UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF ILLINOIS

MIRAGE WINE + SPIRIT'S, INC., d/b/a MIRAGE WINE & SPIRITS, Individually and on Behalf of All Others Similarly Situated,

Plaintiff,

v.

APPLE INC., VISA INC., and MASTERCARD INCORPORATED,

Defendants.

Case No. 3:23-cv-3942

CLASS ACTION COMPLAINT

DEMAND FOR JURY TRIAL

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I. INTRODUCTION

1. Visa, Mastercard, American Express, and Discover (the "Entrenched Networks") have dominated the U.S. market for Point-of-Sale ("POS") Payment Card Network Services since the 1960s. As a result of their dominance, the Entrenched Networks have long imposed inflated fees on Merchants for use of their POS Transaction Payment networks, and U.S. Merchants have paid fees that significantly exceed fees charged in other jurisdictions.

2. One company and device – Apple and its iPhone – had the power to disrupt the Entrenched Networks' dominance and restore competition. In 2014, Apple was preparing to introduce its "Apple Pay" payment feature on the ubiquitous iPhone. The iPhone had already displaced music players, cameras, and GPS systems, and Apple had over $100 billion in cash on its balance sheet. The Entrenched Networks worried that Apple and its iPhone would disrupt (or "disintermediate") their longstanding POS Transaction Payment networks by driving down the lucrative fees the Entrenched Networks have charged Merchants for decades.

3. Rather than compete in the U.S. POS Payment Card Network Services market, however, Apple and the Entrenched Networks agreed to allocate that market. Apple reached agreements with Visa and then with Mastercard not to use the iPhone to establish its own independent POS Transaction Payment network. Instead, Apple, Visa, and Mastercard agreed to run Apple Pay transactions over the Entrenched Networks' POS Transaction Payment networks. Upon information and belief, Apple agreed with the Entrenched Networks to protect their market division from competition by blocking third parties from accessing certain hardware in the iPhone, namely the iPhone's "Secure Element,"[1] which those third parties could have used to establish

[1] Capitalized terms have the meanings assigned them in the Appendix attached to this complaint.

mobile-based payment solutions that competed with the Entrenched Networks. Upon information and belief Apple later reached similar agreements with American Express and Discover.

4. In exchange, the Entrenched Networks agreed that Apple would be paid a portion of the fees generated through the Entrenched Networks' respective POS Transaction Payment systems. Specifically, the Entrenched Networks arranged for Apple to be paid 15 basis points (*i.e.*, 0.15%) on the value of all U.S. credit transactions and 0.5 cents ($0.005) on all U.S. debit transactions initiated with Apple Pay at the POS on their respective networks. These payments initially amounted to hundreds of millions of dollars each year and are now worth billions of dollars each year.

5. But for this anticompetitive agreement, Apple had the incentive to welcome all payment solutions to its Apple Pay wallet as it derived its income by taking a percentage of the transaction fee earned by the payment system on transactions facilitated by Apple Pay. Consequently, the greater the transaction volume passed through Apple's Mobile Wallet, the greater Apple's revenue opportunity. By agreeing to protect the Entrenched Networks from competition from other payment systems, Apple was forgoing significant revenue.

6. Apple and the Entrenched Networks' agreement to allocate and divide the market for POS Payment Card Network Services in the United States are *per se* violations of Section 1 of the Sherman Act, 15 U.S.C. § 1. Since entering into these unlawful agreements, starting in 2014, Apple and the Entrenched Networks have continued to take affirmative steps in furtherance of the conspiracy, including, on information and belief, reaffirming this agreement (via written contract) as recently as 2020.

7. Plaintiff Mirage Wine + Spirit's, Inc., d/b/a Mirage Wine & Spirits brings this action under Sections 4 and 16 of the Clayton Act (15 U.S.C. §§ 15 and 26) on behalf of itself

individually and on behalf of a proposed "Class" consisting of Merchants in the United States that accepted Apple Pay as a method of payment at the physical point-of-sale, from December 14, 2019 to the present (the "Class Period"), and who have not previously released the claims asserted in this Complaint. Plaintiff and the Class seek monetary relief for the inflated fees they have paid as a result of Apple and the Entrenched Networks' unlawful agreement to restrain trade, including treble damages, the costs of suit, and reasonable attorneys' fees, and injunctive relief if the unlawful conduct continues through trial.

8. A glossary of terms used in this Complaint appears in the Appendix attached to this complaint.

II. JURISDICTION AND VENUE

9. This Court has subject matter jurisdiction over this case pursuant to 28 U.S.C §§ 1331, 1337, and Sections 4 and 16 of the Clayton Act, 15 U.S.C. §§ 15 and 26.

10. This Court has personal jurisdiction over Defendants, because, *inter alia*: (a) Defendants transacted business throughout the United States, including in this District; (b) Apple provided Mobile Wallet services throughout the United States, including in this District; (c) Merchants located throughout the United States, including in this District, accepted Visa and Mastercard Payment Cards through Apple Pay; (d) Defendants had sufficient minimum contacts with the United States, and including in this District; and/or (e) Defendants engaged in anticompetitive conduct that was directed at and had a direct, foreseeable, and intended effect of causing injury to the business or property of persons residing in, located in, or doing business throughout the United States, including in this District.

11. Venue is proper in this District pursuant to Sections 4, 12, and 16 of the Clayton Act, 15 U.S.C. §§ 15, 22, and 26 and 28 U.S.C. § 1391(b), (c), and (d), because (a) Plaintiff operates its business and accepts POS Payments from Apple Pay in this District; (b) Defendants

resided or transacted business in this District, is licensed to do business or is doing business in this District, and (c) a substantial portion of the affected interstate commerce described herein was carried out in this District.

12. Defendants' activities, as described herein, were within the flow of, were intended to, and did have direct, substantial, and reasonably foreseeable effects on the interstate commerce of the United States.

III. PARTIES

A. Plaintiff

13. Plaintiff Mirage Wine + Spirit's, Inc., d/b/a Mirage Wine & Spirits is an Illinois corporation, with its principal place of business at 2020 W. Highway 50, O'Fallon, Illinois 62269. Plaintiff is a Merchant that accepts Apple Pay as a method of payment at the POS. Plaintiff was incorporated as a corporation on March 26, 2019, and conducted business thereafter.

B. Defendants

14. Defendant Apple Inc. ("Apple") is a California corporation with its principal place of business in Cupertino, California. Apple designs, markets, and sells mobile devices, including iPhones, iPads, and watches.

15. Defendant Visa Inc. is a Delaware corporation with its principal place of business in San Francisco, California. Visa is a world leader in digital payments and dominates the market for POS Payment Card Network Services in the United States. According to Visa's Form 10-Ks filed with the SEC, Visa recognizes Mobile Wallets, alternative payment providers, and/or technology companies as potential competitive threats to its business.

16. Defendant Mastercard Incorporated is a Delaware corporation with its principal place of business in Purchase, New York. Mastercard is a world leader in digital payments and operates the second largest POS Payment Card Network Services in the United States. According

to Mastercard's Form 10-Ks filed with the SEC, Mastercard recognizes Digital Wallets, alternative payments systems, and new entrants as potential competitive threats to its business.

IV. AGENTS AND CO-CONSPIRATORS

17. Various other persons, firms, and corporations not named as Defendants including American Express, Discover, and Chase, Citi, Bank of America, Wells Fargo, and Capital One – large banks that issue Payment Cards on the Entrenched Networks' systems have participated as conspirators with Defendants and have performed acts and made statements in furtherance of Defendants' anticompetitive conduct. Apple, Visa, and Mastercard are jointly and severally liable for the acts of their conspirators, whether or not named as Defendants in this Complaint.

18. Whenever reference is made to any act of any corporation, the allegation means that the corporation engaged in the act by or through its officers, directors, agents, employees, or representatives while they were actively engaged in the management, direction, control, or transaction of the corporation's business or affairs.

19. Unless specifically stated otherwise, all allegations are made upon information and belief after a reasonable investigation.

V. TRADE AND COMMERCE

20. During the Class Period, each of the Defendants, directly or through their subsidiaries or other affiliates, conducted related business activities in the United States in a continuous and uninterrupted flow of interstate commerce and foreign commerce, including through and into this District.

21. By reason of the unlawful activities hereinafter alleged, Defendants and their co-conspirators substantially affected interstate trade and commerce throughout the United States and caused antitrust injury to Plaintiff and members of the Class.

VI. FACTUAL ALLEGATIONS

A. The Entrenched Networks Began in the 1960s to Facilitate Payments from Consumers to Merchants

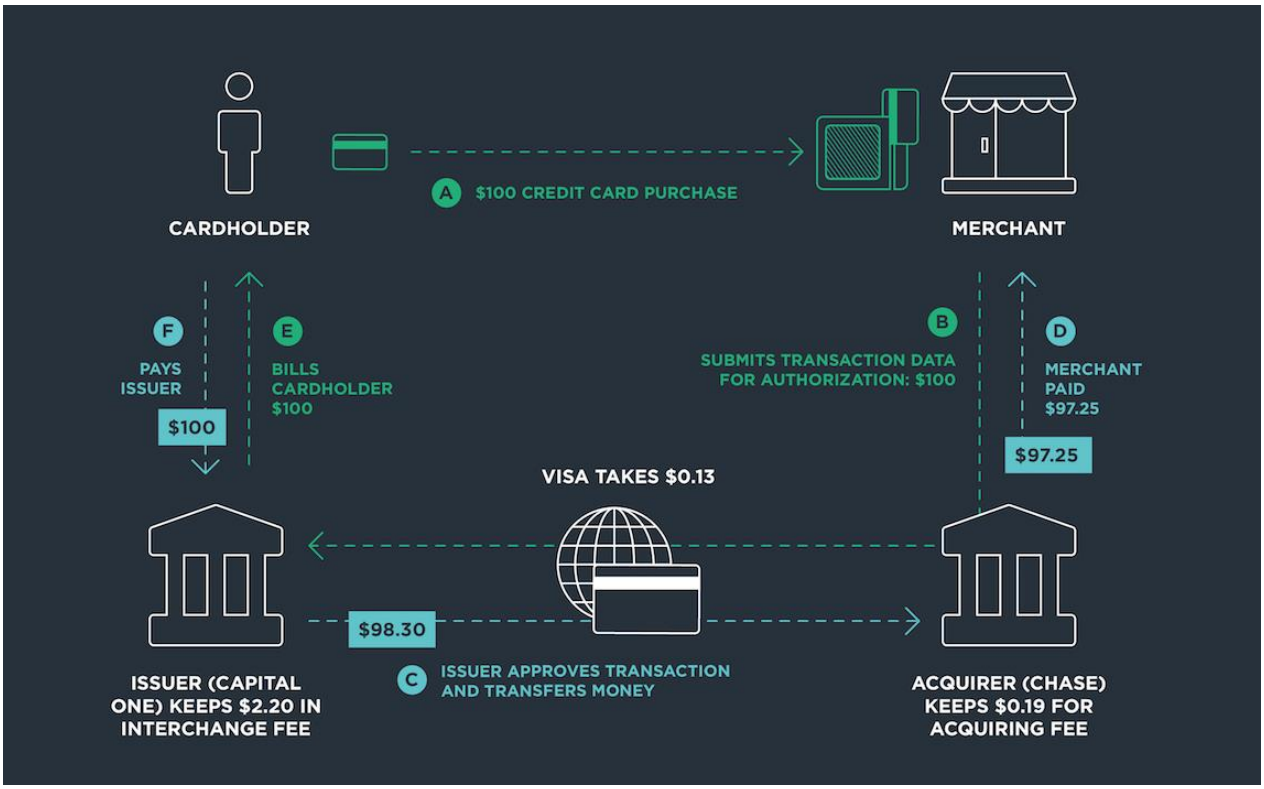
22. Credit and debit cards have been a feature of the American payment landscape since the 1960s, when the first regional and local credit card systems began to emerge.

23. Card networks Visa, Mastercard, Amex, and Discover sit at the center of the existing payments industry, facilitating transactions among consumers, Merchants, processors, and banks. These companies supply the electronic networks that allow all the players to communicate and process transactions. They charge fees to the financial institutions involved in transactions based on total transaction volume (rather than on a per-transaction basis). Merchants also pay to accept Payment Cards (in other words, purchasing POS Payment Card Network Services, as defined in Section VII).

24. In the case of Visa or Mastercard, the networks facilitate the deduction of a portion of the transaction amount (known as the interchange fee) from the amount owed to the Merchant, which is retained by the card-issuing bank. In addition to the interchange fee, the networks and the Merchant acquiring banks impose additional fees that increase Merchants' costs of accepting Payment Cards.

25. A Visa or Mastercard transaction is known as a "four-party" transaction, as it involves the cardholder, the Merchant, the card-issuing bank, and the Merchant's "acquiring" bank. The flow of funds for a "typical" four-party credit card transaction is depicted in Figure 1 below.

Figure 1



26. The business models of Amex and Discover differ from Visa and Mastercard: they consolidate the functions of the Merchant bank (commonly referred to as the acquiring bank), card Issuer, and card network by personally extending credit and cards to card-holders. Accordingly, Amex and Discover directly charge Merchants a percentage of the transaction amount.

B. POS Payment-Card Networks Evolved in a Way that Could Have Facilitated Greater Competition in the Relevant Market

27. During the early years of POS Payment Card transactions, transactions were accomplished via paper forms called "drafts," which were slow and burdensome for consumers and Merchants, as well as susceptible to fraud.

28. By the mid-1980s, technology evolved such that many transactions were processed electronically by the Entrenched Networks, and paper drafts were no longer needed for most Payment Card transactions. Payments during this period relied on swiping the magnetic stripe (or

"magstripe") on the back of the customer's credit or debit card through a terminal capable of reading the magnetic code on that card.[2]

29. Although the payment-processing industry grew with magstripe technology, it suffered from several drawbacks. Using the encoded data on the magnetic stripe required the physical card to be present at the POS, an inconvenience for customers in many situations. It was also unable to provide access to more than one credit or deposit account, which necessitated that the consumers carry separate cards for each account that they might wish to access. Additionally, the magnetic stripes on the back of cards could be surreptitiously read, allowing scammers to steal consumers' Payment Card data or create counterfeit cards for their own fraudulent use. The main security feature of magnetic stripe cards, the signature field, provided no real security at all, as Merchants rarely viewed signatures and, even if they did, those signatures could have easily been forged.

30. In the mid-1980s, however, the majority of retail transactions were made at the physical POS and required the consumer to present the physical card to complete the transaction.

31. With the rise of the internet, credit and debit transactions shifted from physical POS purchases to Remote Transactions, where the card was not physically presented to the Merchant.

32. Despite this shift, physical POS Transactions remained the norm for most Merchants and cardholders throughout the 1990s and into the early part of the new millennium. Whereas in other jurisdictions, banks began migrating cardholders and Merchants to EMV-compatible chip cards by the early 2000s — cards that carried enhanced security features for

[2] *How does a magnetic stripe on the back of a credit card work?*, HowStuffWorks, https://money.howstuffworks.com/personal-finance/debt-management/magnetic-stripe-credit-card.htm.

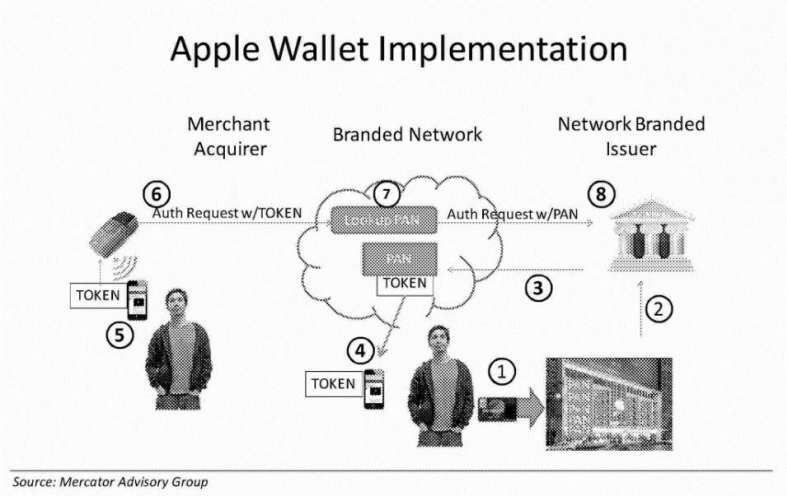
Merchants and consumers — U.S. Issuers did not begin converting cardholders until approximately 2015.

33. By the mid-2010s, the prevalence of Smart Mobile Devices capable of storing the same financial information that is encoded on multiple credit or debit cards launched yet another evolution in POS processing.

34. At the physical POS, if a Merchant has a compatible terminal with the requisite technology, the Merchant can accept a payment (following the customer entering a passcode or biometric verification on the Smart Mobile Device for the particular transaction) using near-field communication ("NFC") technology. NFC technology is installed in both the Smart Mobile Device and the payment terminal, and the technology permits communication over a very short distance between an NFC transmitter device and a POS Payment terminal, allowing a fast, contactless "touch and go" payment method.[3]

35. The following Figure 2 depicts how a mobile-payments transaction functions on the Apple Pay platform:

Figure 2



[3] Dock Treece, *What Are NFC Mobile Payments?*, BUSINESS NEWS DAILY (updated Feb. 21, 2023), https://www.businessnewsdaily.com/16250-nfc-mobile-payments.html.

36. Smart Mobile Devices began to carry NFC technology in 2011.[4] The payment function created by this combination of mobile devices, appropriate software, and NFC technology is commonly known as a "Digital Wallet" or "Mobile Wallet." A Digital Wallet holds a cardholder's Payment Cards (and other payment methods) digitally.

37. This combination of hardware (Smart Mobile Devices with NFC technology) and software (the Digital Wallets themselves) allows Smart Mobile Device users to make contactless payments in stores through their mobile devices, rather than having to carry and use physical credit or debit cards.

38. Absent the anticompetitive conduct described herein, Apple had the incentive and ability to inject needed competition into the U.S. market for POS Payment Card Network Services, by providing Merchants a payment solution that bypassed the Entrenched Networks with more competitive transaction fees. Such transactions could have saved Merchants billions of dollars in transaction fees.

C. The Launch of the iPhone Disrupts Multiple Markets

39. Apple debuted the iPhone in 2007, promoting the iPhone as "completely redefin[ing] what users can do on their mobile phones."[5] Steve Jobs announced the product in an over one-hour long presentation extolling the iPhone as "one device" that combined "three

[4] *NFC Technology in Smartphones & Mobile Devices*, STMicroelectronics, https://www.st.com/content/st_com/en/support/learning/essentials-and-insights/connectivity/nfc/nfc-and-mobile-devices.html.

[5] *Apple Reinvents the Phone with iPhone*, APPLE NEWSROOM (Jan. 9, 2007), https://www.apple.com/newsroom/2007/01/09Apple-Reinvents-the-Phone-with-iPhone/.

revolutionary products . . . The first one is a widescreen iPod with touch controls. The second is a revolutionary mobile phone. And the third is a breakthrough internet communications device."[6]

40. Consumers lined up outside stores to purchase iPhones, resulting in approximately 270,000 iPhones sold in just the first weekend it became available.[7] By Labor Day that year, Apple had sold one million iPhones.

41. The iPhone joined several competing products in the Smartphone market, such as the Blackberry, but offered revolutionary features the other Smartphones lacked. Notably the iPhone offered a full touch-sensitive multisensory interface, also known as the "touchscreen," which allowed users to manipulate programs and phone functions with their fingertips on the screen rather than with a stylus or physical keys. The iPhone also featured web browsing, music and video playback, and a digital camera, among other features, all in a user-friendly, intuitive interface in a portable easy-to-carry size. The *Wall Street Journal* touted the iPhone as "on balance, a beautiful and breakthrough handheld computer."[8] *Time* hailed the iPhone as the "Invention of the Year."[9] And even before the iPhone was available in stores for purchase, *New York Magazine* called the device "the Jesus Phone," "the gizmo we'd all been pining for lo these

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[6] *See* John Schroter, *Steve Jobs Unveils The Original iPhone - Macworld San Francisco 2007*, YOUTUBE (Oct. 8, 2011), https://www.youtube.com/watch?v=MnrJzXM7a6o; David Pierce, *Even Steve Jobs Didn't Predict the iPhone Decade*, WIRED (Jan. 9, 2017), https://www.wired.com/2017/01/apple-iphone-10th-anniversary/.

[7] David Pierce & Lauren Goode, *The WIRED Guide to the iPhone*, WIRED (Dec. 7, 2010), https://www.wired.com/story/guide-iphone/.

[8] Walter S. Mossberg & Katherine Boehret, *Testing Out the iPhone*, THE WALL STREET JOURNAL (June 27, 2007), https://www.wsj.com/articles/SB118289311361649057.

[9] Lev Grossman, *Invention of the Year: The iPhone*, TIME (Nov. 1, 2007), https://content.time.com/time/specials/2007/article/0,28804,1677329_1678542,00.html.

many years: a music player, camera, e-mail tool, Web browser, and a cell phone, all rolled into one impossibly seductive package."[10]

42. One year after the debut of the original iPhone, Apple introduced the iPhone 3G, which offered much faster access to email and web browsing, an upgraded digital camera that could also record videos, and introduced a GPS feature. The iPhone 3G also introduced the App Store, which introduced a platform for developers to sell software Apps to millions of iPhone owners.

43. Over the years, the iPhone continued to evolve, with each new model introducing new or improved features and capabilities and displacing formerly dominant products — becoming increasingly a "one-stop-be-all" device. The iPhone 4 introduced the front-facing camera, allowing users to take photos of themselves, and FaceTime, allowing users to make video calls and displacing Skype as the leading video-calling service. According to *Engadget*, a technology news platform, "yes, there are some amazing alternatives to the iPhone 4 . . . But when it comes to the total package — fit and finish in both software and hardware, performance, app selection, and all of the little details that make a device like this what it is — we think [the iPhone 4] is the cream of the current crop."[11] The iPhone 4s introduced the Siri personal-voice-assistant feature, as well as a new operating system that introduced among other features, iMessage (a messaging system for iPhone users to communicate with one another without having to use traditional SMS text messages), iCloud (Apple's cloud computing service), and Apple's first 8-megapixel camera with 1080p video recording (producing photos and videos comparable in quality and speed to

[10] John Heilemann, *Steve Jobs in a Box*, NEW YORK MAGAZINE (June 15, 2007), https://nymag.com/news/features/33524/.

[11] Joshua Topolsky, *iPhone 4 Review*, Engadget (June 22, 2010), https://www.engadget.com/2010-06-22-iphone-4-review.html.

many digital cameras at the time). Subsequent models such as the iPhone 7 and iPhone 11 Pro further improved on the phone's digital-camera feature, introducing "portrait mode" (capturing studio-like photos that allowed focusing on the subject while blurring the background) and the addition of three cameras on a single phone (allowing for high quality ultrawide-angle photos rivaling some high-end digital cameras).

D. Apple Dominates the Smart Mobile Device Industry

Smartphones

44. Approximately 55% of adults in the United States owned a Smartphone in early 2014.[12] By 2021, this number increased to 85% of adults in the United States.

45. Apple sells the majority of Smartphones in the United States. Through June 2023, more than 55% of Smartphones in the United States were Apple iPhones. The next closest competitor — Samsung — accounted for less than 23% of device sales. After that, competitor shares dip into the single digits.[13] Apple's market share is likely higher if shares are measured in terms of revenues from the sale of Smartphones as opposed to units sold.

46. The iPhone benefits from significant network effects generated by its sizable user base. That is, the more consumers who have iPhones, the more developers that want to develop Apps for the device. In the case of payments, the more users of iPhone's Apple Pay, the more Merchants want to accept it for payment. In 2019, Apple revealed that there are 1.4 billion active

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[12] *See Demographics of Mobile Device Ownership and Adoption in the United States*, PEW RESEARCH CENTER (Apr. 7, 2021), https://www.pewresearch.org/internet/fact-sheet/mobile/.

[13] *See US Smartphone Market Share*, Oberlo, https://www.oberlo.com/statistics/us-smartphone-market-share. CFPB, *Big Tech's Role in Contactless Payments: Analysis of Mobile Device Operating Systems and Tap-to-Pay Practices* (Sept. 7, 2023), https://www.consumerfinance.gov/data-research/research-reports/big-techs-role-in-contactless-payments-analysis-of-mobile-device-operating-systems-and-tap-to-pay-practices/full-report/.

Apple devices in circulation. Since each of these devices comes equipped with Apple Pay preinstalled, this equates to approximately one billion or more actual or potential Apple Pay users. In terms of user base, this places Apple between the twin payment giants, Visa (with 3.3 billion cards in circulation) and Mastercard (875 million).[14]

Smart Watches

47. Apple Watch, launched in 2015, leads the Smart Watch market. Based on the best available public information, the Apple Watch accounts for over 46% of sales of Smart Watches. This 46% figure includes as Smart Watches less sophisticated devices, such as fitness trackers, which can tell time and track health, fitness, and training metrics, but lack the suite of Apps available on the Apple Watch, and importantly for this Complaint, generally lack the ability to make POS Transactions. On information and belief, fitness trackers do not constrain the prices of Smart Watches. Apple and other manufacturers of Smart Watches do not consider fitness trackers when setting prices or determining competitive strategies. A hypothetical monopolist in the Smart Watch market could impose a small but significant (5-10%) price increase without losing sufficient sales to fitness trackers and other devices to make such a price increase unprofitable.

48. Because fitness trackers do not constrain the prices of Smart Watches, they should not be included in the Smart Watch market. Accordingly, Apple's share of true smart-watch sales is likely significantly higher than 46% noted above.[15] The barriers to entry in the Smart Watch market largely mirror those in the Smartphone market.

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[14] *A Brief History of Apple's Payment Revolution*, YAHOO! (Sept. 3, 2019), https://www.yahoo.com/video/brief-history-apple-apos-payment-182700212.html.

[15] *See* Katharina Buchholz, *Apple Watch Leads U.S. Market*, STATISTA (Oct. 15, 2021), https://www.statista.com/chart/25982/smartwatch-market-by-brand-usv/.

E. Apple Seeks to Leverage Its iPhone to Enter the Payments Space

49. Beginning around the early 2010s, Apple branched into the payments space by acquiring a number of start-up companies, filing patents relating to payments, and collaborating with the largest financial institutions in the country.[16] The result was the Apple Pay service, which was officially announced on September 9, 2014, and launched in the United States on October 20, 2014.[17]

50. Apple Pay is a Mobile Wallet that allows users to make payments for their physical-POS purchases through their iPhone or Apple Watch devices.[18] Apple Pay works by creating a unique device account number (known as a "token") for each payment account method entered by the consumer into the Mobile Wallet on Apple devices. That token, rather than the 16-digit account number printed on the consumer's Payment Card, is stored in the Mobile Wallet for future use.[19] The "token service provider" (*e.g.*, the Entrenched Networks), securely stores data that maps a token to the corresponding 16-digit account number. Apple's access to these tokens was offered to ensure that Merchants and consumers had sufficient incentive to adopt Apple Pay, in turn assuring that Apple would receive the value it expected for gatekeeping against competitors to the Entrenched Networks.

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16 *See Supra* n.14.

17 *Apple Pay Announces Apple Pay*, APPLE NEWSROOM (Sept. 9, 2014), https://www.apple.com/newsroom/2014/09/09Apple-Announces-Apple-Pay/; *Apple Pay Set to Transform Mobile Payments Starting October 20*, APPLE NEWSROOM(Oct. 16, 2014), https://www.apple.com/newsroom/2014/10/16Apple-Pay-Set-to-Transform-Mobile-Payments-Starting-October-20/.

18 *Apple Pay*, MACRUMORS (Aug. 9, 2022) https://www.macrumors.com/roundup/apple-pay/.

19 *Id.*

51. To make an in-store purchase using Apple Pay, the consumer selects her preferred payment method and holds her device close to a compatible POS Payment terminal, and NFC is used to communicate the token from the device to the Merchant's payment interface.[20] The Merchant never sees the underlying 16-digit account number, but instead submits the token along with a dynamic security code unique to each transaction (the "cryptogram," a one-time use code that replaces the card's CVV code) via its transaction processor or Acquirer to the token service provider (*e.g.*, Visa), which decrypts and translates the token back to the 16-digit account number, forwards the transaction information to the issuing bank for authorization, and returns the authorization decision for the transaction to the Merchant.[21]

F. Apple Agrees Not to Disintermediate the Entrenched Networks from the Point-of-Sale

52. Visa and Mastercard, the largest Payment Card networks in the United States, feared Apple's potential to create an alternative POS Transaction Payment system that would compete directly with Visa and Mastercard, eroding their ability to charge monopoly prices to Merchants for Payment Card acceptance. Discover and Amex shared similar concerns.

53. Apple's established user base, recognizable brand, and the NFC technology on the iPhone would have enabled it to enter the POS Transaction Payment Network Services market. Indeed, the Entrenched Networks feared their "disintermediation" from payment transactions if Apple were to compete or facilitate others competing in the POS Payment Card Network Services market. Given the substantial population of iPhone users who have activated Apple Pay, and the fact that iPhone users are locked into Apple Smartphones due to the users' investment in purchasing the phone and purchasing and configuring iOS Apps, Issuers cannot easily shift iPhone

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20 *Id.*

21 *Id.*

users to Android devices and Android Mobile Wallets. Indeed, the number of Issuers that enable Apple Pay has increased steadily since its launch, reaching 5,480 banks worldwide by 2020. These Issuers are highly likely to have determined that removing access to Apple Pay will lead to consumers switching Payment Card Issuers, rather than switching devices from Apple to an Android offering.

54. Given Apple's power and potential to enter the POS Transaction Payment networks market, Visa and Mastercard took steps to cement their position over POS Transactions conducted with mobile devices by conspiring with Apple. Specifically, Visa, Mastercard, and Apple concocted an anti-competitive scheme. The scheme had three principal components that worked together to restrain competition in the Relevant Market. First, Apple agreed that it would not create its own payment system that would compete with Visa and Mastercard's respective payment systems. Upon information and belief, similar agreements were reached with Amex contemporaneously with the Apple Pay roll-out and thereafter in 2015 between Apple and Discover. Second, Apple agreed to artificially restrict the choices available to consumers (and Merchants) interested in using (or accepting) its Apple Pay Mobile Wallet for POS Transactions. In particular, Apple, Visa, Mastercard and their co-conspirators agreed that Apple would prohibit consumers from using the Apple Pay Mobile Wallet to transfer funds from their bank account directly to the Merchant's bank account. Third, Apple agreed not to allow other third-party payment Applications installed on Apple devices to reside in the Apple Pay Mobile Wallet or use the NFC hardware on those devices to facilitate POS Transactions in the Relevant Market. Apple and the Entrenched Networks made this agreement to stymie competing Mobile Wallets or other Applications from offering consumers and Merchants a more cost-effective POS Payment system, such as ACH or other direct bank-to-bank solutions.

55. But for the agreements with the Entrenched Networks, Apple would have had an incentive to allow consumers to fund their Apple Wallets with bank transfers. If Apple allowed this functionality, it could have charged Merchants a fee for acceptance that was highly profitable to Apple but significantly below the Entrenched Networks' inflated Merchant fees, while incentivizing consumers to use the cash balances in their Apple Wallets to make purchases. Some of the incentives that Apple may have been able to offer include "rewards" that could be used on Apple products or purchases at partner Merchants, POS discounts at select Merchants, or refunds (known as "cash back") to consumers for purchases made with their Apple Pay cash balances.

56. But for the agreements with the Entrenched Networks, Apple would also have had an incentive to open up the NFC functionality on Apple hardware to third-party Apps, as doing so would improve the functionality of the iPhone, and thereby make it more valuable in the eyes of consumers. In other mobile-software environments, Apple readily allows consumers to download and use Apps that compete with pre-loaded, proprietary Apple Apps. For example, Apple allows competing music-streaming services, internet browsers, smartwatch Apps, and video-calling Apps to be loaded onto the iPhone and access key iPhone hardware and software, even though Apple has competing Apps that, in some cases generate significant revenue for Apple.

57. It is noteworthy that Google, whose Android mobile operating system is a distant second to Apple's in market share, does allow third-party Mobile Wallets to access the NFC functionalities of Mobile Phones that operate Android, even though Google offers the Google Pay service that competes with those Mobile Wallets.

58. The Entrenched Networks knew that without access to Apple's NFC functionality, no potential competitor had the means or incentive to challenge the Entrenched Networks' dominance via a Digital-Wallet solution because they were locked out of over 50% of Smartphones

as a result of Apple's dominance of the upstream device markets. Accordingly, they also knew that blocking competitors' access to the NFC antenna would prevent their anticompetitive market-division agreement with Apple from being undercut by disruptive competition.

59. In exchange for agreeing not to compete with Visa and Mastercard in the Relevant Market, the two card networks offered Apple a very large and ongoing cash bribe. They agreed to pay Apple 15 basis points (*i.e.*, 0.15%) on the value of all U.S. credit transactions and 0.5 cents ($0.005) on all U.S. debit transactions initiated with Apple Pay at the POS on their respective networks. Even as Apple Pay was in its infancy, the Entrenched Networks and Apple understood that this bribe would amount to hundreds of millions of dollars per year.

60. In other words, Visa and Mastercard offered to pay Apple not to independently enter the POS Transaction Payment networks market to compete in against Visa, Mastercard, and the other Entrenched Networks.[22] The Entrenched Networks also offered to pay Apple to forego the significant additional revenue Apple could have earned by allowing competing payment systems to appear within Apple Pay or by facilitating payments via the Apple device NFC.

61. In addition, Visa and Mastercard agreed to allow Apple to select which Issuers would be allowed on Apple Pay. This was contrary to Visa's and Mastercard's policy of "honor all cards." According to news reports:

> Visa and Mastercard also agreed to give Apple an unusual concession, according to people familiar with the matter: Apple would be able to choose which issuers it would allow onto Apple Pay and which of those issuers' cards it would accept. Visa and Mastercard generally require that entities that accept their credit cards

[22] AnnaMaria Andriotis, *Apple Pay Fees Vex Credit-Card Issuers*, WALL STREET JOURNAL (Oct. 5, 2021), https://www.wsj.com/articles/apple-pay-fees-vex-credit-card-issuers-11633449317?page=1.

> must accept them all. Apple agreed to not develop a card network to compete against Visa and Mastercard, the people said.[23]

62. It has been publicly reported that Apple accepted Visa's and Mastercard's proposal on or around August 31, 2014.[24] Indeed, Apple went further and excluded PayPal from Apple Pay at Visa and Mastercard's request, notwithstanding that Apple had been working with PayPal previously to jointly launch Apple Pay. One industry analyst reported in October 2014 that it had "learned . . . that PayPal wasn't included in Apple Pay at the request of the card issuers and card networks. Sources within PayPal say that the card issue[r]s and networks asked Apple Pay to *not* partner with PayPal — which Apple was happy to oblige . . . ."[25]

63. Since entering into the agreement with Visa and Mastercard, Apple has made most of its Mobile Wallet revenue through the ongoing payments it receives from the Entrenched Networks not to complete with their services.[26] On information and belief, Apple renewed its anticompetitive agreements with Visa, Mastercard, and Amex in 2017 and 2020, each agreement running for a renewable three-year term.[27] On information and belief, Discover has similarly renewed its agreement with Apple.

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23 *Id*.

24 *Id*.; Dante D'Orazio, *Apple reportedly reaches agreements with Visa, Mastercard, and American Express for iPhone mobile payments*, THE VERGE (Aug. 31, 2014), https://www.theverge.com/2014/8/31/6090019/apple-rumored-partnership-with-american-express-for-mobile-payments.

25 Ian Kar, *The Real Reason PayPal Isn't an Apple Pay Preferred* Partner, BANK AUTOMATION NEWS (Sept. 30, 2014 – updated Oct. 1, 2014), https://bankautomationnews.com/allposts/payments/missing-from-the-paypal-ipo-apple-pay/.

26 *Supra* n.22.

27 Tripp Mickle, *Apple Pay Promised to Make Plastic Obsolete. Then Came Wary Shoppers, Confused Clerks*, WALL STREET JOURNAL (Apr. 06, 2017), https://www.wsj.com/articles/apple-pay-promised-to-make-plastic-obsolete-then-came-wary-shoppers-confused-clerks-1491384606.

64. After reaching its agreements with the Entrenched Networks, Apple also reached agreements with individual Issuers that issued Visa, Mastercard, Discover, and Amex branded credit and debit cards to permit those cards to be stored in a consumer's Apple Pay wallet. Those agreements required the issuing banks to comply with the terms agreed to by the Entrenched Networks, including paying Apple's share of the transaction fees paid by Merchants accepting payments via Apple Pay. Only issuing banks that have an agreement with Apple have access to the Apple Wallet. Upon information and belief, Apple and the Entrenched Networks agreed that Apple would restrict access to the Apple Wallet in this fashion, and the Entrenched Networks ensured that their issuing banks would agree to and comply with these terms.

1. Apple Agrees Not to Enter the Relevant Market

65. By the early 2010's, Apple was uniquely situated to enter (or facilitate others' entry) into the POS Payment Card Network Services market. By that time, it had solved much of the "chicken and egg problem" that had plagued previously prospective entrants into the Relevant Market (*i.e.*, that an entrant would have to attract enough Merchants to make the network attractive to cardholders and *vice versa*). It had done this by accumulating a large base of users, to which a significant number of U.S. Merchants would like to have access. It also had the capability, through the NFC antenna in the iPhone, to connect to millions of Merchant terminals in the United States.

66. Apple's agreement with Entrenched Networks to refrain from entering the POS Payment Card Network Services market is a "horizontal market allocation," which the antitrust laws condemn as illegal *per se*. *See Addyston Pipe & Steel Co. v. United States*, 175 U.S. 211 (1899); *Timken Roller Bearing Co. v. United States*, 341 U.S. 593 (1951); *Palmer v. BRG of Georgia, Inc.*, 498 U.S. 46 (1990) (*per curium*); Phillip E. Areeda (late) & Herbert Hovenkamp, *Antitrust Law: An Analysis of Antitrust Principles and Their Application*, ¶2030. (4th and 5th eds., 2023 Cum. Supp. 2018-2023) ("naked" market-division agreement is unlawful per se, and the "per

se rule against naked horizontal market-division agreements applies equally to firms that were actual competitors before the division agreement took effect and to firms whose competition was merely potential"); ABA Section of Antitrust Law, *Antitrust Law Developments* 108 (8th ed. 2017).

67. As a consequence of Apple's agreement, at the inception, Apple Pay consumers could load their Apple Pay wallet only with payment products associated with Visa, Mastercard, and the other Entrenched Networks. Moreover, as noted above, Apple dropped its plans to include its own competing payment system option in Apple Pay, whether in partnership with PayPal, another fintech, or by itself. Instead, it limited Apple Pay to a pass-through Mobile Wallet, which only facilitated payments made via the Entrenched Networks' existing payment networks.

68. While it is true that Apple Pay users have recently become able to load funds onto a digital "Apple Cash" card in the Apple Wallet, the Apple Cash card can be loaded only with one of the Entrenched Networks' Payment Cards (as opposed to through a bank-to-bank transfer) and subjects Merchants to the same transaction fees as they would have paid for a transaction on one of the Entrenched Networks.

69. Similarly, while consumers may obtain a physical Apple-branded credit card, this card is in reality a Mastercard, such that it too is just an extension of the Entrenched Networks.

70. The horizontal market division between Apple and the Entrenched Networks serves no countervailing procompetitive benefit to offset its anticompetitive harm. The agreements among the Entrenched Networks and Apple were not necessary to or ancillary to the successful launch of Apple Pay. In a competitive market, the Entrenched Networks would have had an incentive to allow their cards to be used in Apple Pay, even without a market-division agreement, because doing so would allow their cardholders to take advantage of the convenience of mobile

payments with the dominant iPhone and permit the Entrench Networks (and their issuing bank clients) additional fees. For its part, Apple would have had an incentive to allow the Entrenched Networks' cards into the Apple Wallet, even if it did launch a competing payment network. Apple would have allowed the Entrenched Networks' cards into the Apple Wallet to make the wallet more attractive to consumers, who desire multiple forms of payment in a Digital Wallet, just as they would in a physical wallet.

71. Consumers cannot use their Apple Pay wallets to facilitate POS bank-to-bank transactions with Merchants or any third-party App that utilizes the NFC antenna, even if they would like to do so. But for Apple's anticompetitive agreements with the Entrenched Networks, consumers would have been able to load, and Merchants could have readily accepted, other payment systems, such as those that utilized direct bank-to-bank transfers, into the Apple Pay wallet. Indeed, because the terminals used by most U.S. Merchants already had, or would soon have, the ability to accept payments via NFC, Merchant adoption was never likely to present a significant obstacle. Moreover, it was in Apple's interest to allow all payment systems on Apple Pay since it could have charged them all a fee for doing so. Because Apple could earn a fee on every transaction, it was in its interest to maximize the volume of transactions routed through Apple Pay, rather than throttle it by limiting Apple Pay to the payment systems offered by the Entrenched Networks.

72. Absent Apple's anticompetitive agreements, Apple (or a third-party App with access to the iPhone NFC functionality) could have charged Merchants fees to conduct transactions via a Mobile Wallet that are less than the Merchant discount fees charged by the Entrenched Networks, which often exceed 2.5% for credit transactions and 1% for debit transactions, while

still making a handsome profit.[28] Moreover, the fees charged by the Entrenched Networks are so high that Apple (or a third-party App) could have undercut the Entrenched Networks and still profitably offered customers perks/incentives for using their competing payments systems, thereby encouraging the customers' adoption of those payment systems.

73. Apple already goes to great lengths to encourage the use of Apple Pay. Apple Pay comes pre-installed on the iPhone and Apple Watch and cannot be deleted.

74. Financial analyst firm, Keefe, Bruyette & Woods, reported on the "surpris[ingly]" extensive level of control by Visa and Mastercard under their agreements with Apple: "Aside from the differences in fees Apple receives on debit vs. credit transactions . . . the other most relevant incremental data point comes from how close the relationship [] between the networks and Apple appears to be."[29] Indeed, the firm has reported that "Visa and Mastercard, beyond the security aspect of tokenization, seem to be playing a large operational role" in their arrangement with Apple, making Visa and Mastercard "quite relevant."[30]

75. Apple could operate a Mobile Wallet without the restrictions described above. In fact, it has since bowed slightly to political pressure in Europe to allow national and regional

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[28] *See, e.g.*, *Visa USA Interchange Reimbursement Fees*, VISA INC. (April 23, 2022), https://usa.visa.com/content/dam/VCOM/download/merchants/visa-usa-interchange-reimbursement-fees.pdf.

[29] *Inside the Apple Pay Issuer Contracts*, PYMNTS.COM (Nov. 5, 2014), https://www.pymnts.com/news/2014/inside-the-apple-pay-issuer-contracts/; *US bank pay high price for cosying up to Apple*, FINEXTRA (Nov. 5, 2014), https://www.finextra.com/newsarticle/26671/us-banks-pay-high-price-for-cosying-up-to-apple.

[30] PYMNTS, *supra* n.29; Jayson Derrick , *KBW: Apple Pay Issuer Contract Reveals Pricing and Network Authority*, BENZINGA (Nov. 3, 2014, 11:39 AM), https://www.benzinga.com/analyst-ratings/analyst-color/14/11/4975141/kbw-apple-pay-issuer-contract-reveals-pricing-and-networ.

networks, like Carte Bancaires, France's local debit-card payment system that competes with Visa and Mastercard, to access certain functionality.[31]

76. Apple's agreement to exclude other Mobile Wallets from access to its NFC hardware insulates its illegal horizontal agreement from competition.

77. Apple's agreement with the Entrenched Networks not to enter the Relevant Market is *per se* illegal as a horizontal market division.

78. Even though this market division is an illegal agreement in and of itself, if other actual and potential competitors could access the Apple NFC technology, they could undercut that agreement by offering Mobile Wallets that could compete for Merchant business at the POS. Thus, in addition to agreeing not to enter the Relevant Market itself, Apple agreed with the Entrenched Networks that it would not allow any other Mobile Wallets to access the iPhone's NFC functionality.

2. The Entrenched Networks and Apple Agree to Protect Their Anticompetitive Market Division by Insulating Their Agreement from Competition

79. Apple's agreement with the Entrenched Networks not to enter the Relevant Market is *per se* illegal as a horizontal market division.

80. Even though the market division is illegal in and of itself, Apple and the Entrenched Networks understood that, if other actual and potential competitors could access the Apple NFC technology — whether to the NFC antenna directly or through the Secure Element, they could undercut that agreement by offering Mobile Wallets that could compete for Merchant business at the POS.

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[31] *Cartes Bancaires*, ADYEN, https://www.adyen.com/payment-methods/cartes-bancaires (last visited August 19, 2022).

81. The Entrenched Networks' agreements with Apple to prevent access to the NFC functionality are designed to prevent — and have been effective in preventing — competing payment systems, or potential entrants, from challenging the Entrenched Networks by developing a Mobile Wallet that could be used on the dominant iPhone. But for these agreements, Apple would have had an incentive to allow multiple Mobile Wallets to access the NFC functionality, in order to maximize the functionality to users of the iPhone and maximize the transaction volume routed through it.

82. Even though competing Smartphone platforms, such as Android, allow multiple Mobile Wallets to access the Smartphone's Secure Element, none of these competing platforms have the necessary scale for a competing payment platform to emerge that could challenge the Entrenched Networks' stranglehold on consumer-to-Merchant payments in the United States.

83. Without access to the NFC functionality, competitive Mobile Wallets can never offer the "touch-and-go" convenience of Apple Pay for POS Transactions. Consequently, as the Dutch competition authority concluded, "[s]ince market participants such as banks are not given access to this [NFC] technology on [Apple] Smartphones, they have not started developing or even stopped developing payments apps of their own. As a result thereof, consumers and retailers have fewer methods of payment to choose from."[32] A recent report suggested that the "NFC access policy on Android devices provides a natural experiment that supports this analysis. Without restrictions like Apple's, third-party apps have competed for space in the Android tap-to-pay

[32] *Closure of the Investigation into Payment Apps Confirms Need for New Rules*, AUTHORITY FOR CONSUMERS & MARKETS (ACM) (Feb. 7, 2021), https://www.acm.nl/en/publications/closure-investigation-payment-apps-confirms-need-new-rules.

ecosystem and offered various consumer-beneficial innovations and opportunities for consumer choice in the process."[33]

84. In other words, by excluding potential competitors like PayPal and other fintech firms, such as Plaid, from access to the iPhone and Apple Watch's NFC hardware, Apple ensured the success of its horizontal market division with the Entrenched Networks. It also ensured the steady flow of fees paid by the Entrenched Networks for Apple Pay transactions.

85. These agreements, which Apple agreed to with Entrenched Networks, violate Section 1 of the Sherman Act, because they are a *per se* unreasonable restraint of trade.

G. But for Apple's Unlawful Agreement with the Entrenched Networks, Competition Would Have Driven Down Transaction Fees to Merchants at the POS

86. Given the dominance of the iPhone, Apple could have entered the Mobile Wallet market itself or it could have allowed third parties to do so by developing iPhone-compatible Mobile Wallet Apps. Either or both of these scenarios would have increased competition for transactions at the POS, resulting in lower fees for Merchants. As described above, absent the agreements with the Entrenched Networks, Apple would have had the incentive and ability to enter the market itself and/or allow third-party Mobile Wallets to access the iPhone's NFC functionality.

87. Through their agreement, the Entrenched Networks and Apple guaranteed that neither of these scenarios would materialize and that fees to Merchants would continue to exist at supracompetitive levels.

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[33] CFPB, *Big Tech's Role in Contactless Payments: Analysis of Mobile Device Operating Systems and Tap-to-Pay Practices* (Sept. 7, 2023) https://www.consumerfinance.gov/data-research/research-reports/big-techs-role-in-contactless-payments-analysis-of-mobile-device-operating-systems-and-tap-to-pay-practices/full-report/.

88. Apple's practice of allowing access to the iPhone's NFC functionality for purposes other than Mobile Wallets demonstrates that blocking competitive Mobile Wallets from that functionality was a result of its agreement with the Entrenched Networks, rather than a unilateral action taken for a procompetitive (or competitively neutral) purpose.

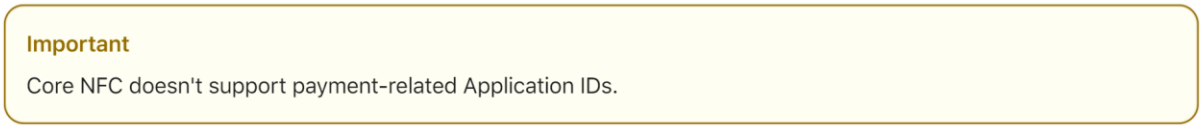
89. For example, Apple allows and encourages App developers to utilize the NFC interface to allow access to concerts, sporting events, and other large events, allow App users to add enhancements to video games, and allow users to scan in-store signs to access coupons. Apple allows third parties to utilize Apple hardware and software, even when Apple offers competing products. As one example, iPhone users can ask Apple's digital voice assistant, "Siri," to "Play Taylor Swift on Spotify," even though Apple offers a competing subscription-based digital-music platform. Similarly, Apple allows health and fitness data collected on Apple Watches to integrate with third-party fitness Apps, such as Peloton and Nike Training Club, that directly compete with Apple's proprietary, subscription-based Apple Fitness+ App. As another example, in Apple's first series of iPhones, Apple contracted with Google to install Google Maps as the default map. By 2012, Apple launched its own navigation App called Maps. Apple then "worked to improve Maps to compete with Google Maps" and "over the years, Google updated features of Google Maps in response to Maps . . ." resulting in users of both Apps benefiting from significant improvements.[34]

90. In other words, Apple leverages the labor and creativity of third-party developers, paired with the device's native hardware and software, to make its products more versatile, functional, and desirable. And Apple would have done so here with POS payment solutions, but for the Entrenched Networks' bribe. Apple's Developer Program License Agreement, which developers must follow to distribute their Applications on Apple devices, incorporates Apple's

[34] *Id.*

NFC guidelines. Those NFC guidelines govern developers' use of Apple devices' NFC hardware. The guidelines provide that NFC can be used "to give users more information about their physical environment and the real-world objects in it," but forbid the use of NFC for payment Apps that might compete with Apple Pay.

Figure 3: Apple's NFC Guideline Extract



91. Apple has cited transaction security as its reason to limit the use of the NFC chip, but this benefit is either pre-textual or could have been achieved by less restrictive means. Apple's NFC lock does not appear to provide additional security for Apple Pay that is not already accomplished by its other features. Tokenization, for example, existed as a security measure available before the advent of Apple Pay, and thus is not NFC lock dependent.

92. According to the Commonwealth Bank of Australia, which conducted an internal study on Mobile Wallet fraud, "[t]he occurrence of fraud is extremely low, [and] there is no material difference between Apple Pay Digital Wallet hosted on Apple's operating system when compared to Google Pay and Samsung Pay . . ." — which do not lock their NFC chips.[35] The bank found that fraud from all enabled third-party Mobile Wallets accounted for only 0.01% of its total spending.

93. Indeed, as the CFPB explained it:

> Apple's commitment to privacy and security does not necessarily conflict with open access to NFC for payments. Specifically, Apple could mandate that a third-party payment app seeking access to the NFC chip provide at least the same level of

[35] *Parliamentary Joint Committee on Corporations and Financial Service – Mobile Payment and Digital Wallet Financial Services*, COMMONWEALTH BANK OF AUSTRALIA (OCT. 2021), https://parlinfo.aph.gov.au/parlInfo/download/committees/reportjnt/024736/toc_pdf/MobilePaymentandDigitalWalletFinancialServices.pdf;fileType=application%2Fpdf.

> privacy as Apple Pay. This is the approach that Apple takes in other areas. For example, Apple restricts the apps users can install on their iOS devices to those available through Apple's App Store, where apps must meet certain standards before they can be offered. And notably, Apple permits some access to NFC by app developers in limited circumstances — for example, "to give users more information about their physical environment and the real-world objects in it.[36]

94. Google does not prevent third-party App developers or device manufacturers from accessing NFC technology to create tap and pay Android payment solutions that may compete with Google Pay (or its predecessors). For example, Barclays bank has created an Android Digital Wallet that permits Barclays customers to store their Barclays issued cards and complete tap and pay payments through an Android device's NFC interface. Capital One, Citibank, and TD Bank offered similar tap-to-pay Android Apps. Because of the limited presence of Android devices relative to Apple, solutions such as these do not have the potential to place meaningful downward pressure on Merchant fees.

95. Real-world examples demonstrate that Apple's restrictions — adopted at the behest of the Entrenched Networks — are not necessary to the efficient functioning of the Apple Pay Mobile Wallet.

96. Similarly, Apple opened up Apple Pay access to certain regional schemes in Europe under pressure from the European Commission without causing any significant change in fraud rates.

97. And in 2019, Germany passed a law requiring Apple to open its mobile-payment system to competitors. In particular, the legislation required Apple to grant access to its NFC antenna to card Issuers, in exchange for a reasonable fee. The legislation became effective in

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[36] *See Supra* n.33.

January 2020. There is no evidence that this requirement has impaired the operation of Apple Pay, or made these transactions less secure.

H. Apple Pay Is Under Investigation in Other Jurisdictions for Similar Anticompetitive Conduct

98. In June 2020, European Commission ("EC") antitrust chief Margrethe Vestager announced that the Commission had begun a formal investigation of Apple Pay, with preliminary concerns over Apple's NFC chip and the technical lock placed by Apple, Apple's terms and conditions governing how Apple Pay should be used in Merchants' Apps and websites, and Apple's refusal to allow rivals access to the payment system.[37] The purpose of the investigation would be "to assess whether Apple's conduct in connection with Apple Pay violates EU competition rules."[38] A preliminary probe raised concerns that Apple's conduct "may distort competition and reduce choice and innovation."[39]

99. Upon information and belief, the conduct challenged by the EC is part of Apple's unlawful agreements with the Entrenched Networks.

100. On May 2, 2022, the EC issued a "Statement of Objections," informing Apple of its preliminary view that Apple, by restricting the NFC interface, violated European competition law against monopoly conduct under Article 102 of the Functioning of the European Union

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37 *Antitrust: Commission Opens Investigation into Apple Practices Regarding Apple Pay*, EUROPEAN COMMISSION PRESS RELEASE (June 16, 2020), https://ec.europa.eu/commission/presscorner/detail/es/ip_20_1075.

38 *Id.*

39 *Id.*

("TFEU").[40] A Statement of Objections constitutes the Commission's preliminary view, after investigation, that Apple's conduct violates EC competition (antitrust) law.

101. Among other preliminary findings, the EC stated that "Apple enjoys significant market power in the market for smart mobile devices and a dominant position on mobile wallet markets." The EC stated that it "takes issue with the decision by Apple to prevent mobile wallets app developers, from accessing the necessary hardware and software ('NFC input') on its devices, to the benefit of its own solution, Apple Pay."[41] The EC's preliminary conclusion is that Apple's restriction of NFC technology "has an exclusionary effect on competitors and leads to less innovation and less choice for consumers for mobile wallets on iPhones."[42] On February 14, 2023, the EC conducted an oral hearing in relation to its statement of objections and is expected to issue a final infringement decision later this year.

102. In September 2021, the Australian Competition and Consumer Commission ("ACCC") launched a formal investigation into Apple's NFC lock, similar to the investigation conducted by the European Commission.[43]

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40 *Antitrust: Commission Sends Statement of Objections to Apple over Practices Regarding Apple Pay*, EUROPEAN COMMISSION PRESS RELEASE (May 2, 2022), https://ec.europa.eu/commission/presscorner/detail/en/ip_22_2764.

41 *Id*.

42 *Id*.

43 James Eyers, *ACCC investigating Apple Pay restrictions on banks*, FINANCIAL REVIEW (Sept. 13, 2021), https://www.afr.com/companies/financial-services/accc-investigating-apple-pay-restrictions-on-banks-20210910-p58qi6; *see also* the UK CMA, *Mobile Ecosystems: Market Study Final Report*, (June 10, 2022), https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1138104/Mobile_Ecosystems_Final_Report_amended_2.pdf.

VII. THE RELEVANT MARKET

103. There is a Relevant Market, the product dimension of which is POS Payment Card Network Services. The geographic dimension of this market is the United States.

104. POS Payment Card Network Services are the provision and acceptance of Payment Cards at the physical POS by Merchants as payment for goods and services. Payments not made at the POS — *i.e.*, online payments — do not belong in the Relevant Market because for a significant subset of consumer-merchant payment transactions — for example, those where the consumer is physically present at the Merchant's location or in which the Merchant does not have an online presence — non-POS forms of payment cannot realistically facilitate the transaction.

105. Nor do other forms of payment such as cash or checks constrain the prices of POS Payment Card Network Services. This is because other forms of payment do not carry the speed or convenience of POS Payment Card Network Services, and increasingly, consumers have stopped carrying cash and checks with them, which means that they can pay for POS Transactions only with POS Payment Card Network Services. Moreover, many Merchants do not accept checks or cash.

106. A hypothetical monopolist in the POS Payment Card Network Services market could profitably impose a small (5-10%) but significant increase in price without losing sufficient business to rivals to make such a price increase unprofitable.

107. Apple Pay does not participate in the Relevant Market because Apple chose to agree with the Entrenched Networks not to enter that market, and thus, it does not process payments or manage a POS Transaction Payment system. Instead, it facilitates the communication between the Merchant and/or their Acquirer to the implicated payment system (*i.e.*, Visa or Mastercard), utilizes the existing rails and preserves the Entrenched Networks' pre-existing fee structure. The Entrenched Networks dominate the POS Transaction Payment systems market in the United States.

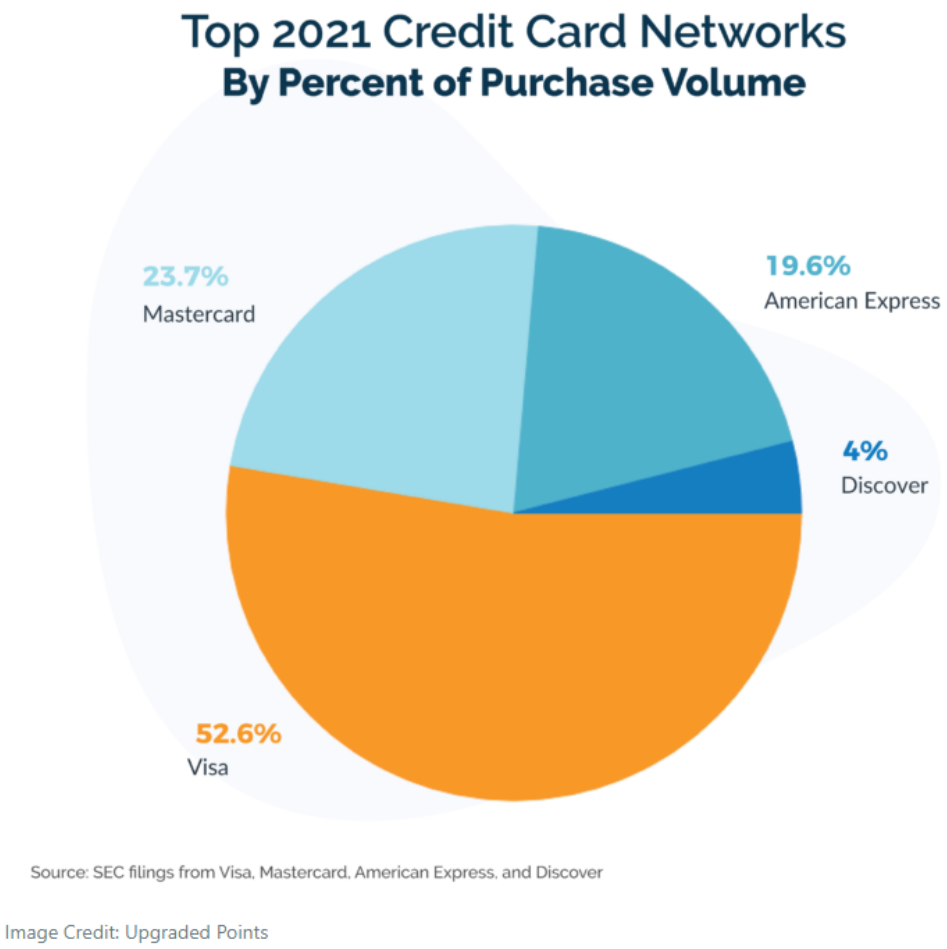
108. Because they are blocked from the iPhone's NFC functionality, mobile-device-based-bank-to-bank transfer solutions do not participate in the Relevant Market. But for the conduct described herein, mobile-device-based-bank-to-bank-transfer solutions would be included in the Relevant Market and may be able to put competitive pressure on the Merchant fees imposed by the Entrenched Networks.

109. While it is true that Apple launched an "Apple Card," which may appear to be a Payment Card on par with the Entrenched Networks' cards, the Apple Card does not actually compete with the Entrenched Networks. Rather, the Apple Card is issued by Goldman Sachs and its transactions are processed over the Mastercard network and subject Merchants to the same fees for an Apple Card transaction as they would any other Mastercard transaction.

110. Payment Cards dominate POS Transactions in the United States and are responsible for approximately 70-80% of all POS Transactions in the United States across the relevant period.[44] Among Payment Card POS Transactions in the United States, the Entrenched Networks dominate:

[44] Raynor de Best, *Market share of cash, credit cards, and other payment methods at point of sale (POS) in the United States in 2017, 2019, 2020 and 2021*, STATISTA (April 22, 2022), https://www.statista.com/statistics/568523/preferred-payment-methods-usa/.

Figure 4: U.S. Payment Cards Market Share in 2021 by Purchase Volume[45]



111. Barriers to entry are high in the Relevant Market. There has been no new entrant to the Relevant Market since Discover entered in the mid-1980s.

112. The Entrenched Networks' dominance of the POS Transaction Payment system makes it a "must have" for all Merchants in the United States. The Entrenched Networks benefit from extensive barriers to entry. Establishing a POS Transaction Payment system requires significant investment, and the establishment of a myriad of contractual relationships with the

[45] Christy Rodriguez, U.S. Credit Card Market Share by Network & Issuer – Facts & Statistics, UPGRADEDPOINTS (June 9, 2023), https://upgradedpoints.com/credit-cards/us-credit-card-market-share-by-network-issuer/.

various players in the payments market, including consumers, the consumers' financial institutions, Merchants, and the Merchants' Acquirers. Indeed, Visa's Chief Financial Officer recently acknowledged that building a competing payment system like Visa's is "very, very hard to do," and "takes many years of investment," but "[i]f you can do that, then you can have a business [like Visa's] that has a relatively high margin."[46]

113. Building a competing Payment Card Network is difficult, of course, unless you have a user base of over one billion devices with installed technology (the NFC antenna) that allows you to connect with millions of Merchants POS equipment.

114. The United States is the relevant geographic market. Apple and the Entrenched Networks all treat the United States as a distinct geographic market. Federal laws and regulations that govern financial transactions operate on a national level. A firm that was the only seller of POS Transactions Payment systems in the United States would be able to maintain prices above the level that would prevail in a competitive market.

VIII. ANTITRUST INJURY

115. Apple and the Entrenched Networks have agreed to allocate the market for POS Transaction Payment networks in the United States. As a direct result, Plaintiff and the Class, who participated in that market, have sustained direct injury to their businesses or property. They have paid and continue to pay artificially inflated fees directly to the Entrenched Networks (Apple's conspirators) for using their POS Transaction Payment networks, and Apple has received a portion of those fees as a bribe. This is an antitrust injury of the type that the antitrust laws were meant to punish and prevent.

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[46] Complaint, ¶4, *United States of Am. v. Visa Inc. and Plaid Inc.*, Case No. 3:20-cv-07810 (N.D. Cal.).

116. But for this market-allocation agreement, Apple or a third party would have entered the Relevant Market, placing downward pressure on the Entrenched Networks' fees in the Relevant Market.

117. Public adoption of Apple Pay continues to rise dramatically, as reflected by the dramatic increase in active users of Apple Pay:

Table 1: Apple Pay Active Users[47]

Year	Active users
2017	337 million
2018	389 million
2019	441 million
2020	507 million
2021	631 million

118. There is ample reason to expect that the number will continue to grow as the technology becomes more widespread, more Merchants adopt Apple Pay, and more consumers become familiar with the technology.

119. Annual transaction volume through Apple Pay has grown even more quickly, according to Apple itself. Its self-reported Apple Pay transaction volume is as follows:

Table 2: Apple Pay Reported Transaction Volume[48]

Year	Transactions
2016	1.8 billion

[47] David Curry, *Apple Statistics 2022*, BUSINESS OF APPS (August 1, 2022 – updated May 2, 2023), https://www.businessofapps.com/data/apple-statistics/#ApplePayactiveusers).

[48] *Id.*

2017	6.6 billion
2018	15 billion
2019	65 billion
2020	90 billion
2021	325 billion
2022	650 billion

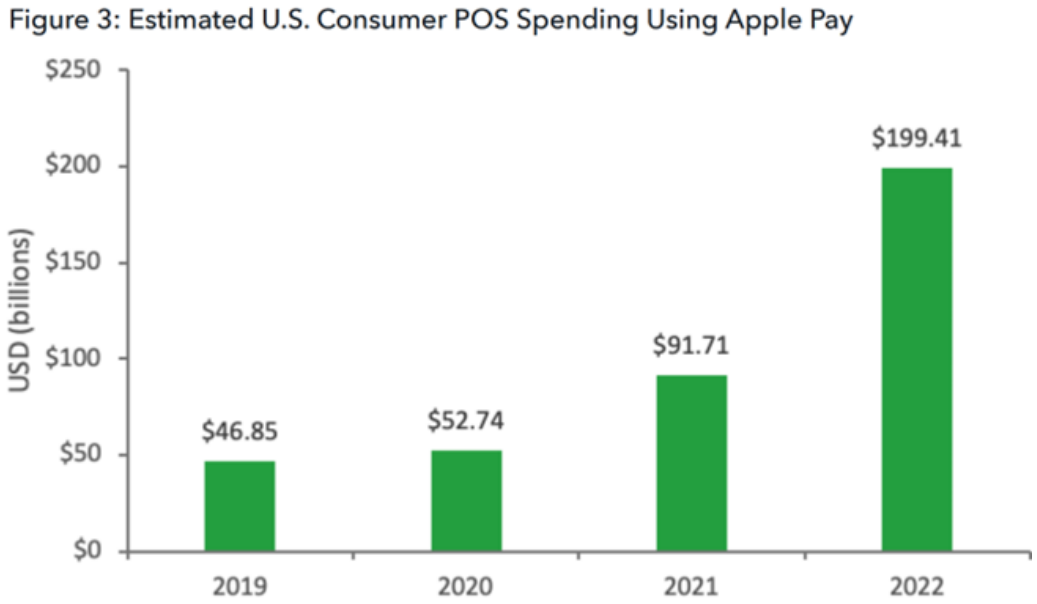
120. Although Apple does not report its Apple Pay earnings directly, industry analysts have estimated that it generated approximately $1.9 billion in revenues in 2022, and expect that number to top $4 billion by 2023.[49] Apple Pay processed more than 92% of the U.S. Mobile Wallet debit transactions in 2020.[50] Because of Apple's restrictions on access to the iPhone's NFC functionality, there is no reason to believe its share of credit card transactions made via Digital Wallets would be any smaller. Analysts estimated that U.S. consumers spent $46.9 billion at stores using Apple Pay in 2019. In 2021, this number grew to $91.7 billion. By 2022, the value of Apple Pay spending shot past $199 billion.[51]

[49] *See* Gene Munster, Will Thompson, *Apple Pay Card Creates New Payments User Experience*, Deepwater Asset Management (Feb. 21, 2019), https://loupfunds.com/apple-pay-card-creates-new-payments-user-experience/.

[50] *See* Mikey Campbell, *Apple Pay Accounted for 92% of US Mobile Wallet Debit Transactions in 2020, Study Says*, APPLEINSIDER (Aug. 17, 2021), https://appleinsider.com/articles/21/08/17/apple-pay-accounted-for-92-of-us-mobile-wallet-debit-transactions-in-2020-study-says.

[51] *See Supra* n.33.

Figure 5



121. But for Apple's anticompetitive conduct — specifically its exclusion of rivals from the NFC functionality — the overall Mobile Wallet transaction volume would have grown significantly more than it did with these restrictions in place.

IX. CLASS ACTION ALLEGATIONS

122. Plaintiff brings this action as a class action pursuant to Rules 23(a) and (b)(3) of the Federal Rules of Civil Procedure on behalf of the following Class:

123. **Class and Class Period:** All Merchants in the United States that accepted Apple Pay as a method of payment at the physical point-of-sale, from December 14, 2019 to the present and who have not previously released the claims asserted in this Complaint.

124. **Exclusions:** Specifically excluded from this Class are Defendants; Defendants' officers, directors, or employees; any entity in which Defendants have a controlling interest; any affiliate, legal representative, heir or assign of Defendants; Defendants' co-conspirators referenced in this Complaint, and any of their legal representatives, heirs, or assigns. Also excluded from this Class are any federal, state, or local governmental entities, any judicial officer presiding over this

action and the members of his/her/their immediate family and judicial staff, any juror assigned to this action, any attorneys of record in this case and the members of his/her/their immediate family and any co-conspirator identified in this action.

125. **Numerosity:** Plaintiff does not know the exact number of the members of the Class, but believe there are (at least) many thousands of members in the Class, such that the members of the Class are so numerous that joinder of all Class members is impracticable. The number of the Class members can be determined through appropriate discovery.

126. **Typicality:** Plaintiff's claims are typical of the claims of the Class members because Plaintiff accepted Apple Pay as a method of payment at the point-of-sale in the United States, and therefore, Plaintiff's claims arise from the same common course of conduct giving rise to the claims of the other members of the Class, and the relief sought is common to the Class.

127. **Common Questions Predominate:** There are questions of law and fact common to the Class, including, but not limited, to:

a. Whether Apple entered into an agreement with the Entrenched Networks to allocate and divide the market for POS Transaction Payment networks;

b. The scope of the alleged agreement;

c. Whether the alleged conduct violated the federal antitrust laws;

d. Whether the conduct of Apple and the Entrenched Networks, as alleged in this Complaint, caused injury to the business or property of the Plaintiff and other members of the Class;

e. The effect of the alleged market allocation agreement on the fees charged by Entrenched Networks to Merchants in the United States during the Class Period;

f. Whether Plaintiff and other members of the Class are entitled to, among other things, injunctive relief, and if so, the nature and extent of such injunctive relief; and

g. The appropriate class-wide measure of damages.

128. These and other questions of law or fact which are common to the members of the Class predominate over any questions affecting only individual members of the Plaintiff Class.

129. **Adequacy:** Plaintiff will fairly and adequately protect the interests of the Class in that Plaintiff's interests are aligned with, and not antagonistic to, those of the other members of the Class who accepted Apple Pay as a method of payment. Plaintiff has retained counsel competent and experienced in class actions, antitrust, technology, and financial services litigation.

130. **Superiority:** A class action is superior to other available methods for the fair and efficient adjudication of this controversy, since individual joinder of all damaged Class members is impractical. Prosecution as a class action will eliminate the possibility of duplicative litigation. The relatively small damages suffered by individual Class members compared to the expense and burden of individual prosecution of the claims asserted in this litigation means that, absent a class action, it would not be feasible for Class members to seek redress for the violations of law herein alleged. Further, individual litigation presents the potential for inconsistent or contradictory judgments and would greatly magnify the delay and expense to all parties and to the court system. Therefore, a class action presents far fewer case management difficulties and will provide the benefits of unitary adjudication, economy of scale, and comprehensive supervision by a single court.

131. The Class is readily definable and ascertainable and is one for which records likely exist in the files of Apple and the Entrenched Networks.

132. The prosecution of separate actions by individual Class members would create the risk of inconsistent or varying adjudications, establishing incompatible standards of conduct for Apple.

133. Apple has acted on grounds generally applicable to the Class, thereby making final injunctive relief appropriate with respect to the Class as a whole.

X. STATUTE OF LIMITATIONS AND TOLLING CONTINUING VIOLATION

134. Plaintiff's Sherman Act claims are timely under the continuing violations doctrine. The conspiracy alleged above began as early as April 2014, and continued into the present. On information and belief, the agreements among Apple, Visa, and Mastercard have been periodically renewed within the applicable limitations period.

135. This Complaint alleges multiple conspiratorial acts pursuant to an anticompetitive agreement by Apple and Entrenched Networks to allocate and divide the U.S. POS Payment Card Network Services market and exclude other competitors (actual and potential) from that market, and these unlawful acts occurred within the applicable statutes of limitations.

136. As a result of Defendants' anticompetitive agreements challenged in this Complaint, throughout the Class Period and to the present, Defendants and their co-conspirators were able to and did prevent lower POS Transaction fees from being charged to Merchants.

137. Plaintiff and Class members paid higher fees for POS Transactions at prices artificially inflated by the conduct challenged in this Complaint throughout the Class Period.

138. Thus, each Mobile Wallet transaction conducted at the POS through Apple Pay constituted a new overt act causing injury to the Class.

139. Accordingly, Plaintiff and members of the Class were injured and may recover for damages suffered at any point in the conspiracy.

140. Apple's unlawful acts and practices described above continue to this day.

XI. CLAIM FOR RELIEF – SHERMAN ACT § 1

141. Plaintiff incorporates the foregoing paragraphs as if fully set forth herein and further allege as follows.

142. Apple, Visa, Mastercard, and their co-conspirators entered into and engaged in a conspiracy to allocate and divide markets and not to compete in violation of Section 1 of the Sherman Act, 15 U.S.C. § 1. The conspiracy consisted of a series of agreements or understandings between Apple, Visa, and Mastercard, and the other Entrenched Networks, under which Apple agreed not to enter and compete in the Relevant Market in exchange for receiving transaction fees for purchases made through Apple's Mobile Wallet service via the Entrenched Networks.

143. Apple's agreement not to compete in the Relevant Market as a provider of Payment Card network services is a *per se* violation of the Sherman Antitrust Act. *Palmer v. BRG of Georgia, Inc.*, 498 U.S. 46 (1990) (*per curiam*).

144. There is no legitimate business justification for, or procompetitive benefits caused by, Apple's unlawful agreement.

145. Defendants' conduct has had and continues to have substantial anticompetitive effects, including impairing competition in the Relevant Market by preventing downward pressure on fees charged by the Entrenched Networks due to the lack of competitive options.

146. As a direct, intended, foreseeable, and proximate result of Defendants' unlawful conduct, Plaintiff and the Class have suffered injury to their businesses or property, by paying higher fees to Payment Card networks during the Class Period that they would not have otherwise paid in the absence of Apple's unlawful conduct.

147. Plaintiff and the Class are threatened with future injury to their businesses and property by reason of Defendants' continuing violation of Section 1 of the Sherman Act.

148. Plaintiff and the Class are entitled to recover for the injury caused by Defendants' wrongful conduct, and an injunction against Defendants' preventing and restraining the violations alleged herein.

XII. REQUEST FOR RELIEF

WHEREFORE, Plaintiff, on behalf of themselves and the Class of all others similarly situated, respectfully requests that the Court grant judgment against Defendants as follows:

A. Determine that this action may be maintained as a class action under Rules 23(a) and (b)(3) of the Federal Rules of Civil Procedure, appoint Plaintiff as Class Representatives and their counsel of record as Class Counsel, and direct that notice of this action, as provided by Rule 23(c)(2) of the Federal Rules of Civil Procedure, be given to the Class, once certified;

B. Order that the unlawful conduct alleged herein be adjudged and decreed in violation of Section 1 of the Sherman Act;

C. Award Plaintiff and the Class damages, to the maximum extent allowed under the applicable laws, and order that a judgment in favor of Plaintiff and the members of the Class be entered against Defendants in an amount to be determined at trial pursuant to Section 4 of the Clayton Act, 15 U.S.C. § 15;

D. Order that Defendants, their affiliates, successors, transferees, assignees and other officers, directors, partners, agents and employees thereof, and all other persons acting or claiming to act on Defendants' behalf or in concert with them, be permanently enjoyed and restrained from, in any manner, committing any additional violations of the law as alleged herein;

E. Award Plaintiff and the members of the Class their costs of suit, including reasonable attorneys' fees, as provided by; and

F. Award Plaintiff and the members of the Class such other and further relief as the case may require and the Court may deem just and proper.

XIII. DEMAND FOR JURY TRIAL

Pursuant to Rule 38(b) of the Federal Rules of Civil Procedure, Plaintiff demands a jury trial as to all issues triable by a jury.

DATED: December 14, 2023

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APPENDIX – GLOSSARY

As used in this Complaint, capitalized terms shall have the following meanings:

"ACH" means the National Automated Clearinghouse for Electronic Funds Transfers by which consumers may transfer funds from his/her bank account to another person's bank account for modest charge.

"Acquirer" means the entity which has a contractual relationship with the Merchant, pursuant to which it provides services to enable a Merchant to accept Payment Cards as a means of payment for goods and services, including point-of-sale technology ("Merchant-Acquirer Services"). Those Merchant-Acquirer Services include access to the Entrenched Networks' payment systems.

"Amex" or "American Express" means American Express Company, a New York corporation headquartered in New York, New York, and each of American Express Company's affiliates – including American Express Travel Related Services Company, Inc – involved in the provision of payment services via the Amex payment system, which process payments made with Amex-issued credit and charge cards (the "Amex Network") and other credits cards issued by other Issuers on the Amex network.[52]

"Application" or "App" means is a software application developed specifically for use on small, wireless computing devices, such as Smartphones, Smart Watches or tablets, rather than desktop or laptop computers.

"Digital Wallet" or "Mobile Wallet" is an App on a mobile device which acts as an electronic wallet. Digital or Mobile Wallets can also hold other information such as gift cards, tickets to events, airline tickets, vaccine passports, and other information meant to be securely held. A "Staged Digital Wallet" allows the user to pre-load funds into the wallet prior to making the purchase (for example, by card or ACH transfer or through a financial-data-aggregation platform such as Plaid). A "Pass-Through Digital Wallet" by contrast, provides direct access to a

[52] American Express Company, Annual Report (Form 10-K) (Dec. 31, 2022) at 1, available at https://www.sec.gov/Archives/edgar/data/4962/000000496223000006/axp-20221231.htm.

consumer's debit/credit card accounts through the medium of a Digital Wallet. Some Digital Wallets permit both forms of functionality.

"Discover" means Discover Financial Services, a Delaware corporation headquartered in Riverwoods, IL, and each of Discover Financial Services' affiliates involved in the provision of payment services via the Discover payment system, which permit process payments made with Discover-issued credit and debit cards (the "Discover Network") and other debit cards issued by other Issuers on Discover's PULSE network.[53]

"EMV" is a technical standard for Payment Cards and Mobile Wallets, as well as payment terminals and automated teller machines (ATMs) that accept them. The EMV standard has been adopted by nearly all contemporary payment terminals, Payment Cards, and Mobile Wallets. EMV stands for "Europay, Mastercard, and Visa," the three companies that created the standard.

"Entrenched Networks" means the Payment Card networks of Visa, Mastercard, Amex, and Discover.

"Issuer" means the issuing bank, or other credit or payment institution, which issues a Payment Card to a cardholder (*e.g.*, Bank of America, Chase, or Wells Fargo) with a unique number associated with the customer's credit, checking, or savings facility. In the case of credit cards, the Issuer extends credit to the cardholder which the cardholder utilizes when he or she presents the Payment Card to the Merchant. In the case of debit cards, the cardholder or an entity related to the cardholder holds a checking or savings account with the Issuer from which funds are ultimately taken when the cardholder presents his or her debit card to the Merchant. In the case of prepaid Payment Cards, the cardholder has previously provided funds to the Issuer from which the payment funds are then taken.

"Mastercard" means Mastercard Incorporated, a Delaware corporation headquartered in Purchase, New York, and each of Mastercard Incorporated's affiliates – including its operating

[53] Discover Financial Services, Annual Report (Form 10-K) (Dec. 31, 2022) at 1, available at https://www.sec.gov/ix?doc=/Archives/edgar/data/1393612/000139361223000007/dfs-20221231.htm.

subsidiary Mastercard International Inc. – involved in the provision of payment services via the Mastercard payment system, a network of contractual relationships governing the provision of services and associated technology to both Issuers and Acquirers to permit transactions processed by Acquirers on behalf of Merchants to be paid from a payment facility with the cardholder's Issuer.[54]

"Merchant" means an individual, business, or other entity that accepts payments in exchange for goods or services rendered, as donations, or for any other reason.

"NFC" means the technology of Near Field Communications. It is a method of wireless data transfer that allows Smart Mobile Devices, computers, tablets and other devices to share data when in close proximity.

"Payment Card" means a plastic card (or digital version of such a card) that enables consumers to make purchases from Merchants that accept the consumer's Payment Card. The term "Payment Card" refers to several different types of cards, including, credit cards, debit cards, travel & entertainment cards, stored-value cards, and Merchant-proprietary cards.

"POS Transaction Payment," "POS Transaction," or "POS Payment" means a transaction at a Merchant's physical point of sale by means of a Payment Card or device, including transactions accomplished via NFC technology.

"Relevant Market" means the POS Payment Card Network Services market defined in Paragraphs 103-114 above.

"Remote Transaction" means a transaction using a Payment Card or device in which the Payment Card or device is not physically present at the Merchant's location.

The "Secure Element" is hardware component of a Smartphone that enables financial transactions, securing the user's Payment Card or bank information with a password or other proof of authentication.

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[54] Mastercard Incorporated, Annual Report (Form 10-K) (Dec. 31, 2022) at 1, 25, available at https://www.sec.gov/Archives/edgar/data/1141391/000114139123000020/ma-20221231.htm.

A "Secure Enclave" is a hardware component of a Smart Watch that enables financial transactions, in a similar fashion to a Secure Element on a Smartphone.

"Smart Mobile Device" means a small handheld computer which is designed to be carried around with a person, typically a mobile phone, but sometimes a tablet or Smart Watch. These devices are generally equipped with NFC capable of facilitating payment transactions, GPS, a microphone, speaker(s), camera(s) and other features. These devices can connect to the internet, run Applications, and communicate in a wide variety of means, including SMS messaging, email and voice calls.

A "Smartphone" is a Smart Mobile Device that has cellular-network connections and thus can be used to send or receive voice calls over cellular networks, while also offering internet connectivity, global positioning system (GPS) technology, and the ability to support a wide variety of proprietary and third-party Apps, including Digital-Wallet Apps. Smartphones generally are of a sufficiently large size to support internet browsing and reading of text on Apps, while of a sufficiently small size to fit into a user's pocket or purse.

A "Smart Watch" is a Smart Mobile Device that, like a Smartphone, can support a large number of proprietary and third-party Apps, including Digital-Wallet Apps. A Smart Watch has a Secure Enclave that can be used to facilitate mobile payments.

"Visa" means Visa Inc., a corporation incorporated in Delaware and headquartered in San Francisco, California, and each of Visa Inc.'s affiliates involved in the provision of payment services via the Visa payment systems, a network of contractual relationships governing the provision of services and associated technology to both Issuers and Acquirers to permit transactions processed by Acquirers on behalf of Merchants to be paid from a payment facility with the cardholder's Issuer.[55]

[55] Visa Inc., Annual Report (Form 10-K) (Sept. 30, 2022) at 1, available at https://www.sec.gov/Archives/edgar/data/1403161/000140316122000081/v-20220930.htm.