Garcia), 9 (Luo), 22 (Meier), and 8 (Cohen). Likewise, the Examiner found Claim 1 to be patentable over the references of Ground 3, which substitutes Goyal for Meier. '414 Patent, References Cited, 22 (Goyal).

Accordingly, the issuance of the '414 Patent demonstrates that the challenged claims of the '310 Patent are patentable over the grounds presented in this IPR. Conducting an IPR trial to reevaluate the '310 Patent would be a waste of Office resources because the Office already determined that claims in the '414 Patent encompassing those of the '310 Patent were patentable over all references of Grounds 1 and 3.

³ Other independent claims of the '414 Patent correspond to the other independent claims of the '310 Patent.

Moreover, Petitioner has not established—or even asserted—that the Examiner committed material error during the prosecution of the '310 Patent as required under the *Advanced Bionics* framework. *Advanced Bionics LLC v. MED-EL Elektromedizinische Gerate*, IPR2019-01469, Paper 6, at 8-10 (PTAB Feb. 13, 2020) (precedential).

Accordingly, the Director should deny the Petition under Section 325(d).

B. Meier and Goyal Are Also Cumulative of the Prasad '562 Reference Applied And Overcome During Prosecution of the '310 Patent.

There is an alternative basis for denial under Section 325(d): Meier and Goyal are cumulative of the Prasad '562 Patent (Ex. 2003) applied by the Examiner and overcome during examination of the '310 Patent.

1. Ground 1 – Garcia, Luo, Meier, and Cohen

Ground 1 asserts Garcia, Luo, Meier, and Cohen against the independent claims of the '310 Patent. All references except Meier were of record and considered by the Examiner during prosecution, as admitted by Petitioner. Pet., 5-6.

Meier was added by Petitioner for its purported teaching of a downloaded application on a mobile device with APIs providing access through an abstraction layer to control a camera to process video. Pet., 22, 29, 39-41. But this alleged

teaching of Meier is found in the Prasad '562 reference (Ex. 2003) considered and applied during examination of the '310 Patent.

During prosecution of the '310 Patent, the Examiner applied Prasad '562 as allegedly teaching a downloadable application on a mobile device with APIs providing access through an abstraction layer to control a camera to process video. See Ex. 1033 (FH '310 Patent), 179-180. The Examiner asserted that Prasad '562 disclosed an “application that when delivered to the client 320 will execute. . . [by] operat[ing] through a software abstraction layer, such as an application programming interface (API).” *Id.*, 179. The Examiner also asserted that Prasad '562 teaches that the downloaded app would control a camera to process video. *Id.*, 180 (processing camera video images using an algorithm).

Accordingly, Meier is cumulative of Prasad '562 because the former is relied on for substantially the same teaching as Prasad '562. This is particularly significant because Prasad '562 was ***applied and overcome*** for the issued claims of the '310 Patent. Ex. 1033 (FH), 176-186, 193-211.

Therefore, the Ground 1 combination of Garcia, Luo, Meier, and Cohen meets part one of the *Advanced Bionics* framework, which shifts the burden to Petitioner to establish that the Examiner made a material error. *Ecto World, LLC v. RAI Strategic Holdings, Inc.*, IPR2024-01280, Paper 13, at 4 (Director May 19,

2025) (precedential). However, Petitioner has not alleged, let alone established, any material error on the part of the Examiner. Thus, the Petition should be denied.

2. Ground 3 – Garcia, Luo, Goyal, and Cohen

Ground 3 consisting of Garcia, Luo, Goyal, and Cohen is asserted against the independent claims of the '310 Patent. Pet., 7. In other words, Goyal in Ground 3 is swapped for Meier in Ground 1.

Like Meier, Goyal is cited by Petitioner as allegedly teaching a downloaded application on a mobile device with APIs providing access through an abstraction layer to control a camera to process video. Pet., 25, 73-74.

For the same reasons as Meier, Goyal is cumulative because it is relied on for substantially the same teaching as found in Prasad '562. Petitioner has not alleged, let alone established, that the Examiner committed material error. The Director should deny the Petition pursuant to Section 325(d).

V. THE PETITION IS IMPROPERLY BASED ON AN EXPERT DECLARATION THAT INCORPORATES BY REFERENCE THE OPINIONS OF A THIRD PARTY EXPERT.

Institution should be denied because the Petition is based on the improper expert declaration of John Hart (Ex. 1078, “Hart Decl.”) that merely incorporates by reference the opinions in a 225-page declaration from a different expert, Daniel

Lopresti (Ex. 1002, “Lopresti Decl.”), that was previously submitted by a different petitioner (Regions Bank) in since-terminated IPR2025-01326.

This IPR2026-00279 proposed by Fifth Third is no longer in a joinder posture because IPR2025-01326 initiated by Regions Bank was terminated. Accordingly, Fifth Third’s Petition and its expert Dr. Hart’s declaration—*standing on their own*—must demonstrate that institution is warranted. That is not possible when Fifth Third’s expert Dr. Hart provided no opinions of his own.

The entirety of Dr. Hart’s opinions on the ’310 Patent is:

V. OPINIONS REGARDING THE ’310 PATENT

17. I have reviewed the Lopresti Declaration, submitted in connection with Regions Bank’s petition for *inter partes review* of the ’310 patent (IPR2025-01326), including the materials and exhibits cited therein. I fully agree with, and hereby adopt as if set forth herein, the opinions set forth in the Lopresti Declaration.

Hart Decl., 6, ¶ 17.

Fifth Third’s expert Dr. Hart does not submit any independent opinion of his own. Instead, he incorporates by reference the opinions set forth in the 225-page declaration of Dr. Lopresti. A one-sentence incorporation by reference is not expert testimony; instead, it is an attempt to import a different witness’s opinions into this proceeding without presenting them as Fifth Third’s expert’s own sworn analysis.

Furthermore, there has been no showing that Dr. Hart's skills and experience are commensurate with those of Dr. Lopresti to justify Dr. Hart adopting Dr. Lopresti's opinions. According to Petitioner, a POSITA would have prior experience with (1) check imaging and (2) application development for mobile devices. Pet., 16. Third party expert Dr. Lopresti attested to his experience in the analysis of images captured by cameras including optical character recognition and other computer recognition of images. Ex. 1002, ¶¶ 9-14. He also has experience with "mobile software development" and "check image analysis." *Id.*, ¶¶ 14-15. Dr. Lopresti meets the experiential qualifications of a POSITA as defined by Petitioner.

In contrast, Fifth Third's expert Dr. Hart professes to have experience in "visual computing," which generically refers to the processing, generation, and display of visual information. Ex. 1078, ¶¶ 4-7. He reports no experience with check imaging and no experience with mobile application development. Dr. Hart lacks Dr. Lopresti's relevant expertise and qualifications, and therefore he cannot baldly adopt all of Dr. Lopresti's opinions by reference, particularly as Dr. Lopresti testified that he "relied upon [Dr. Lopresti's] training, knowledge, and experience in the relevant art" in formulating Dr. Lopresti's opinions (Ex. 1002, ¶ 33), none of which Petitioner has demonstrated Dr. Hart shares.

For this and other reasons, Fifth Third’s expert Dr. Hart’s declaration is entitled to no weight and should be disregarded. In *Xerox Corp. v. Bytemark, Inc.*, IPR2022-00624, Paper 9, at 5 (Director Feb. 10, 2023 (precedential), the Director affirmed the denial of institution because the expert declaration provided no technical detail, explanation, or supporting statements. In *Xerox*, the declaration was defective because it parroted the petition. If a declaration that parrots the petition is entitled to no weight, Fifth Third’s expert’s declaration that does no more than incorporate another expert’s declaration by reference is entitled to no weight.

Indeed, Dr. Hart’s declaration is the type of incorporation-by-reference that is regularly rejected by courts and the Office. *Parus Holdings, Inc. v. Google LLC*, 70 F.4th 1365, 1370-71 (Fed. Cir. 2023) (refusal to consider arguments incorporated by reference from declarations); *General Access Solutions, Ltd. v. Sprint Spectrum L.P.*, 811 F. App’x 654, 657–58 (Fed. Cir. 2020). *See 3M Co. v. Evergreen Adhesives, Inc.*, 860 F. App’x. 724, 725-727 (Fed. Cir. 2021) (Board is not to be forced to “play archeologist with the record” because of incorporation by reference); *Microsoft Corp. v. DataTern, Inc.*, 755 F.3d 899, 910 (Fed. Cir. 2014) (rejecting incorporation by reference as “fundamentally unfair”). *See* 37 C.F.R. §

42.6(a)(3) (“Arguments must not be incorporated by reference from one document into another document.”).

Not only did Petitioner improperly have its expert incorporate by reference the opinions of a third party expert, but the Petition’s arguments for Grounds 1–4 do not cite Petitioner’s own expert declaration even once. See Pet. 25–80 (no citations to Ex. 1074 of John Hart). The Petition thus relies on unsupported attorney argument rather than competent evidentiary support for its asserted grounds. Institution should be denied because Petitioner has failed to provide a proper evidentiary basis for the arguments on which Grounds 1–4 depend.

If that is not enough, there is the problem that (to the best of Patent Owner’s knowledge) Dr. Lopresti has not been engaged by Fifth Third. If this IPR is instituted, Patent Owner will have to depose both Dr. Hart and Dr. Lopresti, which is extremely burdensome. Further, deposition of non-party witness Dr. Lopresti will not be obtainable via routine IPR discovery, raising significant witness availability and due process concerns. A Petitioner should not be permitted to initiate a new IPR proceeding on the back of a declaration from an expert who is not engaged and who cannot be made available by Petitioner for cross-examination. See *OpenSky Industries, LLC v. VLSI Technology LLC*, IPR2021-01056, Paper 18, at 4–10 (PTAB Dec. 23, 2021) (denying institution because of

“this unusual situation [where petitioner is] relying on a prior declaration by [another party’s] expert, rather than retaining its own expert for a new declaration.”).

VI. USAA’s SIGNIFICANT INVESTMENT IN THE INVENTION AND DOMESTIC MANUFACTURE WEIGH IN FAVOR OF DENIAL.

Settled expectations can be established by Patent Owner’s significant investment in the invention and efforts involving commercialization, marking, licensing, and enforcement. *Amgen Inc. v. Bristol-Myers Squibb Co.*, IPR2025-00601, Paper 9 (Director July 24, 2025) (informative) (recognizing that “an extraordinary amount of investment, time, and resources dedicated to research, development, trials, and regulatory approval” may support settled expectations, even for a recently issued patent); *Alliance Laundry Systems, LLC v. PayRange LLC*, IPR2025-00950, Paper 11 (Director Sept. 19, 2025) (denying institution where, despite the patent’s relatively recent issuance, evidence that patent owner had licensed the challenged patent created settled expectations); *Intel Corp. v. Proxense LLC*, IPR2025-00327, Paper 12 (Director June 26, 2025) (settled expectations where a patent has been “commercialized, asserted, marked, licensed, or otherwise applied” in petitioner’s technology space).

This is the quintessential case for settled expectations based on USAA's significant investment in developing and practicing the invention, coupled with licensing and other activity policing the patented technology. USAA invested many millions of dollars and thousands of employee-hours in the development and implementation of its remote mobile deposit auto-capture technology. See Ex. 2005, ¶ 12. USAA has been practicing the patented technology of the family of the '310 Patent for many years since the first application was filed in August 2009.⁴

USAA has also enforced patents in this family against multiple banks and has licensed numerous other banks. Ex. 2005, ¶¶ 8, 11, 16-18, 22-24, 33, 36 (Wells Fargo), 37 (PNC Bank), 38 (Truist Bank), 43 (license to Discover), 44 (license to Esquire Bank), 45 (license to First Citizens Bank), 47 (marking).

Patent Owner's settled expectations are bolstered by USAA's domestic manufacturing activity for systems and processes covered by the '310 Patent. The Deposit@Mobile® invention was developed in USAA's facilities in the United

⁴ The original application of the '310 Patent family was App. No. 12/545,127 filed on August 21, 2009. USAA publicly launched the Deposit@Mobile® product in 2009. Ex. 2009 (New York Times, *Bank Will Allow Customers to Deposit Checks by iPhone*; Aug. 9, 2009).

States. Improvements to Deposit@Mobile®, which is embedded in the USAA Mobile application, are developed in the United States. The patented technology is provided to Apple's App Store and Google's Play Store, which allow domestic banking customers to download the app to their devices and practice the invention in the United States.

Accordingly, USAA's activity in the United States developing the invention, commercializing the invention, and distributing software embodying the invention strongly weighs in favor of discretionary denial.

VII. CONCLUSION

For the foregoing reasons, the Director should deny institution.

Dated: October 5, 2026

Respectfully submitted,

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VIII. CLAIMS APPENDIX⁵

1[pre] 1. A method enabling mobile check deposit auto-capture functionality via video frame processing, the method comprising:

1[a] providing an app for download to a mobile device of a user, the user's mobile device including a camera and a memory storing a software abstraction layer for controlling the camera, the app associated with a bank to control check deposit by controlling the camera through the software abstraction layer, wherein the app, when downloaded to the user's mobile device and executed by the user's mobile device, is configured to cause the user's mobile device to perform operations comprising:

1[b] providing instructions to the user for capturing an image of a check;

1[c] generating a live video of the check in a field of view of the camera, the downloaded app causing the live video to be generated by controlling the camera through the software abstraction layer;

⁵ The claim limitations are numbered as they were in the Petition filed in IPR2026-00279.

1[d] overlaying an alignment guide on the live video of the check in the field of view of the camera;

1[e] monitoring the live video of the check in the field of view of the camera with respect to at least one monitoring criterion;

1[f] determining that a video frame of the live video of the check satisfies the at least one monitoring criterion and then automatically capturing the video frame;

1[g] when the video frame of the live video of the check in the field of view of the camera is determined to satisfy the at least one monitoring criterion, providing feedback advising the user that the check has been captured;

1[h] using a wireless network, transmitting a digital image of the check from the user's mobile device and submitting the check for mobile check deposit in the bank after automatically capturing the video frame, wherein the digital image is the captured video frame or is based on the captured video frame; and

1[i] before the submitting, confirming that the mobile check deposit can go forward after optical character recognition is performed on the check in the digital image, a magnetic ink character recognition (MICR) line on the check in the digital image is recognized, and an amount payable on the check in the digital image is validated;

1[j] receiving the digital image of the check transmitted by the user's mobile device;

1[k] processing the digital image of the check including performing optical character recognition on the check in the digital image and verifying that the digital image of the check is acceptable for mobile check deposit, wherein the app, when downloaded and executed by the user's mobile device, is configured to cause the user's mobile device to perform additional operations including receiving an indication of a result of the processing before confirming that the mobile check deposit can go forward; and

1[l] updating, by a computer, a balance of an account at a financial institution of the user to reflect an amount of funds associated with the check submitted for mobile check deposit by the user's mobile device, after the submitting the check for mobile check deposit in the bank, the confirming that the mobile check deposit can go forward, and the verifying that the digital image of the check is acceptable for mobile check deposit,

1[m] wherein the app, when downloaded and executed by the user's mobile device, is configured to cause the user's mobile device to perform additional operations comprising:

1[n] before determining that the video frame of the live video of the check satisfies the at least one monitoring criterion, determining that a different video frame of the live video of the check does not satisfy the at least one monitoring criterion; and

1[o] after determining that the different video frame of the live video of the check does not satisfy the at least one monitoring criterion, providing feedback to the user.

2[pre] 2. A method enabling mobile check deposit auto-capture functionality via video frame processing, the method comprising:

2[a] providing an app for download to a mobile device of a user, the user's mobile device including a camera and a memory storing a software abstraction layer for controlling the camera, the app associated with a bank to control check deposit by controlling the camera through the software abstraction layer, wherein the app, when downloaded to the user's mobile device and executed by the user's mobile device, is configured to cause the user's mobile device to perform operations comprising:

2[b] providing instructions to the user for capturing an image of a check;

2[c] generating a live video of the check in a field of view of the camera, the downloaded app causing the live video to be generated by controlling the camera through the software abstraction layer;

2[d] overlaying an alignment guide on the live video of the check in the field of view of the camera;

2[e] monitoring the live video of the check in the field of view of the camera with respect to at least one monitoring criterion;

2[f] determining that a video frame of the live video of the check satisfies the at least one monitoring criterion and then automatically capturing the video frame;

2[g] when the video frame of the live video of the check in the field of view of the camera is determined to satisfy the at least one monitoring criterion, providing feedback advising the user that the check has been captured;

2[h] using a wireless network, transmitting a digital image of the check from the user's mobile device and submitting the check for mobile check deposit in the bank after automatically capturing the video frame, wherein the digital image is the captured video frame or is based on the captured video frame; and

2[i] before the submitting, confirming that the mobile check deposit can go forward after optical character recognition is performed on the check in the digital

image, a magnetic ink character recognition (MICR) line on the check in the digital image is recognized, and an amount payable on the check in the digital image is validated;

2[j] receiving the digital image of the check transmitted by the user's mobile device;

2[k] processing the digital image of the check including performing optical character recognition on the check in the digital image and verifying that the digital image of the check is acceptable for mobile check deposit, wherein the app, when downloaded and executed by the user's mobile device, is configured to cause the user's mobile device to perform additional operations including receiving an indication of a result of the processing before confirming that the mobile check deposit can go forward; and

2[l] updating, by a computer, a balance of an account at a financial institution of the user to reflect an amount of funds associated with the check submitted for mobile check deposit by the user's mobile device, after the submitting the check for mobile check deposit in the bank, the confirming that the mobile check deposit can go forward, and the verifying that the digital image of the check is acceptable for mobile check deposit,

2[m] wherein the at least one monitoring criterion is a plurality of monitoring criteria based on two or more selected from a group consisting of light contrast, light brightness, check positioning, check dimensions, character spacing, skewing, warping, corner detection, edge detection, and magnetic ink character recognition (MICR) line detection.

3. The method of claim 2, wherein the plurality of monitoring criteria includes a criterion based on magnetitic character recognition (MICR) line detection.

4. The method of claim 2, wherein the plurality of monitoring criteria includes criteria based on light brightness, skewing, and warping.

5[pre] 5. A method enabling mobile check deposit auto-capture functionality via video frame processing, the method comprising:

5[a] monitoring a live video of a check in a field of view of a camera with respect to at least one monitoring criterion, wherein the live video is generated by a mobile device of a user, the user's mobile device including the camera and a downloaded app, the downloaded app associated with a bank to control check deposit by controlling the camera, the downloaded app, when executed by the user's mobile device, being configured to cause the user's mobile device to perform operations comprising:

5[b] providing instructions to the user for capturing an image of the check;

5[c] generating the live video of the check in the field of view of the camera, the downloaded app causing the live video to be generated by controlling the camera;

5[d] overlaying an alignment guide on the live video of the check in the field of view of the camera; and

5[e] using a wireless network, submitting the check for mobile check deposit in the bank after a frame of the live video of the check in the field of view of the camera is automatically captured;

5[f] determining that a video frame of the live video of the check satisfies the at least one monitoring criterion and then automatically capturing the video frame;

5[g] when the video frame of the live video of the check in the field of view of the camera is determined to satisfy the at least one monitoring criterion, providing feedback advising the user that the check has been captured;

5[h] processing a digital image of the check including performing optical character recognition and verifying that the digital image of the check is acceptable for mobile check deposit, the digital image of the check being the captured video frame or being based on the captured video frame;

5[i] confirming that the mobile check deposit can go forward after optical character recognition is performed on the check in the digital image, a magnetic ink character recognition (MICR) line on the check in the digital image is recognized, and an amount payable on the check in the digital image is validated;

5[j] updating, by a bank computer, a balance of an account at a financial institution of the user to reflect an amount of funds associated with the check submitted for mobile check deposit by the user's mobile device, after the check is submitted for mobile check deposit in the bank, confirming that the mobile check deposit can go forward, and verifying that the digital image of the check is acceptable for mobile check deposit;

5[k] before determining that the video frame of the live video of the check satisfies the at least one monitoring criterion, determining that a different video frame of the live video of the check does not satisfy the at least one monitoring criterion; and

5[l] after determining that the different video frame of the live video of the check does not satisfy the at least one monitoring criterion, providing feedback to the user.

6[pre] 6. A method enabling mobile check deposit auto-capture functionality via video frame processing, the method comprising:

6[a] monitoring a live video of a check in a field of view of a camera with respect to at least one monitoring criterion, wherein the live video is generated by a mobile device of a user, the user's mobile device including the camera and a downloaded app, the downloaded app associated with a bank to control check deposit by controlling the camera, the downloaded app, when executed by the user's mobile device, being configured to cause the user's mobile device to perform operations comprising:

6[b] providing instructions to the user for capturing an image of the check;

6[c] generating the live video of the check in the field of view of the camera, the downloaded app causing the live video to be generated by controlling the camera;

6[d] overlaying an alignment guide on the live video of the check in the field of view of the camera; and

6[e] using a wireless network. submitting the check for mobile check deposit in the bank after a frame of the live video of the check in the field of view of the camera is automatically captured;

6[f] determining that a video frame of the live video of the check satisfies the at least one monitoring criterion and then automatically capturing the video frame;

6[g] when the video frame of the live video of the check in the field of view of the camera is determined to satisfy the at least one monitoring criterion, providing feedback advising the user that the check has been captured;

6[h] processing a digital image of the check including performing optical character recognition and verifying that the digital image of the check is acceptable for mobile check deposit, the digital image of the check being the captured video frame or being based on the captured video frame;

6[i] confirming that the mobile check deposit can go forward after optical character recognition is performed on the check in the digital image, a magnetic ink character recognition (MICR) line on the check in the digital image is recognized, and an amount payable on the check in the digital image is validated; and

6[j] updating, by a bank computer, a balance of an account at a financial institution of the user to reflect an amount of funds associated with the check submitted for mobile check deposit by the user's mobile device, after the check is submitted for mobile check deposit in the bank, confirming that the mobile check deposit can go forward, and verifying that the digital image of the check is acceptable for mobile check deposit,

6[k] wherein the at least one monitoring criterion is a plurality of monitoring criteria based on two or more selected from a group consisting of light contrast, light brightness, check positioning, check dimensions, character spacing, skewing, warping, corner detection, edge detection, and magnetic ink character recognition (MICR) line detection.

7. The method of claim 6. wherein the plurality of monitoring criteria includes criteria based on light brightness, skewing, and warping.

8[pre] 8. A method enabling mobile check deposit auto-capture functionality via video frame processing, the method comprising:

8[a] monitoring a live video of a check in a field of view of a camera with respect to at least one monitoring criterion, wherein the live video is generated by a mobile device of a user. the user's mobile device including the camera and a downloaded app, the downloaded app associated with a bank to control check deposit by controlling the camera, the downloaded app, when executed by the user's mobile device, being configured to cause the user's mobile device to perform operations comprising:

8[b] providing instructions to the user for capturing an image of the check;

8[c] generating the live video of the check in the field of view of the camera, the downloaded app causing the live video to be generated by controlling the camera;

8[d] overlaying an alignment guide on the live video of the check in the field of view of the camera; and

8[e] using a wireless network, submitting the check for mobile check deposit to the bank after a frame of the live video of the check in the field of view of the camera is automatically captured;

8[f] determining that a video frame of the live video of the check satisfies the at least one monitoring criterion and then automatically capturing the video frame;

8[g] when the video frame of the live video of the check in the field of view of the camera is determined to satisfy the at least one monitoring criterion, providing feedback advising the user that the check has been captured;

8[h] processing a digital image of the check including performing optical character recognition and verifying that the digital image of the check is acceptable for mobile check deposit, the digital image of the check being the captured video frame or being based on the captured video frame;

8[i] confirming that the mobile check deposit can go forward after optical character recognition is performed on the check in the digital image, a magnetic

ink character recognition (MICR) line on the check in the digital image is recognized, and an amount payable on the check in the digital image is validated; and

8[j] updating, by a bank computer, a balance of an account at a financial institution of the user to reflect an amount of funds associated with the check submitted for mobile check deposit by the user's mobile device, after the check is submitted for mobile check deposit in the bank, confirming that the mobile check deposit can go forward, and verifying that the digital image of the check is acceptable for mobile check deposit,

8[k] wherein the downloaded app, when executed by the user's mobile device, is configured to cause the user's mobile device to perform additional operations comprising the monitoring, the determining, the providing, and the confirming.

9[pre] 9. A method enabling mobile check deposit auto-capture functionality via video frame processing, the method comprising:

9[a] monitoring a live video of a check in a field of view of a camera with respect to at least one monitoring criterion, wherein the live video is generated by a mobile device of a user, the user's mobile device including the camera and a downloaded app, the downloaded app associated with a bank to control check deposit by controlling the camera, the downloaded app, when executed by the user's mobile

device, being configured to cause the user's mobile device to perform operations comprising:

9[b] providing instructions to the user for capturing an image of the check;

9[c] generating the live video of the check in the field of view of the camera, the downloaded app causing the live video to be generated by controlling the camera;

9[d] overlaying an alignment guide on the live video of the check in the field of view of the camera; and

9[e] using a wireless network, submitting the check for mobile check deposit in the bank after a frame of the live video of the check in the field of view of the camera is automatically captured;

9[f] determining that a video frame of the live video of the check satisfies the at least one monitoring criterion and then automatically capturing the video frame;

9[g] when the video frame of the live video of the check in the field of view of the camera is determined to satisfy the at least one monitoring criterion, providing feedback advising the user that the check has been captured;

9[h] processing a digital image of the check including performing optical character recognition and verifying that the digital image of the check is acceptable

for mobile check deposit, the digital image of the check being the captured video frame or being based on the captured video frame;

9[i] confirming that the mobile check deposit can go forward after optical character recognition is performed on the check in the digital image, a magnetic ink character recognition (MICR) line on the check in the digital image is recognized, and an amount payable on the check in the digital image is validated; and

9[j] updating, by a bank computer, a balance of an account at a financial institution of the user to reflect an amount of funds associated with the check submitted for mobile check deposit by the user's mobile device, after the check is submitted for mobile check deposit in the bank, confirming that the mobile check deposit can go forward, and verifying that the digital image of the check is acceptable for mobile check deposit,

9[k] wherein the confirming step is performed before the submitting step and the user's mobile device receives an indication of a result of the processing the digital image of the check before the confirming step.

10[pre] 10. A method enabling mobile check deposit auto-capture functionality via video frame processing, the method comprising:

10[a] providing an app for download to a mobile device of a user, the user's mobile device including a camera and a memory storing a software abstraction layer, the app associated with a bank to control check deposit by controlling the camera through the software abstraction layer, wherein the app, when downloaded to the user's mobile device and executed by the user's mobile device, is configured to cause the user's mobile device to perform operations comprising:

10[b] providing instructions to the user for capturing an image of a check;

10[c] generating a live video of the check in a field of view of the camera, the downloaded app causing the live video to be generated by controlling the camera through the software abstraction layer;

10[d] monitoring the live video of the check in the field of view of the camera with respect to at least one monitoring criterion;

10[e] determining that a video frame of the live video of the check satisfies the at least one monitoring criterion and the automatically capturing the video frame;

10[f] when the video frame of the live video of the check in the field of view of the camera is determined to satisfy the at least one monitoring criterion, providing feedback advising the user that the check has been captured;

10[g] using a wireless network, transmitting a digital image of the check from the user's mobile device and submitting the check for mobile check deposit in the bank after automatically capturing the video frame, wherein the digital image is the captured video frame or is based on the captured video frame; and

10[h] before the submitting, confirming that the mobile check deposit can go forward after optical character recognition is performed on the check, a magnetic ink character recognition (MICR) line on the check is recognized, and an amount payable on the check is validated; and

10[i] updating, by a computer, a balance of an account at a financial institution of the user to reflect an amount of funds associated with the check submitted for mobile check deposit by the user's mobile device, after the submitting the check for mobile check deposit and the confirming that the mobile check deposit can go forward,

10[j] wherein the app, when downloaded and executed by the user's mobile device, is configured to cause the user's mobile device to perform additional operations comprising:

10[k] before determining that the video frame of the live video of the check satisfies the at least one monitoring criterion, determining that a different video

frame of the live video of the check does not satisfy the at least one monitoring criterion; and

10[l] after determining that the different video frame of the live video of the check does not satisfy the at least one monitoring criterion, providing feedback to the user.

11[pre] 11. A method enabling mobile check deposit auto-capture functionality via video frame processing, the method comprising:

11[a] providing an app for download to a mobile device of a user, the user's mobile device including a camera and a memory storing a software abstraction layer, the app associated with a bank to control check deposit by controlling the camera through the software abstraction layer, wherein the app, when downloaded to the user's mobile device and executed by the user's mobile device, is configured to cause the user's mobile device to perform operations comprising:

11[b] providing instructions to the user for capturing an image of a check;

11[c] generating a live video of the check in a field of view of the camera, the downloaded app causing the live video to be generated by controlling the camera through the software abstraction layer;

11[d] monitoring the live video of the check in the field of view of the camera with respect to at least one monitoring criterion;

11[e] determining that a video frame of the live video of the check satisfies the at least one monitoring criterion and then automatically capturing the video frame;

11[f] when the video frame of the live video of the check in the field of view of the camera is determined to satisfy the at least one monitoring criterion, providing feedback advising the user that the check has been captured;

11[g] using a wireless network, transmitting a digital image of the check from the user's mobile device and submitting the check for mobile check deposit in the bank after automatically capturing the video frame, wherein the digital image is the captured video frame or is based on the captured video frame, and

11[h] before the submitting, confirming that the mobile check deposit can go forward after optical character recognition is performed on the check, a magnetic ink character recognition (MICR) line on the check is recognized, and an amount payable on the check is validated, and

11[i] updating, by a computer, a balance of an account at a financial institution of the user to reflect an amount of funds associated with the check submitted for mobile check deposit by the user's mobile device, after the submitting the check for mobile check deposit and the confirming that the mobile check deposit can go forward,

11[j] wherein the at least one monitoring criterion is a plurality of monitoring criteria based on two or more selected from a group consisting of light contrast, light brightness, check positioning, check dimensions, character spacing, skewing, warping, corner detection, edge detection, and magnetic ink character recognition (MICR) line detection.

12. The method of claim 11, wherein the plurality of monitoring criteria being based on magnetic ink character recognition (MICR) line detection and one or both of corner detection and edge detection.

13. The method of claim 11, wherein the plurality of monitoring criteria includes criteria based on light brightness, skewing, and warping.

14[pre] 14. A method enabling mobile check deposit auto-capture functionality via video frame processing, the method comprising:

14[a] receiving an image of a check, wherein the image of the check is provided for mobile check deposit in a bank by a mobile device of a user, the user's mobile device including a camera and a memory storing a software abstraction layer and a downloaded app, the downloaded app associated with the bank to control check deposit by controlling the camera through the software abstraction layer, and the downloaded app, when executed by the user's mobile device, being configured to cause the user's mobile device to perform operations comprising:

14[b] providing instructions to the user for capturing the check;

14[c] generating a live video of the check in a field of view of the camera, the downloaded app causing the live video to be generated by controlling the camera through the software abstraction layer;

14[d] monitoring the live video of the check in the field of view of the camera with respect to at least one monitoring criterion;

14[e] determining that a video frame of the live video of the check satisfies the at least one monitoring criterion and then automatically capturing the video frame;

14[f] when the video frame of the live video of the check in the field of view of the camera is determined to satisfy the at least one monitoring criterion, providing feedback advising the user that the check has been captured;

14[g] using a wireless network, transmitting a digital image of the check from the user's mobile device and submitting the check for mobile check deposit in the bank after automatically capturing the video frame, wherein the digital image is the captured video frame or is based on the captured video frame; and

14[h] before the submitting, confirming that the mobile check deposit can go forward after optical character recognition is performed on the check, a

magnetic ink character recognition (MICR) line on the check is recognized, and an amount payable on the check is validated;

14[i] performing image processing operations on the image of the check, the image processing operations including performing optical character recognition and verifying that the image of the check is acceptable for mobile check deposit, wherein the image of the check is the digital image transmitted by the user's mobile device or is based on the digital image transmitted by the user's mobile device; and

14[j] updating, by a computer, a balance of an account at a financial institution of the user to reflect an amount of funds associated with the check submitted for mobile check deposit by the user's mobile device. after the submitting the check for mobile check deposit in the bank. the confirming that the mobile check deposit can go forward, and the verifying that the image of the check is acceptable for mobile check deposit,

14[k] wherein the downloaded app, when executed by the user's mobile device, is configured to cause the user's mobile device to perform additional operations comprising:

14[l] before determining that the video frame of the live video of the check satisfies the at least one monitoring criterion, determining that a different video

frame of the live video of the check does not satisfy the at least one monitoring criterion; and

14[m] after determining that the different video frame of the live video of the check does not satisfy the at least one monitoring criterion, providing feedback to the user.

15[pre] 15. A method enabling mobile check deposit auto-capture functionality via video frame processing, the method comprising:

15[a] receiving an image of a check, wherein the image of the check is provided for mobile check deposit in a bank by a mobile device of a user, the user's mobile device including a camera and a memory storing a software abstraction layer and a downloaded app, the downloaded app associated with the bank control check deposit by controlling the camera through the software abstraction layer, and the downloaded app, when executed by the user's mobile device, being configured to cause the user's mobile device to perform operations comprising:

15[b] providing instructions to the user for capturing the check;

15[c] generating a live video of the check in a field of view of the camera, the downloaded app causing the live video to be generated by controlling the camera through the software abstraction layer;

15[d] monitoring the live video of the check in the field of view of the camera with respect to at least one monitoring criterion;

15[e] determining that a video frame of the live video of the check satisfies the at least one monitoring criterion and then automatically capturing the video frame;

15[f] when the video frame of the live video of the check in the field of view of the camera is determined to satisfy the at least one monitoring criterion, providing feedback advising the user that the check has been captured;

15[g] using a wireless network, transmitting a digital image of the check from the user's mobile device and submitting the check for mobile check deposit in the bank after automatically capturing the video frame, wherein the digital image is the captured video frame or is based on the captured video frame; and

15[h] before the submitting, confirming that the mobile check deposit can go forward after optical character recognition is performed on the check, a magnetic ink character recognition (MICR) line on the check is recognized, and an amount payable on the check is validated;

15[i] performing image processing operations on the image of the check, the image processing operations including performing optical character recognition and verifying that the image of the check is acceptable for mobile check deposit,

wherein the image of the check is the digital image transmitted by the user's mobile device or is based on the digital image transmitted by the user's mobile device; and

15[j] updating, by a computer, a balance of an account at a financial institution of the user to reflect an amount of funds associated with the check submitted for mobile check deposit by the user's mobile device, after the submitting the check for mobile check deposit in the bank, the confirming that the mobile check deposit can go forward, and the verifying that the image of the check is acceptable for mobile check deposit,

15[k] wherein the at least one monitoring criterion is a plurality of monitoring criteria based on two or more selected from a group consisting of light contrast, light brightness, check positioning, check dimensions, character spacing, skewing, warping, corner detection, Edge detection, and magnetic ink character recognition (MICR) line detection.

16. The method of claim 15, wherein the plurality of monitoring criteria includes a criterion based on magnetic ink character recognition (MICR) line detection.

CERTIFICATE OF COMPLIANCE WITH TYPE-VOLUME LIMITS

This Patent Owner Request for Discretionary Denial consists of 20 pages, excluding table of contents, table of authorities, certificate of service, this certificate, or table of exhibits. The Response complies with the type-volume limitation of 20 pages as set forth by the Office at www.uspto.gov/patents/ptab/interim-director-discretionary-process at Section III.C.iii. In preparing this certificate, counsel has relied on the word count of the word-processing system used to prepare the paper (Microsoft Word).

Dated: October 5, 2026

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CERTIFICATE OF SERVICE

I hereby certify that on October 5, 2026, I caused a true and correct copy of the foregoing Patent Owner Request for Discretionary Denial and exhibits to be served on the following counsel for Petitioner by electronic mail to the following email addresses:

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