1	Ben M. Harrington (SBN 313877)			
2	Benjamin J. Siegel (SBN 256260) Gayne A. Kalustian-Carrier (SBN 336814)			
3	HAGENS BERMAN SOBOL SHAPIRO LLP 715 Hearst Avenue, Suite 202			
4	Berkeley, CA 94710 Telephone: (510) 725-3000			
5	Facsimile: (510) 725-3001			
6	benh@hbsslaw.com bens@hbsslaw.com			
7	gaynek@hbsslaw.com			
8	Attorneys for Plaintiff and the Proposed Class			
9	[additional counsel on signature page]			
10				
11	UNITED STATES	DISTRICT COURT		
12	NORTHERN DISTRICT OF CALIFORNIA			
13				
14	JULIANNA FELIX GAMBOA, individually and behalf of all others similarly situated,	No.		
15	Plaintiff,	CLASS ACTION COMPLAINT FOR VIOLATIONS OF THE SHERMAN ACT		
16	v.	AND CLAYTON ACT		
17	APPLE INC., a California corporation,	DEMAND FOR JURY TRIAL		
18	Defendant.			
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CLASS ACTION COMPLAINT – 1

Plaintiff Julianna Felix Gamboa, on her own behalf and that of all similarly situated consumers, alleges as follows:

I. INTRODUCTION

- 1. Mobile devices (smartphone and tablets) rely increasingly on cloud storage to host the abundance of data users accumulate through ordinary use. The apps, pictures, videos, messages, and other data files users amass often vastly exceed the storage capacity of their device. To retain files and access them seamlessly across devices, users can upload them to a cloud platform or "the cloud" for safe storage. Cloud storage has become a billion (soon-to-be trillion) dollar industry.
- 2. Apple is a dominant manufacturer of mobile devices. Its flagship products—the iPhone and iPad—are used by billions of consumers worldwide. More than 100 million Americans have an iPhone or an iPad, or both. In addition to manufacturing devices, Apple also generates revenue through an array of apps and services that it markets to its users. One of these is a cloud-storage platform called iCloud.
- 3. First introduced in 2011, iCloud has become a profit center for Apple, generating billions in annual revenues. By any metric, iCloud dominates all other cloud platforms accessible on Apple's mobile devices, with a market share estimated to exceed 70 percent.
- 4. Apple does not dominate cloud storage on its devices due to any shortage of would-be competitors. Cloud storage is offered by every major technology company (e.g., Google and Microsoft) and numerous cloud-storage specialists (e.g., Dropbox, Sync.com, IDrive, to name a few). Apple also does not dominate because it built a superior cloud-storage product. From a security and functionality standpoint, iCloud is no better (and often inferior) to other cloud storage platforms. Instead, Apple has achieved market dominance by rigging the competitive playing field so that only iCloud can win.
- 5. Apple has accomplished this with surgical technological restraints. While competing cloud providers can access and host certain iPhone and iPad data (e.g., photos and videos), Apple arbitrarily sequesters a set of files (mainly app data and device settings) and denies all but iCloud permissions to host them. These sequestered files—hereafter "Restricted Files"—are significant because they include data needed to restore a device when it is replaced. But from a technological and

¹ "iOS Security," APPLE (Oct. 2014),

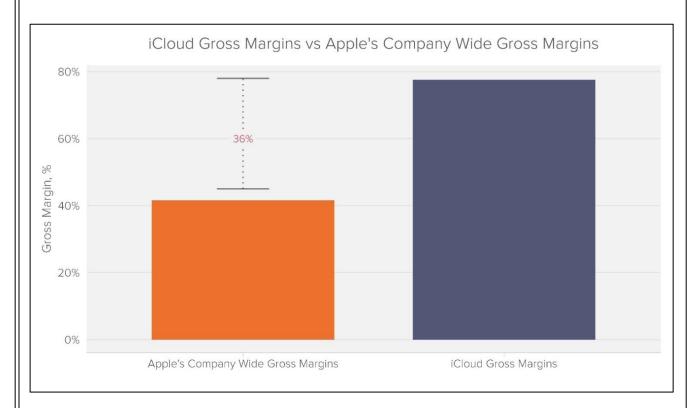
 $\underline{https://www.apple.com/mx/privacy/docs/iOS_Security_Guide_Oct_2014.pdf}.$

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security standpoint, these files are no different from all other data that accumulates on Apple's mobile devices. The storage infrastructure required to host all file types is the same.

- 6. Apple's arbitrary prohibition on hosting Restricted Files fundamentally distorts the competitive landscape to privilege iCloud over all rivals. As a result of this restraint, would-be cloud competitors are unable to offer Apple's device holders a full-service cloud-storage solution, or even a pale comparison. Sure, rivals can host photos, videos, and certain other data files. But they cannot host all of the data users want to back up, including for device restoration. This gives iCloud an enormous structural advantage against all would-be competitors. A consumer that uses a competing cloud platform to store photos will still need iCloud for Restricted File storage. As Apple knows, this is an unattractive option. It requires juggling multiple cloud accounts with multiple interfaces and splitting files between them. This is far less convenient than using a single cloud storage service capable of storing all file types in one location. Through the restraints challenged in this lawsuit, Apple has ensured that only iCloud can perform this basic function.
- 7. There is no plausible technological or security justification for Apple granting iCloud exclusive access to Restricted Files. As Apple itself admits, cloud storage is "agnostic about what is being stored and handles all file content the same way, as a collection of bytes." Samsung has historically offered its own proprietary cloud storage platform (Samsung Drive) while also giving users the option of backing up the entirety of their devices (all file types) on Google Drive. Moreover, Apple itself uses infrastructure provided by others—including Google, Microsoft, and Amazon—to host iCloud data, further undermining any notion that Restricted Files must be retained by Apple for security reasons.
- 8. Apple's restraints can be coherently explained only as an attempt to stifle competition, and that is their manifest effect. Having insulated itself from any real threat to iCloud's dominance, Apple charges supracompetitive fees for iCloud subscription plans. This is reflected in Apple's gross margins, which approach 80 percent for iCloud, substantially exceeding Apple's already high

company-wide gross margins (which fall in the 40 percent range). In other words, undisciplined by competition, Apple has marked up its iCloud prices to the point where the service is generating almost pure profit. Apple's ability to sustain these prices is a testament to its monopoly power.



- 9. Plaintiff seeks to represent a nationwide class (and a California subclass) of consumers who purchased iCloud storage plans and were overcharged. Plaintiff and the class were further harmed because Apple's restraints reduce output and stifle innovation by suppressing competitors' incentives to develop cloud storage solutions that better serve the needs of Apple device holders. In short, absent Apple's restraints, cloud storage on Apple mobile devices would be better, safer, cheaper, and more prevalent, all to the benefit of consumers.
- 10. The antitrust laws provide a remedy. Apple has violated the Sherman Act in at least two ways. *First*, Apple has unlawfully "tied" two products together—specifically, its mobile devices and iCloud—by compelling that device holders use iCloud to back up and store Restricted Files. This tie satisfies all criteria for *per se* condemnation because Apple has market power in the tying device markets and the tie involves separate products and a significant volume of commerce.

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CLASS ACTION COMPLAINT - 4

- 11. Second, by inhibiting competition from rival cloud-storage providers, Apple unlawfully monopolizes (and has attempted to monopolize) the market for Cloud Storage on Apple Mobile Devices. This is a relevant market, technically an "aftermarket" to the device foremarkets in which apple's iPhones and iPads compete. Apple exercises monopoly power in this market, as evidenced by its high market share, estimated to exceed 70 percent, and demonstrated ability to restrict output and charge supracompetitive prices to iCloud subscribers.
- 12. Apple has also violated California's Unfair Competition Law (UCL) by engaging in "unlawful, unfair, or fraudulent" business practices, including tying and restraining competition among cloud-storage platforms that would otherwise inure to the benefit of consumers.
- 13. On behalf of a proposed class of tens of millions of consumers who were overcharged for iCloud plans, Plaintiff seeks damages, restitution, injunctive relief, and all other relief available to end Apple's anticompetitive practices.

II. **JURISDICTION AND VENUE**

- 14. This Court has subject matter jurisdiction over this action under 28 U.S.C. § 1331 because Plaintiff alleges violations of federal law, namely, the Sherman Act.
- 15. This Court has personal jurisdiction over Defendant Apple, which is headquartered in this District. Apple has engaged in sufficient minimum contacts with the United States, this judicial district, and this State, and it has intentionally availed itself of the laws of the United States and this State by conducting a substantial amount of business throughout the State.
- 16. This judicial district is a proper venue because Apple resides in this District and transacts affairs in this District. A substantial part of the events giving rise to Plaintiff's claims occurred in this District.

III. **PARTIES**

17. Plaintiff Julianna Felix Gamboa resides in Los Angeles, California. Ms. Felix Gamboa purchased a 200GB iCloud storage plan in or around September 2022 for \$2.99 a month. Ms. Felix Gamboa maintains the same 200GB iCloud storage plan as of the filing of this complaint and continues to pay the same monthly price. Ms. Felix uses her iCloud storage plan to back up her iPhone, including device settings, as well as to store photos, videos, and other files. As a result of

Apple's anticompetitive practices alleged herein, Ms. Felix Gamboa has paid (and continues to pay) a supracompetitive price for her iCloud storage plan.

18. Defendant Apple designs, manufactures, and markets smartphones, personal computers, tablets, and smart watches, and sells a variety of services, including iCloud. Apple maintains its headquarters and principal place of business in Cupertino, California.

IV. RELEVANT FACTS

A. Cloud Storage

- 19. Cloud storage is a means of storing and backing up digital files on remote servers where it is accessible via an internet connection. More than 70 percent of U.S. consumers reportedly use some form of cloud storage.² All major technology companies offer a cloud-storage service and there are numerous technology companies specializing in cloud storage.
- 20. While cloud storage is available across a number of computing devices, it plays a particularly vital role on smartphones and tablets, which typically have limited local storage capacity. Smartphones and tablets accumulate an enormous amount of data in myriad forms, including pictures, videos, music, apps, emails, texts, device settings, and podcasts. For many smartphone and tablet users, these files quickly exceed the storage capacity of their devices. To retain these files, while maintaining ready access to them through an internet connection, mobile device users can obtain a cloud storage solution. Cloud storage allows mobile device users to access a surplusage of files seamlessly across multiple devices (e.g., their smartphone and their tablet) without transferring them between devices or porting them with a physical external drive.
- 21. In addition to storing files on remote servers, thereby freeing up space on users' devices, cloud storage can be used to "back up" files so that they can be readily restored in the event a device is lost or replaced.

² Martin Armstrong, "What's in the Cloud," STATISTICA (Sep. 30, 2021), https://www.statista.com/chart/25896/gcs-cloud-storage-services-usage/.

B.

iCloud

Apple's cloud storage service is called iCloud. It launched in 2011. iCloud permits Apple's users to store all types of data on remote or "cloud" servers, and then access that data across their devices. File types that can be stored on iCloud include, without limitation, user photos, videos, music, device settings, and apps.

23. iCloud is one of Apple's most widely used subscription services. Reports indicate that Apple had at least 850 million iCloud users by 2020, and the service has become a major profit center for the company.³ For reference, Apple's most profitable business line is its "services" division, which comprises (among other things), Apple's licensing revenues, subscription plans like iCloud, as well as Apple Pay.⁴ Apple's service division generates more than \$20 billion a quarter, or \$80 billion annually,⁵ and analysts report that 20% of Apple's services revenue comes from iCloud.⁶

This means iCloud is generating approximately \$16 billion in annual revenues.

24. Apple device holders are given 5GB of free iCloud storage space, but as Apple's iCloud revenues attest, most users find this insufficient for their storage needs and purchase a supplemental iCloud storage plan.⁷ Apple presently offers six iCloud storage tiers by monthly subscription.

iCloud Storage Tiers	
Up to 5GB	Free
50GB	\$0.99/month
200GB	\$2.99/month

³ Alexander Eser, "Essential Apple Icloud Statistics in 2024," ZIPDO (updated July 16, 2023), https://zipdo.co/statistics/apple-icloud/.

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⁴ Kif Leswing, "Apple's most profitable line of business is making up for some hardware struggles," CNBC (Aug. 3, 2023), https://www.cnbc.com/2023/08/03/apple-services-are-very-profitable-and-may-be-ready-for-takeoff-again.html.

⁵ "Apple's revenues from iTunes, software and services from 1st quarter 2013 to 1st quarter 2024," STATISTICA, https://www.statista.com/statistics/250918/apples-revenue-from-itunes-software-and-services/.

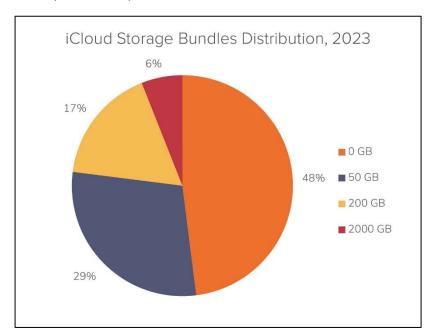
⁶ Alexander Eser, "Essential Apple Icloud Statistics in 2024, ZIPDO (Updated July 16, 2023), https://zipdo.co/statistics/apple-icloud/.

⁷ Sidney Ho, Ross Seymore, dbDIG Primary Research Survey on Apple Services, DEUTSCHE BANK (Oct. 24, 2023).

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2TB	\$9.99/month
6TB	\$29.99/month
12TB	\$59.99/month

25. Of these storage tiers, the 50GB tier is Apple's most popular offering, followed by the 200GB tier and the 2TB (or 2000GB) tier.⁸



26. While iCloud is an Apple service, Apple has historically contracted with third parties to host users' iCloud data. When iCloud launched, Apple used Amazon Web Services and Microsoft Azure infrastructure to host iCloud data, and later Apple began using Google Cloud Platform for the same purpose. Peports indicate that Apple pays Google just \$0.0031 per gigabyte per month for

⁸ Sidney Ho, Ross Seymore, dbDIG Primary Research Survey on Apple Services, DEUTSCHE BANK (Oct. 24, 2023). Apple's 6TB and 12TB plans are new offerings, launched in September 2023, and data on their usage has not been released. For the distribution chart above, the share of users per iCloud bundle were estimated by scaling bundle distribution data from the cited Deutsche Bank analysis to all iCloud users.

⁹ Chris Davies, "Apple confirms iCloud uses Google servers (but don't panic)," SLASH GEAR (Feb. 26, 2018), https://www.slashgear.com/apple-confirms-icloud-uses-google-servers-but-dont-panic-26521087.

storage, ¹⁰ which, as addressed below, amounts to an infinitesimal fraction of the prices Apple charges its iCloud subscribers. *See infra* § IV.D.1.a.

C. Apple Unlawfully Ties iCloud to Its Mobile Devices by Arbitrarily Restricting Access to Alternative Cloud Storage Platforms.

- 27. From a technological standpoint, the same storage infrastructure is needed to back up all types of files and data stored on Apple's mobile devices. Apple has acknowledged as much, observing in security protocols that its iCloud "service is agnostic about what is being stored and handles all file content the same way, as a collection of bytes."
- 28. Apple nevertheless arbitrarily requires that its mobile device holders use iCloud to back up certain file types—mainly, device settings as well as apps and apps data ("Restricted Files"). With respect to other file types—e.g., photos and videos ("Accessible Files")—Apple mobile device holders can select from other cloud-based storage providers servicing the market, including Google Drive, Sync.com, pCloud, and others.
- 29. For consumers, backing up Restricted Files is significant because these are the files that allow users to effectively restore the look and feel of their device—i.e., reinstall apps and device settings—after a factory reset or when they purchase a new device. There is obvious convenience to using a cloud storage solution that can store and back up both Restricted Files (which will allow restoration of their device) and Accessible Files, including photos and videos.
- 30. By sequestering Restricted Files, and denying all other cloud providers access to them, Apple prevents rival cloud platforms from offering a full-service cloud solution that can compete effectively against iCloud. The cloud products that rivals can offer are, by virtue of Apple's restraints, fundamentally diminished because they can only host Accessible Files. Users who want to back up all of their files—including the basic Restricted Files needed to restore their device at replacement—have but one option in the marketplace: iCloud.

¹⁰ Mike Peterson, "Apple is now Google's largest corporate customer for cloud storage," APPLE INSIDER (Jan. 29, 2021), https://appleinsider.com/articles/21/06/29/apple-is-now-googles-largest-corporate-customer-for-cloud-storage.

¹¹ *Id*.

- 31. There is no technological or security justification for Apple mandating the use of iCloud for Restricted Files. Apple draws this distinction only to curtail competition and advantage its iCloud product over rival cloud platforms.
- 32. Tellingly in this regard, Samsung—which Apple depicts as one of its chief competitors in device markets—has historically offered a proprietary cloud storage platform (Samsung Cloud), but, unlike Apple, Samsung does not require that its device holders use Samsung Cloud to store or backup any file types. Rather, Samsung device holders historically have been allowed to choose between Samsung Cloud and Google Drive to back up the entirety of their devices, including the files needed to restore them.
- 33. As this example attests, there is nothing inherent to Restricted Files that requires that they be hosted only on a cloud platform maintained by a device's manufacturer. Absent Apple's restrictions, any rival cloud platform could host Restricted Files and consumers would have the option of choosing between iCloud and such rival platforms for all of their cloud-storage needs.
- 34. Apple's restrictions eliminate that choice and, in doing so, effectively compel Apple device holders to use iCloud for cloud storage. Technically speaking, Apple imposes what economists refer to as a "requirements" tie. That is, if iPhone or iPad holders wish to use cloud storage for Restricted Files—and most do— iCloud is their only option for fulfilling that requirement. And for anyone requiring more than 5GB of storage, which is to say most Apple customers, ¹² they must pay for it.
- 35. As addressed immediately below, this tie exhibits all the hallmarks of a *per se* unlawful tying arrangement, including: (1) the tie involves two separate products; (2) Apple possesses market power in the tying product markets; and (3) the tie impacts a substantial volume of commerce.

1. The Tie Involves Separate Products.

36. Smartphones and tablets (the tying products here) are distinct from cloud storage on Apple's mobile devices (the tied product). There is separate demand for these products as evidenced

¹² See Sidney Ho, Ross Seymore, dbDIG Primary Research Survey on Apple Services, DEUTSCHE BANK (Oct. 24, 2023).

by the fact that many firms offer them separately. That is, consumers can buy smartphones and tablets (including Apple's) without also purchasing or using any cloud storage. Indeed, Apple was manufacturing smartphones before iCloud even existed. And likewise, consumers can purchase a cloud storage plan (including iCloud) without also purchasing a smartphone or tablet. Notably in this regard, iCloud can be purchased and used on Apple's personal computers. Other cloud storage providers likewise offer cloud storage plans as a freestanding product.

- 37. Accordingly, it is both possible and efficient to separate the tying and tied products at issue. It would be illogical and ignore market realities to treat Apple's mobile devices (smartphones and tablets) and cloud storage as a single product. They are distinct products, with distinct uses, serving distinct needs.
- 38. The same logic holds if one considers the tied product to be cloud storage of Restricted Files on Apple's mobile devices (rather than cloud storage generally). For precisely the same reasons, cloud storage for Restricted Files is not the same product as Apple's smartphones and tablets.
 - 2. Apple Has Market Power in the U.S. Markets for Smartphones and Tablets.
 - 39. Apple has substantial market power in both the smartphone and tablet product markets.

a. The Smartphone Product Market

40. Smartphones are a singular device that has transformed the way people interact with the world. They allow people to access the internet anytime and anywhere with a cellular or Wi-Fi connection. Smartphones also provide access to apps with a staggering range of functionality. With a smartphone in hand, consumers can shop online, navigate a city, post on social media, buy movie tickets, check the weather, and so much more. While it has ceased to be their primary function, smartphones are also mobile telephones. Apple and other smartphone manufacturers treat smartphones

as a distinct product line, both in marketing materials and public filings.¹³ There is widespread industry and public recognition of a distinct market for smartphones.¹⁴

- 41. There is no reasonably close substitute for the smartphone. Various devices can provide some piece of a smartphone's functionality, but none provide a substantial share. Landline phones enable phone calls, but not on the move, and they do not offer the other features smartphones provide. Cellphones (that are not smartphones) provide mobility, but not internet access or any of the other features of a smartphone. Personal computers (including laptops) provide internet access and computing functions, and sometimes phone applications, but they are not as portable as a smartphone, and generally do not have cellular access. That consumers typically own a smartphone along with these and other electronic devices shows that the products are compliments, not substitutes.
- 42. The absence of close substitutes in part explains the ubiquitous adoption of smartphones. As of 2021, approximately 85% of adults in the U.S. owned a smartphone. As of 2024, that number has reached 90%. 16
- 43. Apple enjoys market power in the U.S. smartphone product market. The iPhone, first launched in 2007, is the leading smartphone in the U.S. For nearly a decade, iPhones have had a market share in the United States exceeding 40%, reaching approximately 61.3% in 2024.¹⁷
- 44. Apple's market power is reinforced by substantial barriers to entry. Developing the hardware and software needed to market a smartphone requires a substantial outlay of capital and expertise. The iPhone also benefits from significant indirect-network effects generated by its sizable

¹³ See Apple Inc. 2022 Form 10-K at 1 (listing iPhone as a distinct product line, separate from other Apple offerings).

¹⁴ See, e.g., Igor Bonifacic, "iPhone overtakes Android to Claim Majority of US Smartphone Market," ENGADGET (Sept. 3, 2022), https://www.engadget.com/iphone-overtakes-android-us-market-share-223251196.html.

¹⁵ 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/.

¹⁶ "Mobile Fact Sheet," PEW RESEARCH CENTER (Jan. 31, 2024), https://www.pewresearch.org/internet/fact-sheet/mobile/.

¹⁷ See "iPhone Market Share: US (2014-2022), OBERLO, https://www.oberlo.com/statistics/iphone-market-share. "US Smartphone Market Share," OBERLO, https://www.oberlo.com/statistics/us-smartphone-market-share.

user base and large community of developers creating iOS apps. To succeed, new entrants would need to convince users to switch to a new smartphone operating system without the catalog of apps available on iOS, while simultaneously convincing developers to incur the costs of writing apps for a new operating system without iOS' sizable user base. These are substantial hurdles. Brand loyalty to existing manufacturers, and high switching costs, compound the difficulty of entry. Highly sophisticated and resourced companies—e.g., Amazon and Microsoft—have sought to market smartphones and failed to gain traction.

b. The Tablet Product Market

- 45. Tablets share certain features of smartphones, and other features of laptops, but they are a distinct product. Apple introduced the first tablet—the iPad—in 2010, marketing it as "a third category of device." Tablets do not replace smartphones and were never intended to. Apple and other tablet manufacturers treat tablets as a distinct product line, both in marketing materials and public filings. There is widespread industry and public recognition of a distinct market for tablets. 21
- 46. One fundamental difference between tablets and smartphones is the screen size. The screen on a smartphone ranges from 4 to 6 inches, making the device small enough to fit into a pocket.²² Tablets have screens ranging from 7 to 17 inches, making them far less mobile or stowable.²³ The screen size differential also means that certain apps are developed solely for either tablets or smartphones, and are not available on both.

^{20 | 18} See infra ¶¶ 69-72.

¹⁹ See William Gallagher, "Apple got tablets right, and created a whole new market with the iPad 12 years ago today" APPLEINSIDER (Jan. 27, 2022), https://appleinsider.com/articles/19/01/27/applegot-tablets-right-and-created-a-whole-new-market-with-the-ipad.

²⁰ See Apple Inc. 2022 Form 10-K at 1 (listing iPad as a distinct product line, separate from other Apple offerings).

²¹ See, e.g., "Tablet Vendor Market Share United States Of America," STATCOUNTER, https://gs.statcounter.com/vendor-market-share/tablet/united-states-of-america.

²² See "Smartphone sales market share in the United States from 2017 to 2019, by display size," STATISTA (Apr. 21, 2022), https://www.statista.com/statistics/1042669/us-smartphone-sales-by-display-size/.

²³ See "Tablet Comparison Chart: List Of Tablets In 2022," TABLETMONKEYS (June 2022), https://tabletmonkeys.com/tablet-comparison/.

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- 47. While some tablets have cellular connectivity and can be used to make and receive telephone calls, that is not a core functionality. Rather, with the larger screen, tablets provide more immersive internet connectivity. And they can be used to perform a range of productivity tasks like a laptop or desktop computer. For example, with keyboard accessories, tablets can be used as word processors. They are also marketed as creativity tools that can be used to create and edit music and video. That consumers typically own a tablet along with smartphones, computers, and other mobile electronic devices shows that the products are compliments, not substitutes.
- Apple enjoys market power in the U.S. tablet product market. As of January 2024, 48. iPad's U.S. market share in the tablet market was 57%, more than triple the 16% share of its closest competitor, Samsung.²⁴
- 49. There are also substantial barriers to entry into the tablet market, bolstering Apple's market power. As with smartphones, bringing a tablet to market requires substantial capital and expertise. Indirect network effects also reinforce Apple's market power and make entry difficult. To succeed, new entrants need to convince users to switch to a new tablet operating system without the catalog of apps available on iOS, while simultaneously convincing developers to incur the costs of writing apps for a new operating system without iOS's sizable user base. Brand loyalty and high switching costs likewise impose a substantial impediment to new entrants. Sophisticated and highly motivated companies, including Google and Microsoft, have sought to market tablets and failed to gain significant market share for their offerings.

3. The Tie Affects a Significant Volume of Commerce.

50. Ties can be condemned per se when they affect a not insignificant (or "non de minimis") volume of commerce. Cloud storage is a billion (soon-to-be trillion)²⁵ dollar industry, and

²⁴ See "Tablet Vendor Market Shares United States of America (Jan 2023 – Jan 2024), STATCOUNTER (Jan. 2024), https://gs.statcounter.com/vendor-market-share/tablet/united-states-ofamerica.

²⁵ See "Cloud Spending to Top \$1 Trillion in Four Years," THENEXTPLATFORM (Jan. 26, 2023), https://www.nextplatform.com/2023/01/26/cloud-spending-to-top-1-trillion-in-four-years/.

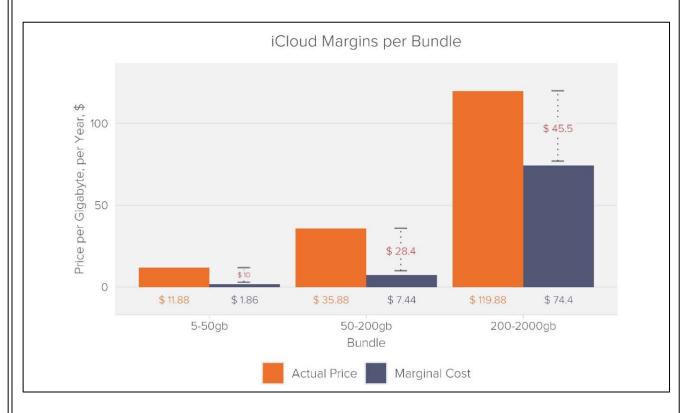
Apple's iCloud alone generates billions in annual revenues, as reflected above (*supra* § IV.B). The volume-of-commerce requirement for *per se* condemnation is thus met.

D. Apple Unlawfully Monopolizes the Market for Cloud Storage on Apple Mobile Devices.

- 51. In addition to imposing an unlawful tie, Apple unlawfully monopolizes the market for Cloud Storage on Apple Mobile Devices. Unlawful monopolization occurs when a firm (1) acquires or maintains a monopoly (2) through anticompetitive conduct. The facts alleged below support both elements.
 - 1. Apple Has Monopoly Power in the Market for Cloud Storage on Apple Mobile Devices.
- 52. Monopoly power is the substantial ability to control prices or exclude competition. It can be established through direct proof of either supracompetitive prices, or reduced output, or both. Alternatively, monopoly power can be established indirectly with proof of high market share in a relevant antitrust market.
 - a. Direct Proof of Monopoly Power: Apple Has Demonstrated Its Ability to Charge Supracompetitive Prices and Restrict Output.
 - (1) Apple Charges Supracompetitive Prices for iCloud.
- 53. Having shielded itself from meaningful competition, Apple is able to charge supracompetitive prices for iCloud.
- 54. It is textbook economics that, in a competitive market, prices tend toward marginal costs, or the cost of producing one additional unit of the product or service sold. It is apparent that Apple prices iCloud significantly above its marginal costs, that is, supracompetitively.
- 55. Rather than build out its own servers to host all iCloud data, Apple relies on the storage infrastructure of third parties, most recently Google. Apple's per-GB cost of acquiring this infrastructure provides a reasonable estimate of its marginal costs. Industry analysts report that Apple

pays Google \$300 million annually for 8 exabytes (or 8 billion gigabytes) of storage.²⁶ This equates to \$0.0031 per gigabyte per month.²⁷

56. Apple's iCloud prices dwarf these marginal costs, resulting in staggering margins. For Apple's three most popular iCloud storage tiers, the below chart compares Apple's per-GB annual marginal costs with the per-GB annual price Apple charges iCloud subscribers like Plaintiff and the proposed class here.



57. In short, Apple is marking up its marginal costs by staggering amounts. For the 5 to 50GB tier, Apple pays Google \$1.86 annually per GB for storage infrastructure, and charges consumers \$11.88. For the 50 to 200GB tier, it pays Google \$7.44 annually per GB and charges

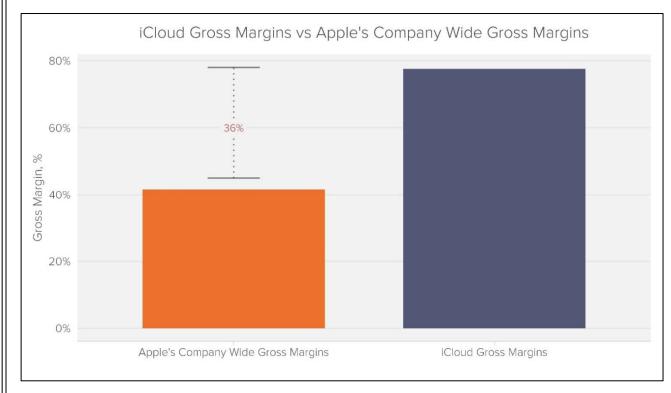
²⁶ Mike Peterson, "Apple is now Google's largest corporate customer for cloud storage," APPLE INSIDER (Jan. 29, 2021), https://appleinsider.com/articles/21/06/29/apple-is-now-googles-largest-corporate-customer-for-cloud-storage.

²⁷ Notably, this is comparable to Amazon's most competitive cloud storage plans for its S3 Glacier service. *See* "Amazon S3 Glacier service (Glacier API for vaults) pricing," AMAZON, https://aws.amazon.com/s3/glacier/pricing/.

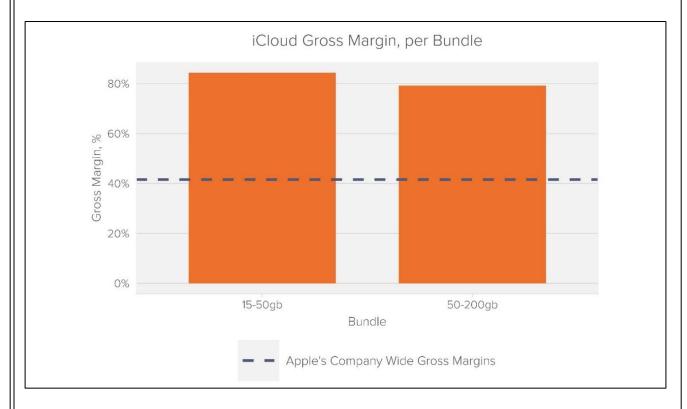
charges consumers \$119.99.

consumers \$35.98. And for the 200GB to 2TB tier, Apple pays Google \$74.40 annually per GB and

58. Markups of this magnitude yield eyewatering gross margins. For context, Apple is one of the most profitable companies the world has ever known. Apple generally reports company-wide gross margins slightly above 40%, which is high.²⁸ But not in comparison to the margins Apple generates with its iCloud plans. Apple's gross margins for iCloud are approximately 78%, and they exceed 80% on Apple's most popular 15-50GB iCloud plan. Put another way, the price the proposed class paid for these plans is almost pure profit to Apple.



²⁸ See "Apple's gross margin as percentage of revenue from 1st quarter 2005 to 1st quarter 2024," STATISTICA (Feb. 2024), https://www.statista.com/statistics/263436/apples-gross-margin-since-2005/#:~:text=As%20of%20the%20first%20quarter,a%20percentage%20of%20total%20revenue.



- 59. Apple's iCloud pricing is thus not simply above Apple's marginal costs, it is grossly above marginal costs. It is manifestly supracompetitive as a matter of textbook economics.
- 60. In a market without Apple's restraints, competition on price would be vigorous. Cloud Storage on Apple Mobile Devices is a billion-dollar industry that Apple completely dominates today. If other cloud storage providers were able to offer a full-service cloud storage solution to Apple's mobile device users, these providers would be highly incentivized to compete aggressively on price to differentiate their offerings and win subscribers. This would place enormous downward pressure on iCloud's pricing. Having carefully insulated itself from these competitive dynamics, Apple is able to maintain its supracompetitive iCloud prices.

(2) Apple's Challenged Restraints Restrict Output.

61. Apple's ability to restrict output is evidenced by its ability to flatly preclude any other cloud provider from accessing and hosting Restricted Files on its mobile devices. This demonstrated ability to restrict output prevents cloud providers from offering new and innovative cloud storage options for Apple mobile device holders. In the absence of Apple's restrictions, additional output would be generated by new entrants and existing cloud providers who would be incentivized to develop

full-service cloud solutions capable of challenging iCloud's market supremacy. Given the billions that cloud providers can earn from Apple's massive user base, cloud platforms would be highly incentivized to compete and appeal to a larger segment of Apple's users, generating more cloud service transactions overall. Apple's restraints suppress this natural output.

62. Output is further diminished because, as addressed immediately above, Apple's restraints result in supracompetitive prices. Higher prices result in lower demand, and thus, lower output. That is, if prices were lower prices for cloud storage on Apple mobile devices, more consumers would purchase cloud storage and in larger amounts. In a more competitive market without Apple's restraints, prices would be lower, yielding higher demand and output.

b. Indirect Proof of Monopoly Power: Apple Has a Dominant Share of a Relevant Antitrust Market.

- 63. Publicly available reports indicate that iCloud's share of the market for Cloud Storage on Apple Mobile Devices exceeds 70 percent.²⁹ That is a monopoly share of the market for Cloud Storage on Apple Mobile Devices.
- 64. As set forth below, Cloud Storage on Apple Mobile Devices is a relevant antitrust market under all conventional market definition principles, and barriers to entry are high.

²⁹ Survey evidence indicates that, as of 2020, 33% of people using personal cloud storage in the U.S. used iCloud. *See* "The Latest Cloud Computing Statistics," AAG (Feb. 2024), https://aag-it.com/the-latest-cloud-computing-statistics/. That market share figure underestimates iCloud's share of the relevant market since it is not specific to Apple mobile devices and includes non-Apple devices too. Since iCloud is available only on Apple's devices, iCloud's market share of the proposed relevant market can be approximated by dividing iCloud's reported market share across all devices (33%) by Apple's average share of the smartphone and tablet markets over the same period (or 45.5%). That yields a market share of 72.5% (33% ÷ 45.5% = 72.5%). *See* "iPhone Market Share: US (2014-2022), OBERLO, https://www.oberlo.com/statistics/iphone-market-share-us (estimating 2020 iPhone US market share of 45.3); "US PC shipments grew 1% to reach 135 million in 2021," CANALYS (Feb. 2022), https://www.canalys.com/newsroom/US-PC-market-Q4-2021?ctid=2640-d86d3e3cc31b674e1dd838f856520b2a (estimating 2020 iPad US market share of 45.8%). Plaintiff reserves all rights to re-estimate iCloud's market share based on materials produced in discovery or otherwise.

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(1) Cloud Storage on Apple Mobile Devices Is a Relevant Antitrust Product Market.

- 65. Cloud Storage on Apple Mobile Devices is a distinct product for which there are no reasonably close substitutes. Consumers with an Apple smartphone or tablet have limited vehicles for storing and backing up their data, none of which are reasonably interchangeable with Cloud Storage on Apple Mobile Devices.
- 66. A salient feature of cloud-based storage is that it offers users relatively seamless access to stored data *across* devices. For example, iPhone users with photos on a cloud platform can generally access them from their iPad, and vice versa. Cloud storage also does away with physical hard drives and other storage media that require a physical connection to port data to and from a device. With a cloud platform, users can generally upload and access stored files wherever they can access the internet. Cloud platforms can also offer ranges of automation that allow users to back-up data automatically without continuous user engagement.
- 67. Cloud Storage on Apple Mobile Devices is widely recognized within the industry as a distinct market for cloud storage with distinguishing characteristics.³⁰ The market involves distinct customers—i.e., users of Apple's mobile devices. Cloud solutions for these customers must be compatible with Apple's mobile devices and operating systems and, in many instances, cloud providers develop customized cloud apps for Apple devices using distinct development tools.
- 68. As for interchangeability of use, there are no comparable, much less reasonably interchangeable, substitutes for Cloud Storage on Apple Mobile Devices.³¹

³⁰ "Best Cloud Storage for iPhone 2024: Backup Your Apps and Photos," CLOUDWARDS (Jan. 27, 2024), https://www.cloudwards.net/best-cloud-storage-for-iphone/; "5 Best Cloud Storage for iPhone," EASEUS (Jan. 31, 2024), https://mobi.easeus.com/iphone-data-transfer/best-cloud-storage-for-iphone.html; "How to avoid paying Apple for extra iCloud storage," COMPUTERWORLD (May 19, 2022), https://www.computerworld.com/article/2476176/mac-os-x-how-to-avoid-paying-apple-for-extra-icloud-storage.html.

³¹ The existence of a market for Cloud Storage on Apple Mobile Devices does not foreclose the existence of cognizable submarkets within that larger market. But under any conceivable segmentation of the market for Cloud Storage on Apple Mobile Devices, Apple would retain a monopoly-level share of the larger market and, mathematically, one or more submarkets.

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(a) Cloud Storage on Android Mobile Devices Is Not a Reasonable Substitute for Cloud Storage on Apple Mobile Devices.

- 69. Consumers with an iPhone or iPad can use cloud storage on non-Apple mobile devices only by switching operating systems and purchasing an Android mobile device. But the high costs and difficulty of switching effectively lock consumers into Apple's device ecosystem. Studies show that switching is remarkably rare. More than 90% of new iPhone purchases are made by consumers whose previous smartphone was likewise a smartphone.³² There are many deterrents to switching. Learning to navigate an operating system (Apple or Android) takes time, and consumers who switch must undertake that labor-intensive process again. A NEW YORK TIMES guide to smartphones recommends against switching operating systems, precisely because "[b]y the time you've used a phone for a couple of years, you've spent a lot of time learning its quirks."³³
- 70. Switching costs are also high. The most immediate cost is that of a new device, a switching cost that cannot be avoided because the Android operating system cannot be run from an Apple device. New smartphones and tablets cost hundreds of dollars, an investment most consumers do not make more than every two to three years. *See infra* ¶¶ 77-82 (applying SSNIP test).
- 71. In addition, much app and in-app content is specific to Apple's operating systems and cannot be ported to a new device utilizing a different operating system. This exacerbates switching costs. As one senior Apple executive has put it: "Who's going to buy a Samsung phone if they have apps, movies, etc. already purchased? They now need to spend hundreds more to get to where they are today." This is not an accident. Locking customers into its ecosystem, and erecting high switching costs, is indeed a central pillar of Apple's business model. Apple's overarching strategy, as Steve Jobs

³² See Chance Miller, "iPhone loyalty rate continues to exceed 90%, new CIRP data shows," 9TO5MAC (Oct. 28, 2021) https://9to5mac.com/2021/10/28/iphone-loyalty-rate-data-switchers/.

³³ See Andrew Cunningham, "iPhone vs. Android: Which is Better for You?" NEW YORK TIMES (Jan. 27, 2021) https://www.nytimes.com/wirecutter/reviews/ios-vs-android/.

³⁴ See "Apple's Past Sideloading Plans, Ecosystem Lock-in Strategy, and More Revealed in Internal Documents," MACRUMORS (Aug. 20, 2021), https://forums.macrumors.com/threads/apples-past-sideloading-plans-ecosystem-lock-in-strategy-and-more-revealed-in-internal-documents.2308143/.

once described it, is to "[t]ie all of our products together, so we further lock customers into our ecosystem."³⁵

72. Given the difficulty and high costs of switching—and its relative infrequency—Apple device holders cannot reasonably substitute to Android-based cloud storage options. Cloud storage on Android devices thus cannot be included in same relevant antitrust market.

(b) Local Storage Is Not a Reasonable Substitute for Cloud Storage on Apple Mobile Devices.

- 73. An iPhone or iPad can theoretically be backed up locally to a hard drive on a Mac or PC, using Apple's program iTunes, but this is labor-intensive and non-automated process that does not reasonably substitute for cloud storage. To begin with, not all files that can be stored on iCloud can be backed up to a local drive. Most prominently, users cannot store or back up content from app stores or iTunes, or PDFs downloaded directly from Apple Books, on a local hard drive. For users of Apples mobile devices, these files can be only stored on iCloud. This difference alone makes local storage a poor substitute for cloud storage.
- 74. Even if local backups provided the same storage capabilities as cloud storage, local backups lack the ease of use and convenience that characterize cloud storage. *First*, local storage is only available to users that have purchased a Mac or PC and have retained storage space on their local drive sufficient to back up their mobile device. Users are also dependent on the functionality of that physical device—if it is damaged or misplaced, all data can be lost. *Second*, users can back up to their Mac or PC only by physically connecting their device, which requires cables and having both devices physically present in the same location. *Third*, backing up locally entails a 7- or 8-step process (depending on whether you are saving to a Mac or PC) that includes downloading and/or opening iTunes, inputting and saving device and encryption passcodes, and following various screen prompts

³⁵ See "Steve Jobs wanted to 'further lock customers into Apple's ecosystem," CNET (April 2, 2014), https://www.cnet.com/tech/tech-industry/steve-jobs-wanted-to-further-lock-customers-into-apples-ecosystem/.

³⁶ Apple Support article, "Backup methods for iPhone, iPad, and iPod touch," https://support.apple.com/en-us/HT204136#:~:text=iCloud%20backs%20up-, Backups%20from%20your%20computer, downloaded%20directly%20to%20Apple%20Books.

and troubleshooting steps.³⁷ *Fourth*, whereas cloud storage platforms can automatically backup data without any action by the user, local backups are manual and require that the user undertake each of the above steps every time they wish to backup new information on their device. This means that, while an iCloud backup generally will include all data on a user's device, including data recently added, local backups will only include data accumulated at the time of the last manual backup, which could be weeks or even months prior. Maintaining a comprehensive backup on a local drive thus requires almost continuous manual updates.

- 75. Local storage also lacks a core distinguishing feature of cloud storage—the ability to seamlessly access and manage stored data across multiple devices, including when the user is on the move. For example, data stored on a home office Mac or PC cannot be accessed from a coffee shop using an iPhone. By contrast, using a cloud-based solution, Apple device holders can access their data on all of their devices, wherever they happen to be, provided they have some means of connecting to the internet.
- 76. For all of these reasons, local storage is not a reasonable substitute for Cloud Storage on Apple Mobile Devices.

(c) The Proposed Market Would Pass a SSNIP Test.

- 77. A common method to determine the relevant market is to assess whether a hypothetical monopolist could impose a small but significant non-transitory increase in price ("SSNIP") in the proposed market, typically 5%. A hypothetical monopolist in the market for Cloud Storage on Apple Mobile Devices could profitably impose a SSNIP—that is, sustain a significant price increase without losing volume sufficient to make the price increase unprofitable.
- 78. A SSNIP test begins with a narrow market definition and asks whether a hypothetical monopolist of that market could sustain a SSNIP without consumers switching to alternative products to a degree that renders the SSNIP unprofitable. If the hypothetical monopolist could sustain the SSNIP, the relevant market does not require expansion. If, however, consumers would switch to

³⁷ See Apple Support article, "How to back up your iPhone, iPad, or iPod touch with iTunes on your PC," https://support.apple.com/en-us/HT212156; Apple support article, "How to back up your iPhone, iPad, and iPod touch with your Mac," https://support.apple.com/en-us/HT211229.

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alternate products and render the SSNIP unprofitable, those alternate products must be included in the relevant market.

- 79. As applied here, consumer substitution to conceivable alternatives would not defeat a SSNIP on Cloud Storage on Apple Mobile Devices. In other words, the proposed market could pass a SSNIP test.
- 80. First, switching to cloud storage on Android devices would be minimal and extremely rare in response to a SSNIP. This is because the cost of Cloud Storage on Apple Mobile Devices, while substantial (and supracompetitive), pales in comparison to the cost of purchasing a new device on a new operating system and porting what data and features can be ported across ecosystems. That is, Apple's most popular storage tiers are all less than \$9.99 per month, meaning for most iCloud users a 5% increase in iCloud pricing would equate to less than 50 cents a month. A new Android smartphone, by contrast, will cost hundreds of dollars, with some premium devices comparable to iPhones exceeding \$1,000. And this is to say nothing about the other costs associated with switching ecosystems. In short, it would be economically irrational for Apple's device holders to respond to a SSNIP on Cloud Storage for Apple Mobile Devices by purchasing a new device to access Android-based cloud storage solutions.
- 81. Consumers also cannot reasonably anticipate or estimate the total cost of an increase in the price for Cloud Storage on Apple Mobile Devices, because users cannot accurately measure their future data storage needs, which can fluctuate dramatically (and unpredictably) over time based on changes in technology (e.g., size of files) and the uses to which consumers put their mobile devices. In addition, consumers generally substantially discount future costs when they choose a device, meaning the future cost of cloud storage, which is already small relative to the cost of a new device, is even less significant.³⁹

³⁸ Apple did not even offer its higher-volume storage tiers (6TB and 12TB) in the United States until September 2023.

³⁹ Gregory Howard, John C. Whitehead, and Jacob Hochard, "Estimating discount rates using referendum-style choice experiments: An analysis of multiple methodologies," Journal of Environmental Economics and Management (Jan. 2021), https://www.sciencedirect.com/science/article/abs/pii/S0095069620301224.

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82. A SSNIP test likewise excludes local storage from the relevant product market. Apple already charges more than 5% more for iCloud storage than its device holders pay to back up their devices to a Mac or PC. Indeed, Apple does not charge anything when users backup their devices to a Mac or PC. If Cloud Storage for Apple Mobile Devices and such local storage were in the same antitrust market, one would expect substantial switching from cloud storage (for which significant monthly fees apply) to local storage (which is free, provided the user has sufficient storage space on their hard drive). This has not occurred. In fact, iCloud usage by Apple device holders has been increasing steadily for years.⁴⁰

The Market for Cloud Storage on Apple Mobile Devices (d) Demonstrates All Characteristics of an "Aftermarket."

- 83. The market for Cloud Storage on Apple Mobile Devices can be considered an aftermarket to the primary device markets for smartphones and tablets. An aftermarket is a derivative market for goods or services used in conjunction with some primary product. In determining whether an aftermarket exists, relevant factors include whether "(1) the challenged aftermarket restrictions are 'not generally known' when consumers make their foremarket purchases; (2) 'significant' information costs prevent accurate life-cycle pricing; (3) 'significant' monetary or non-monetary switching costs exist; and (4) general market-definition principles regarding cross-elasticity of demand do not undermine the proposed single-brand market." Epic Games, Inc. v. Apple, Inc., 67 F.4th 946, 977 (9th Cir. 2023). The market for Cloud Storage on Apple Mobile Devices satisfies each of these criteria.
- 84. Restrictions Not Generally Known at Foremarket Purchase. When consumers purchase an Apple mobile device, they are nowhere advised that iCloud is the only cloud service capable of storing or backing up Restricted Files on their device. Such a term cannot even be found in the fine print of Apple's otherwise highly detailed Apple's Software License Agreement for iPhones and iPads. Nor is such a term included in Apple's iCloud user terms and conditions. In fact, far from suggesting that iCloud is the only option for backing up Restricted Files (or any files), the iCloud terms

See, e.g., "Essential Apple iCloud Statistics in 2024," ZIPDO (July 16, 2024), https://zipdo.co/statistics/apple-icloud/.

and conditions specify: "[I]t is your responsibility to maintain appropriate alternate backup of your information and data."⁴¹

- 85. Cloud storage is also widely available on other platforms, with many well-known technology firms offering cloud storage products that are available on Apple's mobile devices. Consumers have no reason to know, and generally do not know, that these otherwise ubiquitous and highly functioning cloud storage solutions are incapable of hosting certain files—i.e., Restricted Files—on Apple's mobile devices. Consumers generally learn of this limitation only *after* they have purchased their mobile device and attempt to use alternative cloud storage platforms to backup Restricted Files, or the entirety of their files. But by this point, the user has already transacted in the foremarket. Accordingly, any competition occurring in the device foremarkets does not serve to meaningfully constrain Apple's restraints on cloud storage in the aftermarket.
- 86. **Significant Information Costs Prevent Accurate Lifecycle Pricing**. For similar reasons, consumers cannot (and do not) accurately estimate the lifecycle price of Apple's challenged restraints when transacting in the foremarket for Apple's mobile devices. The restraints are, as just noted, generally unknown to users and thus no life-cycle pricing can occur.
- 87. Even if consumers knew at the time they purchased their iPhone or iPad that iCloud is the only available cloud platform for Restricted Files—which generally they do not—they could not accurately measure the lifecycle cost of this restraint. Consumers' cloud storage needs change over time, including as to Restricted Files, often for reasons users cannot anticipate and for reasons users do not control. For example, anytime a developer updates an app, the storage required for that app can change. These type of app updates can be pushed to the users of Apple mobile devices without any action of the user. Similarly, a consumer that happens to receive text messages with large attached files (e.g., videos) will see a marked increase in his or her storage needs. File sizes are also increasing dramatically over time as the fidelity of mobile photos and videos, and size of other user content, increases.

^{41 &}quot;Welcome to iCloud," APPLE, at Section II.O, https://www.apple.com/legal/internet-services/icloud/.

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hosting, device holders would both need to be aware of the restraint (which they generally are not) and be capable of predicting the amount and types of data they will store on their phone into the openended future. Given the variability and unpredictability of data needs over time, this is not possible.

89. Lifecycle pricing is made even more difficulty because consumers are typically locked

Accordingly, to accurately life-cycle price Apple's restriction on Restricted File

- 89. Lifecycle pricing is made even more difficulty because consumers are typically locked into Apple's mobile-device ecosystem beyond the life of any particular device—that is, once a consumer purchases an iPhone, he or she is overwhelmingly likely to purchase an iPhone when replacing that device. This is known as "path dependency." Because of path dependency, the lifecycle costs of Apple's restraints extend far beyond the lifecycle of any particular Apple mobile device, and encompass the entire period users remain with in Apple's device ecosystem. This makes the costs even more difficult to predict with any accuracy.
- 90. **High Switching Costs and General Market Definition Principles**. For reasons already addressed, the final two elements of a cognizable "aftermarket" are also present. *First*, high costs deter users from switching away from Apple's devices in the foremarket (*supra* ¶¶ 69-72). *Second*, conventional market definition principles support treating Cloud Storage on Apple Mobile Devices as a relevant antitrust market (*supra* ¶¶ 65-82). In sum, the market for Cloud Storage on Apple Mobile Devices exhibits all characteristics of an aftermarket.

(2) Barriers to Entry are Substantial.

- 91. Apple's dominant share in the market for Cloud Storage on Apple Mobile Devices is reinforced through high barriers to entry. Developing a cloud storage platform requires a substantial outlay of capital to procure sufficient server capacity. Cloud storage platforms must also invest substantially in data security protections. These upstart costs erect significant barriers to entry.
- 92. More critically, even a firm with the resources needed to develop a cloud platform for Apple's mobile devices cannot compete profitably in the market for Cloud Storage on Apple Mobile Devices. And this is because Apple's challenged restraints prevent would-be competitors from offering

⁴² The Netherlands Authority for Consumers & Markets, Market Study Into Mobile App Stores (2019), at 55.

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cloud storage solutions for the full range of files Apple's device holders wish to store. Would be competitors can only host a limited set of file types, offering consumers a product that is—due to this limitation—inherently disadvantaged to iCloud. This prevents would be entrants from placing any meaningful competitive constraints on Apple.

(3) The Relevant Geographic Market is the United States.

- 93. There is a relevant U.S. market for Cloud Storage on Apple Mobile Devices.
- 2. Apple Has Secured and Maintained its Monopoly through Anticompetitive Restraints.
- Apple dominates the market for Cloud Storage on Apple Mobile Devices not because 94. it built a superior cloud storage platform. Far from it, industry analysts describe iCloud as a "fairly sparse offering, with lots of common cloud storage features missing completely",43 and a "rather insecure and expensive" platform. 44 Other analysts have noted iCloud's persistent "problems with its most basic functionality."45
- 95. What drives iCloud's success is that Apple has designed its ecosystem to prevent rival cloud storage platforms from mounting a meaningful competitive threat. Apple has done this by preventing other platforms from accessing and hosting Restricted Files, which are the very files users need to restore their device in the event it is lost or replaced.
- Through this restraint, which serves no technological or security purpose, Apple has 96. made iCloud the only cloud-storage platform capable of servicing all of its device holders' cloudstorage needs. Apple device holders can either use iCloud for cloud-based storage or undertake the added expense and burden of splitting out their files and managing multiple cloud storage accounts iCloud for Restricted Files and a competitor service for Accessible Files. Faced with this Hobson's

⁴³ Alexander Hougen, "iCloud Drive Review," CLOUDWARDS (Jan. 31, 2021), https://www.cloudwards.net/review/icloud-drive/.

⁴⁴ "Best Cloud Storage for iPhone 2024: Backup Your Apps and Photos," CLOUDWARDS (Jan. 27, 2024), https://www.cloudwards.net/best-cloud-storage-for-iphone/.

⁴⁵ "Apple has an iCloud problem," MACWORLD (Oct. 19, 2023), https://www.macworld.com/article/2110142/icloud-free-tier-storage-drive-mail-sync.html.

choice, most consumers select a single iCloud storage plan, rather than juggle multiple cloud-storage accounts, on different platforms, with different interfaces and billing cycles.

- 97. By handicapping all would-be rivals in this fashion, Apple has severely thwarted competition across the market. In a competitive market, cloud-storage providers—Apple included—would be required to compete aggressively on the merits to gain user acceptance. There are many technology firms positioned to compete, and many would compete aggressively to serve a lucrative cloud storage market in which Apple's iCloud product reportedly generates billions in annual revenues.
- 98. Given a real choice between iCloud and competing services capable of backing up their entirety of their devices, many Apple users would select a competitor service. But Apple's challenged restraints have surgically prevented this competition from unfolding, securing a durable monopoly for Apple.

E. Apple Cannot Justify Its Restraints as Serving Any Procompetitive End.

- 99. Apple's challenged restraints on hosting Restricted Files can only be coherently explained as an attempt to impede competition. There is no technological reason mandating for Apple to bar competitor access to Restricted Files. As addressed in this Complaint (supra ¶ 27), Apple itself acknowledges that all files—Restricted and Accessible—are alike. The infrastructure needed to host them is no different. Apple's chief competitor in the device markets (according to Apple) is Samsung, and tellingly Samsung has not required that its device holders store any particular file types on Samsung's proprietary cloud platform, Samsung Cloud. Instead, Samsung has given users the choice to use Google Drive to back up the entirety of their devices. Other manufacturers of Android devices likewise permit third-party cloud services to back up all user files, including settings needed to restore devices.
- 100. Similarly, while the process is far more cumbersome (*supra* ¶¶ 73-76), even Apple mobile device holders can backup many types of Restricted Files on hard drives, including a PC. While this form of storage is distinguishable, and not reasonably substitutable for cloud-based storage (and thus not in the same relevant market), it further demonstrates that rival storage platforms could, absent Apple's restrictions, host and back up Restricted Files.

101. Apple also cannot credibly assert that foreclosing competitor access to Restricted Files is necessary for security reasons. The reality is that Apple already allows third-party cloud storage providers to access some of the most sensitive data on users' devices—including photos and videos. If Apple believed that preventing third-party cloud providers from accessing user data was necessary to protect user security, Apple would not permit such access for some of the most sensitive data users amass.

102. In addition, Apple outsources the infrastructure for its own iCloud service to other cloud platforms. It now uses Google's infrastructure, and previously it used Amazon's and Microsoft's. In other words, Apple already allows rival cloud providers to access Restricted Files, but only to support iCloud and not to offer a competing cloud product. This further undermines any security-based justification Apple might assert.

V. INTERSTATE TRADE AND COMMERCE

103. Apple's conduct, as alleged in this Complaint, were within the flow of, and substantially affected, interstate commerce. Apple markets and provides iCloud services across, and without regard to, state lines.

VI. CLASS ALLEGATIONS

- 104. Plaintiff brings this proposed class action for damages and injunctive relief pursuant to Fed. R. Civ. P. 23(b)(1), (2), and (3).
 - 105. Plaintiff brings this action on their own behalf and on behalf of the following class:

Nationwide Class: All persons and entities who, as residents of the United States, and during the period of March 1, 2020 to the date of class notice, purchased any iCloud plan to store any iPhone or iPad data.

California Subclass: All persons and entities who, as residents of California, and during the period of March 1, 2020 to the date of class notice, purchased any iCloud plan to store any iPhone or iPad data.

106. Excluded from the proposed class is Defendant; Defendant's affiliates and subsidiaries; Defendant's current or former employees, officers, directors, agents, and representatives; the district judge or magistrate judge to whom this case is assigned, as well as those judges' immediate family

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- 109. **Typicality**: Plaintiff's claims are typical of the claims of the members of the proposed class. The factual and legal bases of Apple's liability are the same and resulted in injury to Plaintiff and all of the other members of the proposed class.
- 110. Adequate representation: Plaintiff will represent and protect the interests of the proposed class both fairly and adequately. Plaintiff has retained counsel competent and experienced in complex class-action litigation. Plaintiff has no interests that are antagonistic to those of the proposed class, and its interests do not conflict with the interests of the proposed class members it seeks to represent. Class counsel have been investigating the claims asserted in this complaint since November 2023, have invested substantial resources developing these claims, have developed a proprietary case in that this case is not based on some public announcement of an antitrust violation, and are qualified and best positioned to lead the representation of the proposed class.
- 111. **Prevention of inconsistent or varying adjudications**: If prosecution of myriad individual actions for the conduct complained of were undertaken, there may be inconsistent or varying results. This would have the effect of establishing incompatible standards of conduct for the Defendant. Certification of Plaintiff's proposed class would prevent these undesirable outcomes.
- 112. **Injunctive and declaratory relief**: By way of its conduct described in this complaint, Apple has acted on grounds that apply generally to the proposed class. Accordingly, final injunctive relief or corresponding declaratory relief is appropriate respecting the class as a whole.
- 113. **Predominance and superiority**: This proposed class action is appropriate for certification. Class proceedings on these facts and this law are superior to all other available methods for the fair and efficient adjudication of this controversy, given that joinder of all members is impracticable. Even if members of the proposed class could sustain individual litigation, that course would not be preferable to a class action because individual litigation would increase the delay and expense to the parties due to the complex factual and legal controversies present in this matter. Here, the class action device will present far fewer management difficulties, and it will provide the benefit of a single adjudication, economies of scale, and comprehensive supervision by this Court. Further, uniformity of decisions will be ensured.

VII. STANDING AND ANTITRUST INJURY

- 114. Plaintiff and members of the proposed class purchased iCloud storage plans directly from Apple. Because of the anticompetitive conduct alleged in this Complaint, Plaintiff and class members were forced to pay more for those plans than they would have absent Apple's alleged tying and monopolization conduct. Apple therefore has caused Plaintiff and class members to suffer overcharge damages.
- 115. Charging supracompetitive prices to consumers like Plaintiff and class members was the purpose and direct effect of Apple's alleged tying and monopolization conduct.
- 116. Because Apple continues to engage in the anticompetitive practices alleged in this Complaint, Plaintiff and class members are reasonably likely to incur future overcharges when they purchase or renew iCloud storage plans. Plaintiff and class members have standing as direct purchasers of products sold by Apple at inflated prices. Both the actual harm and the threat of future harm are cognizable antitrust injuries directly caused by Defendant's violations of federal antitrust laws. The full amount of such overcharge damages will be calculated after discovery and upon proof at trial.

VIII. CLAIMS FOR RELIEF

FIRST CAUSE OF ACTION: VIOLATION OF THE SHERMAN ACT – TYING (15 U.S.C. §§ 1, 3)

- 117. Plaintiff repeats and re-alleges every allegation above as if set forth herein in full.
- 118. Apple has unlawfully tied iCloud to its mobile devices, namely the iPhone and iPad.
- 119. As demonstrated herein, iCloud is a product in the market for Cloud Storage on Apple Mobile Devices. This market is distinct from the relevant markets for Apple's mobile devices. Apple's unlawful tying arrangement thus ties two separate products that are in separate markets.
- 120. Apple exercises market power in the mobile device markets for smartphones and tablets.
- 121. Apple coerces iOS consumers to use and purchase iCloud by foreclosing would-be rivals from accessing and hosting Restricted Files on a cloud platform. By virtue of Apple's tying

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conduct, consumers' only cloud storage option for hosting Restricted Files, or for hosting all files, is iCloud.

- 122. Apple's conduct forecloses competition in the market for Cloud Storage on Apple Mobile Devices. Given the volume of transactions and the money at issue, Apple's conduct affects a substantial volume of commerce in that market.
 - 123. Apple has thus engaged in a *per se* illegal tying arrangement.
- 124. In the alternative only, even if Apple's tying conduct does not constitute a *per se* violation of the law, a rule-of-reason analysis of Apple's tying arrangement also would demonstrate that it violates the law.
- 125. There is no valid business necessity or pro-competitive justification for Apple's tying conduct.
- 126. Plaintiff and the class have been injured, and will continue to be injured, in their businesses and property as a result of Apple's conduct, including by way of overpaying for Cloud Storage on Apple Mobile Devices.
- 127. Plaintiff and members of the putative class have suffered and continue to suffer damages and irreparable injury, including ongoing harm to their businesses, and such damages and injury will not abate until the Court issues an injunction ending Apple's anticompetitive conduct issues.

SECOND CAUSE OF ACTION: VIOLATION OF THE SHERMAN ACT – MONOPOLIZATION OF MARKET FOR CLOUD STORAGE ON APPLE MOBILE DEVICES (15 U.S.C. § 2)

- 128. Plaintiff repeats and re-alleges every allegation above as if set forth herein in full.
- 129. Apple possesses monopoly power in the market for Cloud Storage on Apple Mobile Devices.
- 130. For the reasons stated herein, Apple has erected substantial barriers to entry and expansion in the market for Cloud Storage on Apple Mobile Devices.
- 131. Apple has the power to exclude competition in the market for Cloud Storage on Apple Mobile Devices, and it has willfully used that power, including by way of its unlawful practices in

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restraint of trade as described herein, in order to achieve, maintain, and expand its monopoly power in that market.

- 132. Furthermore, in order to willfully obtain, maintain, and enhance its monopoly power in the market for Cloud Storage on Apple Mobile Devices, Apple has tied iCloud to its mobile devices, specifically the iPhone and iPad. Consumers of these devices are given no option and are coerced to use iCloud for cloud storage.
- 133. Apple's conduct as described herein, including its unlawful practices in restraint of trade, is exclusionary vis-à-vis potential rivals in the market for Cloud Storage on Apple Mobile Devices.
- 134. Apple has behaved as alleged herein to achieve, maintain, and grow its monopoly in the market for Cloud Storage on Apple Mobile Devices, with the effect being that competition is foreclosed and that consumer choice is diminished. So is innovation. Additionally, Apple has abused its market power by imposing supracompetitive prices on consumers for Cloud Storage on Apple Mobile Devices. Further, Apple's actions have depressed output as alleged herein.
- 135. There is no valid business necessity or pro-competitive justification for Apple's conduct. Instead, Apple's actions are designed to destroy competition as alleged herein.
- 136. Plaintiff and the class have been injured, and will continue to be injured, in their businesses and property as a result of Apple's conduct, including by way of paying supracompetitive prices.
- 137. Moreover, Plaintiff and the class are entitled to an injunction to prevent Apple from persisting in its unlawful behavior to their detriment, including the harm that its behavior is causing to their businesses.

THIRD CAUSE OF ACTION: VIOLATION OF THE SHERMAN ACT – ATTEMPTED MONOPOLIZATION OF MARKET FOR CLOUD STORAGE ON APPLE MOBILE DEVICES (15 U.S.C. § 2)

- 138. Plaintiff repeats and re-alleges every allegation above as if set forth herein in full.
- 139. Apple has attempted to monopolize the market for Cloud Storage on Apple Mobile Devices.

- 140. Apple's anticompetitive conduct has given Apple a monopoly or, at least, a dangerous probability that it will achieve monopoly power in the relevant market described above.
- 141. Apple has a specific intent to achieve monopoly power in the relevant market described above.
- 142. Apple has the power to exclude competition in the market for Cloud Storage on Apple Mobile Devices, and it has willfully used that power, including by way of its unlawful practices in restraint of trade as described herein, in an attempt to achieve, maintain, and expand its monopoly power in that market.
- 143. Apple's conduct as described herein, including its unlawful practices in restraint of trade, is exclusionary vis-à-vis all potential rivals in market for Cloud Storage on Apple Mobile Devices.
- 144. Apple has behaved as alleged herein in a willful attempt to obtain a monopoly in the market for Cloud Storage on Apple Mobile Devices, with the effect being that competition is foreclosed and that consumer choice is gravely diminished. So is innovation. Additionally, Apple has abused its market power by imposing supracompetitive prices on consumers for Cloud Storage on Apple Mobile Devices. Further, Apple's actions have depressed output as alleged herein.
- 145. There is no valid business necessity or pro-competitive justification for Apple's conduct.
- 146. Plaintiff and the class have been injured, and will continue to be injured, in their businesses and property as a result of Apple's conduct, including by way of paying supracompetitive prices.
- 147. Moreover, Plaintiff and the class are entitled to an injunction to prevent Apple from persisting in its unlawful behavior to their detriment, including the harm that its behavior is causing to their businesses.

FOURTH CAUSE OF ACTION: VIOLATION OF CALIFORNIA'S UNFAIR COMPETITION LAW, CAL. BUS. & PROF. CODE § 17200, ET SEQ. (LIMITED TO CALIFORNIA SUBCLASS)

148. Plaintiff repeats and re-makes every allegation above as if set forth herein in full.

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will cease such activity in the future.

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Apple has engaged in acts and practices that are unlawful, unfair, and fraudulent.

150. Apple's restraints on cloud storage, as alleged herein, violate the Sherman Act and thus are "unlawful" for purposes of the UCL.

151. Apple's restraints also violate the "unfair" prong of the UCL because they constitute at

any "unlawful, unfair, or fraudulent" business act or practice. Cal. Bus. & Prof. Code §§ 17200 et seq.

California's Unfair Competition Law (UCL) defines "unfair competition" to include

threaten to harm competition, and are substantially injurious to consumers.

152. The illegal conduct alleged herein is continuing and there is no indication that Apple

least an incipient violation of the antitrust laws, violate the policy and spirit of the antitrust laws,

- 153. Apple's conduct in violation of the UCL has caused Plaintiff and members of the California Subclass to pay supra-competitive and artificially inflated prices for cloud storage. Plaintiff and the members of the California Subclass suffered injury in fact and lost money or property as a result of such unfair competition.
- 154. As alleged herein, Apple has been unjustly enriched in violation of the UCL. Plaintiff and the members of the California Subclass are accordingly entitled to equitable relief including restitution and/or disgorgement of all revenues, earnings, profits, compensation, and benefits that may have been obtained as a result of such business practices, pursuant to California Business and Professions Code sections 17203 and 17204.

PRAYER FOR RELIEF

WHEREFORE, Plaintiff respectfully requests the following relief:

- A. That the Court certify this case as a class action and that it appoint Plaintiff as class representative and her counsel as class counsel;
- B. That the Court award Plaintiff and the proposed class all appropriate relief, to include, but not be limited to, injunctive relief requiring that Apple cease the abusive, unlawful, and anticompetitive practices described herein; declaratory relief, adjudging such practices unlawful; as well as monetary relief, whether by way of restitution or damages, including treble damages, or other

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1	multiple or punitive damages, or restitution, where mandated by law or equity or as otherwise		
2	available; together with recovery of the costs of suit, to include reasonable attorneys' fees, costs, and		
3	expenses, together with pre- and post-judgment interest to the maximum levels permitted by law or		
4	equity.		
5	C. Th	nat the Court grant	such additional orders or judgments as may be necessary to prevent
6	the unlawful practices complained of herein; and		of herein; and
7	D. That the Court award Plaintiff and the proposed class such other, favorable relief as		
8	may be available	and appropriate un	nder federal or state law, or at equity.
9			JURY TRIAL DEMANDED
10	Plaintiff demands a trial by jury on all claims so triable.		
11			
12	DATED: March	1, 2024	Respectfully submitted,
13			By /s/ Ben M. Harrington Ben M. Harrington (SBN 313877)
14			Benjamin J. Siegel (SBN 256260)
15			Gayne A. Kalustian-Carrier (SBN 336814) HAGENS BERMAN SOBOL SHAPIRO LLP
16			715 Hearst Avenue, Suite 202 Berkeley, CA 94710
17			Telephone: (510) 725-3000 Facsimile: (510) 725-3001
18			benh@hbsslaw.com bens@hbsslaw.com
19			gaynek@hbsslaw.com
20			Steve. W. Berman (pro hac vice forthcoming) Robert F. Lopez (pro hac vice forthcoming)
21			Catherine Y. N. Gannon (pro hac vice forthcoming) HAGENS BERMAN SOBOL SHAPIRO LLP
22			1301 Second Avenue Suite 2000 Seattle, WA 98101
23			Telephone: (206) 623-7292 Facsimile: (206) 623-0594
24			steve@hbsslaw.com robl@hbsslaw.com
25			catherineg@hbsslaw.com
26			Attorneys for Plaintiffs
27			
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