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21	PROTON AG,		Case No. 4:25	-cv-05450			
22	Plaintiff,		CLASS ACT	ION COMPLAINT			
23	vs.		JURY TRIAL	DEMANDED			
24	APPLE INC.,						
25	Defendant.						
26							
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				Case No. 4:25-cv-05450			
				CLASS ACTION COMPLAINT			

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	-ii- Case No. 4:25-cv-05450 CLASS ACTION COMPLAINT

## 1 OVERVIEW OF ACTION

This case challenges Apple Inc.'s ("Apple") monopolization of the markets for iOS
 app distribution and iOS app payment processing. Apple has eliminated competition and extracted
 supracompetitive profits from app developers through a web of exclusionary conduct.

2. Apple is one of the world's most valuable companies. It controls the iOS operating
system powering hundreds of millions of iPhones, iPads, and other devices in the United States and
worldwide. Rather than compete on the merits, Apple has leveraged its smartphone market power
to create and maintain illegal monopolies in two critical aftermarkets: (1) the distribution of iOS
applications, and (2) the processing of payments for iOS applications and in-app purchases.

In the iOS app distribution market, Apple maintains a complete monopoly through
 its App Store, which it has designed as the sole gateway for iOS users to obtain applications. Apple
 has systematically excluded competing app stores through a combination of technological
 restrictions and contractual prohibitions. When alternative iOS app distribution platforms have
 emerged, Apple has used its control over iOS to render them inoperable, ensuring that developers
 like Proton have no choice but to distribute their iOS apps exclusively through Apple's App Store.

4. In the iOS app payment processing market, Apple similarly maintains a monopoly
through its In-App Purchase ("IAP") system. From the launch of the iPhone until recently, Apple
mandated the use of Apple's proprietary payment system by fiat. Due to some recent changes,
Apple now theoretically allows some steering to alternative payment methods. However, Apple
requires developers to offer its payment processing services for transactions within their apps, and
makes steering difficult and cumbersome. Moreover, Apple still charges a commission for these
steered transactions, making Apple's theoretical alternative worthless as a practical matter.

5. Apple's anticompetitive conduct extends beyond mere exclusion of competitors.
The company has actively suppressed innovation that threatens its monopoly power, including
"super apps" that could reduce user dependence on iOS, and cloud gaming services that could
eliminate the need for expensive Apple hardware.

27 6. The anticompetitive harm caused by Apple's conduct is substantial and ongoing.
28 Developers are forced to pay Apple's supracompetitive commission rates, which they must either

absorb as reduced profits or pass on to consumers as higher prices. Innovation is stifled as Apple
 excludes competitors who could offer better services, lower prices, or novel distribution models.
 Consumers are deprived of choice and forced to use Apple's inferior services at inflated prices.

7. Regulators worldwide have recognized Apple's anticompetitive conduct. The U.S.
Department of Justice and fifteen state attorneys general have sued Apple for antitrust violations,
comparing the company to "oil barons and railroad tycoons." The European Commission has fined
Apple €1.8 billion for abusing its dominant position. Competition authorities in South Korea, the
United Kingdom, Germany, France, and India have all taken enforcement actions against Apple's
anticompetitive practices.

8. Despite this regulatory scrutiny, Apple remains an illegal monopolist and continues
to extract supracompetitive profits from developers. Recent cosmetic changes to Apple's policies—
such as reducing commission rates for small developers generating less than \$1 million annually—
affect only a small percent of App Store revenues and fail to address the fundamental
anticompetitive structure of Apple's business model.

9. This lawsuit seeks to restore competition to the iOS app distribution and payment
processing markets through injunctive relief that would allow competing app stores and payment
processors to serve iOS users. This action also seeks monetary damages for developers for the harm
suffered from Apple's illegal monopolization, including the excessive commissions it has been
forced to pay and the lost opportunities for innovation and growth.

10. The relief sought in this case would benefit not only app developers, but also the
millions of iOS users who have been denied the benefits of competition—including lower prices,
better services, and greater innovation—due to Apple's anticompetitive conduct.

## 23 THE PARTIES

A.

24

## PLAINTIFF—PROTON

11. Proton AG ("Proton") is a globally recognized technology company based in
Geneva, Switzerland, known for building widely used, privacy-focused alternatives to core digital
services. Founded in 2014 by scientists who met at CERN—the birthplace of the World Wide
Web—Proton has grown into one of the world's leading independent software providers. Proton

offers a suite of secure and transparent digital tools that compete directly with Apple's ecosystem, 1 2 including Proton Mail (Apple Mail), Proton Calendar (Apple Calendar), Proton Drive (iCloud), and 3 Proton Pass (Keychain). These applications offer users meaningful control over their data, often 4 surpassing Apple's offerings in both privacy protections and transparency. Proton also provides 5 Proton VPN and Proton Wallet. While Apple does not offer a system-wide VPN and Apple Pay is not comparable to Proton's self-custodial bitcoin wallet, these services further position Proton as a 6 7 serious and mission-driven competitor to Apple's platform dominance. Proton AG is overseen by 8 the Proton Foundation, a Swiss non-profit which helps ensure that Proton serves the public interest.

9 12. With more than 100 million user accounts across 180+ countries and a workforce
10 exceeding 500 employees, Proton has emerged as a global leader in privacy-focused technology.
11 Proton's user base spans a wide demographic, from everyday individuals seeking data protection to
12 journalists and human rights defenders operating in high-risk environments. The United Nations
13 has recommended Proton Mail as a secure tool for documenting human rights abuses, reflecting its
14 reputation for providing exceptionally strong privacy guarantees.

15 13. In geopolitical contexts where digital repression is acute, Proton has repeatedly
16 demonstrated technological leadership and ethical responsibility. For example, in Myanmar, when
17 users were being arrested for merely having VPN apps installed on their phones, Proton developed
18 and launched a "discreet icon" feature that allowed its VPN to appear as an innocuous weather or
19 notes app, thereby helping users evade authoritarian surveillance. This kind of innovation
20 exemplifies Proton's commitment to user autonomy and security.

14. In addition to developing secure communications tools, Proton is also a public
advocate for internet freedom. The company has donated over \$4 million to organizations that
promote digital rights and resist censorship. Its transparency practices, including maintaining fully
open-source code and publishing independent privacy guides, have made it a standard-bearer in the
encrypted communications space.

26 15. Proton has been at the forefront of encryption standardization efforts, which are not
27 only technically significant but also competitively relevant, as Apple increasingly markets itself on
28 the strength of its own security infrastructure. Proton's advancements pose a credible and

meaningful challenge to Apple's self-characterization as the most secure and private technology
 provider.

16. All of Proton's consumer-facing applications—including Proton Mail, Proton
Calendar, Proton Drive, Proton Pass, Proton Wallet, and Proton VPN—are distributed to iOS users
exclusively through Apple's App Store. As a result, Proton is subject to Apple's unilateral control
over app distribution, updates, user access, and payment processing on iOS devices. Apple's
exclusive distribution channel compels developers like Proton to accept Apple's restrictive terms
and conditions as a condition of market entry, with no viable alternative means of reaching iOS
users.

10 17. Apple's exclusionary App Store policies and anti-competitive restrictions have
11 directly harmed Proton and impeded its ability to compete on the merits. As a privacy-focused
12 alternative to Apple's ecosystem of apps, Proton is subject to arbitrary delays, opaque guidelines,
13 and exploitative fees that disadvantage its products in the marketplace. The net result is that Apple's
14 dominance suppresses competition, obstructs innovation, and deprives consumers of meaningful
15 choices in privacy-respecting technologies.

16 18. Proton has never self-identified as U.S.-based when registering for Apple's
17 Developer Program.

18 19. Throughout the Class Period, Proton paid Apple supracompetitive commissions—up
19 to thirty percent (30%)—on all purchases and payments related to Proton's iOS apps, and was
20 damaged thereby.

21

## B. DEFENDANT—APPLE

22 20. Defendant Apple is a California corporation with its principal place of business in
23 Cupertino, California. Apple is one of the world's largest and most valuable companies, with a
24 market capitalization of approximately \$3.0 trillion. Apple sells hardware, in the form of iPhones,
25 iPads, Apple Watches, and Mac computers, as well as several related services. Apple controls and
26 administers iOS as well as the Apple App Store ("App Store"), which includes setting policy for the
27 App Store and contracting with app developers and consumers.

## 1 JURISDICTION AND VENUE

2 21. This Court has subject matter jurisdiction over plaintiff's federal antitrust claims
3 under the Clayton Antitrust Act, 15 U.S.C. § 26, and 28 U.S.C. §§ 1331 and 1337. The Court has
4 supplemental jurisdiction over plaintiff's state law claims pursuant to 28 U.S.C. § 1367.

5 22. This Court has personal jurisdiction over Apple because Apple's headquarters are 6 located in Cupertino, California. Apple has engaged in sufficient minimum contacts with the United 7 States and has purposefully availed itself of the benefits and protections of both United States and 8 California law such that the exercise of jurisdiction over Apple would comport with due process. 9 Apple has also entered into agreements with developers that require related disputes to be litigated 10 in this District.

11 23. Venue is proper in this District pursuant to 28 U.S.C. § 1391(b) because Apple 12 maintains its principal place of business in the State of California and in this District, and because a 13 substantial part of the events or omissions giving rise to plaintiff's claims occurred in this District. 14 In the alternative, personal jurisdiction and venue also may be deemed proper under Section 12 of 15 the Clayton Antitrust Act, 15 U.S.C. § 22, because Apple may be found in or transacts business in 16 this District. Venue is also proper in this District because Apple's Developer Program License 17 Agreement ("DPLA"), executed between Apple and app developers, contains a venue selection clause for the Northern District of California.<sup>1</sup> 18

19 **I** 

## INTRADISTRICT ASSIGNMENT

20 24. Pursuant to Civil Local Rule 3-2(c), this antitrust case shall not be assigned to a
21 particular Division of this District, but shall be assigned on a District-wide basis. Plaintiff notes
22 that the related cases of *In re Apple iPhone Antitrust Litig.*, No. 4:11-cv-06714-YGR (N.D. Cal.)
23 and *Korean Publishers Ass 'n v. Apple, Inc.*, No. 4:25-cv-04438 (N.D. Cal.) are currently pending in
24 the Oakland Division.

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<sup>1</sup> See Apple Developer Program License Agreement § 14.10,

<sup>28</sup> https://developer.apple.com/support/terms/apple-developer-program-license-agreement/.

## 1 || FACTUAL ALLEGATIONS

### A. APPLE

2

3 25. Apple was founded in 1976 to make and market personal computers. From its
4 inception, Apple favored expensive, high-end design and niche marketing relative to its competitors.
5 but struggled to compete against rivals that offered lower prices and more programs. By the late
6 1990s, it was on the brink of bankruptcy.

7 26. Apple's fortunes changed around the time it launched the iPod in 2001. Design and 8 savvy marketing had not been enough to drive a successful business strategy. This time, a 9 confluence of several factors made it a smash success. Apple's iTunes application allowed iPod 10 users to organize their song library and update their iPod. A path-clearing antitrust enforcement 11 case brought by the United States and state attorneys general against Microsoft opened that market 12 and constrained Microsoft's ability to prohibit companies like Apple from offering iTunes on 13 Windows PCs. Licensing agreements with the major music labels allowed Apple to offer iPod/iTunes users a wide selection of music for a fee per download. The iPod experience gave 14 15 Apple a recipe for the future: a high-end device, a large number of platform participants (*i.e.*, music 16 labels and consumers), and a digital storefront. More importantly, it gave Apple a playbook: drive 17 as many consumers and third-party participants to the platform as possible and offer a wide selection 18 of content, products, and services created by those third-parties. This structure put Apple in the 19 driver's seat to generate substantial revenues through device sales in the first instance and 20subsequently the ancillary fees that it derives from sitting between consumers on the one hand and 21 the products and services on the other.

22 27. Apple's experience with the iPod set the stage for Apple's most successful product 23 yet. In 2007, Apple launched the iPhone, a smartphone that offered hardware and software 24 applications, called "apps," built atop a mobile operating system. Apple initially offered only a 25 small number of apps that it created for the iPhone. But Apple quickly realized the enormous value 26 that a broader community of entrepreneurial, innovative developers could drive to its users and the 27 iPhone platform more broadly. So Apple invited and capitalized on the work of these third-parties 28 while maintaining control and monetizing that work for itself. The value of third-parties' work served an important purpose for Apple. Indeed, as early as 2010, then-CEO Steve Jobs discussed
 how to "further lock customers into our ecosystem" and "make Apple['s] ecosystem even more
 sticky." Three years later, Apple executives were still strategizing how to "get people hooked to the
 ecosystem."

5 28. That strategy paid off. Over more than 15 years, Apple has built and sustained the most dominant smartphone platform and ecosystem in the United States by attracting third-party 6 7 developers of all kinds to create apps that users could download on their smartphones through a 8 digital storefront called the App Store. As developers created more and better products, content, 9 apps, and services, more people bought iPhones, which incentivized even more third-parties to 10 develop apps for the iPhone. Today, the iPhone's ecosystem includes products, apps, content, 11 accessories, and services that are offered by content creators, newspaper publishers, banks, 12 advertisers, social media companies, airlines, productivity developers, retailers and other merchants, 13 and others. As Apple's power grew, its leverage over third-parties reinforced its tight control over how third-parties innovate and monetize on and off the smartphone in ways that were 14 15 anticompetitive and exclusionary.

29. Today, Apple charges as much as \$1,599 for an iPhone and earns high margins on 16 17 each one, more than double those of others in the industry. When developers imagine a new product 18 or service for iPhone consumers, Apple demands up to 30% of the price of an app whose content, 19 product, or service it did not create. Then when a consumer wants to buy an additional service 20within that app, Apple extracts up to another 30%, again for a service Apple does not create or 21 develop. When customers buy a coffee or pay for groceries, Apple charges a fee for every "tap-to-22 pay" transaction, imposing its own form of an interchange fee on banks and a significant new cost 23 for using credit cards. When users run an internet search, Google gives Apple a significant cut of 24 the advertising revenue that an iPhone user's searches generate.

30. Apple keenly understands that while a community of developers and accessory
makers is indispensable to the success of the iPhone, they also pose an existential threat to its
extraordinary profits by empowering consumers to "think different" and choose perfectly functional,
less-expensive alternative smartphones.

Apple's smartphone business model, at its core, is one that invites as many
 participants, including iPhone users and third-party developers, to join its platform as possible while
 using contractual terms to force these participants to pay substantial fees. At the same time, Apple
 restricts its platform participants' ability to negotiate or compete down its fees through alternative
 app stores, in-app payment processors, and more.

6 32. In order to protect that model, Apple reduces competition in the markets for 7 performance smartphones and smartphones generally. It does this by delaying, degrading, or 8 outright blocking technologies that would increase competition in the smartphone markets by 9 decreasing barriers to switching to another smartphone, among other things. The suppressed 10 technologies would provide a high-quality user experience on any smartphone, which would, in 11 turn, require smartphones to compete on their merits.

33. Apple suppresses such innovation through a web of contractual restrictions that it
selectively enforces through its control of app distribution and its "app review" process, as well as
by denying access to key points of connection between apps and the iPhone's operating system
(called Application Programming Interfaces or "APIs"). Apple can enforce these restrictions due
to its position as an intermediary between product creators such as developers on the one hand and
users on the other.

18

B.

## RELEVANT MARKETS

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## 1. Smartphone Market

34. A smartphone is a mobile phone with a connection to a cellular network and/or to
the internet, which performs many of the functions of a computer. Smartphones typically have a
touchscreen interface, internet access, and an operating system capable of running downloaded
applications.

35. Today, smartphones are widely recognized as a distinct relevant product market. As
a category, they are significantly more expensive than "dumb" mobile phones, given their numerous
added features and functionality. Consumers looking to purchase a smartphone therefore do not
view other types of mobile devices as reasonably interchangeable, because of a unique combination
of functionality and portability.

36. For example, although tablet computers (like the iPad) perform some of the same 1 2 functions as smartphones, they are typically much larger and cannot act as a replacement for 3 smartphones. On the converse, smartwatches are much smaller than smartphones and have much 4 more limited functionality. And, at least for Apple's smartwatch, the Apple Watch, a user can only 5 set it up if they also have an iPhone.<sup>2</sup> Finally, laptop computers are much larger than a smartphone and are used for more traditional computing needs, whereas smartphones today provide a number 6 7 of functions a laptop simply cannot, or for which it would be too unwieldy. It is for these reasons 8 that consumers with smartphones will almost always have one or more of these *other* types of 9 devices, but will still separately purchase and use their smartphone due to its unique combination of 10 features.

37. Smartphones' uniqueness translates into unique pricing. The price of smartphones
does not depend on the price of laptops, tablets, or non-smartphone mobile devices because
consumers do not view them as reasonably interchangeable with one another, given smartphones'
unique features. Accordingly, if a hypothetical monopolist of all smartphones were to raise prices
for such devices by a small but significant nontransitory amount (*e.g.*, 5%), it could profitably do so
because a sufficient number of smartphone users would not switch away to other types of products
as a result.

38. Smartphones are a multi-sided platform. Multi-sided platforms bring together
different groups that benefit from each other's participation on the platform. A platform is
"multi-sided" because it may offer multiple services, from multiple providers, to a variety of
consumers. Multi-sided platforms are therefore distinct from two-sided transaction platforms,
discussed in more detail below.

39. Smartphones are a multi-sided platform because they marry numerous different
service providers to a wide array for disparate consumers. For instance, smartphones offer mobile
calling functionality, which allows wireless phone carriers (*e.g.* AT&T, Verizon) to provide mobile
calling services to consumers. That same provider might also sell internet connectivity services.

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<sup>2</sup> Set Up Your Apple Watch, https://support.apple.com/en-us/HT204505 (Feb. 28, 2025).

But a smartphone may also have digital wallet functionality, such as Apple's Apple Pay.<sup>3</sup> Apple Pay
allows users to load their payment card (debit or credit cards) information into their smartphone,
and then use their smartphone to make purchases. This functionality connects consumers to their
credit card companies (*e.g.*, Visa, Mastercard), their payment card issuing bank (*e.g.*, Chase, Citi),
and merchants they frequent (*e.g.* their local grocery store).

- 40. An important feature of smartphones is their ability to run applications, or "apps."
  An app is a type of software designed to perform a specific task.<sup>4</sup> For instance, a calculator app can
  serve the same functionality as a physical calculator (*i.e.*, basic computation). Apps vary greatly in
  terms of complexity and function. App developers also vary greatly, with some developers
  generating millions in revenue annually, and others generating much less.
  - 41. Apps must run on an operating system, or "OS." An operating system is a type of
    software that manages a computer or smartphone's memory, storage, processes, and connects the
    computer or smartphone's software to its hardware. Apple's iPhone runs the iOS operating system.<sup>5</sup>
  - 42. Apps can be either third-party (*i.e.*, developed by someone other than the
    manufacturer of the smartphone on which they run), or first-party (*i.e.*, developed by the smartphone
    manufacturer). For instance, the New York Times Company develops the third-party New York
    Times: Live News app, which allows consumers to read news articles. But Apple also develops its
    own first-party Apple News app, which similarly allows consumers to read news articles.

43. The economics of a smartphone platform are such that the platform's value to users—
and in turn to the platform operator—increase when new apps and new features are added to the
platform. In order to create these economic benefits for itself and its users, Apple has opened its
smartphone platform to third-party developers, whose countless inventions and innovations have
created enormous value. Apple has willingly opened the platform to third-party developers to
capture this value even though there is no extensive regulatory framework requiring it to do so or

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26 <sup>3</sup> Apple Pay, https://www.apple.com/apple-pay/.

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 $^{4}$  Id.

<sup>&</sup>lt;sup>5</sup> As of April 2024, the latest iOS version is iOS17. *See iOS 17*, MacRumors (Sept. 23, 2024), https://www.macrumors.com/roundup/ios-17/.

overseeing how it interacts with those third-parties. In this way, smartphone platforms are very 1 2 different from other platforms, like landline telephone networks, whose value-adding features were 3 built primarily by the platform operator and which were only opened to third-parties when the 4 platform operator was required to do so by regulation. When a third-party developer for the iPhone 5 creates a valuable new feature, consumers benefit and consumer demand goes up for Apple's products, increasing the economic value of the iPhone to Apple. This has played out hundreds of 6 7 thousands of times for the iPhone, resulting in an enormously valuable smartphone platform 8 reflecting the combined contributions of millions of developers.

9 44. The interplay between apps and smartphones makes smartphones a fundamentally 10 different product than any other consumer electronic. Because they are designed for a specific 11 smartphone operating system, smartphone apps typically work only on smartphones running that 12 same system. Developing the same app for a different type of device may be outright impossible 13 (for example, complex apps developed for "dumb" phones). Additionally, the form factor of 14 smartphones—a pocket-sized computer capable of running apps—makes them unique from the 15 perspective of the consumer. And because 97% of consumers in the United States today own a smartphone,<sup>6</sup> access to those consumers also makes smartphones unique from the perspective of the 16 17 developer. Accordingly, neither consumers nor developers view smartphones as reasonably 18 interchangeable with non-smartphone devices.

45. The United States is a relevant geographic market for smartphones. There are a
variety of legal regulations and requirements that require smartphone manufacturers to provide
specific U.S. certifications and technological limitations for their smartphones devices to be made,
imported, and/or sold in this country. Furthermore, U.S. consumers typically purchase smartphones
either domestically from U.S.-based sellers or by directly importing U.S.-specific devices.

46. Users in the United States demand services offered by U.S. retailers when they
purchase a smartphone. For example, consumers who purchase a smartphone from their mobile

<sup>&</sup>lt;sup>6</sup> Alexus Bazen, *Cell Phone Statistics* 2025, ConsumerAffairs (Mar. 20, 2025), https://www.consumeraffairs.com/cell\_phones/cell-phone-statistics.html.

carrier can get assistance with activating their new device, setting it up, and transferring important
 content like apps, messages, photos, and video to their new smartphone. A smartphone purchased
 abroad for use in the United States might be incompatible with the consumer's domestic carrier,
 may not have the necessary radio technology to take advantage of the carrier's highest speed
 connections, the carrier might not be able to offer support during setup or subsequently, or the
 phone's warranty may be invalid.

7 47. Consumers must also purchase smartphones through a U.S. retailer if they want to
8 take advantage of valuable promotions offered by their mobile carrier. These same promotions and
9 free financing are unavailable to U.S. consumers who purchase their phones in other countries.

Consumers in the United States could not avoid or defeat an increase in the price of 10 48. 11 performance smartphones or smartphones by purchasing and importing smartphones from abroad. 12 This allows Apple to set prices for the same smartphone in the United States separately from those 13 in other countries. For example, Apple lowered the price of the iPhone 11 in China relative to the 14 United States because Apple faced greater competition in China. This additional competition arises 15 in part because a popular super app put competitive pressure on Apple and made it easier for users 16 to switch from an iPhone to a rival smartphone. As a result, Apple is unable to command the same 17 prices for the iPhone in China that they do in the United States due to increased competition.

18

#### 2. iOS App Distribution Market

49. Although some first party apps come pre-downloaded to a user's smartphone, the
vast majority of apps must be downloaded by the users after purchaser. Accordingly, there is a
distinct market for app *distribution*, as opposed to either smartphones or apps themselves.

50. App distribution markets are a narrow subspecies of multi-sided platforms, called a
two-sided transaction platform. The core function of a two-sided transaction platform is to facilitate
the simultaneous "purchase" of a transaction by two parties, a buyer and a seller. For instance,
payment cards are a two-sided transaction market. When a consumer uses a payment card to
purchase groceries, both the consumer and the grocer are simultaneously purchasing a transaction
from the payment card company (and its bank members) on the face of the card. The payment card
company (and its member banks) are paid a commission for facilitating the exchange. That

commission is a percentage of the total value of the transaction. Thus, the consumer purchases two 1 2 goods: their groceries and the means by which they paid for those groceries.<sup>7</sup> App distribution 3 similarly facilitates a simultaneous transaction between a buyer (smartphone user) and seller (app developer). App distributors—in this case, only Apple, as it holds 100% market share in the iOS 4 5 app distribution market—similarly take a commission for facilitating the purchase. Thus, in twosided transaction markets—including this one—both consumers and sellers are direct purchasers of 6 7 the good at issue, meaning the transaction. In practice, when an iPhone user purchases an app 8 through the App Store, they pay the cost of the app as set by the developer. Apple then remits the 9 purchase price to the developer, minus its enormous 30% commission. Some developers may 10 choose to increase the price of their apps to account for Apple's commission.

11 51. Apple's proprietary iOS app distribution service is the Apple App Store. Apple's 12 tack with the App Store—and the iPhone generally—has been somewhat different than its strategy 13 with other devices. In personal computing, historically, Apple's app distribution strategy has been 14 closed, meaning that Apple has limited third-party developer access to its devices. In the 1980s and 15 1990s, Apple took an almost entirely proprietary approach to its hardware and software. That 16 approach, however, severely limited the scope of Apple's software offerings and put it at a decided 17 competitive disadvantage against others, such as Microsoft and original equipment manufacturers 18 ("OEMs") that used the Windows operating system, who took a much more open approach to 19 software. Apple thus carved out only a very small, niche market share during that era, and in fact 20 almost went bankrupt as a result. Indeed, it was not until Apple relented and stopped trying to 21 prevent third-party developers from operating in its software application markets that its fortunes 22 turned around.

- 52. Guided by this historical lesson, Apple realized soon after introducing the iPhone
  that it needed to offer at least the appearance of broad choice of software to use on its new
  smartphone. This was particularly so because other companies—notably, Google, Microsoft, and
- 27

 <sup>&</sup>lt;sup>7</sup> Payment cards, somewhat uniquely, are often free for consumers, with the merchant-side of the market subsidizing the entire cost of the transaction.

Blackberry—were developing their own smartphones and had a much more open history regarding
third-parties' ability to create and sell applications for their respective platforms. Apple therefore
introduced the App Store in July 2008 and thereafter actively tried to encourage the appearance of
a robust market for iOS apps. Touting the choice and breadth of apps the App Store presumably
enabled, Apple has consistently used the availability of third-party applications to fuel the demand
for the iPhone and its iOS operating system. Indeed, Apple promoted the iPhone by heavily
advertising third-party applications and stating, "there's an app for that."

8 53. Apple's efforts have succeeded in driving demand for its iOS devices, including the
9 iPhone, in competition with devices running other operating systems. In the U.S. alone, consumers
10 own nearly 200 million iPhones, and tens of millions of other iOS devices, including iPads.<sup>8</sup> All of
11 those devices run only iOS applications.

12 54. But, Apple's efforts were a ruse. Apple always intended its "ecosystem" of products 13 to be closed. For instance, in 2010, a top Apple executive emailed Apple's then-CEO about an ad 14 for the new Kindle e-reader. The ad began with a woman who was using her iPhone to buy and 15 read books on the Kindle app. She then switches to an Android smartphone and continues to read 16 her books using the same Kindle app. The executive wrote to Jobs: the "message that can't be 17 missed is that it is easy to switch from iPhone to Android. Not fun to watch." Jobs was clear in his 18 response: Apple would "force" developers to use its payment system to lock in both developers and 19 users on its platform. No more would users or developers be able to easily integrate their disparate 20devices. Instead, everything had to flow through Apple.

21 55. Apple's strategy did (and does) depend on switching costs. Switching costs are the
22 cost of a user or developer switching from one smartphone and operating system to another.

56. Consumer switching costs are high in this market. These switching costs increase
over time for a variety of reasons, including, among other things, the cost of the mobile device
(typically hundreds, if not over a thousand, dollars); the user's familiarity with the operating system

 <sup>&</sup>lt;sup>8</sup> Apple iPhone Sales in the United States from 2014 to 2018, Statista (May 2018), https://www.statista.com/statistics/242269/apple-iphone-in-the-usa-sales-since-2nd-quarter-2007/.

and unwillingness to learn a different operating system; the user's familiarity with apps on that 1 operating system; the users' costs sunk into purchased applications that are not compatible with 2 3 other operating systems, which is amplified by the restrictions on the App Store and the inability of 4 App Store developers to communicate freely with their users; and the costs of hardware purchased 5 to support the mobile devices utilizing that operating system (e.g., power cords, wireless mouse/keyboards, wireless headphones, other device-specific peripherals), which would have to be 6 7 incurred anew if the user switched to a different type of device. Moreover, switching costs for 8 mobile devices—particularly for iOS devices, due to Apple's typically extreme practices—have 9 increased dramatically in recent years with the advent of cloud computing, which, *inter alia*, allows 10 users to store their files in the "cloud" (i.e., not directly on their device). As specifically relevant to 11 Apple, iOS users' photos, videos, music files, and other personal files are often stored on iCloud 12 and only accessible on other Apple devices. Although users may obtain copies of those files, Apple 13 has made doing so neither easy nor intuitive, and thus made it very difficult for users to effectuate this kind of transition. This means that iOS users become more and more locked into iOS devices, 14 15 because they wish to have continued access to their personal files-and this is a switching cost they 16 have little ability to understand or appreciate before purchasing an iOS device.

17 57. High switching costs are also present for developers. Development and support of 18 an app can be expensive and time-consuming, particularly as apps become more complex. 19 Additionally, apps developed for one operating system typically do not work on another operating 20system, at least not without modification. Accordingly, developers face a cost if they wish to 21 "multi-home" their apps, *i.e.*, develop them for multiple smartphone operating systems. And, 22 similarly, if a developer only has budget to build an app for a single operating system, it will 23 typically select the operating system with the largest population of users. In the smartphone market, 24 that is the iPhone and iOS.

58. These high switching costs, which were (and are) not readily apparent to the vast
majority of iPhone users before they purchase their devices, were nevertheless apparent to Apple
early on. This led it to realize that it could make enormous additional profits if it exerted complete

control over the various aftermarkets into which iPhone users were locked once they purchased their
 device.

2

3 59. One such aftermarket is the iOS app distribution market. Once Apple realized that 4 iOS app distribution was a significant opportunity and that smartphones made electronic app 5 distribution uniquely attractive and profitable, Apple began taking drastic steps that continue to this day via separate and new acts to, *inter alia*, ensure that it controlled every aspect of iOS app 6 distribution, preinstalling the App Store app on every model of the iPhone that has come out since 7 8 2008 (including every model within the four years preceding the original complaint in this lawsuit) 9 and insisting via contracts with both consumers and developers that they use the App Store as the 10 sole marketplace and distributor for iOS apps instead of more traditional channels, such as 11 developers' websites, general websites, competing electronic marketplaces, and even brick and 12 mortar stores. Apple exerted this control because, once it forced its way into that gatekeeper role, 13 Apple was able to completely control (and maintain control of) the aftermarket for iOS app distribution (via its power over iOS app developers who wanted to sell to iOS device users) and 14 15 accordingly increase its profits at an exponential rate.

60. 16 Today, users who want apps on their iOS devices *must* download those applications 17 from Apple's iOS App Store app. By means of technological updates to each new version of iOS 18 (including each version released in the four years preceding this lawsuit), exclusionary design 19 choices for each new version of the iPhone released since 2008 (including every new model in the 20four years preceding this lawsuit), as well as the contractual restraints discussed herein, Apple has 21 engaged in a continuous campaign to prevent iPhone users and iOS app developers from using or 22 selecting other third-party services in order to distribute iOS apps. Apple has generally made it 23 harder and harder to utilize alternative distribution methods through the present via the new overt 24 acts described herein, even though those third-party app distribution services may be obtained by 25 consumers directly from the internet rather than through the App Store.

61. Furthermore, although it has long harmed competition through these measures,
Apple recently implemented design changes in iOS that finally made it so no iOS app distributor
could actually provide an app that was even useable on iOS devices. These new technological

constraints were an increased and more aggressive version of semi-regular technological updates 1 2 Apple made as part of its broader anticompetitive scheme from 2008-2018, where it would make a 3 change to iOS every six to nine months to impede rival app stores' ability to operate on both existing 4 and new models of iPhone devices. During that 2008-2018 period, the technological changes Apple 5 made to iOS and to its new iPhone devices caused regular problems for those competitors but acted mainly to damage their ability to obtain customers for their platform, while not fully excluding them 6 7 from the market. The more aggressive acts Apple took beginning in 2018, however, made it so that 8 rival app stores could not operate nearly at all on both existing and new models of iPhones, thus 9 representing a dramatically escalated version of Apple's anticompetitive conduct, and one that 10 finally excluded rivals that had continued to compete, albeit in hampered form, for the previous 11 decade. In this way, Apple is significantly different than other companies. For example, in the 12 Android operating system, Android users can download Android applications from multiple 13 application marketplaces-including Google's Play Store, Amazon's Appstore, and Samsung's Galaxy Store. Apple takes multiple, active steps to prevent anything similar for iOS devices, 14 15 including both technologically and contractually preventing users and application developers from 16 circumventing that prohibition.

17 62. All of this is highly problematic because, as also noted above, apps must be designed 18 to run on a specific operating system. A device running iOS can only run apps designed for iOS. 19 Thus, once a user selects iOS as their operating system by purchasing an Apple device, that user can 20only run applications designed for iOS on their device. This means that, for iOS users, apps written 21 for other operating systems are not interchangeable at all with iOS apps, because they cannot be 22 used on an iOS device. Put differently, iOS apps exist in an aftermarket, much the same as Windows 23 apps exist in their own aftermarket and Android apps exist in their own aftermarket. The operating 24 system on a user's device, once they purchase that device, defines and limits the universe of apps 25 from which they can choose any alternatives (let alone reasonable alternatives).

63. App developers face the same problem. The existence of other mobile device
operating systems is meaningless to developers who program apps and in-app products for use on
iOS devices, because it does not change the markets into which those apps are sold and developers

cannot take a one-size-fits-all approach to app development. Developers may learn to code in the 1 2 Swift or Objective-C programming languages—*i.e.*, the two main programming languages for iOS 3 apps—and they and their employees, if any, may not know how to code in a different programming 4 language applicable to devices running on a different operating system. Regardless of what 5 programming languages they know, however, developers cannot simply run a program to convert iOS applications to the code used for a different operating system environment in the way that one 6 7 might convert a Word document to a PDF; instead, the apps must be written anew in the code for 8 that device or system.

9 64. Based on these differences, a move away from the iOS system would mean that a 10 developer could no longer offer its iOS apps or in-app products to tens of millions of consumers 11 (who would have no other way to buy these products for their devices), and the developer would 12 have no substitute available, because it could not sell its iOS app(s) into a different market for mobile 13 apps, such as for the Android or Windows operating systems. And, even if one engaged in the time and expense to reprogram an iOS app for Android, Windows, etc., distributing it through an app 14 15 distribution service geared toward apps written for that other operating system would have (and has) no effect on Apple's pricing for iOS app distribution services.<sup>9</sup> 16

17 65. Thus, other app distribution services for other operating systems offer no competitive
18 downward pressure on iOS app distribution pricing. Google's distribution services, which are tied
19 to offerings in its Google Play store, do not cover iOS products—only Android OS products
20 distributed via Google Play. The same is true of Amazon.com's distribution services, which are
21 tied to its app distribution service—these, too, are solely for Android OS products, and never for
22 iOS items.

- 23 66. In previously filed legal actions regarding Apple's App Store-related
  24 anticompetitive conduct, Apple has argued that consumers sometimes have multiple devices running
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<sup>9</sup> Moreover, even app developers that offer cross-platform apps (*e.g.*, Minecraft, Epic) can
 exert no pricing pressure on Apple for iOS app distribution by using marketplaces for other OS's apps. This is because, for cross-platform apps, different operating systems are *complements*, not substitutes.

different operating systems, and that this somehow means there is not a market (or aftermarket) for 1 2 iOS app distribution. Such an argument, however, is factually incorrect. As an initial matter, 3 different types of computing devices are not reasonable substitutes for one another, due to both 4 switching costs and imperfect information. (A user will not buy a laptop, for example, just because 5 they want to avoid restrictions on a phone or tablet. They purchase the laptop because of its unique form factor and the computing purposes to which the user wants to put the device.) But, even if this 6 were not the case, consumers typically purchase and use just one smartphone mobile device at a 7 8 time. The same goes for other types of computing devices, such as tablet computers or laptops. The 9 apps available to a consumer are therefore typically confined to the operating system on each device; 10 it is not as if the typical user has one smartphone for email, one smartphone for playing games, and 11 one smartphone for watching videos. But, even if that were the case, on each device a user owns 12 and uses, they can only run apps written for that device's operating system. Thus, if a consumer has 13 an iPhone and a Windows laptop, they will need apps written for iOS and Windows, respectively, 14 even if those apps perform the same essential functions (e.g., web browsing, email, etc.).

15 67. Notably, Apple admits that it shuts out all competition from app distribution to iOS device consumers, but claims it does so to protect its device customers from bad apps and malware. 16 17 But there is no reason to believe that reputable vendors could not host an app store and provide a 18 trustworthy app distribution system if Apple were to cease excluding and undermining competitors; 19 indeed, Apple's smartphone competitors (e.g., Google) explicitly permit competing app distribution 20services, which shows that Apple's actions and justifications to the contrary are pretextual. Apple 21 also permits third-party app distribution to its macOS-compatible devices, and, in limited instances, 22 even on iPhones where there are extenuating circumstances for Apple's broader business—such as 23 its 2017 decision to permit WeChat to distribute apps as "miniprograms" within the WeChat app on 24 iPhones, despite Apple's recognition that it presented the same issues as other alternative app stores, 25 because Apple could not afford to alienate WeChat due to its much broader market penetration in 26

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Asia.<sup>10</sup> Apple even allows developers that simply pay it extra for "enterprise" accounts to avoid
 many of the so-called security restrictions of the App Store.<sup>11</sup>

3

## 3. iOS App Payment Processing Market

68. Since they first began offering iOS apps, many third-party developers have not only
sold those apps for a fee up front, but also built purchase options into their apps, such as upgraded
versions of the app, special game options (*e.g.*, tokens, special outfits, extra characters),
subscriptions to an app-based service, or other features not offered as part of the initial app
download. In order to effectuate such purchases, the app developer must use a payment processing
service. That service takes the user's payment information and runs it through the appropriate credit,
debit, or other payment network to complete the sale.

In order to maximize the user experience, app developers prefer that any payments
occur in-app. This is because directing a user out of the app to complete a purchase reduces
engagement with the app and increases the chance that the user will not complete the purchase
transaction, due to the higher "friction" of the experience. Accordingly, as a practical matter,
developers must include payment options directly in their apps, or else they risk losing customers.

16 70. Just as distribution for software for a specific OS has historically been a robust and
17 separate market from the devices running that OS, so, too, has payment processing for apps written
18 on different OSs. Application developers on Windows machines, for example, had multiple
19 different options to process payments made through their software, including proprietary systems
20 or third-party options. That practice continues to this day outside of the iOS ecosystem, including
21 in Apple's macOS ecosystem.

- 22 71. Apple largely keeps a stranglehold on payment processing through its control of the
  23 iOS mobile operating system. Specifically, in most cases, Apple mandates that the only payment
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27 https://distillingfrenzy.notion.site/Part-4-Apple-s-Worst-Frenemy-

<sup>28</sup> *See Apple Developer Enterprise Program*, https://developer.apple.com/programs/enterprise/.

 <sup>&</sup>lt;sup>10</sup> See, e.g., Arnold Zafra, Apple Is Notoriously Strict with App Store Rules, But Gives China's WeChat a Free Pass, Reclaim The Net (Apr. 15, 2020), https://reclaimthenet.org/apple-app-store-wechat-china/; Part 4: Apple's Worst Frenemy, Distilling Frenzy (May 1, 2020),

<sup>&</sup>lt;sup>2</sup>/ a8ace8b4283f4b63bfb34d14aef9eb40.

processing service allowed within iOS applications is Apple's own payment processing service.
 While Apple nominally allows steering to alternative payment methods in some cases, Apple
 maintains strict control over such uses and, in many cases, charges excessive fees that render those
 alternatives largely ineffective. There is no legitimate reason for Apple to enforce strict control of
 payment processing within iOS mobile applications—Apple does so for the purpose of preserving
 its monopoly rents.

## 7

## C. APPLE POSSESSES MONOPOLY POWER IN THE RELEVANT MARKETS

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1.

# Apple Possesses and Illegally Maintains Monopoly Power in the Smartphone Market

10 72. Apple has market power in the relevant U.S. smartphone market, as demonstrated by
11 numerous different pieces of evidence.

12 73. First, since introducing the iPhone, Apple has steadily gained market share in the
13 smartphone market and for the last several years held well over 50% share of that relevant product
14 market in the U.S. (with market share today in at least the 54% range, and growing).<sup>12</sup>

- 15 74. Second, even though commentators and users regularly observe that Apple's
  16 products do not contain better hardware or software (and are often objectively worse in key respects
  17 from other manufacturers' smartphones), Apple is able to command higher prices for its iPhones
  18 divorced from the actual value of the underlying product.
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<sup>12</sup> E.g., Mobile Operating System Market Share United States of America, StatCounter,
 https://gs.statcounter.com/os-market-share/mobile/united-states-of-america/#yearly-2009-2023
 (iOS at 58% mobile market share); US Smartphone Market Share (2024), Oberlo,

 $^{25}$  || the United States from 2018 to 2024, Statista (Apr. 2025),

<sup>23</sup> https://www.oberlo.com/statistics/us-smartphone-market-share (Apple at 56% smartphone market share); US Smartphone Market Share: Quarterly, Counterpoint (May 26, 2025),

https://www.counterpointresearch.com/insights/us-smartphone-market-share/ (Apple at 53%
 smartphone shipments market share); Subscriber Share Held by Smartphone Operating Systems in

<sup>26</sup> https://www.statista.com/statistics/266572/market-share-held-by-smartphone-platforms-in-the-

united-states/ (iOS at 54% subscriber share); Tripp Mickle, *As Smartphone Industry Sputters, the iPhone Expands Its Dominance*, N.Y. Times (Sept. 11, 2023),

https://www.nytimes.com/2023/09/11/technology/apple-iphone-17.html (iPhone over 50% of smartphone sales).

75. Third, commentators and users similarly observe that many iPhone users would 1 2 readily purchase non-Apple smartphones, but often believe they have no choice in the matter, 3 because they are locked into Apple's "ecosystem." This is by design and acts both as a 4 demonstration of Apple's market power and the barriers to entry it has erected. To this point, Apple 5 leverages network effects to make it extremely difficult for an iPhone user to leave its ecosystem, once they enter it by purchasing and using an iOS device. One notable example is the so-called 6 7 "green bubble," which Apple applies to non-iPhone users in text message chains. Besides creating 8 a social stigma among iPhone users, Apple also limits the messaging functionality between an 9 iPhone and non-iPhone user, such that special features one can use in iPhone-to-iPhone 10 conversations are unavailable with non-iPhone users relegated to the "green bubble." Furthermore, 11 a single non-iPhone user in a group chat will render the entire experience extremely unwieldy and 12 objectively worse, which many commentators note is by design, in order to prompt iPhone users to 13 encourage their non-iPhone-owning friends and family to buy one.<sup>13</sup>

14 76. But this is not the only example of how Apple leverages network effects to build and 15 maintain its market power. As part of its "ecosystem," and as discussed further below, Apple makes it very easy to place one's digital life on Apple servers, but then extremely difficult to remove it, 16 17 once there. For example, one's photos and videos, their music collection, and message histories 18 with loved ones and friends are tied to Apple's servers—making it extraordinarily difficult (if not 19 impossible) for iOS device users to take those cherished and important digital items with them, if 20they want to consider non-iPhone smartphones. Apple also closely integrates its own products while 21 making it difficult for many other device manufacturers' products to interact with iOS devices. And 22 it specifically designs several of its non-smartphone devices in a way that they work worse (or not 23 at all) with non-Apple smartphones. The net effect of this long-term strategy is to make it so a single 24 iPhone purchase enmeshes one so deeply into Apple's world that the user finds it difficult to break 25 away. And, as Apple's smartphone market share has only grown throughout the years, the objective

<sup>&</sup>lt;sup>13</sup> See, e.g., Tim Higgins, *Tim Cook Advises Man Concerned About Green Text Bubbles: 'Buy Your Mom an iPhone'*, Wall St. J. (Sept. 8, 2022), https://www.wsj.com/articles/tim-cook-advises-man-concerned-about-green-text-bubbles-buy-your-mom-an-iphone-11662614342.

evidence shows the network effects strategy has worked and today firmly maintains Apple's market
 power (and, as discussed further below, its aftermarket power over iOS app distribution and iOS
 app payment processing).

Apple amplifies these anticompetitive lock-in effects by strictly controlling how
third-party application developers, such as Proton, can interact with Apple's products and services
through Apple Application Programming Interfaces ("APIs"). Apple readily makes sure its own
products (e.g. the iPhone) have full, unfettered access to other Apple services, like iCloud Photos.
But when it comes to third-party developers like Proton, Apple imposes strict and arbitrary limits
about which functionality those developers can access and on what terms. This conduct further
increases switching costs for consumers, and further cements Apple's market power.

11 78. Similarly, Apple is one of the most notoriously secretive companies in the world and
12 makes it extremely difficult for iPhone users to know what exactly Apple does behind the scenes
13 with its software, hardware, and apps. These information restrictions are discussed in further detail
14 below, but erect barriers around Apple's market share and pricing power in a way akin to the
15 network effects discussed above.

79. Apple has also illegally reinforced its monopoly power in the smartphone market via
its battle against "super apps." A super app is an app that can serve as a platform for smaller "mini"
programs developed using programming languages such as HTML5 and JavaScript. By using
programming languages standard in most web pages, mini programs are cross platform, meaning
they work the same on any web browser and on any device. Developers can therefore write a single
mini program that works whether users have an iPhone or another smartphone.

80. For years, Apple denied its users access to super apps because it viewed them as
"fundamentally disruptive" to "existing app distribution and development paradigms" and
ultimately Apple's monopoly power. Apple feared super apps because it recognized that as they
become popular, "demand for iPhone is reduced."<sup>14</sup> So, Apple used its control over app distribution

<sup>28 &</sup>lt;sup>14</sup> Am. Compl. ¶ 60, *United States v. Apple Inc.*, No. 2:24-cv-04055, ECF No. 51 (D.N.J. 2024).

and app creation to effectively prohibit developers from offering super apps instead of competing
 on the merits.

81. Super apps can provide significant benefits to users. For example, a super app that
incorporates a multitude of mini programs might allow users to easily discover and access a wide
variety of content and services without setting up and logging into multiple apps, not unlike how
Netflix and Hulu allow users to find and watch thousands of movies and television shows in a single
app. As one Apple executive put it, "who doesn't want faster, easier to discover apps that do
everything a full app does?" Restricting super apps makes users worse off and sacrifices the
short-term profitability of iPhones for Apple.

82. Super apps also reduce user dependence on the iPhone, including the iOS operating
system and Apple's App Store. This is because a super app is a kind of middleware that can host
apps, services, and experiences without requiring developers to use the iPhone's APIs or code.

As users interact with a super app, they rely less on the smartphone's proprietary
software and more on the app itself. Eventually, users become more willing to choose a different
smartphone because they can access the same interface, apps, and content they desire on any
smartphone where the super app is also present. Moreover, developers can write mini programs that
run on the super app without having to write separate apps for iPhones and other smartphones. This
lowers barriers to entry for smartphone rivals, decreases Apple's control over third-party developers,
and reduces switching costs.

84. Apple recognizes that super apps with mini programs would threaten its monopoly.
As one Apple manager put it, allowing super apps to become "the main gateway where people play
games, book a car, make payments, etc." would "let the barbarians in at the gate." Why? Because
when a super app offers popular mini programs, "iOS stickiness goes down."

85. Apple's fear of super apps is based on first-hand experience with enormously popular
super apps in Asia. Apple does not want U.S. companies and U.S. users to benefit from similar
innovations. For example, in a Board of Directors presentation, Apple highlighted the
"[u]ndifferentiated user experience on [a] super platform" as a "major headwind" to growing iPhone
sales in countries with popular super apps due to the "[1]ow stickiness" and "[1]ow switching cost."

For the same reasons, a super app created by a U.S. company would pose a similar threat to Apple's
 smartphone dominance in the United States. Apple noted as a risk in 2017 that a potential super app
 created by a specific U.S. company would "replace[] usage of native OS and apps resulting in
 commoditization of smartphone hardware."<sup>15</sup>

5 86. Apple did not respond to the risk that super apps might disrupt its monopoly by 6 innovating. Instead, Apple exerted its control over app distribution to stifle others' innovation. 7 Apple created, strategically broadened, and aggressively enforced its App Store Guidelines to 8 effectively block apps from hosting mini programs. Apple's conduct disincentivized investments 9 in mini program development and caused U.S. companies to abandon or limit support for the 10 technology in the United States.

11 87. In particular, part of what makes super apps valuable to consumers is that finding
12 and using mini programs is easier than using an app store and navigating many separate apps,
13 passwords, and set-up processes. Instead of making mini program discovery easy for users,
14 however, Apple made it nearly impossible.

15 88. Since at least 2017, Apple has arbitrarily imposed exclusionary requirements that 16 unnecessarily and unjustifiably restrict mini programs and super apps. For example, Apple required 17 apps in the United States to display mini programs using a flat, text-only list of mini programs. 18 Apple banned displaying mini programs with icons or tiles, such as descriptive pictures of the 19 content or service offered by the mini program. Apple also banned apps from categorizing mini 20programs, such as by displaying recently played games or more games by the same developer. These 21 restrictions throttle the popularity of mini programs and ultimately make the iPhone worse because 22 it discourages developers from creating apps and other content that would be attractive to iPhone 23 users. Apple also selectively enforced its contractual rules with developers to prevent developers 24 from monetizing mini programs, hurting both users and developers. For example, Apple blocked 25 mini programs from accessing the APIs needed to implement Apple's in-app payment (IAP) 26 system—even if developers were willing to pay Apple's monopoly tax. Similarly, Apple blocked

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<sup>15</sup> *Id*. ¶ 66.

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developers' ability to use in-app payment methods other than directly using IAP. For instance, super
 apps could create a virtual currency for consumers to use in mini programs, but Apple blocked this
 too. Apple, however, allows other, less-threatening apps to do so.

89. Much like the company's treatment of super apps, Apple blocked cloud streaming
apps that would have given users access to desirable apps and content without needing to pay for
expensive Apple hardware because this would threaten its monopoly power. In Apple's own words,
it feared a world where "all that matters is who has the cheapest hardware" and consumers could
"buy[] a [expletive] Android for 25 bux at a garage sale and . . . have a solid cloud computing
device" that "works fine."<sup>16</sup>

90. Cloud streaming apps let users run a computationally intensive program without
having to process or store the program on the smartphone itself. Instead, a user's smartphone
leverages the computing power of a remote server, which runs the program and streams the result
back to the phone. Cloud streaming allows developers to bring cutting-edge technologies and
services to smartphone consumers—including gaming and interactive artificial intelligence
services—even if their smartphone includes hardware that is less powerful than an iPhone.

91. Apple's conduct made its own product worse because consumers missed out on apps
and content. This conduct also cost Apple substantial revenues from third-party developers. At the
same time, Apple also made other smartphones worse by stifling the growth of these cross-platform
apps on other smartphones. Importantly, Apple prevented the emergence of technologies that could
lower the price that consumers pay for iPhones.

92. Cloud streaming has significant benefits for users. For example, Apple has promoted
the iPhone 15 by promising that its hardware is powerful enough to enable "next-level performance
and mobile gaming." But powerful hardware is unnecessary if games are played via cloud streaming
apps. For a cloud game, the user experiences and plays the game on the smartphone, but the game
is run by hardware and software in remote computing centers ("the cloud"). Thus, cloud gaming
apps deliver rich gaming experiences on smartphones without the need for users to purchase

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 $^{16}$  *Id.* at 4.

-26-

powerful, expensive hardware. As a result, users with access to cloud streamed games may be more
 willing to switch from an iPhone to a smartphone with less expensive hardware because both
 smartphones can run desirable games equally well.

93. Cloud streaming also has significant advantages for developers. For example,
instead of re-writing the same game for multiple operating systems, cloud platforms can act as
middleware that allow developers to create a single app that works across iOS, Android, and other
operating systems. Cloud streaming provides more and simpler options for offering subscriptions,
collecting payments, and distributing software updates as well. All of this helps game developers
reach economies of scale and profitability they might not achieve without offering cloud gaming
apps and reduces their dependence on iOS and Apple's App Store.

94. Apple wielded its power over app distribution to effectively prevent third-party
developers from offering cloud gaming subscription services as a native app on the iPhone. Even
today, none are currently available on the iPhone.

14 95. For years, Apple imposed the onerous requirement that any cloud streaming game-15 or any update to a cloud streaming game—be submitted as a stand-alone app for approval by Apple. Having to submit individual cloud streaming games for review by Apple increased the cost of 16 17 releasing games on the iPhone and limited the number of games a developer could make available to iPhone users. For example, the highest quality games, referred to as AAA games, typically 18 19 require daily or even hourly updates across different platforms. If these updates need to be 20individually approved by Apple, developers must either delay their software updates across all 21 platforms or only update their games on non-iOS platforms, potentially making the iOS version of 22 the game incompatible with other versions on other platforms until Apple approves the update. 23 Neither option is tenable for players or developers.

96. Until recently, Apple would have required users to download cloud streaming
software separately for each individual game, install identical app updates for each game
individually, and make repeated trips to Apple's App Store to find and download games. Apple's
conduct made cloud streaming apps so unattractive to users that no developer designed one for the
iPhone.

-27-

97. Apple undermines cloud gaming apps in other ways too, such as by requiring cloud 1 2 games to use Apple's proprietary payment system and necessitating game overhauls and payment 3 redesigns specifically for the iPhone. Apple's rules and restrictions effectively force developers to 4 create a separate iOS-specific version of their app instead of creating a single cloud-based version 5 that is compatible with several operating systems, including iOS. As a result, developers expend considerable time and resources re-engineering apps to bring cross platform apps like multiplayer 6 7 games to the iPhone. Cloud streaming apps broadly speaking—not just gaming—could force Apple 8 to compete more vigorously against rivals. As one Apple manager recognized, cloud streaming 9 eliminates "a big reason for high-performance local compute" and thus eliminates one of the 10 iPhone's advantages over other smartphones because then "all that matters is who has the cheapest 11 hardware." Accordingly, it reduces the need for users to buy expensive phones with advanced hardware. This problem does not "stop at high-end gaming," but applies to "a number of high-12 13 compute requirement applications."<sup>17</sup>

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2.

## Apple Possesses Monopoly Power in the iOS App Distribution Market

15 98. As the above facts indicate, Apple clearly has market and monopoly power in the 16 iOS app distribution market. Apple has complete control over prices in this market and is able to 17 raise them at will. For example, in this market, Apple can (and does) charge whatever it wants for its commission. This has led to Apple charging a much higher commission, and in far more 18 19 instances, than would have otherwise occurred in a market in which Apple had competitors who 20could have, inter alia, charged lower commissions, offered better benefits in exchange for their 21 commissions, reduced the number of instances in which they charged commissions, or other 22 competitive acts constraining Apple's pricing behavior.

99. Apple also has the absolute power to exclude competitors from the market. As a
result, Apple has obtained and maintained nearly 100% market share in this market for well over a
decade. Apple's market and monopoly power in this market is protected by high barriers to entry,
including (a) the required investment to build and maintain an app store, (b) requisite software and

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 $^{17}$  Id. ¶ 79.

algorithms for an app, (c) intellectual property licensing requirements, (d) the scale necessary to
 achieve cost efficiencies, and (e) Apple's exclusionary and anticompetitive conduct.

100. App developers cannot constrain Apple's anticompetitive conduct in the iOS app
distribution or iOS app payment processing markets by declining to develop apps for iOS. If a
developer does not develop apps for iOS, the developer must forgo *all* of the one billion plus iOS
users. No developer has sufficiently important or attractive apps to overcome the network effects
and switching costs associated with iOS to entice enough iOS users to leave iOS, such that
developing apps solely for other platforms would be profitable. Thus, developers need to be on iOS.

9 101. Similarly, competition in the sale of mobile devices does not constrain Apple's 10 power in the iOS app distribution market because, as discussed above, Apple not only has market 11 power in the smartphone market, but iOS device users also face substantial switching costs and 12 lock-in to the iOS ecosystem. Further, regardless of competition in the sale of mobile devices, 13 competition at the smartphone level would not constrain Apple's power in the iOS app distribution market because consumers cannot adequately account for and therefore constrain Apple's 14 15 anticompetitive conduct through their purchasing behavior. The same is true of competition at the tablet level. 16

17 102. From a geographic perspective, the iOS App Distribution Market encompasses all
18 app distribution transactions involving United States consumers. There are no material geographic
19 barriers to competition for iOS App Distribution.

20 103. Apple is also an attempted monopolist in the market (or aftermarket) for iOS App
21 Distribution. Given that the facts alleged amply support a finding that Apple has always maintained
22 monopoly power in this market, they no doubt support a finding that Apple is attempting to
23 monopolize both by improper, intentional means.

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#### 3. Apple Possesses Monopoly Power in the iOS App Payment Processing Market

104. Similar to iOS app distribution, Apple realized early on that controlling iOS app
 payment processing by excluding competitors would generate massive profits for itself. Apple
 therefore began to impose contractual terms that iOS developers agree to exclusively use Apple for

app payment processing, else face exclusion from the App Store. Apple has continued to do so for 1 2 new iPhone activations and on new models of iPhone ever since, including for many new device 3 activations and device models in the four years preceding the original complaint in this lawsuit. 4 Apple has also changed the terms of these agreements in an ever-more-restrictive fashion so as to 5 shore up perceived "holes" in developers' ability to use other iOS app payment processing services, including in the four years preceding the original complaint in this lawsuit. And, Apple has strictly 6 7 enforced these contractual terms, including such famous examples as kicking Epic Games off the 8 App Store for daring to try to use its own payment processing services rather than Apple's IAP ("in-9 app purchase") API.<sup>18</sup> While Apple nominally allows steering to alternative payment methods in 10 some cases, Apple maintains strict control over such uses and, in many cases, charges excessive 11 fees that render those alternatives largely ineffective.

12 105. Apple was able to impose these terms and coerce app developers into agreeing to 13 them because of its monopoly power over iOS app distribution. The net result was to make Apple 14 the only realistic option for iOS app payment processing, even when app developers wanted other 15 options due to the high commission (30%) that Apple charged for such processing. Apple 16 announced in 2020 that it planned to lower its 30% commission for businesses reporting "proceeds" 17 of less than \$1 million per year.<sup>19</sup> Apple also executed a settlement with the developers in the

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 <sup>&</sup>lt;sup>19</sup>
 <sup>18</sup> Apple continues to exclude any apps that compete (now or in the future) with features that
 <sup>20</sup> Apple plans to release itself. Kosta Eleftheriou (@keleftheriou), X (Sept. 14, 2021, 2:28 PM),
 <sup>18</sup> https://x.com/keleftheriou/status/1437845736951992321; Sean Hollister, *The Bitter Lawsuit*

<sup>21</sup> *Hanging over the Apple Watch's New Swipe Keyboard*, The Verge (Sept. 16, 2021), https://www.theverge.com/2021/9/16/22676706/apple-watch-swipe-keyboard-flicktype-lawsuit-

<sup>&</sup>lt;sup>22</sup> kosta-eleftheriou; Natt Garun, 9 Apps and Products Apple Copied for iOS 13 and macOS

<sup>23</sup> *Catalina*, The Verge (June 4, 2019), https://www.theverge.com/2019/6/4/18651190/apple-ios-13mac-os-catalina-third-party-apps-products-copy-wwdc-2019; James Vincent, *Six Apps, Services*,

and Features Apple Copied for iOS 12, The Verge (June 5, 2018),

https://www.theverge.com/2018/6/5/17428598/ios-12-apps-features-third-party-clones-bitmojihouseparty; Adi Robertson, *Apple Restores Mail App after Developer Tries to Rally 'Sherlocked'* 

*Victims*, The Verge (Feb. 11, 2020), https://www.theverge.com/2020/2/11/21133023/apple-

 <sup>&</sup>lt;sup>26</sup> bluemail-blix-restored-mac-app-store-sherlocking-patent-lawsuit. These are categorical examples
 <sup>27</sup> of apps that could find a home on a competing app store.

<sup>&</sup>lt;sup>19</sup> Announcing the App Store Small Business Program,

<sup>&</sup>lt;sup>28</sup> https://developer.apple.com/news/?id=i7jzeefs (Nov. 18, 2020).

*Cameron* class action, in which it agreed to relax some of the rules regarding developers' use of 1 2 alternative payment processing services besides IAP. These policy changes demonstrate that 3 Apple's restrictions on both payment processing and iOS app distribution were a choice, not a 4 requirement, and that Apple was always able to compete on price and that any justifications it 5 provides for the 30% commission are pretextual in nature and not procompetitive. The truth is that, based on its substantial monopoly power, Apple chose to impose anticompetitive restraints, chose 6 to apply anticompetitive design choices, chose to implement exclusionary changes to iOS, and chose 7 8 to charge excessive royalties to developers that would have been particularly inclined to seek out 9 competitive services.

10 106. One particularly notable example of Apple's dominance of this market is Spotify. In 11 an attempt to get around Apple's burdensome commission for its app payment processing service, 12 Spotify began directing iOS app users to its website when they wanted to purchase a subscription to 13 its music streaming service. In exchange for the inconvenience of leaving the app to make a purchase (which greatly detracted from the user experience), Spotify offered a lower subscription 14 15 fee. If users nevertheless purchased a subscription through the iOS app instead, Spotify charged a higher fee because of Apple's 30% tax. In response, Apple threatened to kick Spotify off the App 16 17 Store if it did not use Apple's iOS payment processing service and did not charge a uniform (higher) fee across all types of devices. Spotify was forced to comply, although it complained to regulators, 18 19 because it had no other option for iOS app payment processing.<sup>20</sup>

20 107. Most other iOS app developers do not even have the option to fight back in the way
21 Spotify did. Instead, they must simply toe the line and obey Apple's command, despite the
22 widely-held desire to avoid Apple's commission for app-related payments in whatever ways
23 possible. But, because they cannot do so without risking complete exclusion from the App Store,

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<sup>&</sup>lt;sup>20</sup> Faced with such public scrutiny, Apple agreed that Spotify user subscriptions would only be
<sup>20</sup> Faced with such public scrutiny, Apple agreed that Spotify user subscriptions would only be
<sup>20</sup> subject to the 30% commission for the first year, and then drop to 15% every year after. But the
<sup>28</sup> and the first year is itself the damaging tax, and Apple forces this on Spotify in order to
<sup>28</sup> make its own Apple Music service appear more attractive, price-wise.

they must comply and, for any app-related payment, use Apple's iOS app payment processing
 service and none other, despite that alternatives exist and are available.

3 108. From a geographic perspective, the iOS App Payment Processing Market
4 encompasses all app payment processing transactions involving United States consumers. There are
5 no material geographic barriers to competition for iOS App Payment Processing.

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## 4. Strong Network Effects Help Apple Maintain Its Market Power

109. Apple's market power in smartphones and its monopoly power in iOS app
distribution and payment processing are significantly maintained and reinforced through powerful
network effects that create self-reinforcing barriers to competition. These network effects operate
across multiple dimensions and become stronger as Apple's user base grows, creating a "virtuous
cycle" for Apple and a corresponding barrier to entry for competitors.

12 110. Apple has deliberately designed its ecosystem to create direct network effects among 13 iPhone users that penalize non-iPhone users and incentivize iPhone adoption. As discussed above, 14 Apple's iMessage system purposefully stigmatizes non-iPhone users through "green bubble" texts 15 and worse functionality for iPhone users when corresponding with non-iPhone users. Apple deliberately degrades the messaging experience by removing advanced features like read receipts, 16 17 high-quality media sharing, encryption, and making group messaging dysfunctional when even a 18 single non-iPhone user is present. This messaging discrimination is not a technical necessity but a 19 deliberate design choice intended to create social pressure for iPhone adoption.

111. Apple has created powerful network effects through its integrated ecosystem of
devices and services that work seamlessly together but create barriers when users attempt to
integrate non-Apple products. Features like AirDrop and iCloud synchronization create significant
value when all of a user's devices are Apple products, but this integration becomes a switching cost
when users consider moving to non-Apple alternatives.

25 112. The large installed base of iOS users creates network effects that attract developers
26 to the platform, which in turn makes the platform more attractive to users. With over 150 million

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iPhone users in the United States alone,<sup>21</sup> developers cannot afford to ignore the iOS platform, even
 when they disagree with Apple's policies or commission rates. This large developer base then
 creates more applications and content for iOS users, making the platform more valuable and further
 entrenching Apple's position.

5 113. Apple has systematically imposed barriers on users exporting their data and content
6 from Apple's ecosystem, creating switching costs that grow over time. Photos, videos, music, app
7 data, and other personal content stored in iCloud are technically retrievable but practically difficult
8 to extract and transfer to competing platforms. Apple has intentionally made this process "neither
9 easy nor intuitive," ensuring that users become increasingly locked into the iOS ecosystem as their
10 digital lives become more intertwined with Apple's services.

11 114. Many popular applications available on iOS create their own network effects that
12 reinforce Apple's platform dominance. Social media apps, gaming platforms, and communication
13 tools become more valuable as more users join, and the large iOS user base makes these apps
14 particularly attractive on Apple's platform. Users who switch away from iOS risk losing access to
15 these network-dependent applications or finding them less useful on platforms with smaller user
16 bases.

17 115. Apple deliberately restricts cross-platform compatibility to maintain network effects.
18 For example, Apple Watch requires an iPhone to function, creating additional switching costs for
19 users who have invested in Apple's wearable ecosystem. Similarly, Apple's AirPods and other
20 accessories work best with Apple devices, creating additional barriers to switching to competing
21 smartphone platforms.

116. Apple has cultivated network effects in professional and enterprise environments
where standardization on Apple products creates workflow efficiencies and compatibility benefits.
When businesses, schools, or creative professionals standardize on Apple products, individual users

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 <sup>&</sup>lt;sup>21</sup> Shubham Singh, *iPhone Users & Sales Statistics 2025 (Worldwide Data)*, DemandSage (May 13, 2025), https://www.demandsage.com/iphone-user-statistics/.

within those organizations face additional switching costs and pressure to remain within the Apple
 ecosystem.

117. These network effects create a self-reinforcing feedback loop that strengthens over
time. As Apple's user base grows, the network effects become more powerful, making it harder for
competitors to attract users and easier for Apple to maintain its market position. This dynamic
allows Apple to maintain market power even when competitors offer superior products or lower
prices, because the network effects create value that is independent of the underlying product
quality.

9 118. Apple's network effects also create barriers to multi-platform strategies that might
10 otherwise provide competitive constraints. Even users who own devices from multiple
11 manufacturers often find that Apple's devices and services work poorly with non-Apple products,
12 creating pressure to consolidate within Apple's ecosystem rather than maintain a diversified
13 technology portfolio.

14 119. These network effects significantly raise barriers to entry for potential competitors
15 in both the smartphone market and the iOS aftermarkets for app distribution and payment
processing. New entrants must overcome not only the direct competitive advantages of Apple's
products but also the network effects that make switching away from Apple's ecosystem
increasingly costly for users. This creates a substantial competitive moat that protects Apple's
market power and enables the company to maintain supracompetitive pricing and policies without
fear of losing significant market share to competitors.

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# 5. Apple's Self-Preferencing Reinforces Its Market Power

120. Apple also furthers and maintains its market power in the relevant markets by
self-preferencing its own products and services. This conduct cements the stranglehold Apple has
in the iOS App Distribution Market, because Apple also artificially increases its share of the
applications that are distributed within that market and makes it artificially difficult for users to
switch away to applications that are competitive with Apple's first-party applications such as Apple
Mail—even if those applications are inferior and of low quality.

1 121. For example, when a user purchases an iPhone, the user is steered to use Apple's
 2 default email product, Apple Mail. It is only through a complex labyrinth of settings that a user can
 3 change her default email application away from the Apple "Mail" application towards an alternative
 4 like Gmail (Google) or Proton Mail.

- 5 122. At least for mail a user can in theory modify the default setting. On the calendar
  6 front the situation is even worse. A user's default calendar is Apple Calendar, and the default cannot
  7 be modified. And because calendar and email functionality are closely linked, this competitive harm
  8 among calendar applications has related effects in other application types, like email.
- 9 123. Additionally, Apple allows its own first-party applications like Mail and iCloud
  10 Drive to engage in continuous background updating and monitoring. When a user takes a new
  11 photograph, that photograph might automatically be stored in iCloud Drive due to Apple's passive
  12 background monitoring. Third-party applications like Proton cannot access this functionality, even
  13 if the user would like those third-party applications to engage such monitoring. Again, this creates
  14 an uneven playing field and tilts the competitive landscape in Apple's direction.
- 15 124. Finally, Apple grants access to certain functionality and features to its first-party 16 applications that it denies to third-party applications. Apple's first-party password manager 17 Keychain can (1) autofill credit card information, (2) autofill contact information, (3) provide "hide 18 my email" functionality when the user is about to provide their email address, (4) provide password 19 generation when a website/app asks for a password, and (5) autosave logins. Proton's products have 20 been denied such functionality, again artificially tilting the playing field in Apple's favor.
- 21 125. At bottom, this self-preferencing conduct shores up Apple's market power in 22 distribution. A potential distribution rival would not only need to compete against Apple's App 23 Store, but also against inertia. The potential rival would only be able to distribute rival applications 24 for Apple's services such as Proton Mail by convincing the user to abandon the "default" 25 applications on their device in favor of competitive options. And the rival would face further 26 roadblocks because a rival application would not only need to compete on the merits against Apple's offering, but also convince the user to take additional complex steps to have the rival application 27 28 enabled.

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#### APPLE'S ANTICOMPETITIVE CONDUCT MONOPOLIZES AND MAINTAINS ITS MONOPOLY IN THE IOS APP DISTRIBUTION AND THE IOS APP PAYMENT PROCESSING MARKETS

3 126. Apple has harmed competition by excluding competitors for iOS app distribution and 4 iOS app payment processing through a variety of unreasonable, exclusionary, and predatory means. 5 Historically, Apple did not exclude such competition, as there were, for example, robust markets for distributing apps for Apple's Mac computers (e.g., brick and mortar stores, websites, multiple6 7 different online marketplaces) and for payment processing on Apple devices (*e.g.*, app developers' 8 proprietary payment processing services, PayPal). Given the profits Apple realized it could reap, 9 however, by entering those markets itself and controlling them through iOS, it changed course and 10 now unreasonably excludes nearly all competition.

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# Apple's Anticompetitive Conduct in the iOS App Distribution Market

12 127. Apple's practices regarding the iOS app distribution market—which it accomplishes 13 using its market power in the smartphone market and/or its lock-in power over iPhone users-are 14 particularly insidious with respect to alternative app stores because those competitors not only act as an alternative to the App Store in general, but also provide a distribution channel for apps that 15 16 Apple rejected from the App Store due to Apple's extensive business conflicts and 17 predatory/exclusionary practices. For example, Apple banned apps from its App Store that supported Google Voice because Apple sought to advantage its own services over Google's.<sup>22</sup> 18 19 Apple has also at times imposed restrictions on applications that can utilize cellular service, 20including the Slingplayer app, among others. Apple has banned apps that have been used by peaceful protesters,<sup>23</sup> and has also worked with hackers who leveraged iOS apps to suppress migrant 21

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   <sup>22</sup> See John Gruber, Choice Nuggets From Apple's Response to the FCC's Inquiry Regarding the Rejection and Removal of Google Voice Apps From the App Store, Daring Fireball (Aug. 21, 2009), https://daringfireball.net/2009/08/apples\_fcc\_response.

<sup>28</sup> 9, 2019), https://www.nytimes.com/2019/10/09/technology/apple-hong-kong-app.html.

<sup>26 &</sup>lt;sup>23</sup> Delia Paunescu, Apple Deleted a Hong Kong Protest App. What Does It Mean for Democracy Around the World?, Vox (Oct. 23, 2019),

<sup>27</sup> https://www.vox.com/recode/2019/10/23/20927577/apple-hong-kong-protest-app-democracy; Jack Nicas, *Apple Removes App That Helps Hong Kong Protestors Track Police*, N.Y. Times (Oct.

and minority groups.<sup>24</sup> Apple routinely punishes app developers that speak out against its policies,
 including Epic (the maker of Fortnite, which filed an antitrust lawsuit against Apple), or those that
 work to support fair competition in the app distribution market, like Toyota.<sup>25</sup>

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4 128. Apple has, with every new model of the iPhone and every new version of iOS 5 (including those models and versions released within the four years preceding this complaint), consistently applied ever-more-restrictive means to try and snuff out alternative app stores and for 6 7 years effectively limited them to just a tiny swath of iPhone owners. To this end, Apple first 8 attempted to argue it was illegal for iPhone owners to fully control their own devices, as they do on 9 Apple's Mac devices, and use distribution channels that users could obtain directly from the internet, 10 as opposed to through Apple's App Store. Apple filed a 27-page argument with the U.S. Copyright 11 Office stating that obtaining the sort of access necessary to implement alternative app stores would 12 or should be illegal. However, Apple lost that battle decisively. The Copyright Office found that 13 such activities were not illegal, and in fact are supported by the copyright laws.

14 129. Given this loss, Apple turned to contractual and technological restraints over 15 alternative app stores' potential customers (iPhone users and iOS app developers) to exclude those 16 competitor iOS app distributors. Over the years (including in the four years leading up to this 17 lawsuit, as described above), Apple has continuously modified its App Store policies to preclude 18 iOS app developers from attempting to distribute their apps through any channel except the App 19 Store and to shore up perceived holes in the terms that might permit developers to distribute their 20apps or process in-app payments through alternatives other than Apple's App Store and/or its IAP 21 API. It has also imposed these regularly updated contractual terms on every new iPhone activation 22 (*i.e.*, a new contract for every new device purchase) and on every new model of the iPhone that 23 Apple released, including every new model released in the four years preceding the original 24

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<sup>24</sup> Stephen Nellis, *Apple Says Uighurs Targeted in iPhone Attack But Disputes Google Findings*, Reuters (Sept. 6, 2019), https://www.reuters.com/article/us-apple-cyber/apple-says-uighurs-targeted-in-iphone-attack-but-disputes-google-findings-idUSKCN1VR29K.

 <sup>25</sup> Matt Hardigree, *Even Toyota Is "Apple's Bitch"*, Jalopnik (Apr. 6, 2011), https://jalopnik.com/even-toyota-is-apples-bitch-5789431.

complaint in this lawsuit, as well as the models released since. See Samsung Elecs. Co., Ltd. v. 1 2 Panasonic Corp., 747 F.3d 1199, 1203–1204 (9th Cir. 2014) (imposing an anticompetitive contract 3 with respect to new device not covered by the original contract is a new overt act); id. at 1204 4 (imposing anticompetitive agreement, even if it was "merely a restatement of" an earlier 5 anticompetitive agreement, on new party for the first time constitutes a new overt act); Hennegan v. Pacifico Creative Serv., Inc., 787 F.2d 1299, 1301 (9th Cir. 1986) (actions to steer away customers 6 7 from plaintiff's business within four years of the lawsuit each constituted a new overt act, even 8 though the scheme to steer such customers away began more than four years earlier); Klein v. 9 Facebook, Inc., 580 F. Supp. 3d 743, 795–797 (N.D. Cal. 2022) (finding new overt acts and rejecting 10 argument that they were not "new and independent" because they were a "reaffirmation of a 11 previous strategy," and in particular noting the defendant provided "no authority for its argument 12 that an act is not 'new and independent' simply because the defendant has previously committed the 13 same type of act as part of a unified anticompetitive strategy"); PBTM LLC v. Football Nw., LLC, 511 F. Supp. 3d 1158, 1182 (W.D. Wash. 2021) ("for a claim alleging an unlawful tying 14 15 arrangement, the cause of action first accrues when the arrangement was executed or became 16 effective"); Garnica v. HomeTeam Pest Defense, Inc., No. 14-cv-05243-VC, 2015 WL 3766514, at 17 \*2 (N.D. Cal. June 16, 2015) (denying statute of limitations motion to dismiss because allegations suggested new overt acts, including, inter alia, that the defendant "may well have altered the terms 18 19 of its agreement" in an anticompetitive way within the limitations period).

130. Apple has selectively and arbitrarily enforced those policies to make it more difficult
for all other iOS app distributors to compete. For example, in August 2017, Apple rejected a cloud
gaming platform from LiquidSky because, according to Apple, that platform included a "sub app
store" that allowed games to be purchased elsewhere to be run on their platform.<sup>26</sup> And, in March
2018, Apple did the same to Tribe, which Apple contended had "a store within our store."<sup>27</sup>

 <sup>&</sup>lt;sup>26</sup> https://embed.documentcloud.org/documents/21043938-2017-august-federighi-shoots down-liquidsky-buy/#document/p3.

<sup>28 &</sup>lt;sup>27</sup> https://embed.documentcloud.org/documents/21043956-2018-march-apple-erb-rejects-tribestore-within-store-games-chat-wechat-messenger/#document/p1.

131. Apple thus actively used its enforcement powers enabled by the contracts it forced 1 2 on iOS app developers to exclude competition-thus constituting an example of new overt acts in 3 support of its long-running scheme. See Samsung, 747 F.3d at 1203 (holding "that certain actions 4 taken to enforce contracts made in violation of the antitrust laws were sufficient to restart the statute 5 of limitations"); Columbia Steel Casting Co., Inc. v. Portland Gen. Elec. Co., 111 F.3d 1427 (9th Cir. 1996) (enforcing a anticompetitive contract—even one that was entered into beyond the 6 7 limitations period—constitutes a new overt act); Eichman v. Fotomat Corp., 880 F.2d 149, 160 (9th 8 Cir. 1989) ("[t]o restart the statute of limitations in a tying situation, [a plaintiff] must show that [a 9 defendant] 'had the ability [to] and actually did enforce the tie during the limitations period."") (quoting Airweld, Inc. v. Arco, Inc., 742 F.2d 1184, 1190 (9th Cir. 1984). 10

11 132. Similarly in June 2019, a store called AltStore, which would have allowed iPhone
12 users to download apps without jailbreaking their phone, was made available for download directly
13 from the internet outside of the App Store. Soon thereafter, Apple killed this new offering because
14 of the competitive threat it represented, once again by changing its code specifically to prevent that
15 alternative app store from working.<sup>28</sup>

16 133. Underscoring that these exclusions were Apple's enforcement *choice* (rather than the 17 unabated inertial consequence of the policy of exclusion that it first put in place in 2008) is the 18 competing example of WeChat, which is a multi-purpose instant messaging, social media and 19 mobile payment app that is incredibly popular in Asia (with over 1 billion monthly active users). In 20 early 2017, Apple allowed WeChat to distribute apps as "miniprograms" within the WeChat 21 system.<sup>29</sup> In subsequently discussing that decision via internal emails in 2020, Apple recognized

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<sup>28</sup> See AltStore.io (@altstoreio), X (Nov. 7, 2019, 4:01 PM),

https://x.com/altstoreio/status/1192547623317585920; All I Talk Is Tech, *iOS 13 Kills All Cydia Alternatives... / Tweakbox/ App Valley / Ignition/ RIP Cydia Alternatives*, YouTube (June 10, 2019), archived at https://web.archive.org/web/20200518102727/https://www.youtube.com/watch?v=-N01u8\_H8kI&gl=US&hl=en.

<sup>29</sup> Roblox is another example within the four year preceding the original complaint of Apple creating a special exception for an app that distributes other apps (in this case, games) being permitted in the App Store. *See* Adi Robertson, *Apple said Roblox developers don't make games,*

28 (footnote continued)

that these miniprograms were effectively being offered through an alternative app store and
 therefore presented many of the same issues that other alternative app stores presented. However,
 given WeChat's massive market penetration in Asia, Apple decided that its best strategic choice
 was to not alienate WeChat (who Apple described as a "frenemy"), so continued to permit those
 miniprogram app downloads.

6 Apple has taken similar steps with respect to iOS payment processing services. For 134. 7 example, Apple specifically revised its developer program license agreement to prohibit developers 8 from facilitating distribution of apps from any source other than the App Store, and it has become 9 infamous in recent years for pausing or delaying app approval on an ad hoc basis if app developers 10 do not add more revenue-generating features for Apple, such as in-app purchases. News stories of 11 this practice have abounded over the years. Examples include Apple insisting on such anticompetitive restraints for Spotify (2017),<sup>30</sup> WordPress (2020),<sup>31</sup> cloud gaming from Microsoft 12 13 (which Apple insisted involve an App Store application and review for every game made available, so that it could control in-app purchases for each game rather than an overarching cloud gaming 14 app) (2020),<sup>32</sup> and, of course Epic Games (2020). iOS app developers have no choice but to abide 15 by these obligations if they wish to sell their apps in the iOS app market, and they agree when they 16 17 become iOS developers to adhere to every new iteration of the App Store policies, which Apple has

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 <sup>31</sup> See, e.g., Sean Hollister, WordPress Founder Claims Apple Cut Off Updates to His
 Completely Free App Because It Wants 30 Percent, The Verge (Aug. 21, 2020), https://www.theverge.com/2020/8/21/21396316/apple-wordpress-in-app-purchase-tax-update-store.

<sup>19</sup> and now Roblox agrees, The Verge (May 14, 2021), https://www.theverge.com/2021/5/14/

<sup>20 22436014/</sup>apple-roblox-epic-fortnite-trial-what-is-game-name-change (noting that every instance of Roblox being described to distribute "games" was changed to distributing "experiences," likely 21 due to the *Epic v. Apple* case); *see also* Jay Peters, *Roblox, Explained*, The Verge (July 7, 2021), https://www.theverge.com/2021/7/7/22457264/roblox-explainer-game-app-faq.

 <sup>&</sup>lt;sup>30</sup> Andrew Liptak, *Spotify Responds to Apple, Calling It a 'Monopolist'*, The Verge (Mar. 16, 2019), https://www.theverge.com/2019/3/16/18268811/spotify-apple-european-commission-antitrust-statement-war-of-words.

 <sup>&</sup>lt;sup>32</sup> Juli Clover, *Microsoft Was Willing to Bring Xbox-Exclusive Games to iPhone via xCloud*, MacRumors (Dec. 9, 2021), https://www.macrumors.com/2021/12/09/microsoft-apple-cloudgaming-negotiations/.

imposed on them anew within the four years preceding this lawsuit (and thus, constituting a new
overt act). *See Samsung*, 747 F.3d at 1203–1204 (imposing an anticompetitive contract with respect
to new device not in existence at time of the original contract is a new overt act); *id.* at 1204
(imposing anticompetitive agreement, even if it was "merely a restatement of" an earlier
anticompetitive agreement, on new party for the first time constitutes a new overt act). Apple thus
coerces them into only using the App Store (else face effective exclusion from iOS users) and into
only using Apple's iOS payment processing services.

8 Apple has also continuously implemented ever more restrictive measures to prevent 135. 9 users from gaining access to their devices and installing alternative app stores. Its first efforts in 10 this regard—which it has included on each new iPhone and every new iPhone model sold for nearly 11 a decade (including the four years preceding this lawsuit), and in updates to iOS throughout that 12 time—Apple created technical restrictions it built into iOS that largely prevent users from 13 downloading and installing competing app stores or apps that are made available directly on websites. Apple placed technical restrictions on app installation through entitlements and code 14 15 signing to prohibit competition in this way, a practice that first began in 2008 and occurred every 16 six to nine months, but then escalated with more permanently exclusionary restrictions beginning in 17 2018. Consequently, iOS app developers were (and are) required to distribute apps through the App 18 Store, and consumers must use the App Store to download these apps to their iOS devices.

19 136. More specifically, Apple's 2018 and 2019 technical restrictions included introducing 20runtime code modification prevention, pointer authentication, physical map codesigning, memory 21 tagging extensions, and other control mechanisms that specifically target and prevent alternative 22 app stores from competing with Apple because they effectively prevent users from using alternative 23 app stores on iOS at all-even if they wish to obtain such alternatives through the internet (*i.e.*, 24 outside of the App Store) to modify their phone through lawful means. Apple's late 2018 change 25 foreclosed competition on iPhone XS and later models (i.e., models released September 2018 and 26 afterward), and its late 2019 changes made it so app store competitors could no longer operate on 27 earlier models, meaning that, for the first time in 2019, Apple finally succeeded in excluding all 28 competition on pre-September 2018 iPhone models. Apple did not merely rely on a policy it adopted

in 2008 or 2009; instead, it actively took steps to suppress and ultimately cripple competition from
 alternatives.

3 137. Apple also pre-installs the App Store app on the home screen of every iOS device it 4 sells (including every new model of the iPhone it introduced for the first time in the four years 5 preceding this lawsuit) and disables users' ability on every one of those devices to uninstall the App Store app or to make any other app marketplace or iOS app distribution channel their default. Apple 6 does not permit any other app stores on iOS devices, both through the technical restrictions 7 8 described above and through its contractual policies, such as Section 3.2.2 of the Apple Developer 9 Agreement. It also prevents users from downloading apps through websites and punishes app 10 developers that attempt to utilize such means. Apple deploys similar means to control and hinder 11 application publishers through the iOS application programming interfaces ("APIs"), such as the 12 API for in-app purchases.

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2.

# Apple's Anticompetitive Conduct in the iOS App Payment Processing Market

138. Apple's conduct in the iOS app payment processing market represents a systematic campaign to eliminate competition and maintain monopoly control through a combination of contractual coercion and technological restrictions. Apple has leveraged its monopoly power in iOS app distribution to force developers into exclusive dealing arrangements for payment processing, creating a second illegal monopoly that generates billions in supracompetitive profits.

139. Since at least 2012, Apple has imposed strict rules around In-App Purchases, or 20 "IAPs." Apple historically required all iOS app developers to use Apple's proprietary IAP system 21 for any digital goods, services, or content sold within their applications. This requirement is 22 enforced through Section 3 of Apple's App Store Review Guidelines. Developers must use in-app 23 purchases to allow users to unlock functionality within apps. That means that developers cannot 24 avoid paying Apple's tax by directing consumers to unlock functionality through other means. 25 Developers who attempt to circumvent these rules are rejected from the App Store or have their 26 existing apps removed.

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140. Today, Apple nominally permits links to other purchase methods, per Section 1 2 3.1.1(a) of the App Store Review Guidelines. These changes were implemented to comply with 3 Court orders regarding Apple's anticompetitive conduct. But, these changes are purely cosmetic 4 and Apple does everything in its power to prevent them from having an effect. For instance, Apple 5 requires developers seek an "entitlement"-meaning an approval from Apple-to allow such links. 6 Apple also charges a fee for these transactions, even though Apple has not processed the transaction. 7 Because the central purpose of steering consumers to a lower-cost payment processing method is to 8 lower prices to consumers, the imposition of yet another fee by Apple makes this "option" worthless.

9 141. Apple's guidelines make very clear what is not permissible vis-à-vis payment
10 processing, in Section 3.2.2 Unacceptable: "Creating an interface for displaying third-party apps,
11 extensions, or plug-ins similar to the App Store or as a general-interest collection."—e.g.,
12 preventing the development of super apps. In short, Apple's rules still make abundantly clear that
13 Apple prohibits any form of real competition.

14 142. Apple has designed iOS and its development frameworks to make IAP the path of
15 least resistance for developers. The IAP system is deeply integrated into iOS development tools
16 and APIs. Apple provides extensive documentation, sample code, and technical support for IAP.

17 143. Apple uses its absolute control over App Store approval and distribution to enforce
18 its payment processing monopoly. Apps that attempt to circumvent IAP requirements are rejected
19 during the review process or removed from the App Store after publication. This enforcement
20 mechanism is particularly powerful because developers have no alternative distribution channel and
21 cannot reach iOS users without Apple's approval.

144. Apple has systematically escalated its enforcement of payment processing
restrictions over time, particularly within the four years preceding this lawsuit. Initially, some
developers were able to work around Apple's restrictions through creative implementations or by
directing users to external websites. Apple has progressively closed these loopholes through
increasingly restrictive policy updates and more aggressive enforcement actions.

27 145. Apple's enforcement actions against major developers demonstrate the scope and
28 intensity of its campaign to maintain payment processing monopoly.

1 146. With every new iPhone activation and every new app developer account creation,
 2 Apple has imposed its payment processing restrictions through updated contractual terms. These
 3 agreements are non-negotiable and presented on a take-it-or-leave-it basis. Developers who refuse
 4 to agree to exclusive use of IAP are denied access to the iOS market entirely, creating a coercive
 5 dynamic that no competitive market would sustain.

6 147. Apple's IAP system operates as a price-fixing scheme that sets uniform commission
7 rates across the entire iOS app payment processing market. The standard 30% commission (reduced
8 to 15% for small developers under specific circumstances) applies regardless of the transaction type,
9 or payment method. This uniform pricing eliminates price competition that would exist in a
10 competitive payment processing market.

11 148. Apple's restrictions have prevented innovation in mobile payment processing that
12 could benefit both developers and consumers. Alternative payment processors have developed
13 features like installment payments, cryptocurrency support, regional payment methods, and loyalty
14 program integration that could enhance the user experience and reduce costs. Apple's monopoly
15 prevents iOS users from accessing these innovations.

16 149. Apple selectively enforces its payment processing requirements in ways that
17 discriminate against services that compete with Apple's own offerings. For example, Apple has
18 been more aggressive in enforcing IAP requirements against music streaming services like Spotify
19 (which competes with Apple Music) while being more lenient with services that don't directly
20 compete with Apple's products.

150. Apple created a narrow "reader app" exception that allows certain apps (like Netflix
and Kindle) to avoid IAP requirements, but has manipulated this exception to serve its competitive
interests rather than consumer welfare. Apps that qualify for this exception still cannot inform users
about external payment options, and Apple has threatened to revoke the exception for apps that
become too competitive with Apple's services.

151. When developers have attempted to implement workarounds to Apple's payment
processing restrictions, Apple has responded with technological changes to iOS that make these
alternatives non-functional. For example, Apple has modified iOS to prevent apps from detecting

whether users have made purchases through external websites, making it impossible for developers
 to unlock premium features based on external transactions.

152. Apple has continuously expanded the scope of its payment processing monopoly to
cover new types of digital transactions. Initially focused on traditional app purchases, Apple has
extended IAP requirements to cover subscriptions, virtual currency, in-app advertising removal, and
even tips or donations to content creators. This expansion demonstrates Apple's intent to capture
an ever-growing share of the digital economy through its payment processing monopoly.

8 153. When faced with regulatory pressure in various jurisdictions, Apple has made
9 minimal cosmetic changes while preserving the core structure of its payment processing monopoly.
10 For example, Apple's announcement of reduced commissions for small developers affected only a
11 very small percent of App Store revenue and maintained the fundamental requirement to use IAP
12 exclusively. These changes were designed to deflect regulatory scrutiny rather than restore
13 competitive conditions.

14

15

3.

# Governments Around the World Recognize Apple's Conduct Is Anticompetitive

154. Regulators and governments are increasingly skeptical of business models like the
one Apple employs with the App Store. This is in part because their operating costs are so much
lower than the commission they charge would suggest.<sup>33</sup> As former Apple App Store executive,
Phillip Shoemaker, told the New York Times, "30 percent is way too much," and the App Store
"should [charge] closer to" 3% given Apple's relatively minimal variable costs for processing App
sales.<sup>34</sup>

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25. This Court recently found Apple in violation of its 2021 injunction in *Epic Games*,
24. Inc. v. Apple Inc., No. 4:20-cv-05640-YGR, ECF No. 1508 (N.D. Cal. Apr. 30, 2025). The Court
23

 <sup>&</sup>lt;sup>33</sup> Jess Conditt, *Apple's App Store Antitrust Questions Will Be Uncomfortable for Valve*, Engadget (July 29, 2020), https://www.engadget.com/apple-google-valve-steam-antitrusthearings-app-store-221442066.html.

 <sup>&</sup>lt;sup>34</sup> Jack Nicas, *How Apple's 30% App Store Cut Became a Boon and a Headache*, N.Y. Times
 (Aug. 14, 2020), https://www.nytimes.com/2020/08/14/technology/apple-app-store-epic-games fortnite.html.

found that "Apple's response to the Injunction strains credulity. . . . Apple, despite knowing its 1 2 obligations thereunder, thwarted the Injunction's goals, and continued its anticompetitive conduct 3 solely to maintain its revenue stream.... contemporaneous business documents reveal that Apple 4 knew exactly what it was doing and at every turn chose the most *anti*competitive option." *Id.* at 2. 5 Not only did Apple ignore the Court issued-injunction in order to continue its anticompetitive conduct, it attempted to "hide the truth" of its behavior from the Court-even going to such lengths 6 7 as to "outright lie[] under oath." Id. The Court referred the matter to the United States Attorney for 8 investigation of criminal contempt. Id. at 3.

9 156. The practice of extracting 30% of every software sale associated with the underlying 10 platform is one of the principal bases for a Congressional investigation into Apple's and other large 11 technology companies' monopolistic and anticompetitive practices. The Digital Markets Report 12 concluded there were serious competition problems with such businesses. The Digital Markets 13 Report begins by stating that "numerous businesses described how dominant platforms exploit their 14 gatekeeper power to dictate terms and extract concessions that no one would reasonably consent to 15 in a competitive market. . . . [T]heir dependence on these gatekeepers to access users and markets requires concessions and demands that carry significant economic harm, but that are 'the cost of 16 doing business."<sup>35</sup> As discussed above, "Apple established its 30 percent commission on paid apps 17 in 2009 with the introduction of the App Store ....."<sup>36</sup> 18

19 157. A congressional panel recently condemned Apple as a monopolist the likes of which
20 "we last saw in the era of oil barons and railroad tycoons." According to a recent U.S. House
21 Judiciary Antitrust Subcommittee report, "Apple leverages its control of iOS and the App Store to
22 create and enforce barriers to competition and discriminate against and exclude rivals while
23 preferencing its own offerings."

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 <sup>&</sup>lt;sup>35</sup> Investigation of Competition in Digital Markets, H.R. Rep. No. 117-8, pt. 1, at 6 (2022).
 <sup>36</sup> Id. at 80.

1 158. On March 21, 2024, the U.S. Department of Justice, along with fifteen states, sued
 2 Apple for antitrust violations.<sup>37</sup> The government's case alleges a broad web of interlocking conduct
 3 by Apple aimed at raising switching costs, thereby continuously re-entrenching a monopoly to the
 4 detriment of both developers and consumers.

5 159. Governments around the world condemn Apple's monopolistic conduct. On March 4, 2024 the European Commission fined Apple 1.8 billion euros for abusing its dominant position 6 in the market for the distribution of music streaming apps through the App Store.<sup>38</sup> The Commission 7 8 found that Apple applied "anti-steering provisions" to developers, preventing them from informing 9 users about alternative music subscription services. These provisions amount to "unfair trading conditions" in breach of Article 102(a) of the Treaty on the Functioning of the European Union.<sup>39</sup> 10 Just weeks after levying the fine, the European Commission began investigating Apple's 11 compliance with the terms of its order.<sup>40</sup> 12

13 160. The South Korean Fair Trade Commission found Apple guilty of anticompetitive
14 practices in 2018.<sup>41</sup> Apple imposed onerous and anticompetitive requirements on cell phone carriers
15 in South Korea. Apple has been required to pay 100 billion South Korean won as a result.<sup>42</sup>

16 161. The United Kingdom's Competition and Markets Authority (CMA) has been
17 investigating Apple since November 2022 for anticompetitive conduct related to mobile browsing
18 and cloud gaming.<sup>43</sup> The CMA found that Apple has "substantial and entrenched market power
19

<sup>37</sup> Compl., United States v. Apple Inc., No. 2:24-cv-04055, ECF No. 1 (D.N.J. 2024).

<sup>38</sup> European Commission Press Release IP/24/1161, Commission fines Apple over €1.8 billion over abusive App store rules for music streaming providers (Mar. 4, 2024).

<sup>39</sup> Id.

<sup>40</sup> Foo Yun Chee, *Apple, Meta, Google to Face EU Digital Markets Act Probes, Sources Say*,
 Reuters (Mar. 21, 2024), https://www.reuters.com/technology/apple-meta-google-set-face-eu-digital-markets-act-probes-sources-say-2024-03-21/.

<sup>41</sup> Ben Lovejoy, Apple Antitrust Case Settled in South Korea; Proposal Accepted, 9to5Mac
 (Feb. 3, 2021), https://9to5mac.com/2021/02/03/apple-antitrust-case-settled-in-south-korea/.

27  $4^2$  *Id.* 

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<sup>43</sup> CMA Wins Appeal in Apple Case, Competition and Markets Authority at 4–5 (Nov. 30, 2023), https://www.gov.uk/government/news/cma-wins-appeal-in-apple-case.

1 over the key gateways through which users access content online through their mobile devices. This 2 control over [the] mobile ecosystem[] puts them in a powerful position, allowing them to determine 3 the 'rules of the game' and making it difficult for rival businesses to compete." The investigation 4 report continues, "Apple's restrictions . . . are holding back potentially disruptive innovation that 5 could transform the way that consumers access and experience content online."44

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162. The French Competition Authority leveled "record-breaking" fines against Apple for anticompetitive behavior involving agreements not to compete.<sup>45</sup> The French government 7 8 previously fined Apple for implementing a battery patch in 2017 that purposefully slowed down 9 older iPhones, forcing consumers to replace otherwise functional devices.<sup>46</sup>

10 163. In June 2022, Germany's Federal Cartel Office (FCO) announced it began investigating Apple's App Tracking Transparency feature over concerns that Apple is using the 11 feature to create unfair barriers for other companies and self-preference.<sup>47</sup> The FCO said in April 12 13 2023, "Apple is active in many ways on market levels and business areas that are linked to each 14 other and is therefore in a position to tie its users to its complex ecosystem on a long-term basis. This is associated with a strong power to set rules for third-parties, above all for app developers."48 15

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<sup>44</sup> Mobile Browsers and Cloud Gaming, Competition and Markets Authority (Nov. 22, 2022), 17 https://assets.publishing.service.gov.uk/media/637b65c0d3bf7f7208f6c709/reference decision 1 18 \_.pdf.

<sup>45</sup> Malcom Owen, Apple's International Antitrust Battles – the Story So Far, AppleInsider 19 (Aug. 15, 2020), https://appleinsider.com/articles/20/08/15/apples-antitrust-battles---the-story-sofar. 20

<sup>46</sup> William Gallagher, Apple Fined \$1.2 Billion by French Antitrust Watchdog, AppleInsider 21 (Mar. 16, 2020), https://appleinsider.com/articles/20/03/16/apple-fined-12-billion-by-frenchantitrust-watchdog; William Gallagher, French Fine Apple \$27 Million for Battery Patch That 22 Could Slow Down Old iPhones, AppleInsider (Feb. 7, 2020),

23 https://appleinsider.com/articles/20/02/07/french-fine-apple-27-million-for-battery-patch-thatcould-slow-down-old-iphones. 24

<sup>47</sup> Natasha Lomas, Apple's App Tracking Privacy Framework Could Fall Foul of German 25 Antitrust Rules, TechCrunch (Feb. 13, 2025), https://techcrunch.com/2025/02/13/apples-apptracking-privacy-framework-could-fall-foul-of-german-antitrust-rules/; Javier Espinoza and 26

Madhumita Murgia, Apple Faces German Antitrust Probe over App Tracking Rules, Fin. Times (June 14, 2022), https://www.ft.com/content/2e814ba8-0379-4432-a9c6-6a13c7b55a7e. 27

<sup>48</sup> Natasha Lomas, *Apple Faces Special Antitrust Abuse Regime in Germany*, TechCrunch 28 (Apr. 5, 2023), https://techcrunch.com/2023/04/05/apple-germany-special-abuse-controls/.

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The Commission is investigating Apple's 30% charge to developers who sell content in their apps.<sup>50</sup>

3 4

# **APPLE'S ANTICOMPETITIVE CONDUCT HAS EXCLUDED NUMEROUS** POTENTIAL COMPETITORS FROM THE RELEVANT MARKETS

India's Competition Commission also opened an investigation into Apple in 2022.<sup>49</sup>

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165. Apple's systematic anticompetitive conduct has successfully excluded numerous actual and potential competitors from both the iOS app distribution and iOS app payment processing markets. These exclusions demonstrate the effectiveness of Apple's monopolization scheme and the substantial harm to competition that has resulted from Apple's illegal practices.

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166. Cydia and Alternative App Stores: Cydia was one of the earliest and most 9 prominent alternative app stores for iOS devices, serving users who had "jailbroken" their devices 10 to circumvent Apple's restrictions. At its peak, Cydia had millions of users and thousands of 11 applications unavailable on Apple's App Store. Apple systematically undermined Cydia through 12 increasingly sophisticated technological restrictions in iOS updates, making jailbreaking more 13 difficult and unstable with each new version. By 2019-2020, Apple's technical countermeasures 14 had effectively eliminated Cydia as a viable competitor.

15

167. AltStore and Direct Distribution: AltStore represented a novel approach to iOS 16 app distribution that attempted to work within Apple's technical restrictions while providing an 17 alternative to the App Store. Launched in 2019, AltStore allowed users to install apps directly from 18 the internet without jailbreaking their devices. Apple quickly responded by modifying iOS to 19 prevent AltStore from functioning, implementing specific technical countermeasures that rendered 20the service inoperable within months of its launch.

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168. Web-Based App Platforms: Multiple companies attempted to create web-based application platforms that could deliver app-like experiences through Safari and other iOS browsers,

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25 <sup>49</sup> Newley Purnell, India Hits Apple With Antitrust Investigation Over App-Store Practices, Wall St. J. (Jan. 3, 2022), https://www.wsj.com/tech/india-hits-apple-with-antitrust-investigation-26 over-app-store-practices-11641207296?msockid=26942fd1ecbb6c700bb539c5ed3a6d48.

27 <sup>50</sup> Amber Neely, India's Antitrust Regulator Investigating Apple's & Google's Business Practices, AppleInsider (Oct. 10, 2023), https://appleinsider.com/articles/23/10/10/indias-28 antitrust-regulator-investigating-apples-googles-business-practices.

effectively bypassing Apple's App Store entirely. These platforms, including efforts by companies
 like PhoneGap, Sencha, and others, were systematically undermined by Apple's restrictions on
 browser capabilities, limitations on web app installation, and deliberate degradation of web app
 performance compared to native apps.

5 169. Streaming Game Platforms as Distribution Channels: Cloud gaming services like
6 Google Stadia, Microsoft xCloud, Amazon Luna, and others represented potential alternative
7 distribution channels for iOS applications, particularly games. Apple systematically excluded these
8 services by imposing requirements that each individual game be submitted for separate App Store
9 review, making it infeasible for these platforms to operate on iOS. These services continue to thrive
10 on other platforms but remain effectively excluded from iOS.

11 170. Super App Platforms: WeChat and other potential "super app" platforms could
12 have served as alternative distribution channels for mini-programs and sub-applications. While
13 Apple made a strategic exception for WeChat due to its importance in Asian markets, the company
14 has systematically prevented U.S. companies from developing similar super app platforms through
15 restrictive App Store guidelines that prohibit apps from hosting other apps or executable code.

16 171. Traditional Payment Processors: Established payment processing companies like
17 Square, Stripe, PayPal, and others have been effectively excluded from processing in-app payments
18 on iOS despite having superior technology, lower fees, and better fraud protection than Apple's IAP
19 system. These companies can only process payments for physical goods or services, not digital
20 content, creating an artificial market division that serves no consumer benefit.

172. Cryptocurrency and Digital Payment Platforms: Companies developing
cryptocurrency payment systems, digital wallets, and alternative payment technologies have been
systematically excluded from iOS in-app payment processing. Platforms like Coinbase, BitPay, and
other cryptocurrency payment processors could offer lower fees and innovative payment features
but are prohibited from processing digital content purchases within iOS apps.

173. Regional and Specialized Payment Methods: Payment processors specializing in
regional payment methods (like Alipay, WeChat Pay, UPI, and others) or specialized payment types
(like installment payments, buy-now-pay-later services, and gift card systems) have been excluded

from iOS in-app purchases despite offering services that would benefit both developers and
 consumers in specific markets or use cases.

3 174. Developer-Specific Payment Solutions: Many large app developers have invested
4 in building their own payment processing infrastructure that offers better fraud protection, customer
5 service, and integration with their existing business systems. Companies like Epic Games, Spotify,
6 Netflix, and others have been forced to either use Apple's inferior IAP system or forgo in-app
7 purchases entirely, despite having payment solutions that would provide better user experiences.

8 175. The exclusion of alternative distribution and payment platforms has created a
9 developer ecosystem that is entirely dependent on Apple's services. This dependency makes it
10 increasingly difficult for new competitors to enter the market because developers lack the expertise,
11 infrastructure, and business relationships necessary to work with alternative platforms.

12 176. European Alternative App Stores: European companies that have developed
13 alternative app distribution platforms in response to regulatory pressure have found their innovations
14 limited to specific jurisdictions due to Apple's refusal to implement meaningful global changes.
15 This geographic limitation reduces the viability of these competitors and prevents them from
16 achieving the scale necessary to provide effective competition.

17 177. Asian Super App Prevention: Despite the success of super app platforms in Asian
markets, Apple has systematically prevented the development of similar platforms in the United
States through restrictive policies that prohibit the hosting of mini-programs and sub-applications.
This has deprived U.S. consumers of innovative app distribution models that have proven successful
elsewhere.

178. Apple maintains exclusive control over critical iOS APIs and system integration
points that would be necessary for competing app distribution or payment processing services to
function effectively. By refusing to provide competitors with access to these technical resources
while using them for its own services, Apple has created insurmountable technical barriers to
competition.

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1 179. Apple's control over iOS security certificates and code signing processes provides it
 2 with the ability to disable competing services at will. This power has been used repeatedly to
 3 eliminate competitors and creates an ongoing threat that deters investment in alternative platforms.

- 4 180. Apple's integration of app distribution and payment processing with iPhone
  5 hardware features (like Touch ID, Face ID, and secure enclave) provides its own services with
  6 technical advantages that are denied to competitors. This hardware-level exclusion makes it
  7 impossible for competitors to offer equivalent functionality even when they have superior software
  8 solutions.
- 9 181. Apple's conduct has resulted in nearly 100% market foreclosure in both iOS app
  10 distribution and iOS app payment processing. No meaningful competition exists in either market,
  11 demonstrating the complete effectiveness of Apple's exclusionary practices.
- 12 182. The exclusion of competitors has prevented innovations in app discovery,
  13 distribution efficiency, payment security, user privacy, and user experience that could have
  14 benefited both developers and consumers. Markets with healthy competition in these areas show
  15 significantly more rapid innovation and lower prices than Apple's monopolized iOS markets.
- 16 183. iOS users have been completely deprived of choice in both app distribution and
  17 payment processing, unlike users of other mobile platforms who can select from multiple competing
  18 services. This elimination of choice represents a fundamental market failure caused by Apple's
  19 anticompetitive conduct.
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# F. APPLE'S ANTICOMPETITIVE CONDUCT HARMS APP DEVELOPERS

21 184. In each of the above scenarios, iOS users are unable to constrain Apple's 22 anticompetitive activities in either of the relevant markets (or aftermarkets) because (a) much of 23 Apple's behavior is behind the scenes and invisible to them; (b) they have little ability to learn about 24 Apple's behavior before they make an iPhone or other iOS device purchase; (c) they become locked 25 into their smartphone or other mobile device purchase at the time of purchase, due to the cost, investment, and longevity of the purchase and associated service contract; and (d) they even become 26 27 more locked into iOS over time, for the reasons previously discussed. Similarly, iOS app developers 28 are unable to constrain Apple's anticompetitive activities because, if they do not accede to its

demands, they are unable to sell into the iOS app market at all. Accordingly, Apple's power has
 only grown over each of the markets over time, and both iOS users and developers are less and less
 able to act as a brake on Apple's power and anticompetitive activities.

4 185. Unfortunately, iOS users' and developers' inability to discipline Apple's 5 misbehavior means that it is able to harm them and competitors in myriad, all-too-inevitable ways. As noted above, Apple excludes competitors in iOS app distribution and iOS app payment 6 7 processing, which has the effect, first and foremost, of removing constraints on its pricing behavior. 8 This has led to higher prices for both iOS app distribution and iOS app payment processing, 9 including the 30% commission Apple historically charged for all iOS app-related revenues the App 10 Store generates, and which it continues to charge for any successful app developer today.<sup>51</sup> Apple's 11 conduct has also reduced market output, reduced market innovation, and plainly reduced both 12 developer and iOS user choice, despite obvious demand for competition to both the App Store and 13 Apple's iOS app payment processing services. These negative competitive effects impact developers and end users directly, because Apple is able to offer lower-quality products at 14 15 supracompetitive prices with impunity, because it has no fear that doing so will cause it to lose market share or power. These anticompetitive effects are discussed in further details below. 16

17 186. As a result of its anticompetitive conduct, Apple is also able to pile on additional
18 unnecessary fees, because iOS app developers cannot fight back. One example is a \$99 annual fee
19 Apple collects from all developers who wish to sell their products through the App Store. In June
20 2017, Apple introduced Rule 4.2.6 into the App Store guidelines which gave it the right to ban any
21 apps that share a code base or template with another app. The rule was subsequently revised in

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- <sup>51</sup> Apple's November 18, 2020 reduction to the commission for developers that generate less
   than \$1 million in proceeds annually does not undercut this fact. Such developers represent only
   5% of the App Store's annual revenues, and they become subject to the higher 30% commission if
   they are lucky enough to grow. They cannot escape either commission, and cannot use
   competition to push back against the prices Apple charges. Put in its simplest terms, the recent
   commission reduction was a public relations move made in response to ever-increasing regulatory
- 27 scrutiny and a growing recognition that Apple has acted anticompetitively for years. It does not
   28 conduct.

December 2017 so that template apps could be submitted to the App Store again. In this context,
 Apple made an important change: to successfully submit apps, developers must create a new
 developer account for each client app—meaning each account required the developer to pay a
 separate \$99 annual fee for each business. Had Apple not illegally restrained trade and/or
 monopolized the market for iOS app distribution, developers either would not have had to pay such
 an annual fee, or Apple would have had to compete on price for the fee with other competitors.

187. Apple also dictates minimum and greater price points, which prevent developers
from offering paid products at less than \$0.99 or at price points ending in anything other than \$0.99.
This pricing mandate inhibits sales and output in app and in-app transactions. There is no lawful
justification for this transaction-inhibiting restraint, and, again, faced with competition from
alternative distribution channels, Apple would have had to compete to allow more flexibility in
pricing for iOS apps.

13 188. Further underscoring that Apple's pricing for the App Store and its iOS app payment processing services have no legitimate procompetitive justifications, other mobile device ecosystem 14 15 providers that also provide a marketplace for apps for their mobile OS act in far less restrictive, yet 16 equally effective ways to attract developers to the mobile platform. For example, Microsoft 17 announced at its Build 2018 conference a new revenue sharing model for app sales in the Microsoft 18 Store where up to 95% of the revenue from consumer applications, including both individual 19 applications and in-app purchases, will go to the developer. The Microsoft rates contrast with 20Apple's supra-competitive 30% rate for the vast majority of app and in-app products.

21 189. Apple's unreasonable restraints on trade and monopolistic practices in the U.S. 22 markets (or aftermarkets) for iOS app distribution and iOS app payment processing eliminate 23 competition and stifle innovation and choice. Further, Apple harms consumers, developers, and 24 competition by depressing output. Evidence shows that consumers of app store products are price 25 sensitive. Apple's overly expensive costs, fees, and pricing inhibit sales of products sold via the 26 App Store. Developers and would-be developers, who can only earn 70% on the dollar on each paid 27 app or product, in addition to paying \$99 annually (or more for multiple apps) to gain entry to the 28 App Store, undoubtedly think very hard about whether to spend the effort, time, and energy that is

required to design and program an app or related product, bring it to market in the single store
 available, and hope to recoup costs and make a reasonable profit. For many, the calculus makes no
 economic sense. This process leads to less output in sales and distribution transactions for
 developers, and thus less output in both the iOS app distribution and iOS app payment processing
 markets overall.

6 190. Apple's anticompetitive behavior also stifles innovation in the U.S. market for iOS
7 app and in-app-product distribution services. For example, Amazon.com devised an alternative way
8 of distributing Android OS apps, Amazon Underground, where Amazon pays developers according
9 to how much time consumers spend interacting with the apps. Yet, Apple's contracts and practices
10 would not allow to utilize such a model.

11 191. Apple's abusive tactics also stifle innovation in apps-another way it hurts 12 competition (and users and developers) generally. By largely excluding app store competitors, and 13 by taking an iron hand approach to what it views as "permissible" for the iPhone, Apple reduces the 14 number of locations app developers can feature their apps, and prevents them from innovating in 15 any ways that Apple does not prefer. Consumers, as well as developers and competition generally, 16 benefit from other venues that host iOS apps and encourage the development of more and better 17 types of apps—including categories that break the mold in term of what "apps" can do. All of these results would engender far more innovation and consumer choice, but are stifled by Apple's 18 19 dominance over iOS app distribution.

192. Apple also harms app developers by denying them the opportunity to choose other
means to be compensated for their work. Apple's aggressive, anticompetitive behavior diminishes
the choice offered by other marketplaces or distribution channels. Finally, Apple depresses output
by being the sole avenue for the distribution of iOS apps and in-app products. This leads to fewer
sales, which in turn leads to fewer distribution transactions and fees.

193. But for Apple's restrictions, would-be competing app distributors could provide
consumers and developers choice beyond Apple's own App Store and inject healthy competition
into the market. These stores could compete on the basis of (among other things) price, service, and
innovation. Competitors could innovate by (among other things) curating the apps available on a

competing app store (such as offering selections of apps in particular categories of consumer
 interest, like gaming, travel, or health), providing more reliable reviews and other information about
 the apps, showing or advertising apps in different ways, or offering different pricing schemes. For
 example, in the personal computer space (including Macs), software can be purchased through many
 different sellers, including online stores provided by an application developer.

6 194. Apple's conduct also increases consumers' costs. Apple's market power permits it 7 to impose a supracompetitive tax on the price of apps purchased through the App Store and 8 payments made through iOS apps—a rate that is far higher than what could be sustained under 9 competitive conditions. Consumers bear some or all of that tax in the form of higher prices or 10 reduced quantity or quality of apps.

11

# **CLASS ACTION ALLEGATIONS**

12 195. Plaintiff brings this action on behalf of itself and, under Federal Rules of Civil
13 Procedure 23(a), (b)(2), and (b)(3), as representatives of a Class defined as follows:

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All former or current developers of any Apple iOS application or in-app product (including subscriptions) sold for a non-zero price via Apple's iOS App Store whose claims were not released in the prior class action settlement of *Cameron v. Apple Inc.*, Case No. 19-cv-3074-YGR (N.D. Cal.).

196. Developers are also direct purchasers of Apple's services in the iOS app distribution
and payment processing markets, and they directly pay Apple's exorbitant commission fees.
Apple's commission is taken from developers before they receive funding from sales made through
the App Store. Apple's contracts with developers state the terms and conditions under which the
developers sell apps through the App Store, including the commission schedule that the developer
will pay.

197. Numerosity. Members of the Class are so numerous that joinder is impracticable.
Plaintiffs do not know the exact size of the Class but believe that there are at least millions of class
members geographically dispersed around the world.

198. Typicality. Plaintiffs' claims are typical of the claims of the members of the Class.
 Plaintiffs and all members of the Class were damaged by the same wrongful conduct of Apple.

Specifically, Apple's wrongdoing caused class members to pay inflated prices to Apple. Developers
 paid an inflated commission directly to Apple.

3 199. Plaintiffs will fairly and adequately protect and represent the interests of the Class.
4 The interests of Plaintiffs are coincident with, and not antagonistic to, those of the Class.
5 Accordingly, by proving their own claims, Plaintiffs will prove other class members' claims as well.

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200. Adequacy of Representation. Plaintiffs are represented by counsel who are experienced and competent in the prosecution of class action antitrust litigation. Plaintiffs and their counsel have the necessary financial resources to adequately and vigorously litigate this class action. Plaintiffs can and will fairly and adequately represent the interests of the Class and have no interests that are adverse to, conflict with, or are antagonistic to the interests of the Class.

11 201. Commonality. There are questions of law and fact common to the Class, which
12 questions relate to the existence of the conspiracy alleged, and the type and common pattern of
13 injury sustained as a result thereof, including, but not limited to:

whether there exist relevant markets for smartphones, iOS app distribution, and iOS payment processing;

• whether Apple possesses market power in the relevant markets;

17 ||

• whether the Apple's conduct is anticompetitive; and

18 202. whether Apple's conduct has led to supracompetitive prices, reduced output, or19 reduced quality in the relevant markets.

20 203. The prosecution of separate actions by individual Class Members would create a risk
21 of inconsistent or varying adjudications, establishing incompatible standards of conduct for
22 Defendant.

23 204. This Class Action is superior to any other method for the fair and efficient
24 adjudication of this legal dispute, as joinder of all members is not only impracticable, but impossible.
25 The damages suffered by many Class Members are small in relation to the expense and burden of
26 individual litigation, and therefore, it is highly impracticable for such Class Members to individually
27 attempt to redress the wrongful anticompetitive conduct alleged herein.

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1	INTERSTATE TRADE AND COMMERCE							
2	205. Apple's conduct has taken place in and affected the continuous flow of interstate							
3	trade and commerce of the United States, in that, inter alia:							
4	(a) Apple has provided iOS app distribution and iOS app payment processing							
5	services throughout the United States;							
6	(b) Apple has used instrumentalities of interstate commerce to provide iOS app							
7	distribution and iOS app payment processing services throughout the United States;							
8	(c) In furtherance of the anticompetitive scheme alleged herein, Apple							
9	employees have traveled between states and have exchanged communications through interstate							
10	wire communications and via U.S. mail; and							
11	(d) The anticompetitive scheme alleged herein has affected billions of dollars of							
12	commerce. Apple has inflicted antitrust injury by artificially excluding competitors, raising prices							
13	paid by developers and consumers, and causing the other antitrust injuries described herein.							
14	CAUSES OF ACTION							
15	<u>COUNT I</u>							
16	Sherman Act Section 1 – Unreasonable Restraints of Trade (15 U.S.C. § 1)							
17	206. The foregoing paragraphs are incorporated by reference as though fully set forth							
18	herein.							
19	herein.							
19	herein. 207. Apple has market power in the relevant market for smartphone devices.							
20								
	207. Apple has market power in the relevant market for smartphone devices.							
20	<ul><li>207. Apple has market power in the relevant market for smartphone devices.</li><li>208. As alleged herein, Apple has imposed certain agreements to restrain trade on iOS</li></ul>							
20 21	<ul> <li>207. Apple has market power in the relevant market for smartphone devices.</li> <li>208. As alleged herein, Apple has imposed certain agreements to restrain trade on iOS developers and iOS device consumers in exchange for the provision of smartphones over which it</li> </ul>							
20 21 22	<ul> <li>207. Apple has market power in the relevant market for smartphone devices.</li> <li>208. As alleged herein, Apple has imposed certain agreements to restrain trade on iOS developers and iOS device consumers in exchange for the provision of smartphones over which it holds market power and/or the ability to develop and distribute apps on such smartphones.</li> </ul>							
20 21 22 23	<ul> <li>207. Apple has market power in the relevant market for smartphone devices.</li> <li>208. As alleged herein, Apple has imposed certain agreements to restrain trade on iOS developers and iOS device consumers in exchange for the provision of smartphones over which it holds market power and/or the ability to develop and distribute apps on such smartphones.</li> <li>209. These contracts, combinations, or conspiracies include but are not limited to tying</li> </ul>							
20 21 22 23 24	<ul> <li>207. Apple has market power in the relevant market for smartphone devices.</li> <li>208. As alleged herein, Apple has imposed certain agreements to restrain trade on iOS developers and iOS device consumers in exchange for the provision of smartphones over which it holds market power and/or the ability to develop and distribute apps on such smartphones.</li> <li>209. These contracts, combinations, or conspiracies include but are not limited to tying arrangements, long-term exclusive dealing arrangements, and vertically arranged boycotts.</li> </ul>							
<ul> <li>20</li> <li>21</li> <li>22</li> <li>23</li> <li>24</li> <li>25</li> </ul>	<ul> <li>207. Apple has market power in the relevant market for smartphone devices.</li> <li>208. As alleged herein, Apple has imposed certain agreements to restrain trade on iOS developers and iOS device consumers in exchange for the provision of smartphones over which it holds market power and/or the ability to develop and distribute apps on such smartphones.</li> <li>209. These contracts, combinations, or conspiracies include but are not limited to tying arrangements, long-term exclusive dealing arrangements, and vertically arranged boycotts.</li> <li><u>Exclusive Dealing</u></li> </ul>							
<ul> <li>20</li> <li>21</li> <li>22</li> <li>23</li> <li>24</li> <li>25</li> <li>26</li> </ul>	<ul> <li>207. Apple has market power in the relevant market for smartphone devices.</li> <li>208. As alleged herein, Apple has imposed certain agreements to restrain trade on iOS developers and iOS device consumers in exchange for the provision of smartphones over which it holds market power and/or the ability to develop and distribute apps on such smartphones.</li> <li>209. These contracts, combinations, or conspiracies include but are not limited to tying arrangements, long-term exclusive dealing arrangements, and vertically arranged boycotts.</li> <li><u>Exclusive Dealing</u></li> <li>210. Apple has entered into long-term exclusive dealing arrangements with iOS</li> </ul>							

211. Apple has similarly entered into long-term exclusive dealing arrangements with iOS
 device purchasers with respect to the exclusive use of the App Store and Apple's payment
 processing.

4 212. Apple's arrangements have had the effect of foreclosing competition in a substantial
5 share of the line of commerce affected and each of the relevant markets for iOS app distribution and
6 payment processing. Within the limitations period, such foreclosure has at minimum ranged from
7 more than 30% of all smartphone users in the U.S. to more than 50% of such users today. And, on
8 the developer side, the foreclosure has covered between 90-100% of all iOS app developers in the
9 U.S.

10 213. Apple's arrangements cannot be circumvented.

11 214. Apple's arrangements with developers and users are of long duration and not easily
12 terminable as a matter of practical economics.

13

215. Apple has coerced developers and users to enter into these arrangements.

14 216. Apple's arrangements are not the product of competition.

15 217. Apple's arrangements have had the effect of unreasonably restraining competition in
16 the relevant markets (or aftermarkets) for iOS app distribution and payment processing.

17

# Tying arrangements – Smartphones and iOS app distribution

18 218. iOS devices are sold in the U.S. smartphone market, and, as described above, Apple
19 possess market power over smartphones.

20 219. Smartphones and iOS app distribution are two separate services or products.

21 220. Apple has conditioned the ability to develop and distribute apps to its smartphone
22 users on developers' agreement to use only its iOS app distribution service (the App Store).

23 221. Apple has conditioned the operation of its smartphones, as well as the warranty on
24 such devices, on the use of its iOS app distribution service (the App Store).

25 222. Apple has sufficient economic power over smartphones to enable it to restrain trade
26 in the separate relevant market for iOS app distribution.

27 223. Apple's conduct has affected a not insubstantial amount of interstate commerce in
28 iOS app distribution.

 2 224. Apple's conduct has had an anticompetitive effect in the relevant market for iOS app distribution.
 3 Tying Arrangements – iOS App Distribution and iOS App Payment Processing

4 225. iOS app distribution and iOS app payment processing services are two separate
5 services or products.

6 226. As described herein, Apple has market power in the relevant market for iOS app
7 distribution.

8 227. As described herein, Apple has conditioned the provision of iOS app distribution on
9 the use of its iOS app payment processing service.

228. Apple has sufficient economic power in the relevant market for iOS app distribution
to enable it to restrain trade in the relevant market for iOS app payment processing services.

12 229. Apple's conduct has affected a not insubstantial amount of interstate commerce in
13 the provision of iOS app distribution and iOS app payment processing.

14 230. Apple's conduct has had an anticompetitive effect in the relevant markets for iOS
15 app distribution and iOS app payment processing services.

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#### Vertically Arranged Boycotts

17 231. Utilizing its market power over smartphones, Apple has induced and coerced
18 developers to boycott Apple's competitors for iOS app distribution and iOS app payment processing
19 services.

20 232. As described herein, Apple has agreed with, induced, and/or coerced developers to
21 boycott Apple's competitors for iOS app distribution and/or iOS app payment processing services.

22 233. Apple's conduct has foreclosed access to the relevant markets for iOS app
23 distribution and iOS app payment processing, which is necessary to enable Apple's competitors in
24 each market to compete.

25

# Anticompetitive Product Design

26 234. Apple preinstalls its App Store on every iOS device it sells.

27 235. Apple designed iOS to make it impossible for iOS users to uninstall Apple's App
28 Store app.

236. Apple also designed iOS so that using any alternative to the App Store (if a user were
 able to circumvent Apple's technological and contractual restraints) will have unpleasant
 consequences for the user, such as the phone ceasing to work, working only poorly, or causing issues
 with respect to other apps' operation (such as "glitches" and/or making the apps crash).

5 237. On information and belief, Apple has placed the code for the App Store in a location
6 within iOS source code that deleting it would also cause the operating system to crash (and thus
7 render the iPhone inoperable).

8 238. The combined effect of these practices has been to reduce users' desire to install or 9 use alternatives to the App Store due to something other than competition on the merits; significantly 10 reduce usage of rivals' alternatives to the App Store (really, eliminate them) through non-11 competitive means; and reduce competitors' options due to fear of "breaking" one's device.

12 239. Apple's conduct is not justified, because its conduct is not intended to enhance
13 overall efficiency and to make the relevant markets more efficient.

240. Apple's conduct has had a substantial effect on interstate commerce.

15 241. Plaintiff has been or will be injured in their property as a result of Apple's conduct.
16 242. Plaintiff has suffered and will suffer injury of the type that the antitrust laws were
17 intended to prevent. Plaintiff has been and will be injured by the harm to competition as a result of
18 Apple's conduct.

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# Sherman Act Section 2 – Monopolization (15 U.S.C. § 2)

**COUNT II** 

21 243. The foregoing paragraphs are incorporated by reference as though fully set forth
22 herein.

23 244. Apple has willfully acquired and maintained monopoly power in the relevant markets
24 for iOS app distribution and iOS app payment processing.

25 245. Apple possesses monopoly power in the relevant market for iOS app distribution and
iOS app payment processing. Apple has the power to control prices or exclude competition in the
relevant markets.

246. Apple has nearly 100% market share in each of the relevant markets, and there are
 substantial barriers to new entry in each relevant market.

3 247. Apple has willfully acquired and maintained monopoly power in the relevant
4 markets, by means of predatory, exclusionary, and anticompetitive conduct, including but not
5 limited to lock-in, tying arrangements, coercion of disloyal developers, vertically arranged boycotts,
6 and leveraging, as alleged herein.

7

#### Aftermarket Monopolization

8 248. Due to the information and switching costs described above, iOS device purchasers
9 become locked in to their purchase after making their initial purchase, and then become more locked
10 into the iOS ecosystem over time.

11 249. Once users were locked into iOS devices and the iOS ecosystem, Apple utilized the
12 power that lock-in conferred in order to exclude competition in the iOS app distribution and iOS
13 app payment processing markets (or aftermarkets), as described herein.

14 250. Apple's actions, based on the lock-in it obtained has impeded its competitors' ability
15 to compete in both the iOS app distribution and iOS app payment processing markets (or
16 aftermarkets).

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# Tying Arrangements – iOS Devices and iOS App Distribution

18 251. iOS devices are sold in the U.S. smartphone market, but, as described above, Apple
19 obtains lock-in monopoly power over iOS device users once they select an iOS device for purchase.

252. iOS devices and iOS app distribution are two separate services or products.

21 253. Apple has conditioned the operation of an iOS device, as well as the warranty on
22 such a device, on the use of its iOS app distribution service (the App Store).

23 254. Apple has sufficient economic power over locked-in iOS device users to enable it to
24 restrain trade in the relevant market for iOS app distribution.

25 255. Apple's conduct has affected a not insubstantial amount of interstate commerce in
26 iOS app distribution.

27 256. Apple's conduct has had an anticompetitive effect in the relevant market for iOS app
28 distribution.

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1	<u>]</u>	Tying Arrangements – iOS App Distribution and iOS App Payment Processing				
2	257. i	OS app distribution and iOS app payment processing services are two separate				
3	services or products.					
4	258. A	258. As described herein, Apple has conditioned the provision of iOS app distribution on				
5	the use of its iOS app payment processing service.					
6	259. A	259. Apple has sufficient economic power in the relevant market for iOS app distribution				
7	to enable it to restrain trade in the relevant market for iOS app payment processing services.					
8	260. A	260. Apple's conduct has affected a not insubstantial amount of interstate commerce in				
9	the provision of iOS app distribution and iOS app payment processing.					
10	261. A	Apple's conduct has had an anticompetitive effect in the relevant markets for iOS				
11	app distribution and iOS app payment processing services.					
12	<u></u>	Vertically Arranged Boycotts				
13	262. A	Apple has induced and coerced developers to boycott Apple's competitors for iOS				
14	app distribution and iOS app payment processing services.					
15	263. A	As described herein, Apple has agreed with, induced, and/or coerced developers to				
16	boycott Apple's	s competitors for iOS app distribution and/or iOS app payment processing services.				
17	264. A	Apple's conduct has foreclosed access to the relevant markets for iOS app				
18	distribution and iOS app payment processing, which is necessary to enable Apple's competitors in					
19	each market to compete.					
20	<u>I</u>	Exclusive Dealing				
21	265. A	Apple has entered into long-term exclusive dealing arrangements with iOS				
22	application developers with respect to the exclusive use of the App Store and Apple's payment					
23	processing.					
24	266. A	Apple has similarly entered into long-term exclusive dealing arrangements with iOS				
25	device purchasers with respect to the exclusive use of the App Store and Apple's payment					
26	processing.					
27						
28						

-63-

267. Apple's arrangements have had the effect of foreclosing competition in a substantial 1 share of the line of commerce affected and each of the relevant markets for iOS app distribution and 2 3 payment processing. 4 268. Apple's arrangements cannot be circumvented. 5 269. Apple's arrangements with developers and users are of long duration and not easily terminable as a matter of practical economics. 6 Apple has coerced developers and users to enter into these arrangements. 7 270. 8 271. Apple's arrangements are not the product of competition. 9 272. Apple's arrangements have had the effect of substantially lessening competition and tending to create a monopoly in the relevant markets (or aftermarkets) for iOS app distribution and 10 11 payment processing. 12 Leveraging 13 273. Apple has monopoly power over locked-in iOS device users, as well as monopoly power in the relevant market for iOS app distribution services. 14 15 274. Apple has used its lock-in monopoly power over iOS device users in a predatory, 16 exclusionary, and anticompetitive manner to monopolize the relevant market for iOS app

distribution, and its monopoly power in iOS app distribution in a predatory, exclusionary, and
anticompetitive manner to monopolize the relevant market for iOS app payment processing services.

19 275. Apple possesses a dominant position in the relevant markets for iOS app distribution
20 and iOS app payment processing.

21

22

Anticompetitive Product Design

276. Apple preinstalls its App Store on every iOS device it sells.

23 277. Apple designed iOS to make it impossible for iOS users to uninstall Apple's App
24 Store app.

25 278. Apple also designed iOS so that using any alternative to the App Store (if a user were
26 able to circumvent Apple's technological and contractual restraints) will have unpleasant
27 consequences for the user, such as the phone ceasing to work, working only poorly, or causing issues
28 with respect to other apps' operation (such as "glitches" and/or making the apps crash).

279. On information and belief, Apple has placed the code for the App Store in a location
 within iOS source code that deleting it would also cause the operating system to crash (and thus
 render the iPhone inoperable).

280. The combined effect of these practices has been to reduce users' desire to install or
use alternatives to the App Store due to something other than competition on the merits; significantly
reduce usage of rivals' alternatives to the App Store (really, eliminate them) through
non-competitive means; and reduce competitors' options due to fear of "breaking" one's device.

8 281. Apple's conduct is not justified, because its conduct is not intended to enhance
9 overall efficiency and to make the relevant markets more efficient.

282. Apple's conduct has had a substantial effect on interstate commerce.

283. Plaintiff has been or will be injured in their property as a result of Apple's conduct.

12 284. Plaintiff has suffered and will suffer injury of the type that the antitrust laws were
13 intended to prevent. Plaintiff has been and will be injured by the harm to competition as a result of
14 Apple's conduct.

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# COUNT III

# Sherman Act Section 2 – Attempted Monopolization

17 285. The foregoing paragraphs are incorporated by reference as though fully set forth18 herein.

19 286. In the relevant markets for iOS app distribution and iOS app payment processing
20 services, Apple has engaged in predatory, exclusionary, and anticompetitive conduct, including but
21 not limited to lock-in, tying arrangements, coercion of disloyal developers, vertically-arranged
22 boycotts, and leveraging, as alleged herein.

23 287. Apple's conduct has had an anticompetitive effect in the relevant markets for iOS
24 app distribution and iOS app payment processing services.

288. Apple's conduct has no legitimate business purpose or procompetitive effect.

26 289. Apple has engaged in that conduct with the specific intent of monopolizing the
27 relevant markets for iOS app distribution and iOS app payment processing services.

28

290. Apple has engaged in that conduct with a dangerous probability of monopolizing
 each of the relevant markets.

291. Apple's conduct has had a substantial effect on interstate commerce.

4 292. Developers have been or will be injured in their property as a result of Defendants'
5 conduct.

6 293. Developers have suffered and will suffer injury of the type that the antitrust laws
7 were intended to prevent. Developers have been and will be injured by the harm to competition as
8 a result of Defendants' conduct.

COUNT IV

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#### Unfair Competition – California Business & Professions Code § 17200 et seq.

11 294. Plaintiff restates and incorporates the foregoing paragraphs as though fully set forth
12 herein.

295. Absent injunctive relief, Plaintiff will suffer loss of money or property and an
economic injury in fact, specifically being forced to terminate contracts with its customers and likely
close its business and lay off its employees, and thus has standing to seek relief under section 17200.
296. Apple's actions establish a claim of unlawful competition on multiple grounds.

Apple's anticompetitive and tortious conduct gives rise to a claim under the "unlawful" business
practices prong of the UCL.

19 297. Similarly, Apple's anticompetitive conduct gives rise to a claim under the "unfair"
20 business practices prong of the UCL.

21 298. As a direct and proximate result of Apple's conduct, Plaintiff has suffered and will
22 continue to suffer damages including but not limited to lost business and potential bankruptcy.

23 299. Plaintiff has no adequate remedy at law because monetary damages will not afford
24 adequate relief for the loss of Plaintiff's business relationships, client goodwill, and ability to
25 continue operating.

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**REQUESTED INJUNCTIVE RELIEF** 1 To remedy Apple's unlawful unreasonable restraints of trade, monopolization, attempted 2 3 monopolization, and unfair competition, Plaintiff requests that the Court enter injunctive relief, 4 including but not limited to the following: 5 (a) Enjoin Apple from conditioning any payment, revenue share, or access to 6 any Apple product or service on an agreement by an app developer to launch an app first or 7 exclusively on the Apple App Store; 8 (b) Enjoin Apple from conditioning any payment, revenue share, or access to 9 any Apple product or service on an agreement by an app developer not to launch a version of the 10 app with enhanced or differentiated features on a third-party iOS app distribution platform or 11 store; 12 (c) Enjoin Apple from conditioning any payment, revenue share, or access to 13 any Apple product or service on an agreement with an Original Equipment Manufacturer (OEM) 14 or carrier not to preinstall an iOS app distribution platform or store other than the Apple App 15 Store: (d) Require Apple to provide rival iOS app stores with access to the App Store 16 17 catalog to ensure interoperability and to facilitate consumer choice; 18 Require Apple to permit the distribution of rival iOS app stores through the (e) 19 Apple App Store on fair, reasonable, and non-discriminatory terms; 20 (f) Enjoin Apple from requiring developers to use Apple's IAP system as a 21 condition of offering subscriptions, digital goods, or other IAPs; 22 (g) Require that third-party application developers be given functionality and 23 access to iOS application programming interfaces on terms no worse than the terms Apple allows 24 for its first-party applications; 25 (h) Require Apple to allow developers to fully disable Apple's IAP system; 26 (i) Require Apple to permit developers to communicate freely and directly 27 with users-within the app, in App Store descriptions, and via external channels such as email or 28 Case No. 4:25-cv-05450 -67-CLASS ACTION COMPLAINT

developer websites—regarding pricing, promotions, and alternative purchasing and payment
 options;

3 (j) Enjoin Apple from prohibiting developers from disclosing or advertising
4 within the app or through other communications the availability and pricing of non-IAP payment
5 methods;

6 (k) Require Apple to allow developers to offer and implement alternative
7 payment systems, including but not limited to PayPal and direct credit card processing, without
8 penalty or discrimination, and without being compelled to use Apple's IAP;

9 (1) Require Apple to permit developers to implement tiered pricing structures
10 that reflect the cost differentials between Apple's IAP and alternative payment methods (e.g.,
11 higher prices for users paying through IAP versus lower prices for users paying via credit card or
12 other third-party processors);

(m) Enjoin Apple from imposing any punitive or coercive fee structures on
developers for using or steering users to alternative IAP methods, including the imposition of
blanket percentage-based surcharges or "core technology fees";

(n) Require Apple to disclose to the Court and developers the costs associated
with operating the App Store and permit Apple to charge developers only such fees as are
demonstrably and proportionally related to those actual operating costs;

(o) Require Apple, at the initial setup stage of a new iOS device, to present
users with a choice screen offering the opportunity to select among available app stores, including
third-party iOS app distribution platforms;

(p) Require Apple to allow users to manage subscriptions purchased outside the
App Store—such as those made via developer websites—through the user's iOS device, including
cancellation, plan changes, and upgrades;

(q) Require Apple to allow users to manage subscriptions purchased via iOS inapp purchases from other devices, including cancellation, plan changes, and upgrades; and

- 27
- 28

1	1 (r) Require Appl	e to permit developers to make their iOS apps available for						
2	direct download via web browsers, including Safari, consistent with the download functionality							
3	3 permitted under macOS, and permit	permitted under macOS, and permit these apps to be automatically updated by the developer.						
4	4	PRAYER FOR RELIEF						
5	5 Wherefore, Plaintiff requests	Wherefore, Plaintiff requests the following relief:						
6	6 (a) Damages in a	(a) Damages in an amount to be determined;						
7	7 (b) Treble damag	es;						
8	8 (c) Attorneys' fe	?S;						
9	9 (d) Costs;							
10	10 (e) Pre-judgment	and post-judgment interest at the maximum rate permitted						
11	11 under the law;							
12	12 (f) Punitive dam	iges;						
13	13 (g) Injunctive rel	ef as described herein;						
14	14 (h) Declaratory r	elief, including but not limited to a declaration and judgment						
15	15 that Apple's conduct alleged in the	that Apple's conduct alleged in the Complaint violates the laws alleged in the Complaint; and						
16	16 (i) Such other ar	d further relief as the Court deems proper and just.						
17	17							
18	18 <b>D</b>	MAND FOR JURY TRIAL						
19	19Pursuant to Rule 38(a) of the	Pursuant to Rule 38(a) of the Federal Rules of Civil Procedure, Plaintiff demands a jury						
20	20 trial as to all issues triable by a jury.	trial as to all issues triable by a jury.						
21	21							
22	22							
23	23							
24	24							
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26	26							
27	27							
28	28							
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4       By/s/San S. Stake         5       San S. Stake (SBN 257916)         6       Sum S. Stake (Quinnemanuel.com         7       Emma C. Barton (application for admission forthcoming)         8       Forthcoming)         9       50 California St., 22nd Floor         10       Telephone: (415) 875-6600         11       Steig D. Olson (pro hac vice forthcoming)         12       Steig D. Olson (pro hac vice forthcoming)         13       David LeRay (pro hac vice forthcoming)         14       Nicolas Siebert (pro hac vice forthcoming)         15       Nicolas Siebert (pro hac vice forthcoming)         16       (212) 849-7000         17       COHEN MILSTEIN SELLERS & TOLL PLIA         18       Benjamin F. Jackson (pro hac vice forthcoming)         19       Benjamin F. Jackson (pro hac vice forthcoming)         20       New York, NY 10005         21       (212) 843-7797         22       Atorneys for Plaintiff Proton AG         23		DATED: June 30, 2025		-	URQUHART &		
3       Sam S. Stake (SBN 257916)         6       Sam S. Stake (Quinnemanuel.com         7       Emma C. Barton (application for admission forthcoming)         8       Fill SULLIVAN LLP         7       Emma C. Barton (application for admission forthcoming)         9       50 California SU, 22nd Floor         10       Steig D. Olson (pro hac vice forthcoming)         11       Steig D. Olson (pro hac vice forthcoming)         12       Steig D. Olson (pro hac vice forthcoming)         13       David LeRay (pro hac vice forthcoming)         14       nicolass Siebert (quinnemanuel.com         15       Nicolas Siebert (quinnemanuel.com         16       (212) 849-7000         17       COHEN MILSTEIN SELLERS & TOLL PLIA         18       Michael B. Eisenkraft (pro hac vice forthcoming)         19       Beijamin F. Jackson (pro hac vice forthcoming)         12       COHEN MILSTEIN SELLERS & TOLL PLIA         20       New York, NY 10016         21       (212) 849-7000         22       Attorneys for Plaintiff Proton AG         23       Quintersy for Plaintiff Proton AG         24       25         25       -70	3						
6       samstake @quinnemanuel.com         7       QUINN EMANUEL URQUHART &         8       SULLIVAN LLP         9       c. Barton (application for admission forthcoming)         9       sol California SL, 22nd Floor         10       Telephone: (415) 875-6600         11       Steig D. Olson (pro hac vice forthcoming)         12       steigolson@quinnemanuel.com         13       David LeRay (pro hac vice forthcoming)         14       nicolassibert@quinnemanuel.com         15       295 5th Avenue, 9th Floor         16       (212) 849-7000         17       COHEN MILSTEIN SELLERS & TOLL PLLO         18       meisenkraft (pro hac vice forthcoming)         19       bjackson@cohenmilstein.com         19       Beingamin F. Jackson (pro hac vice forthcoming)         12       Street, 14th Floor         19       bjackson@cohenmilstein.com         19       bjackson@cohenmilstein.com         11       Street, 14th Floor         12       Attorneys for Plaintiff Proton AG         13       21         24       25         25       26         26       27         27       .70       Cas No. 425-cy.	4		By /s/ Sam S. Stake				
6       QUINN EMANUEL URQUHART & SULLIVAN LLP         7       Emma C. Barton (application for admission forthcoming)         8       Emma C. Barton (application for admission forthcoming)         9       50 California St. 22nd Floor         10       Telephone: (415) 875-6600         11       Steig D. Olson (pro hac vice forthcoming)         12       steigolson@quinnemanuel.com         13       David LeRay (pro hac vice forthcoming)         14       nicolassibert@quinnemanuel.com         15       295 5th Avenue, 9th Floor         16       (212) 849-7000         17       COHEN MILSTEIN SELLERS & TOLL PLL Michael B. Eisenkraft (pro hac vice forthcoming)         18       meisenkraft@cohenmilstein.com         19       bjackson@cohenmilstein.com         20       New York, NY 10016         21       (212) 834-7797         22       Attorneys for Plaintiff Proton AG         23       -70-         24       -70-	5						
7       SULLIVAN LLP         8       forma C. Barton (application for admission for domission for theoring)         9       50 California St., 22nd Floor         10       San Francisco, California 94111         10       Telephone: (415) 875-6600         11       Steig D. Olson ( <i>pro hac vice</i> forthcoming)         12       Steigolson @quinnemanuel.com         13       David LeRay ( <i>pro hac vice</i> forthcoming)         14       Nicolas Sibert ( <i>pro hac vice</i> forthcoming)         15       295 5th Avenue, 9th Floor         16       (212) 849-7000         17       COHEN MILSTEIN SELLERS & TOLL PLLO         18       Michael B. Eisenkraft ( <i>pro hac vice</i> forthcoming)         19       Bejamin F. Jackson ( <i>pro hac vice</i> forthcoming)         10       New York, NY 10016         12       COHEN MILSTEIN SELLERS & TOLL PLLO         18       meisenkraft@cohenmilstein.com         19       Bejamin F. Jackson ( <i>pro hac vice</i> forthcoming)         11       New York, NY 10005         12       (212) 838-7797         13       Attorneys for Plaintiff Proton AG         14       -70.       Cae No. 4:25-cy.	6						
8       forthcoming)         9       50 California St., 22nd Floor         10       San Francisco, California 94111         10       Telephone: (415) 875-6600         11       Steig D. Olson (pro hac vice forthcoming)         12       Steig D. Olson (pro hac vice forthcoming)         13       davidleray @quinnemanuel.com         14       David LeRay (pro hac vice forthcoming)         15       295 5th Avenue, 9th Floor         16       (212) 849-7000         17       COHEN MILSTEIN SELLERS & TOLL PLLO         18       meisenkraft@quinnemanuel.com         19       Beijamin F. Jackson (pro hac vice forthcoming)         10       Beijamin F. Jackson (pro hac vice forthcoming)         19       Beijamin F. Jackson (pro hac vice forthcoming)         10       S8 Pine Street, 14th Floor         10       New York, NY 10005         11       (212) 838-7797         12       Attorneys for Plaintiff Proton AG         13       24         14       25         15       26         16       27         27       .70	7			SULLIVAN LL	Р		
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13       davidleray@quinnemanuel.com         14       Nicolas Siebert (pro hac vice forthcoming)         15       295 5th Avenue, 9th Floor         16       (212) 849-7000         17       COHEN MILSTEIN SELLERS & TOLL PLLO         18       michael B. Eisenkraft (pro hac vice forthcoming)         19       Benjamin F. Jackson (pro hac vice forthcoming)         19       Benjamin F. Jackson (pro hac vice forthcoming)         20       New York, NY 10005         21       (212) 838-7797         22       Attorneys for Plaintiff Proton AG         23	12				-		
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