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Interim Co-Lead Class Counsel

UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF CALIFORNIA
SAN FRANCISCO DIVISION

IN RE GOOGLE PLAY DEVELOPER ANTITRUST LITIGATION

Related Actions:
Epic Games, Inc. v. Google LLC, No. 3:20-cv-5671-JD
In re Google Play Consumer Antitrust Litigation, No. 3:20-cv-5761-JD

Case No. 3:20-cv-05792-JD

FIRST AMENDED CONSOLIDATED CLASS ACTION COMPLAINT FOR VIOLATION OF THE SHERMAN AND CLAYTON ACTS (15 U.S.C. §§ 1, 2, 3, 15, 26), CARTWRIGHT ACT (CAL. BUS. & PROF. CODE §§ 16700 ET SEQ.) AND UNFAIR COMPETITION LAW (CAL. BUS. & PROF. CODE §§17200 ET SEQ.)

DEMAND FOR JURY TRIAL OF ALL ISSUES SO TRIABLE

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For their suit against Defendants Google LLC, Google Ireland Limited, Google Commerce Limited, Google Asia Pacific PTE. Ltd. and Google Payment Corp. (collectively, Google), Plaintiffs Pure Sweat Basketball Inc. and Peekya App Services, Inc., on their own behalf and that of all similarly situated U.S. Android OS application developers, allege as follows:

I. INTRODUCTION

1. Native applications—apps of various sorts programmed for and downloaded to a mobile device—bring smartphones and tablets to life. In turn, add-ons for apps—items such as consumables (for example, extra lives in an adventure game) or subscriptions for full-fledged mobile productivity apps—make apps more fun or useful. These apps and in-app digital content are created through the ingenuity, training, investment, and hard work of developers, and the buyers of their products now include most households in the United States. As of February 2021, 85% of Americans owned smartphones, and 53% owned tablets.[1] Where U.S. consumers buy apps and add-ons depends on whether their devices run on Apple's or Google's respective operating systems. As the Congressional Subcommittee on Antitrust, Commercial, and Administrative Law recently reported, "both Apple and Google have durable and persistent market power in the mobile operating system market; iOS and Android run on more than 99% of mobile devices in the U.S. and globally."[2] The Apple App Store is "the only app store available on iOS devices," and the "Google Play store is the primary app store installed on all Android devices."[3]

2. And because the apps and add-ons for iOS and Android devices are incompatible[4] (with all the barriers and switching costs entailed), Apple's app store does not place competitive pressure on the Google Play Store, particularly regarding the prices that Google charges developers for app-

[1] http://www.pewinternet.org/fact-sheet/mobile/ (last accessed July 19, 2021).

[2] *Investigation of Competition in Digital Markets: Majority Staff Report and Recommendations*, Subcommittee on Antitrust, Commercial and Administrative Law of the Committee on the Judiciary, United States House of Representatives (October 6, 2020) ("House Report") at 94, available at https://judiciary.house.gov/uploadedfiles/competition_in_digital_markets.pdf (last accessed Oct. 21, 2020).

[3] *Id.* at 95.

[4] https://yourbusiness.azcentral.com/apple-apps-compatible-android-20369.html (last accessed Aug. 15, 2020); *see* House Report at 94.

distribution services. The same is true for in-app purchases (often called "IAP"), which primarily entail the processing of consumers' payments for any add-ons they purchased in apps distributed through Google Play Store (collectively, "in-app digital content").[5] As a result, Google and Apple split the lucrative mobile apps world between them, with enormous profits for each.

3. This suit concerns the anticompetitive conduct Google has engaged in to (1) establish and maintain its monopoly in the U.S. market for the distribution of Android OS apps, and (2) extend that monopoly to the market for in-app digital content.

4. Initially, Google purported to be building an "open ecosystem" that permitted developers to sell apps to consumers however they choose.[6] In reality, through a thicket of agreements with smartphone manufactures and carriers, "revenue sharing" payoffs, and technical barriers, Google has constructed an effectively closed ecosystem, i.e., an ecosystem closed to rival app stores. In total, Google Play now distributes more than 90% of all Android OS apps in the United States, enjoying monopoly power in the market for the distribution of Android OS apps. Furthermore, Google illegally ties the Google Play Store to its own in-app payment processor ("Google Play Billing," or "GPB")—requiring all developers selling apps through Google Play Store to sell any in-app digital content through Google Play Billing. Google also enjoys a monopoly in the U.S. market for in-app payment processing on Android OS.[7]

[5] *See* House Report at 95 ("The App Store and the Play Store do not compete against one another. Android users cannot access the Apple App Store, and iOS users cannot access the Google Play Store, so the dominance of the Play Store is not constrained by the App Store and vice versa.") (citation omitted); *id.* at 102 ("high switching costs and a lack of on-device competition means that neither firm's market power is disciplined by the presence of the other.").

[6] [redacted]

[7] While Google has "always required developers who distribute their apps on Play to use Google Play's billing system if they offer in-app purchases of digital goods, and pay a service fee from a percentage of the purchase," it recently "clarified" its Payments Policy "to be more explicit that all developers selling digital goods in their apps are required to use Google Play's billing system." "[F]or those who already have an app on Google Play that requires technical work to integrate [Google's] billing system[,]" Google has set a deadline of September 30, 2021 for developers to "complete any needed updates." *See* https://android-developers.googleblog.com/2020/09/listening-to-developer-feedback-to.html (last accessed July 15, 2021).

5. Far from maintaining its Android OS apps monopoly in a competitive "open" ecosystem, Google has and continues to systematically leverage anticompetitive agreements and technical barriers to secure that monopoly and block potential competition. Google has done so in two main ways.

6. *First*, Google obtained and maintains its monopoly status through agreements with device manufacturers (often called original equipment manufacturers or "OEMs"). The key agreement in this respect is the Mobile Application Distribution ("MADA") Agreement. Any OEM that wants to preinstall the Google Play Store must sign a MADA Agreement to obtain a license for Google's must-have apps—including the popular YouTube and Google Maps apps, which are literally "must-have" because of Google's forced-bundling practices.[8] And under the MADA Agreements, the manufacturer is required not only to preinstall Google Play Store but must, in addition, give it premium placement through a permanent position on the device's home screen.

7. As discovery produced so far in this case has revealed, starting in 2019, Google also began [redacted].

8. *Second,* in addition to using a thicket of agreements with OEMs to substantially foreclose distribution of other app stores,[9] Google deploys unnecessary and pretextual technical barriers to deter consumers from "sideloading" apps. These barriers include (1) default settings to block downloading; (2) misleading official Android security warnings; and (3) other security mechanisms designed to deter consumers from using a competing app store or downloading apps from

[8] *See* House Report at 213 (finding that "Google required that any smartphone manufacturer seeking to license Android preinstall Google Search and Google Play Store, alongside a host of other rotating apps selected by Google.") (citation omitted).

[9] *See id.* at 219 ("Because Google's Play Store is the primary way that users install applications on Android devices, the Play Store effectively functions as a gatekeeper for software distribution on a majority of the world's mobile devices.")

outside the Google Play Store. Google also prevents the automatic updating of apps downloaded outside Google Play Store and, through its security systems, sometimes disables such apps without a user's knowledge.

9. Google's pretextual technical barriers create, as the Congressional Subcommittee explained, "significant friction for sideloading apps to Android devices. … [S]ideloading entails a complicated twenty-step process, and users encounter multiple security warnings designed to discourage sideloading."[10]

10. Through this conduct, Google has substantially *and intentionally* foreclosed competition, even from otherwise established and successful companies capable of policing their own stores for malware.

11. Not surprisingly, an internal Google document from 2021 estimates that, in the United States, [redacted] of devices have a user-sideloaded store.

12. That is precisely what Google intended—to degrade and eliminate alternative channels of app distribution and in-app content. As Google knows, few Android users are even aware of the necessary process for going outside the Google Play Store, much less willing go to such trouble (and ignore Google's security warnings) to download an app from a competitor. Its internal documents show that Google [redacted] that [redacted] from sideloading [redacted] that it would [redacted]"[11]

13. Through its anticompetitive conduct, including both its anticompetitive agreements with OEMs and others and unjustifiable technical barriers, Google has prevented the erosion of its monopoly power in the market for distribution of Android OS apps and in the market for in-app payment processing. Google's contracts and practices "cut off the air supply" even from well-resourced competitors like Amazon, robbing the marketplace of innovative means of distributing apps

[10] *Id.* at 97.

[11] *See also* "Download apps to your Android device," available at: https://support.google.com/android/answer/7391672?hl=en&ref_topic=7311596 (last accessed Aug. 15, 2020) (setting forth official safety warnings for those who would venture outside Google Play).

at lower costs to developers. By stifling competition, Google deprives consumers of readily accessible, alternative choices in the U.S. market for Android OS app distribution and in-app payment processing.

14. Google also abused its unlawfully acquired market dominance to impose supracompetitive pricing on developers. Google maintains a default service fee of 30%[12] (subject to exceptions for certain kinds of purchases) paid by developers to Google on each sale of non-zero-priced Android OS apps through the Google Play Store and of in-app digital content[13] through (the mandatory) Google Play Billing.[14] So if an app or in-app digital content costs $1.99, Google usually takes nearly 60 cents.

15. For a small portion of transactions, Google charges developers a 15% service fee. For example, after Plaintiffs commenced this litigation, Google allowed app developers to register for a lower 15% service fee on the first $1 million of annual revenue they generate through Google Play Store. But like Google's 30% service fee, the 15% service fee is still a supracompetitive charge.

16. Moreover, as a condition of accessing Google Play Store, Google forces developers to process payments for in-app purchases exclusively through Google Play Billing—at a cost of 15% to 30% on each transaction. In other words, Google illegally ties its Google Play Billing solution to the

[12] Google's current and past 70% (developer) / 30% (Google) revenue split is memorialized at paragraph 3.4 of its Google Play Developer Distribution Agreement by reference to a Service Fee, which in turn is linked to Google's "Service fees" schedule. (*See* https://play.google.com/about/developer-distribution-agreement.html (Dev. Agr.) (last accessed Aug. 15, 2020), available at: https://support.google.com/googleplay/android-developer/answer/112622?hl=en ("For apps and in-app products offered through Google Play, the service fee is equivalent to 30% of the price. You receive 70% of the payment. The remaining 30% goes to the distribution partner and operating fees.") (last accessed Aug. 15, 2020).)

[13] Google has modified its service-fee structure with respect to subscriptions. (https://support.google.com/googleplay/android-developer/answer/112622?hl=en ("As of January 1, 2018, the transaction fee for subscription products decreases to 15% for any subscribers you retain after 12 paid months. If a subscriber has been active as of this date, that time will be counted. For example, if a subscriber has been active for 4 months, the transaction fee will be reduced to 15% after 8 more paid months.").)

[14] Google also charges developers a $25 fee to set up a Google Play developer account. (https://support.google.com/googleplay/android-developer/answer/6112435?hl=en) ("There is a $25 USD one-time registration fee … .") (last accessed Aug. 15, 2020).) This fee helps offset costs that Google may claim as justification for its supracompetitive 30% (or 15%) service fee, especially considering the sheer number of developers from whom Google collects it.

agreement to distribute apps through Google Play Store and then charges a supracompetitive fee for that tied product.

17. The anti-competitive effects of this tie are far-reaching; not only does it impose a supracompetitive fee on developers, but it also stymies innovation and limits key ways in which developers manage and develop their businesses. But for that illegal tie, developers could create and use proprietary payment systems or the products of competitors that could compete not just on price but by offering more features and better functionality. The result would be an ecosystem fundamentally enriched by market competition.

18. Documents produced by Google confirm that its 30% service fee wa [redacted] when Google launched the earliest version of what is now the Google Play Store. [redacted]).

More recent documents [redacted] —a Google presentation from 2021 estimates that processing in-app payments costs Google [redacted] per transaction.

19. What all this shows is that Google could generate a profit while charging developers significantly less than 15%—a conclusion confirmed by Google's own documents, as well as by other benchmarks for competitive rates. Epic, for example, charges a 12% service fee on the Epic Games Store. Another relevant benchmark comes from Google's own Chrome Web Store. Unlike Google Play Store, the Chrome Web Store faces competition from various distribution channels, and thus Google cannot charge arbitrary anticompetitive rates. Instead, Google charges just 5%—a rate that is *one sixth* the charge for the Google Play Store.[15]

20. By imposing supracompetitive fees on developers, Google extracts more money from developers than they would otherwise have to pay for the distribution of Android OS apps and the

[15] "The transaction fee for all purchases in Google Play (apps and in-app purchases) is 30% of the price the customer pays. In other words, developers get 70% of the payment and the remaining 30% goes to the distribution partner and operating fees." "The transaction fee for app purchases in Chrome Web Store is 5% of the app prices. In other words, developers get 95% of the purchase price." *See Google Pay Help*, GOOGLE, https://support.google.com/paymentscenter/answer/7159343?hl=en.

payment processing for in-app digital content. But for Google's exclusionary behavior, competition in the Android app distribution market (as well as the tied market for in-app payment processing) would have eroded Google's monopoly power and constrained its ability to impose supracompetitive prices.

21. In sum, Google's willful acquisition and maintenance of monopoly power in the markets identified, and its abuse of that power (among other things) to impose its supracompetitive distribution and in-app payment-processing fees on U.S. Android OS developers like Plaintiffs, are harmful to competition and, specifically, to developers.

22. Alternatively, if Google is found to be the purchaser of digital products from Android OS developers and to, in turn, sell those products to end-users via Google Play Store or otherwise, then Google acts as a monopsonist, or attempted monopsonist. (A monopsonist is a buy-side monopolist.) The circumstances, effects, and allegations are essentially the same for monopoly or attempted monopoly: Google uses its monopsony power to pay Android OS developers a price below the but-for price they would obtain in a competitive market for their apps and in-app products. Therefore, Plaintiffs' allegations herein should be understood to also plead in the alternative claims based on monopsony, both for Plaintiffs and the putative class. In either alternative, and as pleaded in this complaint, Google's behavior violates antitrust and consumer protection laws.

23. Plaintiffs seek monetary relief to redress the injuries caused by Google's past and ongoing conduct, and injunctive relief to stop Google's ongoing improper, unlawful, and harmful behavior in the relevant markets.

II. JURISDICTION AND VENUE

24. This Court has subject matter jurisdiction over this action under 28 U.S.C. § 1331 because Plaintiffs allege violations of federal law, namely, the federal Sherman Act. The Court has supplemental jurisdiction over the Plaintiffs' state law claim pursuant to 28 U.S.C. § 1367(a).

25. This Court has personal jurisdiction over the Defendants. Google LLC and Google Payment are headquartered in this District. All Defendants have engaged in sufficient minimum contacts with the United States and have purposefully availed themselves of the benefits and protections of United States and California law, such that the exercise of jurisdiction over them would

comport with due process requirements. Further, the Defendants have consented to the exercise of personal jurisdiction by this Court.

26. Venue is proper in this District pursuant to 28 U.S.C. § 1391(b) because Google LLC and Google Payment maintain their principal places of business in the State of California and in this District, because a substantial part of the events or omissions giving rise to Plaintiffs' claims occurred in this District, and because, pursuant to 28 U.S.C. § 1391(c)(3), any Defendants not resident in the United States may be sued in any judicial district and their joinder with others shall be disregarded in determining proper venue. In the alternative, personal jurisdiction and venue also may be deemed proper under Section 12 of the Clayton Antitrust Act, 15 U.S.C. § 22, because Defendants may be found in or transact business in this District. Furthermore, the Google Play Terms of Service incorporates the Google Terms of Service by reference, and the latter designates this judicial district as the federal venue for this action.[16]

III. INTRA-DISTRICT ASSIGNMENT

27. Pursuant to N.D. Cal. Civil Local Rule 3-2 and General Order 44, this antitrust class action has been assigned on a district-wide basis and is not subject to reassignment on the basis of intra-district venue.

IV. PARTIES

A. The Plaintiffs

28. Plaintiff Pure Sweat Basketball Inc. ("Pure Sweat Basketball") is an Illinois corporation with its principal place of business in Crystal Lake, Illinois. It is the developer of the Pure Sweat Basketball Workout App. Pure Sweat Basketball is a party to the developer contracts referenced in this complaint. These agreements specify the commission rate and pricing and other mandates described herein. Also, in order to be permitted to make its app available in Google Play, and to sell non-zero

[16] *See* Google Play Terms of Service, https://play.google.com/about/play-terms/index.html, which incorporates the Google Terms of Service, the latter of which is available at: https://policies.google.com/terms ("California law will govern all disputes arising out of or relating to these terms, service-specific additional terms, or any related services, regardless of conflict of laws rules. These disputes will be resolved exclusively in the federal or state courts of Santa Clara County, California, USA, and you and Google consent to personal jurisdiction in those courts.") (last accessed Aug. 15, 2020).

priced subscriptions through its app, Pure Sweat Basketball has paid Google's $25 developer fee. To the best of its knowledge, Pure Sweat Basketball's last distributions of its app through Google Play, and sales of subscriptions at non-zero prices through the app, have occurred this year. Pure Sweat Basketball charges $4.99 monthly for its digital subscription product, or $49.99 annually, and it has paid Google's supracompetitive commissions on these sales.

29. Alternatively, Google paid Pure Sweat Basketball what amounts to an artificially low wholesale price for digital products sold via Google Play. Furthermore, Pure Sweat Basketball's in-app subscription sales (like the app, if sold at above-zero prices) have always been subject to Google's requirement that app transactions be priced at a minimum of $.99, as well as other pricing mandates. Google has denied Pure Sweat Basketball the ability to choose to sell digital products at price points below $.99, in efforts to achieve maximum sales and effect business plans as it would elect, to Plaintiffs' detriment.

30. Plaintiff Peekya App Services, Inc. ("Peekya") is a Florida corporation with its principal place of business in Sarasota, Florida. Peekya developed and maintains an app called "*Peekya*" that has been and currently is distributed through Google Play. Peekya is a party to and has complied with the Google-developer contracts that are described in this Complaint. In order to sell its app through Google Play for $2.99, Peekya has paid Google's $25 developer fee. Within the four years preceding the filing of this Complaint, Android mobile device users have purchased and downloaded *Peekya*, and Peekya paid Google's supracompetitive commission on these sales. Furthermore, Peekya's pricing of its app has always been subject to Google's requirement that app transactions be priced at a minimum of $.99, as well as other pricing mandates. Google has denied Peekya the ability to choose to sell digital products at price points below $.99, in efforts to achieve maximum sales and effect business plans as it would elect, to Plaintiff's detriment.

B. The Defendants

31. Defendant Google LLC is a Delaware limited liability company with its headquarters and principal place of business in Mountain View, California. It is the owner of Google Play Store, from and by which developers of Android apps sell paid applications, music, movies, books, and in-

app products to Android device owners. Its parent, Alphabet Inc., was number 9 on last year's U.S. Fortune 500,[17] with 2020 revenues of nearly $183 billion and profits of $40.269 billion.[18]

32. Defendant Google Ireland Limited is a limited company organized under the laws of Ireland with its principal place of business in Dublin, Ireland, and a subsidiary of Google LLC. Google Ireland contracts with all app developers that distribute their apps through Google Play and is therefore a party to the anticompetitive contractual restrictions at issue in this complaint.

33. Defendant Google Commerce Limited is a limited company organized under the laws of Ireland with its principal place of business in Dublin, Ireland, and a subsidiary of Google LLC. Google Commerce contracts with all app developers that distribute their apps through Google Play Store and is therefore a party to the anticompetitive contractual restrictions at issue in this complaint.

34. Defendant Google Asia Pacific Pte. Ltd. is a private limited company organized under the laws of Singapore with its principal place of business in Mapletree Business City, Singapore, and a subsidiary of Google LLC. Google Asia Pacific contracts with all app developers that distribute their apps through Google Play and is therefore a party to the anticompetitive contractual restrictions at issue in this complaint.

35. Defendant Google Payment Corp. is a Delaware corporation with its principal place of business in Mountain View, California, and a subsidiary of Google LLC. Google Payment provides in-app payment-processing to Android app developers and users and collects up to a 30% commission on many types of processed payments, including payments for apps sold through Google Play and in-app purchases made within such apps.

V. RELEVANT FACTS

36. Google has injured Plaintiffs, the putative class of U.S. developers they seek to represent, and competition in the relevant markets, *see* Part VII, by way of its unlawful behavior in the U.S. markets for the sale of paid Android OS apps and for payment processing of in-app sales of digital content, including but not limited to subscriptions. As the holder of an unlawfully obtained monopoly,

[17] https://fortune.com/company/alphabet/fortune500/ (last accessed July 19, 2021).

[18] *Id.*

Google overcharges developers in these transactions by imposing a supracompetitive service fee on each paid sale from Google Play Store and on sales of in-app digital products through (the mandatory) Google Play Billing. Google has stifled competition in the U.S. market for Android OS app[19] distribution by strongly inhibiting the emergence of vibrant—and viable—competitors, reinforcing its monopoly power.

37. Additionally, Google requires app developers to sell at minimum prices. There is no pro-competitive justification for this practice, and certainly none in an environment where Google Play holds a dominant share of the U.S. market for Android OS app distribution services.

A. The Market for Licensable Smart Mobile Operating Systems

38. Smart mobile devices like smart phones and tablets enable users to connect wirelessly to the Internet and perform many functions traditionally associated with desktop and laptop computers. Consumers use smart mobile devices to browse the Internet, shop, access social media, stream music and videos, read books, and play games.

39. Like desktop and laptop computers, smart mobile devices require an operating system (an "OS"), which is a software product that controls the basic functions of the device. Without an operating system, the user cannot operate the device or run other software. Operating systems designed for smart mobile devices are "smart mobile OSs."

40. In addition to the features typically found in a desktop or laptop computer OS, smart mobile OSs include features such as a touchscreen, cellular, Bluetooth, and Wi-Fi capabilities, GPS mobile navigation, cameras, video cameras, speech recognition capability, voice recorders, music players, personal digital assistants and other features.

41. Licensable smart mobile OSs constitute a distinct product market. Although desktop and laptop computers, early mobile phones (like flip phones) and game consoles also use operating systems, those operating systems are not compatible with smart mobile devices and are not included in the relevant market. From the demand side, the manufacturers of smart mobile devices cannot use

[19] Throughout this complaint, references to "Android OS apps" also refer to in-app purchases and paid subscriptions.

the operating systems found in computers, older flip phones, or game consoles to power their smart mobile devices. From the supply side, any OS developer that switched from a computer, flip phone, or game console-compatible OS to a smart mobile OS would have to invest substantial time and money in redesigning the operating system to account for the specific functionalities of smart mobile devices.

42. As the Congressional committee recently found, Google has "durable and persistent market power" in this "mobile operating system market."[20] This was not a groundbreaking conclusion. Following a years-long investigation, the European Commission ("EC" or "Commission") concluded in a July 18, 2018 decision that had Google abused its dominant power in the Android app distribution market by tying Google Search to Google Play Store, and by tying Google Chrome to Google Play Store and Google Search. The Commission ordered Google to pay a $5.1 billion fine and to change its practices. Google is currently appealing the decision. Notably, Google has publicly stated that it has complied with the Commission's conduct remedies by changing its contracts with manufacturers that ship phones and tablets into the European Economic Area.

43. Google did not contest the Commission's conclusion that smart mobile OSs constitute a distinct product market.

44. Smart phone OSs and tablet OSs make up the smart mobile OS product market. From the demand side, the same operating system, or similar versions of it, power both smartphones and tablets. From the supply side, all the principal OS developers use the same operating system to power both smartphones and tablets. Apple, for example, which makes both the operating system and hardware for its smartphones and tablets, has confirmed that it uses a single OS for its iPhone and iPad. And Google did not contest the European Commission's conclusion that smart phone and tablet OSs belong in the same product market.

45. OEMs preinstall smart mobile OSs on devices before selling them to retailers and end users. Most device manufacturers do not develop their own OSs but instead license Google's Android OS. The most widely used mobile non-Android OS outside of China is Apple's iOS. But because

[20] House Report at 94.

Apple manufactures its own smart phones and tablets and does not license its operating system to OEMs, Apple's iOS is not an option for OEMs.

46. Non-licensable smart mobile OSs (like Apple's iOS) do not belong to the same product market as licensable smart mobile OSs. From the demand side, OEMs cannot obtain a license to preinstall Apple's iOS because Apple does not license iOS to OEMs. As even Google has conceded, OEMs cannot switch to non-licensable OSs such as iOS.

47. Apple's strategy of remaining vertically integrated within its "walled garden" and selling luxury products to loyal customers has been wildly successful. What other company has exceeded a market capitalization of $2 trillion? As device manufacturer Nokia put it: "Apple has no incentives to enter the market for licensable OS[s] by starting to license iOS to third-party device manufacturers. This is because Apple currently holds a monopoly over the supply of iOS compatible devices. Apple makes most of its mobile profits with device sales and opening the system for third party device manufacturer competition would be likely to erode Apple's device profits. […] Apple does not need to expand its ecosystem in order to attract developers."[21]

48. The European Commission concluded that Apple's iOS "exercises an insufficient indirect constraint on Google's dominant position in the worldwide (excluding China) market for licensable smart mobile OSs," confirming that iOS should not be included in the relevant market for licensable smart mobile OSs.[22]

49. Google has monopoly power in the market for licensable smart mobile OSs. This monopoly power is demonstrated by Google's market share, the existence of high barriers to entry and expansion, the lack of countervailing buyer power, and the lack of constraint posed by non-licensable smart mobile OSs like Apple's iOS.

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[21] Statement in Intervention by Bundesverband Digitalpublisher und Zeitungsverleger e.V. (*Google LLC v. European Comm'n*), Case No. T-604/18, at ¶ 41 n.31 (June 26, 2020) ("BDZV Intervention").

[22] *See* European Commission, *Google Android*, Case AT 40099, Commission Decision of 18 July 2018, at ¶243, §§7.3.5 & 9.3.4, available at https://ec.europa.eu/competition/antitrust/cases/dec_docs/40099/40099_9993_3.pdf (last accessed Oct. 21, 2020).

50. The EC found that, excluding China, the Android OS is installed on more than 95% of smart mobile devices with licensed mobile OSs worldwide. In the United States, that percentage appears to be in excess of 95%. As of July 2020, 98.85% of smartphones with licensed mobile OSs were powered by Android, compared to just 0.15% for other licensed mobile OSs (Samsung's share was 0.11%; Windows was 0.02%, and "unknown" was 0.02%). For that same period, Windows, Linux and "unknown" licensable mobile OSs collectively powered only 0.17% of tablets, leaving the remaining 98.83% to Google. There also has been very little competitor entry, while at the same time "once-competitive mobile operating systems like Nokia, BlackBerry, and Microsoft struggled to survive as Apple and Google grew more dominant, eventually exiting the marketplace altogether."[23] The only other licensable smart mobile OSs that have entered the market since 2011 have not made a dent in Google's market share. The most prominent competitor—Microsoft—dropped below 2% market share in 2016 and exited the market shortly thereafter.[24] The other providers, including Firefox OS, Tizen and Sailfish, have been unable to gain more than 0.2% market share. As the House Subcommittee reported, "[i]ndustry experts have testified before the Subcommittee that the 'reality is that it would be very difficult for a new mobile phone operating system today' to compete with Apple and Google, 'even if it offered better features.'"[25]

51. The market for licensable smart mobile OSs is characterized by high barriers to entry and expansion. First, development of a smart mobile OS requires an enormous investment of time and money in research and development. Google says, for example, that it subsidized the development of Android through advertising revenue derived from Google Search and Chrome.

52. According to findings by the Commission, Google's monopoly power in OSs is also supported by the lack of countervailing buyer power among OEMs. There are numerous OEMs that

[23] House Report at 106; *see id.* at 105 ("Over the past decade, several large technology companies have attempted and failed to leverage their large user bases to compete against Apple and Google in the mobile OS market.") (citation omitted).

[24] *See id.* at 106 ("In 2017 Microsoft abandoned its mobile OS business, and by that time, more than 99% of all new smartphones were running on iOS or Android and market observers expressed no confidence that new competition would emerge.") (citation omitted).

[25] *Id.* at 104 (citations omitted).

license Android OS for preinstallation in smart mobile devices. Of these, only Samsung had more than a 10% market share, demonstrating the diffusion of buyer power. This lack of buyer power is further evidenced by the apparently limited nature of the negotiations that occur between Google and OEMs when OEMs enter into licensing agreements with Google. The agreements are signed online, with the device manufacturer representative merely providing contact information and clicking in the relevant box accepting the terms and conditions of the agreement.

53. Nor does Apple's non-licensable iOS impose sufficient indirect constraints to undermine Google's monopoly power in the market for licensable smart mobile OSs. As the Commission concluded, there are several reasons why Apple's iOS does not inhibit Google's monopoly power. First, "there is significant inertia in the choice of operating system and smartphone brand."[26] High switching costs deter consumers from switching between OS systems. More importantly, even if some consumers switched from Android to iOS devices, as long as there is no significant changes in market shares of Android and iOS devices, the high switching cost for device manufacturers would be maintained. The high switching costs reflect Apple's and Google's different commercial strategies. Apple's vertically integrated approach is aimed at keeping its affluent, loyal customers in Apple's ecosystem, and purchasing its hardware and services, which generates the bulk of Apple's revenue. Of Apple's revenue for the third quarter of 2020, 78% was based in hardware such as iPhones, MacBooks, iPads and wearables. Google, on the other hand, wants to put Android devices in as many hands as possible to ensure its continued domination of search advertising, which generates the bulk of Google's revenue. In the first quarter of 2018, for example, 82% of Google's revenue came from advertising. As the Netherlands Authority for Consumers & Markets put it in a recent study [27]: "In contrast to Apple and Microsoft, Android was not developed by Google to generate revenues through the sale of software or hardware. Android, apps, and the Play Store are only a means to an end to become embedded everywhere on the internet, and to increase the audience for its services so it can

[26] Grzybowski, L. and Nicolle, A., 2021. Estimating Consumer Inertia in Repeated Choices of Smartphones. *The Journal of Industrial Economics*, 69(1), pp.33-82 at p. 34.

[27] The Netherlands Authority for Consumers & Markets, "Market Study into Mobile App Stores" (April 11, 2019) ("Market Study") at 28, https://www.acm.nl/sites/default/files/documents/market-study-into-mobile-app-stores.pdf (last accessed Oct. 21, 2020).

create more advertising space." As the House Subcommittee found, information collected via Android and Google Play Store gave Google "intimate user profiles, spanning billions of people," which are "a key source of Google's advantage in its ad business."[28]

B. The Google Play Store

54. Google introduced its app store, then known as Android Market, in or about August 2008.[29] Within weeks, Google, HTC, and T-Mobile released the first Android OS smartphone, the T-Mobile G-1.[30] This very first released-to-consumer Android OS smartphone came pre-loaded with the Android Market (the predecessor to Google Play Store). As T-Mobile's September 2008 press release explained:

Android Market:

> The T-Mobile G1 is the first phone to offer access to Android Market, which hosts unique applications and mash ups of existing and new services from developers around the world. With just a couple of short clicks, customers can find and download a wide range of innovative software applications — from games to social networking and on-the-go shopping — to personalize their phone and enhance their mobile lifestyle. When the phone launches next month, dozens of unique, first-of-a-kind Android applications will be available for download on Android Market . . . .[31]

[28] House Report at 217-18.

[29] Google launched Android Market, Google Play's predecessor for Android OS Apps, on or about August 28, 2008. (*See, e.g.*, https://www.cnet.com/news/google-announces-android-market-for-phone-apps/ (dated Aug. 28, 2008) (last accessed Aug. 15, 2020).)

[30] "T-Mobile Unveils the T-Mobile G1—the First Phone Powered by Android," dated September 22 (and 23), 2008, https://www.t-mobile.com/news/t-mobile-unveils-the-t-mobile-g1-the-first-phone-powered-by (last accessed Aug. 15, 2020).

[31] *Id.*

55. Next, on or about March 6, 2012,[32] Google introduced its Google Play Store, which both succeeded and subsumed its predecessor, Android Market, adding digitized music and books to the store's offerings.[33] It now carries movies and television programs as well.[34]

56. To sell products through Google Play Store, app developers[35] must enter into the Google Play Developer Distribution Agreement ("DDA").[36] The developer then uploads its product to Google servers for review, testing (if any), limited release (if any), and production-release for sale to consumers in the store.[37] As part of the process, the developer "authorize[s] Google on a non-exclusive, worldwide, and royalty-free license to . . . reproduce, perform, display, analyze, and use [the developer's] Products" "in the manner indicated in the Play Console."[38] The Google DDA states that Google agrees to "display and make [developers'] Products available for viewing, download, and purchase by users"[39] in Google Play for a "'Service Fee,' … charged on the sales price and apportioned to the Payment Processer and, if one exists, the Authorized Provider."[40]

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[32] https://googleblog.blogspot.com/2012/03/introducing-google-play-all-your.html (last accessed Aug. 15, 2020).

[33] *Id.* ("Starting today, Android Market, Google Music and the Google eBookstore will become part of Google Play. On your Android phone or tablet, we'll be upgrading the Android Market app to the Google Play Store app over the coming days.").

[34] https://play.google.com/store/apps/details?id=com.google.android.videos&hl=en_US (last accessed Aug. 15, 2020).

[35] Except presumably Google, which also offers its own products—including paid products—in the Google Play store. (*See* https://play.google.com/store/apps/details?id=com.google.android.apps.youtube.music&hl=en (offering YouTube Music app in Google Play, and referring to the paid Music Premium version that is also available) (last accessed Aug. 15, 2020).

[36] Dev. Agr. (current agreement, effective as of Nov. 17, 2020) ("Dev. Agr.") (last accessed July 20, 2021). For the pre-November 2020 version, *see* https://play.google.com/about/developer-distribution-agreement/archive.html (last accessed July 20, 2021).

[37] *Id.* ¶ 4.2 ("You are responsible for uploading Your Products to Google Play, providing required Product information and support to users, and accurately disclosing the permissions necessary for the Product to function on user Devices.") (last accessed July 20, 2021); https://support.google.com/googleplay/android-developer/answer/113469?hl=en ("Upload an app") (last accessed Aug. 15, 2020); https://support.google.com/googleplay/android-developer/answer/7159011? ("Prepare & roll out releases") (last accessed Aug. 15, 2020).

[38] *Id.* ¶ 5.1.

[39] *Id.* ¶ 2.1.

[40] *Id.* ¶ 3.4.

57. Developers ostensibly set prices for products sold in Google Play Store. But Google's DDA (more specifically, its incorporated terms or policies) requires that non-zero-priced products be sold to U.S. consumers at a regular price of no less than $0.99 (and no more than $400).[41] For example, developers cannot sell apps in the United States at $0.69. The DDA has allowed for lower minimum prices in 18 other countries since 2015).[42] Thus, an app that must be priced at no lower than $0.99 for U.S. customers can be priced at approximately $0.13 for Indian purchasers (as of August 15, 2020).[43]

58. Developers sell their apps and in-app digital content[44,45] directly through the Google Play Store (for apps) and Google Play Billing (for in-app digital content). Consumers select apps from the displays that Google organizes and sets up; tender payments to Google; and download apps from the Google Play Store to their devices.[46]

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[41] *Id.* ¶ 5.2 (referring to sales to be made "in the manner indicated in the Play Console"). The Play Console, and Play Console help sections, set forth the minimum pricing requirements: *see* https://support.google.com/googleplay/android-developer/answer/6334373?hl=en ("Set up prices & app distribution") (last accessed July 20, 2021); https://support.google.com/googleplay/android-developer/table/3541286? ("Supported locations for distribution to Google Play users") (last accessed July 20, 2021).

[42] *See, e.g.*, "Google slashes minimum app prices to way below $0.99 in 17 countries," *Mashable*, Nov. 18, 2015, available at: https://mashable.com/2015/11/18/google-minimum-app-prices/#JluQdT6ebEqd (last accessed Aug. 15, 2020).

[43] https://support.google.com/googleplay/android-developer/table/3541286 (apps for Indian consumers may be priced from between 10.00 INR to 26,000.00 INR, or approximately $.13 to $347.11, as of Aug. 15, 2020—see https://transferwise.com/us/currency-converter/inr-to-usd-rate?amount=10 (last accessed Aug. 15, 2020)). There is no evidence that Google is somehow losing money by way of this contractual practice. But even if it were, then it would mean that U.S. developers (and consumers) are subsidizing app purchases in other countries (through higher U.S. minimum prices) because of Google's restraint of trade.

[44] *See, e.g.*, https://support.google.com/googleplay/answer/1061913?hl=en&ref_topic=7049688# ("Make in-app purchases in Android apps") ("With some apps, you can buy additional content or services within the app. We call these 'in-app purchases.' Here are some examples of in-app purchases: A sword that gives you more power in a game . . . .") (last accessed Aug. 15, 2020).

[45] https://support.google.com/googleplay/answer/2476088?hl=en&ref_topic=1689236 ("Subscribe to services or content") (referring to subscriptions to magazines, newspapers, and other material, and explaining how to subscribe) (last accessed Aug. 15, 2020).

[46] *See, e.g.*, https://support.google.com/googleplay/answer/4355207?hl=en&ref_topic=3364260&co=GENIE.Platform%3DAndroid&oco=1 ("Get started with Google Play"-Android) (last accessed Feb. 1, 2019); https://support.google.com/googleplay/answer/113409?hl=en&ref_topic=3365058 ("Get Android apps and digital content from the Google Play Store") ("1. Open the Google Play Store app. 2. Search or browse for content. 3. Select an item. 4. Tap Install (for free items) or the item's price. 5. Follow the onscreen instructions to complete the transaction and get the content.") (last accessed Aug. 15, 2020).

59. Developers, in turn, pay Google a "service fee" of 30% (or 15%) on each paid sale of an app and most in-app digital products.

60. Developers are directly injured by Google's supracompetitive service fee—a fee that would be lower in a competitive market free of Google's restraints.

C. While the Android OS is Superficially Open-Source, Google Leveraged a Thicket of Contracts and Incentive Payments to Maintain an Iron Grip on the Ecosystem and to Cement Play's Dominance.

61. Google owns and controls the Android OS. Ostensibly, the code for the operating system itself is open source. According to Google, anyone can download, use, and modify the Android OS source code, as long as Google allows it. Google calls this aspect of its OS the Android Open Source Project (AOSP). As Google[47] puts it:

> Android is an open source operating system for mobile devices and a corresponding open source project led by Google. This site and the Android Open Source Project (AOSP) repository offer the information and source code needed to create custom variants of the Android OS, port devices and accessories to the Android platform, and ensure devices meet the compatibility requirements that keep the Android ecosystem a healthy and stable environment for millions of users. . . .[48]

62. But the open-source code enables only a device's most basic functions. As Google explains: "The Android Open-Source Project (AOSP) is the core software stack behind the Android OS and consists of the operating system, middleware, and open-source apps like a phone dialer, email, and messaging. Mobile operators, device makers, and developers can use this to build devices and apps."[49]

63. Google obtained and maintains monopoly power in the U.S. market for Android OS apps through, in part, three interlocking types of contractual agreements with OEMs: (1) Anti-

[47] "Android was originated by a group of companies known as the Open Handset Alliance, led by Google. . . . The Android Open Source Project is led by Google, who maintains and further develops Android." (https://source.android.com/setup/ (last accessed Aug. 15, 2020).)

[48] https://source.android.com/ (last accessed Aug. 15, 2020).

[49] "Understanding Android," https://www.android.com/everyone/facts/ (last accessed Aug. 15, 2020).

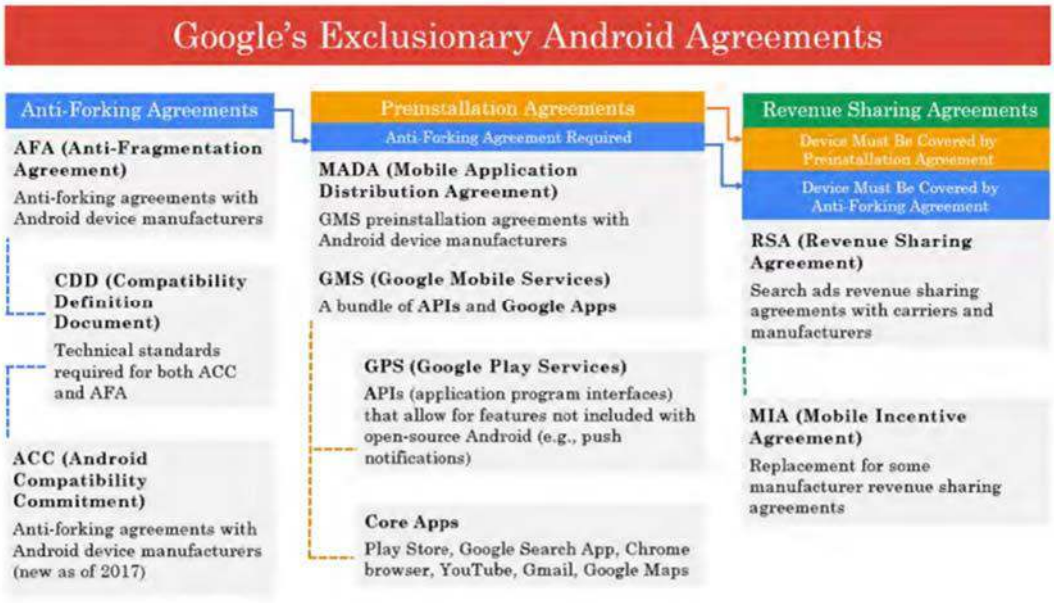
Fragmentation Agreements ("AFAs") and Android Compatibility Commitments ("ACCs")[50], which generally prohibit "forking" (i.e., making or distributing versions of Android not compliant with Google technical standards); (2) MADA agreements ("MADAs"), which grant access to key Google apps and critical application program interfaces ("APIs"); and (3) revenue-sharing agreements, in the form of Mobile Incentive Agreements ("MIAs") and Revenue Share Agreements ("RSAs"), which allow OEMs to share in Google's revenue in exchange for abiding by various restrictions in favor of Google. Under the RSAs and MIAs, Google shares its search ad revenue in exchange for OEMs' agreement to use Google search as the sole preset search service on a list of "search access points" and, under certain MIAs, to forego preinstalling rival general search services and comply with certain "incentive implementation requirements."[51] And as explained in more detail below, since 2019,

[redacted]

64. These agreements are explicitly linked. An OEM can enter a MADA Agreement and receive access to key Google apps and critical application program interfaces only if it first enters an AFA or ACC. Similarly, an OEM can enter an RSA or MIA only if it first enters a MADA:

[50] Before 2017, Google required distributors to sign AFAs. It has since shifted its anti-forking restrictions to ACCs, which allow manufacturers to build devices or components for third parties to sell to consumers that do not comply with Google's technical standards (while still restricting signatories from manufacturing or distributing forks of their own, or from making "forked" devices on behalf of third parties).

[51] These implementation requirements sometimes mandate, among other things, preloading up to fourteen additional Google apps on MIA-enrolled devices.



65. Google's logic is simple: what makes a mobile device marketable is its apps. Google has developed several popular apps, including YouTube, Google Maps, Gmail, and Google Play Store, that are not open source. Any OEMs seeking access to those key apps must get a license, which is available only to OEMs that agree (pursuant to the MADA and license agreements) to preinstall these Google apps on their Android OS devices. Indeed, for devices sold into the United States, these Google apps are bundled as a suite, so OEMs that want to license one app must preinstall them all.[52] Google touts this program as Google Mobile Services ("GMS"):

> The best of Google, right on your devices
>
> Google Mobile Services brings Google's most popular apps and APIs to your Android devices.
>
> Google's most popular apps, all in one place
>
> Google Mobile Services (GMS) is a collection of Google applications and APIs that help support functionality across devices. These apps work together seamlessly to ensure your device provides a great user experience right out of the box.[53]

[52] "After building an Android compatible device, consider licensing Google Mobile Services (GMS), Google's proprietary suite of apps (Google Play, YouTube, Google Maps, Gmail, and more) that run on top of Android. GMS is not part of the Android Open Source Project and is available only through a license with Google." (https://source.android.com/compatibility/overview (last accessed Aug. 15, 2020).)

[53] https://www.android.com/gms/ (last accessed Aug. 15, 2020).

66. GMS is a crucial element of Google's domination of the Android ecosystem. Indeed, the GMS restrictions "have strictly limited—if not excluded—third-party apps from being preinstalled. In this way, Google's licensing agreements not only preclude the vast majority of third-party apps from being preinstalled, but they also funnel those apps into the Google Play Store, subject to Google's commissions and arbitrary enforced policies."[54]

67. Over time, Google has moved more and more apps into its proprietary, non-open-source universe of apps, as well as services that make third-party apps work effectively, in ways that users have come to expect (e.g., by calling up map services, now through the proprietary Google Maps). As one analyst describes Google's machinations:

> Over time, Google began migrating applications – like Search, Music, and the Calendar – out of AOSP and into GMS. Any OEM wanting to use AOSP to build its own Android fork would now have to build their own versions of these apps, on top of email, maps, and so on. (*Ars Technica* has a good rundown of the application migration here[55].) On top of that, the device would lack the Google services APIs that lots of third-party apps need. And Google didn't stop there. Google Mobile Services mutated into Google Play Services[56] in September 2012.
>
> A fork in the road: Why Google Play Services is key to understanding the 'forking' question

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[54] House Report at 222-23.

[55] https://arstechnica.com/gadgets/2018/07/googles-iron-grip-on-android-controlling-open-source-by-any-means-necessary/ (last visited July 19, 2021).

[56] Google Play services is different from the Google Play store. In fact, one method of distribution is via Google Play. (*See, e.g.*, https://play.google.com/store/apps/details?id=com.google.android.gms&hl=en_US ("Google Play services is used to update Google apps and apps from Google Play. This component provides core functionality like authentication to your Google services, synchronized contacts, access to all the latest user privacy settings, and higher quality, lower-powered location based services.") (last accessed Aug. 15, 2020).) In its Overview of Google Play Services, Google writes:

> With Google Play services, your app can take advantage of the latest, Google-powered features such as Maps, Google+, and more, with automatic platform updates distributed as an APK through the Google Play store. This makes it faster for your users to receive updates and easier for you to integrate the newest that Google has to offer.
>
> * * *
>
> The client library contains the interfaces to the individual Google services and allows you to obtain authorization from users to gain access to these services with their credentials.

https://developers.google.com/android/guides/overview (last accessed Aug. 15, 2020).

> Back in May 2013 at the Google I/O Keynote there was no mention of an Android upgrade. Instead, Google announced a bunch of new features to be rolled out to Android devices via Google Play Services. Google had started to move away from Android-as-platform to Play Services-as-platform. As Ron Amadeo writes: 'Play Services has system-level powers, but it's updatable. It's part of the Google apps package, so it's not open source. OEMs are not allowed to modify it, making it completely under Google's control… If you ever question the power of Google Play Services, try disabling it. Nearly every Google App on your device will break.' It is 'a single place that brings in all of Google's APIs on Android 2.2 and above.' Things like Play Game services, Google Cloud Messaging and fused location services are all handled by Play Services, and not the OS.

68. As noted above, one important condition for access to GMS is that manufacturers agree to comply with so-called compatibility requirements set forth in AFAs and ACCs. As Google puts it:

> We ask GMS partners to pass a simple compatibility test and adhere to our compatibility requirements for their Android devices. In turn, your users enjoy greater app reliability and continuity.[57]

69. Ostensibly, Google seeks compatibility to help assure that software works across a variety of devices. But Google has gone further than merely requiring compatibility testing for devices on which manufacturers wish to install the GMS suite. As part of its strategy to maintain as much dominance over the Android ecosystem as possible, Google refuses (as a condition of its MADA agreements) to license GMS to manufacturers who develop "Android forks"—variants of the official Android OS published by Google. As the European Commission put it with respect to the record antitrust fine it imposed on Google in 2018 (discussed *infra*[58]):

> Google has prevented device manufacturers from using any alternative version of Android that was not approved by Google (Android forks). In order to be able to pre-install on their devices Google's proprietary apps, including the Play Store and Google Search, manufacturers had to commit not to develop or sell even a single device running on an Android fork. The Commission found that this conduct was abusive as

[57] https://www.android.com/gms/ (last accessed July 20, 2021).

[58] *See* Section V.F.1, *infra*.

> of 2011, which is the date Google became dominant in the market for app stores for the Android mobile operating system.[59]

70. According to the European Commission, this has thwarted even as powerful a potential competitor as Amazon. Manufacturers that want access to GMS are prohibited by way of the AFA contractual terms from building even a single device based on Amazon's Android OS fork, known as Fire OS. As discussed below, this means that Amazon is denied another way to distribute its own Android OS app store.[60]

71. There is no justifiable basis for Google's restraints with regard to Android forks. As the European antitrust authorities found, Google's stated aim—to help ensure that software works across various Android OS devices—does not require or justify the restraints on competition that Google forces upon OEMs:

> The Commission also assessed in detail Google's arguments that these restrictions were necessary to prevent a "fragmentation" of the Android ecosystem, and concluded that these were not well founded. First, Google could have ensured that Android devices using Google proprietary apps and services were compliant with Google's technical requirements, without preventing the emergence of Android forks. Second, Google did not provide any credible evidence that Android forks would be affected by technical failures or fail to support apps.[61]

72. Google further exercises control over the market by bundling the Google Play Store with Google Play Services, a proprietary software layer that runs in the background on Android. It provides application programming interfaces that enable apps to integrate with other apps and with

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[59] *See* "Antitrust: Commission fines Google €4.34 billion for illegal practices regarding Android mobile devices to strengthen dominance of Google's search engine," July 18, 2018, http://europa.eu/rapid/press-release_IP-18-4581_en.htm (last accessed Aug. 15, 2020).

[60] Per the European Commission:

> This practice reduced the opportunity for devices running on Android forks to be developed and sold. For example, the Commission has found evidence that Google's conduct prevented a number of large manufacturers from developing and selling devices based on Amazon's Android fork called "Fire OS."
>
> In doing so, Google has also closed off an important channel for competitors to introduce apps and services, in particular general search services, which could be pre-installed on Android forks.

http://europa.eu/rapid/press-release_IP-18-4581_en.htm (emphasis added).

[61] *Id.*

Google services. Many of these Google services are critical to the functioning of apps. Without Google Play Services, for example, apps cannot provide crucial functionalities like displaying "push notifications" or locating a user's location on a map—thus rendering them, in many cases, commercially irrelevant.[62] As another example, more than half of the apps in Google Play use Google's cloud messaging service; nearly half use AdMob, Google's mobile advertising service. Apps cannot access these functionalities without Google Play Services. As the European Commission concluded, without Google Play Services, "many apps would either crash, or lack important functions."

73. Market participants agree that access to the Google Play Services bundle is critical. According to one mobile network operator, "without [Google Play Services] the Android OS would be more like a feature phone OS than a smartphone OS." ("Feature phones," colloquially known as "dumb phones," are earlier-generation phones with simple operating systems and user interfaces).

74. Google does not license Google Play and Google Play Services separately. They can only be licensed together, thus further entrenching Google Play's dominance to the exclusion of competitors.

75. Google has also entered into separate [redacted]

76. Specifically, shortly after the launch of the Android Market (the predecessor to Google Play Store), Google began [redacted]

[62] "A [push] notification is a message that pops up on the user's device. Notifications can be triggered locally by an open application, or they can be "pushed" form the server to the user even when the app is not running. They allow [an app's] users to opt-in to timely updates and allow [apps] to effectively re-engage users with customized content. Push Notifications API lets the app display system notifications to the user. The Push API allows a service worker to handle Push Messages from a server, even with the app is not active. The Notification and Push APIs are built on top of the Service Worker API, which responds to push message events in the background and relays them to [an] application." *Introduction to Push Notifications*, GOOGLE, https://developers.google.com/web/ilt/pwa/introduction-to-push-notifications.

[redacted]

77. This plan was successful. As Google explained proudly [redacted]. The numbers have only increased since.

78. On top of this, Google prohibits app developers that distribute apps through the Google Play Store from distributing any competing *app store* through Google Play. Although this would be a logical and effective way to distribute app stores—which are themselves mobile apps—Google prohibits this distribution method to maintain its monopoly in the app-distribution market.

79. Google imposes this restraint through provisions of the DDA, which Google requires all app developers to sign before they can distribute their apps through Google Play Store. Each of the Defendants is a party to the DDA.

80. Section 4.5 of the DDA provides that developers "may not use Google Play to distribute or make available any Product that has a purpose that facilitates the distribution of software

[63] For example, a 2011 agreement between [redacted] and Google states that [redacted]

[64] For example, Google's [redacted] required [redacted] to preload [redacted] During negotiations Google [redacted]

applications and games for use on Android devices outside of Google Play."[65] In other words, no app on the Google Play Store may compete in the Android app distribution market. The DDA further reserves to Google the right to remove and disable any Android app that it determines violates this requirement. The DDA is non-negotiable, and developers that seek access to Android users through the Google Play Store must accept Google's standardized contract of adhesion. The House Subcommittee reported developers' allegations that Google has used "rule violations as a pretext for retaliatory conduct," and that "challenging a Play Store decision is like navigating a black box," because Google does not explain its determination that a rule violation supposedly occurred.[66]

81. Google has imposed this restriction since at least 2009, when the section was labeled "Non-Compete" and applied to distribution through Android Market (Google Play Store's predecessor). Over time, Google has tightened the anticompetitive restrictions in section 4.5 in response to specific threats posed by app-distribution competitors such as Amazon and Facebook.

82. The original language of the DDA was limited to apps that had a "primary purpose" of facilitating distribution of apps outside the Android Market, which allowed some flexibility for developers to use Google's app store to distribute Android apps that also linked to apps that could be downloaded outside Google's app store. In 2012, however, when Amazon attempted to distribute its app store to consumers directly through its Amazon Store app, distributed on the Google Play Store, Google took swift action. At the time, Amazon used a browser within the app to direct users to a page to download Android application files, which use the extension ".apk." This effectively allowed customers to download Amazon apps without going through Google Play Store. Google alleged this was a violation of the DDA agreement and threatened to remove Amazon from the Play Store, days before Black Friday.

83. Wise to the threat of similar entrants, Google eventually changed its policy in direct response to the Amazon Store app. In September 2014, Google updated Section 4.5 of the DDA to

[redacted]

[65] Dev. Agr. ¶ 4.5

[66] House Report at 222.

[redacted] Eventually, Amazon was forced to disable app distribution functionality from its App distributed through Google Play Store, and its app store was only available via sideloading, a process that makes it significantly harder to reach Android users for the reasons discussed in Section V.F.2.

D. Google Is a Monopolist in the U.S. Markets for Android OS App Distribution and In-App Payment Processing.

84. Through its contracts and technological barriers, Google has obtained and maintains a monopoly in the U.S. markets for Android OS apps and in-app payment processing. That monopoly power is demonstrated by Google's overwhelming market share, the existence of high barriers to entry and expansion, and Google's ability to extract supracompetitive service fees (of generally 30%) from app developers for all transactions. Apple's App Store is not in the relevant product market because apps distributed on it work only on Apple's iOS devices. Apple's app store thus does not directly compete with Google Play and does not discipline Google's monopoly power in the alleged markets.

85. While Google resists publicly disclosing its share of the U.S. market for Android OS app distribution—going so far as to tell its employees not to "define markets or estimate market shares"[67]—its share of that market can be inferred from the number of devices sold with Google Play Store preinstalled as well as the number of apps downloaded from Google Play Store. Not surprisingly, the European Commission found that Google Play Store is preinstalled by OEMs[68] on nearly all—more than 90%—of Android mobile devices sold outside of China. No other Android app store comes close to that number of preinstalled users.[69] Samsung's "Galaxy" app store, which is a distant second

[67] Five Rules of Thumb for Written Communications, The Markup, https://www.documentcloud.org/documents/7016657-Five-Rules-of-Thumb-for-Written-Communications.html (last accessed Jul. 20, 2021); To Head Off Regulators, Google Makes Certain Words Taboo, The Markup, Aug. 7, 2020, Adrianne Jeffries, https://themarkup.org/google-the-giant/2020/08/07/google-documents-show-taboo-words-antitrust (last accessed Jul. 20, 2021); *see also* Google Employees Are Free to Speak Up. Except on Antitrust, The New York Times, Oct. 13, 2020, Daisuke Wakabayashi, https://www.nytimes.com/2020/10/13/technology/google-employees-antitrust.html.

[68] *See, e.g.*, https://support.google.com/googleplay/answer/1727131?hl=en (Google Play Help screen, providing 852-page list of supported devices, including devices manufactured by Samsung, HTC, LG, and Motorola, among many others) (last accessed Aug. 15, 2020).

[69] [redacted]

to Google Play, is the only app store that comes preinstalled on more than 10% of smart mobile devices outside of China, according to the European Commission.

86. The numbers underscore Google Play Store's dominance on OEM devices. In an August 2019 presentation, for instance, Google estimated that Samsung made [redacted] on its Galaxy Store, while Google had made [redacted] These sales data indicate that Google Play Store had a [redacted] share of Android app distribution even on Samsung phones. Elsewhere, Google has estimated that users spend only [redacted] of the time on the Samsung Galaxy Store that they spend on the Play Store, and [redacted]

87. Google Play's market share is also demonstrated by the number of apps downloaded from the store, 108.5 billion in 2020, and by the sheer number of apps available.[70] Simply put, no other app store can reach as many Android users as Google Play Store. This is by design. As a result of, among other things, Google requiring OEMs to preinstall Google Play, more than 90% of apps on Android devices have been downloaded via Google Play Store. In October 2018, according to the Netherlands Authority for Consumers & Markets, Google Play offered 3.3 million apps, compared to about 700,000 offered by Aptoide, which is the second largest Android app store behind only Google Play. As Amazon said in the Android case before the European Commission, "it has become increasingly difficult over time to obtain and retain a competitive selection of apps because, as the Play Store continues to grow by virtue of being preinstalled on all licensed Android devices, more and more app developers have focused their development efforts on developing apps that use [Google Play Services]."[71]

88. Because of their small shares of the user base, other existing Android app stores cannot discipline Google's exercise of monopoly power in the Android app-distribution market. [redacted]

[70] *Annual number of app downloads from the Google Play Store worldwide from 2016 to 2020*, Statista, https://www.statista.com/statistics/734332/google-play-app-installs-per-year/ (last visited July 20, 2021).

[71] *Google Android*, Case AT.40099, Council Regulation (EC) 1/2003, July 18, 2018, https://ec.europa.eu/competition/antitrust/cases/dec_docs/40099/40099_9993_3.pdf (last accessed July 20, 2021).

[redacted]

[redacted]

89. A 2017 Google presentation on Amazon's App Store acknowledges the same dynamic:

[redacted]

[redacted]

[redacted]

90. The most dramatic proof of Google's monopoly power is its ability to impose on developers a supracompetitive service fee. As David Heinemeir Hansson, CTO and Cofounder of Basecamp, a small internet software company, testified recently before Congress, businesses should not be required to "hand over 30% of their revenue for the privilege" of selling software through Google Play Store; "[m]ost mobsters would not be so brazen as to ask for such an exorbitant cut."[72] Hansson contrasted Google's cut to the fees his company pays to transact in the credit card processing market. "[W]e basically pay around 2% … and there are countless competitors constantly trying to

[72] Written Testimony of David Heinemeier Hansson Before the Committee on the Judiciary, Subcommittee on Antitrust, Commercial, and Administrative Law U.S. House of Rep., at 33, Jan 17, 2020, available at https://www.govinfo.gov/content/pkg/CHRG-116hhrg40788/pdf/CHRG-116hhrg40788.pdf (last accessed July 20, 2021).

win our business by offering lower rates. … Mobile application stores are not a competitive market, and the rates show."[73]

91. In the absence of Google's entrenched monopoly, rivals could establish app stores that would compete, among other dimensions, on price. The CEO of Epic Games, for example, has suggested that they could run a store with as little as an 8% cut while remaining profitable.[74]

92. A limited number of OEM app stores are present on Android smartphones running Google Mobile Services—including the Samsung Galaxy store. But those stores are OEM-specific—e.g., the Galaxy store is on Samsung devices only—and they do not competitively constrain Google's exercise of monopoly power, i.e., the power to profitably charge prices above the competitive level. Not only are these stores, at most, available only a given OEM's smartphones, but they are disadvantaged by the premium placement that they are contractually required to provide to the Google Play Store (and other Google apps).

93. In addition, as to the Galaxy Store, [redacted]

94. Discovery also shows that Google [redacted]

[73] *Id.*

[74] https://www.pcgamesn.com/steam-revenue-cut-tim-sweeney (last accessed July 21, 2021).

[redacted] [75]

95. Thus, even though Samsung and other existing OEM stores have not constrained its monopoly power, [redacted]

96. Notably, on personal computers, application distribution is competitive. Consumers download applications from a variety of sources, including the application developer's website or stores on websites such as Amazon, Apple, Microsoft, Google, or Steam. As a result, commissions are often lower, and there is meaningful price and service competition among major distribution channels. For example, Steam charges lower commission rates for higher revenue apps,[76] Microsoft charges lower commission rates for non-game apps (15%) and (as of August 1, 2021) game apps (12%),[77] and Epic charges 12% for transactions on the Epic Games Store.[78]

There are high barriers to entry in the Android OS app distribution market.

[75] Specifically, Google proposed as part of this deal (codenamed [redacted] and later [redacted] that, while [redacted]

[76] Since October 1, 2018, Steam has charged a 30% commission for each game's first $10M in revenue, a 25% commission for each game's next $40M in revenue, and a 20% commission for each game's remaining revenue. Steam Team, *New Revenue Share Tiers and other updates to the Steam Distribution Agreement* (published November 30, 2018, steamcommunity.com/groups/steamworks/announcements/detail/1697191267930157838) ("Starting from October 1, 2018,. . . . when a game makes over $10 million on Steam, the revenue share for that application will adjust to 75%/25% on earnings beyond $10M. At $50 million, the revenue share will adjust to 80%/20% on earnings beyond $50M. Our hope is this change will reward the positive network effects generated by developers of big games, further aligning their interests with Steam and the community.")

[77] On its PC store, Microsoft currently charges a 15% commission for non-game Windows 10 apps and a 30% commission for Windows 10 game apps. However, Microsoft announced in April 2021 that it would reduce its commission for Windows 10 game apps to 12% beginning on August 1, 2021. Tom Warren, *Microsoft Shakes Up PC Gaming by Reducing Windows Store Cut to Just 12 Percent* (published April 29, 2021, https://www.theverge.com/2021/4/29/22409285/microsoft-store-cut-windows-pc-games-12-percent ("The software giant is reducing its cut from 30 percent to just 12 percent from August 1st.") Furthermore, in June 2021, Microsoft announced that developers of non-game apps will be allowed to keep 100% of their Microsoft Store sales if they use their own (or a third party's) payment system. *See* Sean Hollister, *Microsoft reveals the new Microsoft Store for Windows 11, and it has Android apps, too*, The Verge (June 24, 2021), https://www.theverge.com/2021/6/24/22546635/microsoft-windows-11-new-app-store.

[78] FAC, Epic Games, https://www.epicgames.com/store/en-US/about (last accessed Jul 20, 2021).

97. There are significant barriers to entry and expansion in the market for Android OS app distribution. A potential market entrant must: (1) build and maintain the app store client, (2) program and maintain the requisite software and algorithms going forward, (3) advertise the client and the steps needed to install it, (4) keep the marketplace safe, and (5) process payments at a high volume. The cost of all this, according to Sony, is "prohibitive"—particularly given the established position of the Google Play. Indeed, Amazon's app store has barely made a dent in Google's market share, despite Amazon's dedication of hundreds of employees and tens of millions of dollars spent annually over several years to develop and commercialize the store.

98. The European Commission also has concluded that there are high barriers to entering the market for Android OS app distribution.[79] The same factors it cited as high barriers to entry in "the worldwide market (excluding China) for licensable smart operating system," where Google's Android OS was estimated in 2018 to have "a market share of more than 95%," apply as well with respect to entry into the U.S. market for Android OS app distribution:

> There are high barriers to entry in part due to network effects: the more users use a smart mobile operating system, the more developers write apps for that system – which in turn attracts more users. Furthermore, significant resources are required to develop a successful licensable smart mobile operating system.[80]

99. Other significant barriers to entry and expansion have been erected by Google, which has excluded competition through its restrictive contracts with OEMs and developers, and (addressed below) through its security warnings and threats to end users.

[79] *See* "Antitrust: Commission fines Google €4.34 billion for illegal practices regarding Android mobile devices to strengthen dominance of Google's search engine," available at: http://europa.eu/rapid/press-release_IP-18-4581_en.htm. (*Id.* ("Google is dominant in the worldwide market (excluding China) for app stores for the Android mobile operating system. Google's app store, the Play Store, accounts for more than 90% of apps downloaded on Android devices. This market is also characterized by high barriers to entry. . . .").) Further, while Plaintiffs' complaint is not based on Google search dominance, nonetheless, Google search is germane because Google Play is bundled with Google search products, which has aided in achieving Google Play's monopoly status in the U.S.

[80] *Id.*

100. Alternatively, Google is an attempted monopolist in the U.S. market for Android OS app distribution, and in the market for app in-app distribution services and payment processing for U.S. Android app developers.

E. Apple Does Not Constrain Google's Monopoly Power.

101. Google's monopoly power is not restrained by Apple's App Store because it does not directly compete with Google Play. Apple's iOS apps do not work on Android operated devices and Android's apps do not work on (and cannot be downloaded onto) Apple devices. Moreover, Apple has not developed or licensed an app store for Android, and it does not license its operating system. Thus, Android users cannot purchase apps from Apple's App Store without switching to an Apple iOS iPhone or iPad.

102. The switching costs between Android and iOS are also high.[81] These costs include (1) the relatively high prices of smartphones and tablets; (2) the learning curve for each operating system; and (3) the fact that apps and in-app purchases are not transferrable between operating systems. And because so few people own both Android and iOS devices, there is almost virtually no demand shifting between the Play Store and the Apple App Store.

103. The European Commission agrees that the Apple App Store does not constrain Google's monopoly power:

> As a licensable operating system, Android is different from operating systems exclusively used by vertically integrated developers (like Apple iOS or Blackberry). Those are not part of the same market because they are not available for license by third party device manufacturers.
>
> Nevertheless, the Commission investigated to what extent competition for end users (downstream), in particular between Apple and Android devices, could indirectly constrain Google's market power for the licensing of Android to device manufacturers (upstream). The

[81] *See* House Report at 102 ("Although both Google Android and Apple iOS both have dominant positions in the mobile OS market, high switching costs and a lack of on-device competition mean that neither firm's market power is disciplined by the presence of the other."); *see also id.*, at 102-103 ("There are significant barriers to switching between the dominant mobile operating systems. As a general matter, consumers rarely switch mobile operating systems. SellCell's 2019 survey found that more than 90% of users with iPhones tend to stick with Apple when they replace their current device.") (citations omitted).

Commission found that this competition does not sufficiently constrain Google upstream for a number of reasons, including:

> end user purchasing decisions are influenced by a variety of factors (such as hardware features or device brand), which are independent from the mobile operating system;
>
> Apple devices are typically priced higher than Android devices and may therefore not be accessible to a large part of the Android device user base;
>
> Android device users face switching costs when switching to Apple devices, such as losing their apps, data and contacts, and having to learn how to use a new operating system; and
>
> even if end users were to switch from Android to Apple devices, this would have limited impact on Google's core business. That's because Google Search is set as the default search engine on Apple devices and Apple users are therefore likely to continue using Google Search for their queries.[82]

104. Regarding app stores specifically, the European Commission found that:

> Google is dominant in the worldwide market (excluding China) for app stores for the Android mobile operating system. Google's app store, the Play Store, accounts for more than 90% of apps downloaded on Android devices. This market is also characterised by high barriers to entry. *For similar reasons to those already listed above, Google's app store dominance is not constrained by Apple's App Store, which is only available on iOS devices.*[83]

F. Google Engages in Unlawful Behavior in Order to Restrain Trade and to Maintain and Grow Its Monopoly.

105. Having obtained monopoly power in the market for Android OS apps and in-app payment processing, Google has constructed a bulwark of contractual restrictions and technical barriers to protect that monopoly status, ensuring that almost all (approximately 90% of) apps and in-app digital content are purchased through Google Play Store and Google Play Billing. These carefully

[82] *See* "Antitrust: Commission fines Google €4.34 billion for illegal practices regarding Android mobile devices to strengthen dominance of Google's search engine," available at: http://europa.eu/rapid/press-release_IP-18-4581_en.htm. (last accessed Aug. 15, 2020).

[83] *Id*. (emphasis added).

constructed restrictions function as a moat around Google Play Store to protect it from market competition.

1. Google enters anticompetitive contracts with OEMs.

106. Google's Play Store dominance begins with users' eyeballs and default habits. As addressed above, Google uses its MADA agreements to secure default premium placement for Google Play Store on the home screen of Android OS devices.[84]

107. Making the Google Play Store the default app store on Android devices gives a significant advantage to Google because users rarely change their default settings. In 2017, in a presentation on Amazon's app store, Google described the power of the Play Store's default placement on the home screen: [redacted]

108. And because Google's MADA agreements also require that OEMs (1) preinstall a suite of Google proprietary apps; (2) prevent consumers from deleting or removing many of these Google apps; and (3) provide such apps preferential placement on the device's home screen, Google effectively crowds out competing apps and app stores. Indeed, in 2009, Google required preinstallation of as many as a dozen Google apps. By 2013, Google doubled the number. Now, Google requires OEMs to preinstall up to thirty Google apps in order to get a license for even one Google app.

109. Moreover, OEMs must agree under the MADA and related Anti-Forking Agreements that their devices will pass the Android Compatibility Test, which Google administers and controls in its sole discretion.[85] This further reinforces Google's restraint on the production of devices using

[84] The home screen appears by default when the device is active (i.e., not in "sleep mode") but no app is open. "By default, your main Home screen shows the date, weather, and a few apps," as well as a large Google Search "widget." *See* Change what's on your Home screen on Android, GOOGLE, https://support.google.com/android/answer/9440648?hl=en.

[85] *See* **Ex. A** hereto (MADA between Google and Samsung), ¶¶ 2.1 ("Devices may only be distributed if all Google Applications (excluding any Optional Google Applications) authorized for distribution in the applicable Territory are pre-installed on the device, unless otherwise approved by Google in writing."), 2.7 ("The license to distribute Google Applications in Section 2.1 is contingent upon the Device becoming an Android Compatible Device."), 3.4 (providing that "Google Phone-top Search must be set as *the default search provider for all search access points on the Device* providing

Android forks as their operating systems,[86] which in turn restricts avenues for distribution of competing app stores.

110. In addition to its MADA agreements, in 2019, Google bega [redacted]

[redacted]

111. [redacted]

[redacted][87]

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for the prime placement of Google Applications" (emphasis added) and also providing for the prime placement of "Google Applications"), 3.8(c) ("Company shall configure Network Location Provider to be the default network-based location provider on all Android Compatible Devices."); **Ex. B** hereto (MADA between Google and HTC), ¶¶ 2.1 (same as ¶ 2.1 in Google-Samsung agreement), 2.7 (same as ¶ 2.7 in Google-Samsung agreement), 3.4 (same as ¶ 3.4 in Google-Samsung agreement), 3.8(c) (same as ¶ 3.8(c) in Google-Samsung agreement).

[86] For example, the House Report notes that "[i]n 2012, Chinese tech giant Alibaba developed a mobile OS called Aliyun for the Chinese market. However, Acer, Alibaba's hardware partner, abruptly canceled its collaboration with Alibaba before the launch of Acer's device running the OS." Reports indicate that Acer's abrupt cancellation was due to threats from Google. House Report at 106 and n.568.

[87] [redacted]

112. [redacted]

113. Indeed, Epic had reached an agreement with OnePlus (one of the brands owned by BBK) to allow users of OnePlus devices to seamlessly install Fortnite—merely by touching an Epic Games app on their devices and without encountering any obstacles typically imposed by the Android OS on sideloaded apps. Although the original agreement between Epic and OnePlus contemplated making this installation method available worldwide, Google demanded that OnePlus not implement its agreement with Epic except for devices sold in India. As OnePlus informed Epic, Google was "particularly concerned that the Epic Games app would have ability to potentially install and update multiple games with a silent install bypassing the Google Play Store." And any waiver of Google's restriction "would be rejected due to the Epic Games app serving as a potential portfolio of games and game updates." [redacted]

[redacted]

114. Another OEM that [redacted] which also told Epic that it had a contract with Google "to block side downloading off Google Play Store this year" but that it could "surely" make Epic apps available to consumers if the Google Play Store were used. [redacted]

115. Google itself recognized that the [redacted]

2. Google designs and implements technical barriers.

116. Google does not stop with contractual restrictions, or with its bar on distributing competing app stores through Google Play. It also designed and implemented a variety of technical barriers [redacted] to keep competing app stores off Android devices. While some technical barriers may, in some instances, have legitimate functions (e.g., protecting user security), Google designs the barriers to ward off competition—an effect that Google is aware of and intentionally seeks to maximize. Indeed, [redacted]

117. A device user seeking to install a third-party app store faces significant technical hurdles. For example, Amazon operates an app store for Android OS apps, but there is no simple or intuitive way for the typical owner of a device using Android OS to download apps from Amazon's app store. Because of Google's anticompetitive practices, an Android user seeking to purchase an app from the Amazon app store must first sideload[88] the store—which requires locating the store online,[89]

[88] "Sideloading is the installation of an application on a mobile device without using the device's official application-distribution method." (https://searchmobilecomputing.techtarget.com/definition/sideloading (last accessed Aug. 15, 2020)).

[89] *See* House Report at 220 ("Rival app stores that are not pre-installed on the device, such as the Amazon Appstore, must be sideloaded.").

figuring out and completing the sideloading process, and changing a security setting on the Android device (a practice that Google strongly discourages).[90]

118. Indeed, as discussed below, documents produced so far in this case [redacted]

How Google's Barriers Fit Together.

119. Despite touting that its system allows consumers to directly download applications, Google programmed Android OS so that, as its default setting, it would block users from loading alternative app stores—requiring consumers to navigate through multiple misleading warnings that label even trusted app stores as "unknown sources." Furthermore, Google programmed the Android OS to disadvantage competing app stores, including [redacted] and by [redacted] Google has even disabled competing app stores after users have downloaded them. These barriers create "friction" for users who otherwise might use alternative app stores—[redacted]

120. As its primary technical barrier, Google restricts users from downloading competitive app stores and apps by using: (1) a default setting on the vast majority of Android OS devices that blocks such downloading, and (2) a permission process to bypass those defaults that display misleading warnings (about the competing store or app being an "unknown source") and forces users to agree that they are responsible for any resulting damage to their devices.

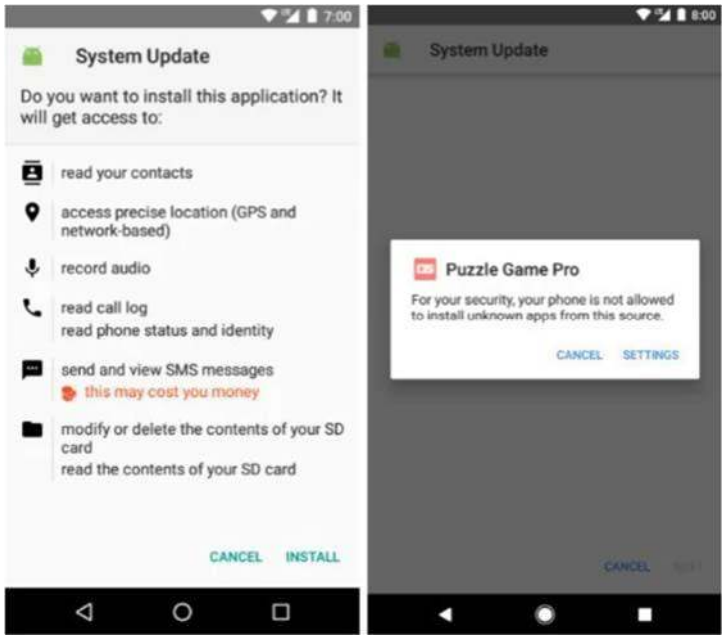
Default Prevents Sideloading of Competitive App Stores.

121. As a foundational barrier, Google created a default setting blocking sideloading on Android OS phones. The vast majority of Android OS phones are set to this default, blocking consumers from downloading alternative stores or apps via sideloading. An internal Google document

[90] *See id.* ("Although sideloading is technically an option for rival app stores and app developers, market participants explained that Google goes out of its way to make side-loading difficult.")

reflects that, as of 2018, [redacted] of devices worldwide had "unknown sources" enabled (meaning that users had changed the default setting such that these devices can install apps from "unknown sources," as described in more detail below), [redacted] a separate document, from when Fortnite decided to launch via sideloading, estimates that [redacted] of users in the United States had "unknown sources" enabled. Unsurprisingly, this means that very few devices in the U.S. have a third-party store installed: an internal Google document from 2021 states that, in the United States, [redacted] of devices have at least one user side-loaded store.[91]

122. For example, in some instances, Google presents a user trying to sideload an app with only the option "Cancel" or go to the device "Settings" menu—with no indication that installation is in fact possible through the "Settings" menu:



123. Thus, in addition to all the steps a user must complete to acquire an app outside the Play Store, a user is by default blocked with no indication from Google as to how to avoid that block.

Friction from multistep permission process and misleading warnings.

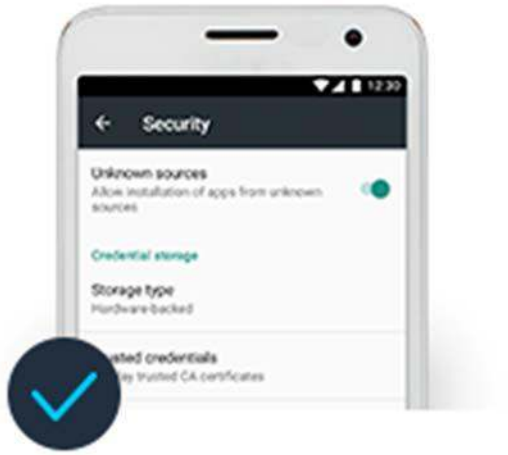
[91] Similarly, a separate Google document estimates that, between June and September 2016 [redacted] of Android app downloads were from "off-Play" sources, including preloaded stores like Samsung's.

124. And even once a consumer decides to try to download a competing store, they must navigate a multi-step process with ominous and misleading "unknown user" warnings.

125. The following is an example of the steps that an Android user must take to download an app through an app store other than the Google Play Store. This example, using Amazon's app store, assumes that the user knows about the alternative store and is sufficiently patient, and tech savvy, to try. First, the user must search Amazon's website to find and obtain a link to Amazon's app store. Then the consumer must do the following:

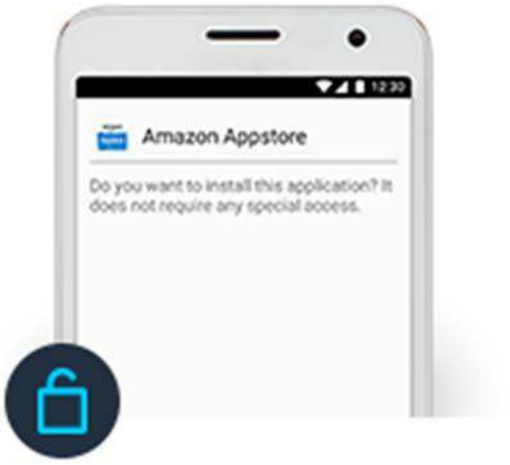
Step 1
Download Amazon Appstore
1. Use link sent to you in email to navigate to the Amazon Appstore download page
2. Tap on "Get Amazon Appstore" button
3. Follow instructions

REDACTED VERSION OF DOCUMENT SOUGHT TO BE SEALED



Step 2
Enable Unknown Sources

1. In your phone Settings page, tap on "Security" or "Applications" (varies with device)
2. Enable "Unknown Sources" permission
3. Confirm with "OK"

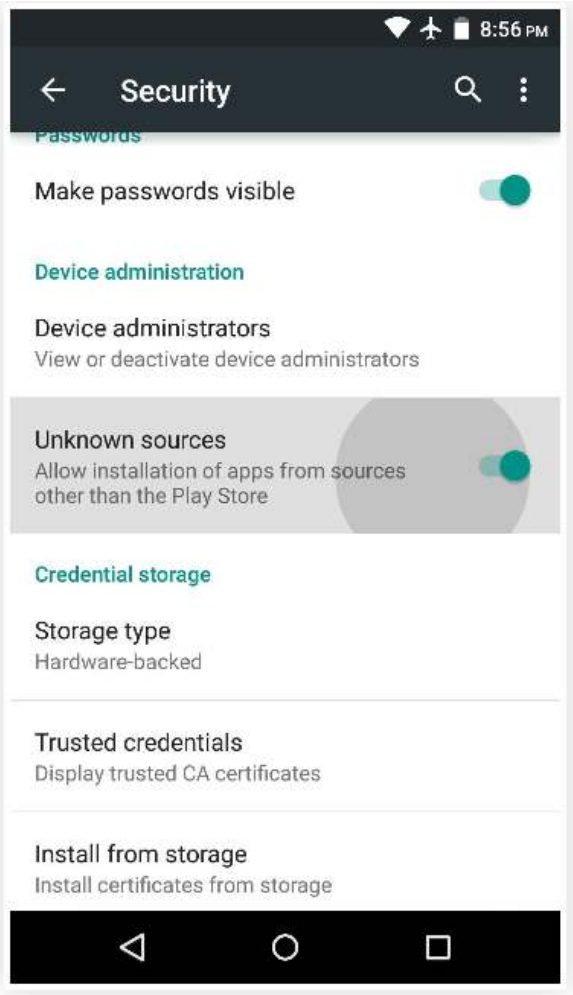


Step 3
Install and Launch Amazon Appstore

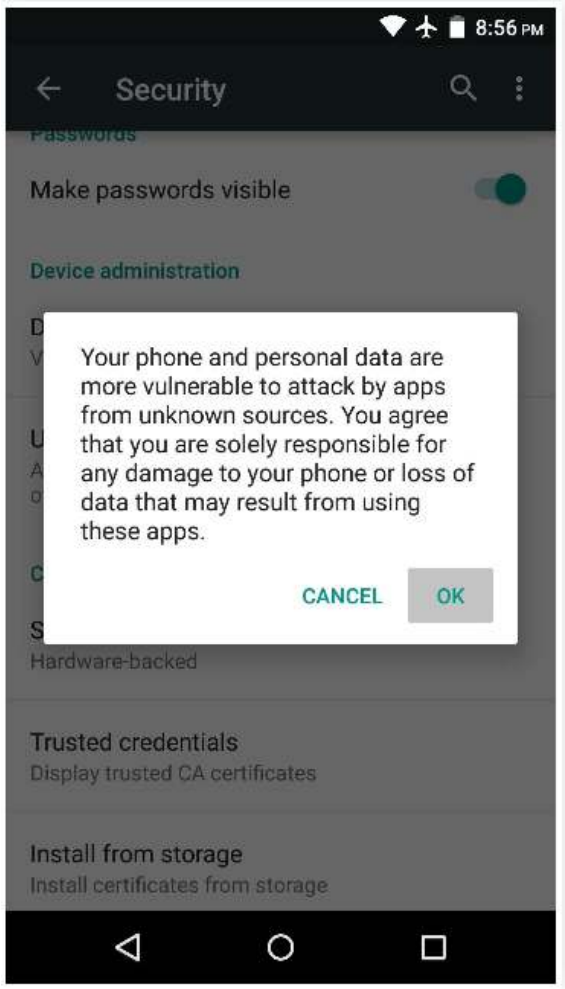
1. In your device's "Download" folder, find and tap on the "Amazon_app.apk" file
2. Tap "Install" on the Android Installer screen
3. Launch the Amazon Appstore[92]

[92] https://www.amazon.com/gp/feature.html/ref=sxts_snpl_1_1_b122686d-95c7-451e-a41b-8f08ca46cdcb?pf_rd_p=b122686d-95c7-451e-a41b-8f08ca46cdcb&docId=1000626391&pf_rd_r=ZSYBJ5ZEY4SCVPB0YXB5&pd_rd_wg=Ou2nJ&pd_rd_w=l6Ci1&qid=1597568508&pd_rd_r=1f985501-51cf-4e11-8fdc-4d076ac56dbb (last accessed Aug. 15, 2020).

126. Because of Google's refusal to allow competitors to distribute app stores via Google Play Store, and because of Android's security features (controlled by Google), the user had to be willing to turn on the "Unknown Sources" permission referenced in Amazon's Step 2 above. In Android versions released before its Oreo variant, the user would first find a screen looking like this:



127. A user opting to enable "Unknown source" would be greeted with this warning about making "[y]our phone and personal data … more vulnerable to attack":



128. Google's exact permission structure has changed over time. For example, on October 26, 2018, Google enabled some users to authorize download from only one source at a time.[93] But some Android OS devices in operation today still likely run pre-Oreo Android versions. Even with the change brought with Oreo, Google knows and intends that (1) most device users will not know how to access stores and apps outside of Google Play and (2), among those users who do, many will be frightened away by having to change a permission switch, given Google's continued warnings in various guises.

[93] *See* https://www.android.com/versions/oreo-8-0/ ("Hostile downloader apps can't operate without permission; users now permit the installation of APKs per-source.") (last accessed Aug. 15, 2020).) Oreo was not released to the public until August 21, 2017. (https://android-developers.googleblog.com/2017/08/introducing-android-8-oreo.html (last accessed Dec. 10, 2018).) As of October 26, 2018, well over a year later, Oreo's worldwide install base was at a mere 21.5%, not counting China. (https://developer.android.com/about/dashboards/ (last accessed Dec. 10, 2018).)

129. For example, users who wish to sideload might see this warning (after first receiving a pre-warning): "Your phone and personal data are more vulnerable to attack by unknown apps. By installing apps from this source, you agree that you are responsible for any damage to your phone or loss of data that may result from their use."[94] Google issues this message no matter how reputable the store operator (or other developer), belying the notion that Google's tactics protect anything other than its monopoly.[95]

130. As a factual matter, Google's warnings grossly exaggerate the risk of sideloading. A 2015 presentation to OEMs stated [redacted] Rather, [redacted] (And, of course, even Google Play has proven vulnerable to malware that could harm users' devices.[96])

131. Nor does data support the claim that third-party stores, particularly those operated by large developers or OEMs, are a significant source of malware. For example, an independent study of Android app stores published in 2017 ranked Aptoide as the safest among the Android app stores analyzed and safer than the Google Play Store itself. Consistent with this, [redacted]

[94] "Android Q currently disables 'Install unknown apps' permission after every use," available at https://9to5google.com/2019/04/04/android-q-install-unknown-apps/ (last accessed Aug. 17, 2020).

[95] And even if users overcome the hurdles imposed by Google and download an app from outside the Play Store, the app may be subject to removal from the user's mobile device by Google's security systems, such as Google Play Secure, and experience problems updating the apps.

[96] *See, e.g.*, "Android security: Malicious apps sneak back into Google Play after tweaks," May 9, 2018, available at https://www.zdnet.com/article/android-security-malicious-apps-sneak-back-into-google-play-after-tweaks/ (last accessed Aug. 15, 2020).

132. Google issues its warnings indiscriminately and with the knowledge that it hampers competitors. Like Google Play, the Amazon Appstore is monitored and curated.[97] Google is well aware of the Amazon App Store and actively monitors it. Yet Google stills labels it an "unknown app," giving users the false impression that even apps Google certainly must have analyzed and determined to be safe nevertheless present an appreciable risk of "damage" to the user's device, including data loss or the exposure of the user's personal information.

133. Google could easily "whitelist" app stores, i.e., disable its ominous warnings for those third-party stores or apps that effectively screen for malware themselves or do not present security risks. But Google steadfastly refuses, recognizing that these concessions would make it easier for rivals to gain scale. [redacted]

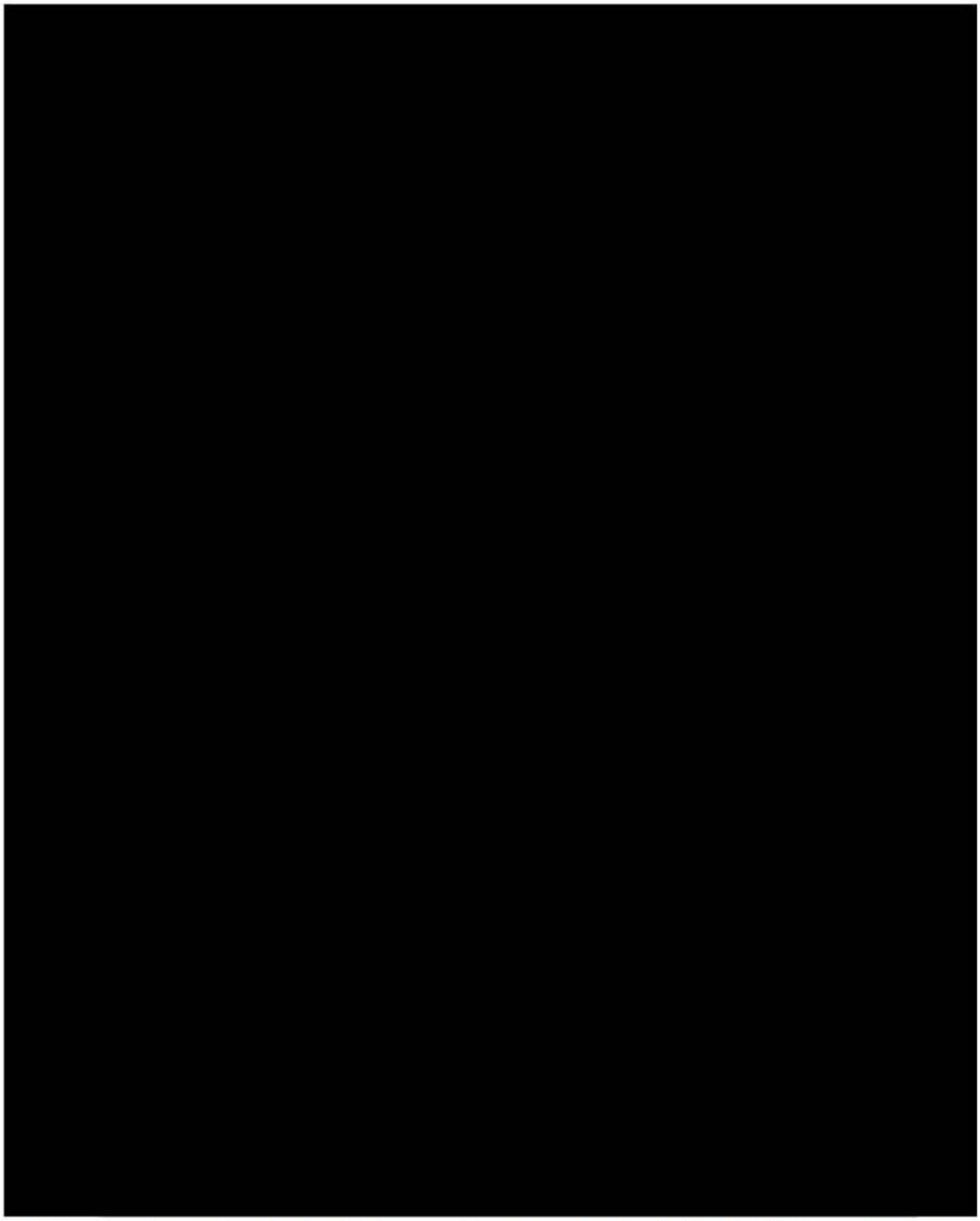
134. [redacted]

135. This strategy is consistent with what one 2019 Google document characterizes internally as [redacted]

[97] *See, e.g.*, "Amazon Appstore Content Policy," available at https://developer.amazon.com/docs/policy-center/understanding-content-policy.html (last accessed Aug. 15, 2020).

REDACTED VERSION OF DOCUMENT SOUGHT TO BE SEALED

[redacted]



136. Further, Google touts its security measures, including initiatives to safety-check and even quarantine or delete *all* apps on Android OS devices, wherever they are obtained. For example, in its February 2016 white paper titled, "How we keep harmful apps out of Google Play and keep your Android device safe,"[98] Google states:

[98] An archived version of this paper is available at: https://docplayer.net/15116445-How-we-keep-harmful-apps-out-of-google-play-and-keep-your-android-device-safe.html (last accessed July 21, 2021).

> Even though we do a lot of work to make Google Play apps safe before they reach you, Google works hard to protect you—no matter where your app comes from. We sandbox each application to constrain bad behavior and if an app wants new permissions, we ask you to confirm at runtime.
>
> In addition to multiple layers of security built into the platform, Android also includes a feature called Verify Apps. Verify Apps continually scans for potentially harmful apps. If an app is discovered later to be potentially harmful, Verify Apps will disable the app and request for you to remove it.
>
> Verify Apps also checks apps you install from outside of Google Play. If we see an app that looks malicious, we warn you before the installation proceeds. Verify Apps is available on every Android device (2.3+) that has Google Play installed.[99]

137. As for its security regime, Google Play Protect, Google assures:

> Google Play Protect helps you keep your device safe and secure.
>
> - It runs a safety check on apps from the Google Play Store before you download them.
> - It checks your device for potentially harmful apps from other sources. These harmful apps are sometimes called malware.
> - It warns you about any detected potentially harmful apps found, and removes known harmful apps from your device.
> - It warns you about detected apps that violate our Unwanted Software Policy by hiding or misrepresenting important information
> - It sends you privacy alerts about apps that can get user permissions to access your personal information, violating our Developer Policy.[100]

138. If these assurances are to be believed, then Google already monitors the security of all apps that would be obtained from any competing app store. If Android security is as robust as Google claims, its warnings against sideloading falsely overstate any potential "harm"—particularly as to

[99] https://docplayer.net/15116445-How-we-keep-harmful-apps-out-of-google-play-and-keep-your-android-device-safe.html at 4 (last accessed Aug. 15, 2020).

[100] https://support.google.com/android/answer/2812853?p=playprotect_download&hl=en&visit_id=636801711322579028-4051903200&rd=1 (last accessed Aug. 15, 2020).

widely used apps and app stores, from reputed developers, which Google has analyzed and found to be harmless.

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139. There is no good reason that a company as technologically sophisticated as Google could not whitelist or otherwise continue to permit unimpeded access to competitors' app stores on Android OS devices, including those run by well-known operators such as Amazon. As noted above, Google [redacted]

3. Google blocks sideloaded applications and app stores from auto-updating and advertising through Google Ads.

140. Even if a user overcomes Google's obstacles to sideloading a competing app store or app, the user faces continuous additional difficulties in keeping the sideloaded app or app store up to date. This is because Google prevents sideloaded apps and app stores from updating in the background. Instead, users who sideload apps or app stores must manually approve every update via a multistep process. Amazon's website describes that process: "1. Open the app store you used to install the app on your device. 2. Search for the app and open the app's detail page. 3. If an update is available, an Update option displays."[101] This multi-step process for updates further discourages consumers from using alternatives to the Play Store.[102]

141. Similarly, Google blocks alternative (i.e., competing) app distribution channels by preventing app developers from advertising these channels through Google's marketing properties. This requirement unreasonably raises the cost of customer acquisition for competing app distribution

[101] "Confirm App is Updated to the Latest Version," https://music.amazon.com/help?nodeId=G202196570 (last accessed July 20, 2021).

[102] Google last month announced plans to reduce some of its impediments to third-party app stores—after some 10 years—in the forthcoming version of the Android OS, Android 12. Sameer Samat, Listening to Developer Feedback to Improve Google Play, ANDROID DEVELOPERS BLOG (September 28, 2020), https://androiddevelopers.googleblog.com/2020/09/listening-to-developer-feedback-to.html. Specifically, initial Google documentation suggests that it will enable automatic updating of sideloaded app stores under certain conditions. See Mishaal Rahman, Android 12 will finally let alternative app stores update apps without bothering the user, XDA DEVELOPERS (May 19, 2021), https://www.xdadevelopers.com/android-12-alternative-app-stores-update-apps-background/.

channels, as they cannot reach consumers through widely used forms of advertising that are uniquely effective in reaching users who are immediately prepared to acquire an app but instead must find alternative means of advertising to reach users.

142. Google's App Campaigns program allows developers to promote apps through ad placements on key online advertising channels, including Google Search, YouTube, Discover on Google Search, and the Google Display Network. These placements are optimized for the advertising of mobile apps and have proven successful. According to Google, one out of every four users discovers an app through a search engine.[103] And because Google Search is the overwhelmingly dominant search engine in the United States (and most of the world), it is a vital channel for app developers to reach customers. Ads on Google's YouTube are likewise a key means for developers to reach consumers.

143. Since late 2017, Google has forced all marketers to relinquish their control over app ad targeting to fully automated "black box" machine learning tools, which have been criticized for penalizing smaller budget advertisers. But within the Android ecosystem, the crucial App Campaigns program is limited to app developers who list their app in the Google Play Store. Android app developers must list their apps in the Google Play Store if they want to reach consumers through the vital channel of Google advertising.

144. Denying competing apps and app stores the ability to auto update or advertise on Google properties erects significant additional barriers to entry. The net effect of this conduct is to harm consumers, including by depriving them of choice in how to download their desired apps and app stores.

4. Google has, at times, shut down existing consumers' access to competitive stores.

145. If all else fails—if a consumer learns of another app store, figures out how to acquire the client, educates herself on how to install it, and ignores Google's manipulative security warnings, Google may attempt to shut down the consumer's access.

[103] https://www.thinkwithgoogle.com/marketing-strategies/app-and-mobile/mobile-app-marketing-insights/ (last accessed July 20, 2021).

146. Not satisfied with denying Aptoide access to the Play Store, Google forced app store operator Aptoide to go to court to seek an antitrust injunction for uninstalling it from Android devices during its Google Play Protect sweeps. And Aptoide won. According to Aptoide's press release:

> **EU National Court rules against Google in Anti-Trust process**
>
> *Lisbon, October 19th, 2018*
>
> The Portuguese Courts issued today a decision against Google in relation to the injunction filed by Aptoide. It is applicable on 82 countries including UK, Germany, USA, India, among others. Google will have to stop Google Play Protect from removing the competitor Aptoide's app store from users' phone without users' knowledge which has caused losses of over 2.2 million users in the last 60 days.
>
> The acceptance of the injunction is totally aligned with Aptoide's claim for Google to stop hiding the app store in the Android devices and showing warning messages to the users. Aptoide is now working alongside its legal team to next week fill in courts the main action, demanding from Google indemnity for all the damages caused.
>
> This action is part of a complaint against foul play by Google, directed to Android's antivirus software, Google Play Protect. Google's anti-malware system was wrongly identifying Aptoide as a potentially malicious app, hiding and uninstalling it from Android smartphones without user consent.
>
> Aptoide, with over 250 million users, 6 billion downloads and one of the top stores globally, also presented last July, a formal complaint to the European Union's anti-trust departments against Google.
>
> Paulo Trezentos, Aptoide's CEO, says that "For us, this is a decisive victory. Google has been a fierce competitor, abusing his dominant position in Android to eliminate App Store competitors. Innovation is the reason for our 200 million users base. This court's decision is a signal for startups worldwide: if you have the reason on your side don't fear to challenge Google."

According to Carlos Nestal, head of the legal team that worked in the case:

> "This case, to our knowledge, is the first of an EU national Court that enforces a clear separation of Android layer and the Services layer. Court is clearly stating that Google's control of the Operating System cannot be used as a competitive advantage in the Services market. We

> believe this may apply to other situations where Google has competition."[104]

147. Reports indicate that Samsung's small app store also was caught up in Google's dubious security net. As androidsage.com reported on June 18, 2018, "[S]ince today, a bunch of Samsung users have reported of Google Play Store flagging the official Samsung Galaxy App Store as potentially dangerous and fake at the extent of even blocking it."[105]

5. Google has substantially foreclosed competition by leveraging agreements with OEMs to foreclose third-party distribution and imposing unreasonable and/or pretextual technological barriers that stymie rivals.

148. By leveraging its agreements with OEMs to foreclose third-party app distribution, thus relegating third-party app distributors to sideloading, and by imposing technical barriers foreclosing effective competition from sideloaded apps and stores, Google has substantially foreclosed competition and built a nearly impenetrable moat around its distribution monopoly.

149. This is exactly what Google intends.

150. Indeed, in a 2020 presentation prepared by and presented to senior Google Play executives, Google boasted that [redacted] that is, the risk of unhappy developers distributing their apps directly to consumers in order to avoid Google's generally 30% cut of sales. Specifically, the document notes that there [redacted]

[104] Press release available at, *inter alia*: https://www.androidpolice.com/2018/10/23/aptoide-gains-injunction-google-latest-antitrust-case-compensation-follow/ (last accessed Aug. 15, 2020).

[105] https://www.androidsage.com/2018/06/18/google-play-protect-blocking-galaxy-app-store-how-to-fix/ (last accessed Aug. 15, 2020).

[106] As noted above, according to Google documents produced in this case, one purpose of the restraints [redacted]

151. According to Google's internal estimate, as of [redacted]

152. Similarly, Google is aware that its conduct, and particularly the "friction" sideloading creates for users, has further blocked competitors and potential competitors.

153. For instance, in a 2018 [redacted]

154. Similarly, with respect to Epic Store, Google observed, [redacted]

155. Notwithstanding its successful efforts to date, Google recognized that even these nascent competitors, if not blocked, would quickly erode its [redacted] As that same 2018 presentation explained, [redacted]

156. Google's Finance Director for Platforms and Ecosystems made a presentation to the CFO of Alphabet around the time of Fortnite's launch confirmed Google's fear of a [redacted]

[redacted]

[redacted]

157. Thus, Google understood that its well-resourced competitors, even if starting out small, would erode Google's monopoly power *if not blocked.*

G. Google's Unlawful Practices Harm Developers and Competition.

158. Google's practices harm developers and competition by depressing output, stifling innovation, limiting choice, and extracting a supracompetitive tax of up to 30% on every paid app purchased through the Play Store and every purchase of in-app digital content using Google Play Billing, which must be used by developers who sell in-app content on apps distributed through Google Play. But for Google's anti-competitive restrictions, app developers would be able to distribute their apps through alternative methods, including by providing apps directly to consumers, selling apps through independent app stores, creating their own competing app stores, or forming business relationships with OEMs that could preinstall apps.

1. Google's monopolization of the market stifles innovation.

159. Google's abusive behavior also stifles innovation in the U.S. market for Android OS app distribution.[107]

160. For example, Amazon devised an alternative model for app distribution through Amazon Underground, which made apps and in-app purchases "actually free" to consumers.[108] Amazon Underground paid developers according to how much time consumers spend interacting with the apps.[109]

[107] *E.g.*, Stephen D. Houck, *Injury to Competition/Consumers in High Tech Cases*, St. Johns L. Rev. Vol. 5, Iss. 4, 593, 598 (2001) ("Any assessment of a restraint's anticompetitive impact, however, will be incomplete if limited to price and output effects. The restraint's impact on consumer choice and innovation must also be considered.").

[108] *See* Sarah Perez, *Amazon is shutting down its "Underground Actually Free" program that gives away free Android apps*, Techcrunch (Aug. 28, 2017), https://techcrunch.com/2017/04/28/amazon-is-shutting-down-its-underground-actually-free-program-that-gives-away-free-android-apps/ (last accessed July 19, 2021).

[109] *Id.*

161. Google's anticompetitive behavior is likely one reason why Amazon shuttered Amazon Underground in 2019.[110] Consistent with Google's own internal assessments, industry analysts perceived Amazon's extreme uphill battle from the outset. One put it this way:

> The first issue is scale. For a system like this you need critical mass and scale in terms of audience and content. Amazon's hands were tied because they weren't able to make Underground readily available on iOS (obviously) or Google devices.
>
> That means they were always going to be limited to those people with Fire devices or who were motivated enough to use more than one app store. . . .[111]

162. Another analyst put it thus:

> **User acquisition is still the biggest challenge**
>
> Amazon's revamped plans offer app publishers an innovative new model for monetizing certain apps but it may not be enough to address its major challenge: how to persuade Android users to download an alternative store to Google Play. . . .
>
> **Strong app store competition**
>
> The app store competition is extremely strong. The Google Play Store offers a catalogue of than more one million apps (far greater than Amazon) and comes preinstalled on almost all Android smartphones outside China. The Google Play Store is more than sufficient for most users' needs and Google reported more than 1.4bn active devices in September 2015.
>
> Beyond Amazon's own Fire branded smartphone (now discontinued) and tablets, Amazon's store does not come preinstalled on any devices[112] and so app publishers correctly focus first on providing content for Google's store rather than Amazon's.
>
> To download the Amazon Underground app, as with its previous Appstore for Android, users have to change their Android permissions

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[110] *See, e.g.*, "Why is Amazon shutting down its Underground Initiative?" May 9, 2017, https://www.pocketgamer.biz/mobile-mavens/65694/why-is-amazon-shutting-down-its-underground-initiative/ ("It was part of a long-term strategy with bold ambitions to change the way mobile developers made games, but two years on Amazon has announced that Underground will no longer feature on the Amazon Appstore as of Summer 2017, with the program officially ending in 2019.") (last accessed Aug. 15, 2020).

[111] *Id.* (quoting Oscar Clark, "Author, Consultant and Independent Developer Rocket Lolly Games").

[112] This was as of October 2015, when the referenced article was published.

> to enable non-Google Play downloads which is a step too far for most customers. Amazon needs to have its store pre-installed on Android smartphones if it is to drive increased adoption. Smartphone brands that wish to reduce their dependency on Google should be open to such a relationship.
>
> **Other stores are unlikely to follow suit, for now**
>
> Amazon's Underground app program is a response challenging market position. As a challenger store with limited market share, Amazon has to innovate to attract users. It also needs to give developers a reason to provide content for its store. Amazon can offset the costs of running the Underground program by tying its users more closely into its ecosystem and driving retail transactions and other content revenues; Amazon Prime Video and its retail store are available alongside mobile apps in Underground. Market leaders Apple and Google do not struggle to attract users or app publishers and the share they take from app transactions have become significant revenue streams, so there is no incentive for them to adopt a similar program.[113]

163. And as Google has done what it can to shut out even a well-resourced potential competitor such as Amazon, Amazon itself continues to soldier on by way of its Amazon Coins program, which allows consumers to buy apps at a discount in the Amazon Appstore.[114] For example, on Aug. 15, 2020, the popular game Minecraft for Android OS was priced at the same nominal sum of $6.99 in both Google Play and the Amazon Appstore.[115] But by using Amazon Coins, a purchaser could save 20%, bringing her price to approximately $5.59:

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[113] *See* "Amazon Underground innovates with free apps but faces challenges," Oct. 7, 2015, available at: https://technology.ihs.com/550085/amazon-underground-innovates-with-free-apps-but-faces-challenges (last accessed Aug. 15, 2020).

[114] Amazon's presumptive revenue split in its own Appstore is also 70% developer / 30% store operator, as with Google and Apple. On the other hand, its Amazon Coins program allows consumers to save money on the purchase price of apps everyday while developers continue to earn their 70% developer share. (*See* https://www.amazon.com/dp/B018HB6E80/ref=twister_B009CDKIA8?_encoding=UTF8&psc=1#where (explaining Amazon Coins programs and noting: "The More You Buy, the More You Save. Amazon Coins come in denominations from 300 to 50,000 Amazon Coins. Bigger denominations always have bigger discounts. The savings on an order of 50,000 Coins is always larger than on an order of 300 Coins."); https://www.amazon.com/Amazon-Coins-Apps-Games/b?ie=UTF8&node=13927674011 (more on Coins program) (last accessed Aug. 17, 2020).

[115] *Compare* https://play.google.com/store/apps/details?id=com.mojang.minecraftpe (last accessed Aug. 15, 2020) *with*, https://www.amazon.com/Mojang-Minecraft/dp/B00992CF6W/ref=sr_1_1?s=mobile-apps&ie=UTF8&qid=1549260798&sr=1-1&keywords=minecraft (last accessed Aug. 15, 2020).

Minecraft

by Mojang

Rated: Guidance Suggested

4.4 out of 5 stars 83,176 customer ratings

Price: **$6.99**

Save up to 20% on this app and its in-app items when you purchase **Amazon Coins**. Learn More

Sold by: Amazon.com Services LLC.[116]

164. Unfortunately, there is no evidence that any of these innovative programs has dented Google's market share to any meaningful degree, which is not surprising considering Google's abusive behavior, including its refusal to permit access via Google Play.

165. Google's domination of the U.S. app distribution market also stifles innovation in apps—another way it hurts competition generally. Other vibrant app stores would mean more places for featuring apps. With so many apps available on the market, product can and does get lost in Google Play. Developers and competition generally, not to mention individual end-users, would benefit from other venues that would surface good, new products and encourage the development of yet more and better apps—all of which would engender more output in the market at issue here.

2. Google harms developers by killing competition and diminishing consumer choice.

166. Google's anticompetitive behavior diminishes the choice offered by endeavors such as Amazon Underground, which lowered prices (even to zero, with its Actually Free component), while also offering developers another way to monetize their apps. If even another corporate giant could not overcome Google's anticompetitive policies, there is little hope for other prospective competitors, unless Google is required to change its anticompetitive contracts and practices.

3. Google also harms developers and competition by depressing output.

167. Google's high service fees prevent app developers from selling more apps and in-app products. As a result of lower sales, developers are deprived of the monetary resources and incentives to invest in app and content development and app distribution. Thus, output is depressed.

[116] https://www.amazon.com/Mojang-Minecraft/dp/B00992CF6W/ref=sr_1_2?dchild=1&keywords=minecraft&qid=1597603583&s=mobile-apps&sr=1-2 (last accessed Aug. 16, 2020).

168. Google's $0.99 minimum price for U.S. app sales also depresses output. Google itself recognizes this by way of contractual terms that permit lower minimum prices in 18 other countries[117]: lower prices move more apps. Again, developers lose volume and real money as a result. There is no good or pro-competitive reason to deny them pricing flexibility for minimum-priced apps.

4. Google harms developers by charging a supracompetitive price for distribution services for Android OS apps and in-app payment processing.

169. The Google Play Developer Distribution Agreement requires that Google will "display and make [developers'] Products available for viewing, download, and purchase by users" in Google Play in exchange for a "'Service Fee', as set forth [in another document] and as may be revised by Google from time to time with notice to Developer…, will be charged on the sales price and apportioned to the Payment Processer and, if one exists, the Authorized Provider."[118]

170. There is no pro-competitive, or otherwise justified reason for the 15% or 30% service fee that Google charges to U.S. app developers for app and in-app payment processing for most of the class period.[119] Google itself has recognized as early as 2009 tha [redacted] and today internally estimates its payment processing costs a [redacted]

171. Nor is there justification for Google's 15% service fee, which Google began to offer developers (for subscriptions) in 2018. In fact, that Google offers the 15% rate for certain transactions underscores the supracompetitive nature of Google's 30% commission rate on others. This unnatural price stability, in the face of improving margins from the accrual of economies of scale and lower costs

[117] *See, e.g.*, ¶ 57, *supra*.

[118] Google Play Developer Distribution Agreement, https://play.google.com/about/developer-distribution-agreement.html (last accessed Jul. 20, 2021).

[119] *See, e.g.*, "A decade on, Apple and Google's 30% app store cut looks pretty cheesy," Aug. 29, 2018, available at: https://www.theregister.co.uk/2018/08/29/app_store_duopoly_30_per_cent/ ("Apple unveiled the App Store in July 2008, and Android Market the following month, opening with the first Android device that October. Apple set the 30 per cent rate, Google simply followed suit.") (last accessed Aug. 15, 2020); *see also* https://support.google.com/googleplay/android-developer/answer/112622?hl=en (last accessed Aug. 15, 2020).

for various inputs over time, is a sure sign of Google's unlawful monopoly power and abuse of market power. Google immediately imposes this charge on developers by way of its contracts of adhesion.

172. Nor do the circumstances give rise to any pro-competitive justification for Google's contractual terms requiring $0.99 minimum pricing for paid apps and in-app add-ons. This pricing mandate, too, is an abuse of Google's monopoly power.

Supracompetitive Service Fee

173. Google does not have physical inventory (as distinct from a mere bit of digital storage for uploaded content); has a large and growing preinstall base for Google Play Store, which has multiplied not by building more physical stores but simply by replicating an app; and has economies of scale that have grown over time. Yet for most of the relevant period, Google has taken from developers nearly a third of every dollar spent as a fee for all covered Google Play transactions. Given how large the market is, Google could substantially lower its 30% (or 15%) service fee to a reasonable rate that would cover the cost of operating the Play Store and process transactions.

174. In fact, Google's internal documents reflect that the rate could be set at [redacted] But for Google's improperly acquired monopoly in the U.S. market for Android OS app distribution and in-app payment processing, which it maintains through contracts and technological barriers, Google would be forced to compete and lower the exorbitant fees it extracts from developers.

175. Internal Google documents discussing its commission note [redacted] and state: [redacted]

176. Meanwhile, managers overseeing the Google Play Store also complain internally about their company's [redacted] One presentation states: [redacted]

Epic Games

177. Epic provides a benchmark for what a relatively more competitive rate app store service fee would be. In stark contrast to Google's supracompetitive 30% (or 15%) service fee, for its own store, Epic will employ a *12%* service fee.

178. This is plenty to achieve a reasonable profit, as explained by Epic's CEO[120]: "'Fixed costs of developing and supporting the platform become negligible at a large scale. In our analysis, stores charging 30 per cent are marking up their costs by 300 to 400 per cent'…'But with developers receiving 88 per cent of revenue and Epic receiving 12 per cent, this store will still be a profitable business for us.'"[121]

179. That a newcomer like Epic can run a store profitably with a 12% fee demonstrates how supracompetitive Google's 30% (or 15%) service fee truly is. Given Google's experience, huge preinstallation base for Google Play, and its other economies of scale, it is likely that Google could earn a healthy profit by charging even less than 12% per covered transaction.

180. Notably, Epic's CEO indicates the rates are "around 2.5 percent to 3.5 percent . . . for major payment methods."[122] Yet for most of the relevant period, Google charged 30% as its fee for in-app purchases (with some subscription rates at 15%, as referenced herein). And this matters deeply to Android developers. The ability for consumers to pay in-app is critical to app developers, since consumers might forego purchasing in-app digital products if they cannot readily make the purchase with the developer's app.[123]

181. Epic has repeatedly tried to do something about this monopolist-imposed rate, to no avail. In fact, Epic recently tried to offer a lower rate to consumers for virtual currency in its popular

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[120] "New Epic Games Store takes on Steam with just 12% revenue share – Tim Sweeney answers our questions," *MCV,* https://www.mcvuk.com/business/new-epic-games-store-takes-on-steam-with-just-12-revenue-share-tim-sweeney-answers-our-questions (dated Dec. 4, 2018) (last accessed Aug. 15, 2020).

[121] *Id.*

[122] These figures are [redacted] as noted above, a 2021 presentation estimates Google's payment processing costs at [redacted]

[123] Complaint for Injunctive Relief, *Epic Games, Inc. v. Google, et al.*, No. 20-cv-05671 (N.D. Cal.), filed Aug. 13, 2020, ECF No. 1, ¶ 134.

Fortnite app for Android, which is distributed via Google Play.[124] Epic offered consumers a choice: pay through Google's payment processing system, or pay 20% less through Epic's.[125] Within hours, Google, in an exercise of its enormous market power, responded by kicking Fortnite out of Google Play.[126]

Chrome Web Store

182. Another comparator comes from Google itself. Google has for years operated the Chrome Web Store, whereby it sells certain apps for use on personal computers.[127] Google's service fee for purchases of paid apps or in-app products is only 5%,[128] a fraction of the 30% default rate that Google Play has extracted from app developers for most of the relevant period. There is no indication that Google is losing money by way of service fees set at 5%. What is clear is that, unlike Google Play, the Chrome Web Store faced competition from distribution channels.

183. Tellingly, however, when App Runtime for Chrome ("ARC") apps are concerned, the fee goes up to 30% for in-app (and one-time[129]) payments. ARC is a project Google introduced in 2014 to bring Android apps to devices running Google's Chrome OS.[130] According to Google:

> **Note:** In-app payments for ARC apps are subject to a 30% transaction fee. For example, if you charge $1.99 for an item offered in an ARC app, you'll receive $1.39. This is to ensure a consistent pricing structure with in-app payments made in apps available on Google Play. ARC does not currently support other purchase models including up-front payments,

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[124] *Id.* ¶ 28.

[125] *Id.*

[126] *Id.* ¶ 29.

[127] *See* https://chrome.google.com/webstore/category/extensions (last accessed Aug. 15, 2020).

[128] https://developer.chrome.com/webstore/pricing#seller ("Each time someone buys your app using Chrome Web Store Payments, Google charges you a 5% transaction fee. For example, if you charge $1.99, you'll receive $1.89; if you charge $9.99, you'll receive $9.49.") (last accessed Aug. 15, 2020); https://developer.chrome.com/webstore/money (same service fee for in-app payments when using the Chrome Web Store API) (last accessed Aug. 15, 2020).

[129] This is evidently equivalent to charging some amount for the app itself. (*See* n.155, *infra*.)

[130] "First set of Android apps coming to a Chromebook near you," Sept. 11, 2014, available at: https://chrome.googleblog.com/2014/09/first-set-of-android-apps-coming-to.html (last accessed Aug. 15, 2020).

> subscriptions and in-app version upgrades; as these types of purchases require provisioning from Google Play which is not currently enabled.[131]

In other words, Google *could* charge much less, but maintains the generally 30% Google Play fee for internal "consistency" reasons.

H. Google Monopolizes the Market for Android In-App Payment Processing for Digital Products.

184. In addition to imposing a supracompetitive service fee for Android OS app distribution, Google forces developers to use Google Play Billing for all in-app digital content purchases. In doing so, Google illegally ties in-app payment processing to its distribution services, which allowed it to monopolize the market for Android In-App Payment Processing for Digital Products.

1. The In-App Payment Processing Market is a relevant antitrust market.

185. Payment processing consist of software employed by merchants that performs the necessary steps to verify and accept (or decline) a customer's purchase (or attempted purchase). Payment processing frequently provides additional customer-facing functionalities such as invoicing, payment history, and refund processing.

186. The ability to make quick, seamless purchases within an app itself is critical to the consumer's experience and to the likelihood of purchase. If a consumer were required to purchase in-app digital content only outside the mobile app, that user might simply abandon the purchase or stop interacting with the app altogether. And in-app purchases are critical to developers: the revenue generated from in-app purchases is substantially greater than the revenue generated by pay-to-download apps.

187. Accordingly, developers seek to make their in-app purchase experience as frictionless as possible. Users similarly seek to consummate in-app transactions with the least interruption of their use of the app. A payment processing product that requires the user to exit an app to complete a

[131] https://developer.chrome.com/webstore/money (last accessed Aug. 15, 2020).

transaction cannot substitute for one that consummates transactions within the app. The more friction and time a payment requires, the less likely a consumer is to complete the transaction. Developers and consumers alike would not regard a payment processing product that required exiting the app as reasonably interchangeable with payment processors that support in-app payment.

188. In particular, purchasing through a developer's website is not a substitute for in-app payment processing. Not only would this require the user to exit the app, but Google's policies prohibit developers from referring or directing users to websites for payment outside the app environment.[132]

189. Moreover, the Android In-App Payment Processing for Digital Products Market is distinct from app distribution, as they are separate products and separate demand exists for each. In other digital ecosystems, payment and distribution services are routinely sold separately. In fact, Google already allows this within the Android mobile ecosystem: developers may use a third-party payment processor like Adyen, PayPal, and Braintree for in-app purchases of physical products and out-of-app services such as those offered through Amazon, Airbnb, and Uber. For in-app purchases of digital content, however, developers must use Google Play Billing as their exclusive payment processor if they wish to distribute their apps through the Google Play Store.

2. Google has unlawfully tied Google Play Billing to the Google Play Store.

190. As a condition of distribution through the Google Play Store, however, Google requires developers to exclusively use Google Play Billing, Google's in-app payment processor, to process all in-app purchases of digital content.

191. Google requires developers to enter its standardized DDA as a condition of having their apps distributed through the Google Play Store. The DDA unlawfully ties use of Google's in-app

[132] Play Console Help, Policy Center, https://support.google.com/googleplay/android-developer/answer/9858738 ("Apps other than those described in 2(b) may not lead users to a payment method other than Google Play's billing system").

payment processor to distribution through the Google Play Store. It also constitutes an unlawful exclusive-dealing arrangement.

192. Under Section 3.2 of the DDA, developers are required to enter into a separate agreement with Google Payment, a Google subsidiary that is not part of Google's Play Store business unit, to use Google Play Billing for all digital content sold in apps downloaded through the Play Store.

193. Further, Section 4.1 of the DDA requires that developers comply with Google's Developer Program Policies. Those policies require that "1. Developers charging for apps and downloads from Google Play must use Google [Play Billing] as the method of payment. 2. Play-distributed apps must use Google [Play Billing] as the method of payment if they require or accept payment for access to features or services, including any app functionality, digital content or goods."[133] By contrast, Google's policies require that developers may not use Google Play Billing to process payments "for the purchase or rental of physical goods (such as groceries, clothing, housewares, electronics)"; "for the purchase of physical services (such as transportation services, cleaning services, airfare, gym memberships, food delivery, tickets for live events)"; or "a remittance in respect of a credit card bill or utility bill (such as cable and telecommunications services)."[134] That is, for physical products and services, Google's policies require a payment processor other than Google Play Billing.

194. Furthermore, for payments subject to Google's requirement to use Google Play Billing, developers are prohibited from "lead[ing] users to a payment method other than Google [Play Billing]."[135] This provision bars developers from linking to a website or other service that would process payments more cheaply. The restrictions are comprehensive: "Within an app, developers may not lead users to a payment method other than Google Play's billing system. This includes directly

[133] Google Play Developer Distribution Agreement, https://play.google.com/about/developer-distribution-agreement.html (last accessed Jul. 20, 2021).

[134] *Id.*

[135] *Id.*

linking to a webpage that could lead to an alternate payment method or using language that encourages a user to purchase the digital item outside of the app."[136]

195. Together, these provisions make Google Play Billing the only in-app payment processor that a developer can use for digital content within Android apps. Google's contractual tie of Google Play Billing to Google Play Services illegally maintains its monopoly in the In-App Payment Processing Market.

3. But for Google's anticompetitive tie, Developers would choose between a variety of reliable and less expensive payment processing options.

196. If Google did not require developers to use its payment processing to pay for in-app digital content, developers would be free to choose from other reliable payment processors, including PayPal, Braintree, Adyen, WorldPay, and Chase Limited – and could also write their own proprietary payment processing software. These alternatives would enter the In-App Payment Processing for Digital Products market, but for Google's anticompetitive tie. Indeed, Google is now forcing these alternatives out of the market as to digital streaming services, to which Google is currently extending its unlawful tie.

197. Moreover, tying together these two distinct products—app distribution and in app-payment processing—is not technologically necessary. Third-party payment companies operate safely and effectively in other digital and real-world ecosystems, including, for example, desktop computers and in-app purchases of physical goods. Companies like PayPal and Braintree offer payment processing at a significantly lower price than Google Play Billing. These major payment processors have all aligned on the same fee (to the cent) —2.9% + 30 cents—vastly lower than Google's fully loaded service fee of 30% (or 15%). (As noted above [redacted] These companies also compete on various

[136] *Id.*

dimensions of convenience, speed, security, privacy, and customer service. Google, in contrast, faces no competitive pressure to improve its service or offerings with regard to any of these characteristics.

198. In fact, developers often choose to use a competitor, rather than Google's offerings, for their payment processing where Google's enforcement practices permit, as with in-app purchases of streaming services. Google's competitors typically offer lower costs, more favorable terms of service, more timely payment to merchants, more payment method options for users (e.g., Apple Pay, Venmo, bank transfer), and more freedom to set prices than Google offers. These competitors' products could readily be adapted (or continue to be permitted) for use in the In-App Payment Processing Market, i.e., for in-app purchases of digital content. Google's unlawful contracts and policies are the primary reason these competitors have negligible market share. Third-party payment processors stand ready to compete, but Google's illegal tying arrangement prevents them from doing so.

199. Google's anticompetitive tie harms developers and consumers, and reduces overall output by eliminating alternative avenues for in-app payment processing that consumers and developers would otherwise use. Rather than competing on the merits, and creating more efficient, innovative, or less expensive payment processing, Google simply blocks its competitive threats.

4. Google's in-app payment processing tie is not necessary to incentivize its investment in the Play Store or Android.

200. Google's tie is not necessary for it to reap significant profits from the Google Play Store and the Android ecosystem, nor for it to continue to invest in the quality of these products. Google's core business model for Android is to collect detailed personal data from Android users and monetize that data through targeted advertising.

201. Google earns substantial revenues from other digital advertising as well: the display advertising it sells on third-party sites; ads within the Google-owned-and-operated apps it mandates that OEMs preinstall; ads within the Play Store; and Google's AdMob, which is among the most popular services developers use to monetize through advertising. The latter two earn Google billions

of dollars solely from or via developers, and developers spend billions on Google's other advertising channels to reach consumers. Nor is the tie necessary to prevent "free riding" by developers as to distribution via the Google Play Store. In fact, Google's current model encourages free riding. Among the apps that benefit from being on the Google Play Store but do not sell digital goods are many categories of very valuable commercial apps such as, for example, those used by banks and other financial institutions, brokerages, insurance companies, and real estate services to interact with customers, in addition to those apps that sell billions of dollars of physical goods (e.g., Amazon), services (e.g., Uber), or advertising (e.g., Facebook). Google could elect to charge a reasonable fee for the Google Play Store's distribution services, but it does not. Instead, it reaps a monopolistic windfall from Android in-app payments, to the detriment of developers and consumers alike.

5. Google's unlawful tie has led to supracompetitive service fees and other anticompetitive effects in the In-App Payment Processing Market.

202. By requiring that apps purchased through the Google Play Store also use Google Play Billing for the purchase of in-app digital content, Google has illegally engaged in tying and exclusive dealing, monopolizing the Android In-App Payment for Digital Product Processing market. Google's anticompetitive conduct has demonstrable anticompetitive effects on the In-App Payment Processing for Digital Products market that harm competition and injure developers.

203. Google's supracompetitive commission on in-app purchases raises prices for consumers, reduces profits for developers, and chills the market for app development and digital content development by making digital content less profitable.

204. Google could not maintain this extravagant commission in a competitive market free from Google's illegal tying, exclusive dealing, and other anticompetitive conduct. The fee is an order of magnitude higher than fees for platforms in which there is competition for electronic payment processing.

205. Without Google's exclusive-dealing mandate, developers would have more options for in-app payment processing; with the potential for higher profits, developers could dedicate more money to research and development, marketing, and creating new apps, further increasing output.

206. By requiring that apps purchased through the Play Store use Google Play Billing for the purchase of digital content, developers lose features like the following, which are not offered by Google Play Billing but are available through developers' own proprietary payment systems or processors like Adyen and WorldPay:

a. Key information about failed consumer in-app purchase transactions, such as the specific reason for the failure (e.g., insufficient funds). Google Play Billing indicates only that a problem exists with the transaction without further description.

b. Features that minimize "involuntary churn," or the inadvertent loss of users through short-term credit card issues such as a credit card expiring or being put on hold.

c. Data indicating that a given consumer card has been recently used successfully with other merchants. This data can increase a developer's confidence that the consumer is likely to pay.

d. Free trial services. Some developers want to offer free trial experiences periodically (a feature available through some non-Google payment processors), but Google Play Billing allows only one free trial service per lifetime per product.

e. Customized cancellation experiences. When a user discontinues in-app subscriptions (for example, after finding a job with a job-seeking app or finding a dating partner with a dating app), developers would like to learn about the user's decision to discontinue and, where appropriate, upsell the user. Google Play Billing does not permit developers flexibility to gather this information or offer additional services.

207. In a competitive market for in-app payment processing, developers could create their own payment infrastructure, or accept third party payment processing—just as retailers accept different types of payment including credit, debit, and prepaid cards. Developers could offer payment systems based on alternative currencies or billing to cell phone carriers. These innovations are substantially foreclosed by Google's anticompetitive contractual requirements.

208. Indeed, native and third-party payment processing products can be better tailored to developers' needs. Absent Google's exclusive-dealing requirements, developers could compete in the

In-App Payment Processing Market themselves or partner with third-party payment processors that charge a fraction of what Google extracts. This would allow developers to offer not only competitive pricing but also a variety of payment options tailored to their users' needs. For example, in many countries outside the United States, users can purchase pre-paid "Paysafecards" in convenience stores that can then be used to purchase in-game content in Fortnite without connecting to a credit card or bank account. Developers have the best information on their own business models and are thus best placed to select their own payment processing solutions.

209. Google's anticompetitive conduct harms potential payment processing competitors who would otherwise be able to innovate and offer developers and consumers alternative payment processing tools that provide better functionality, lower prices, and better security, but are barred from entering the In-App Payment Processing for Digital Products market. Because Google prevents them from accessing a large portion of the market, their sales and profits are also lower than they would be but for Google's conduct.

210. Google also harms developers by preventing them from efficiently informing consumers *through their app* of lower-priced payment options for in-app purchases and app subscriptions, forcing developers to incur additional costs to communicate through other means. Developers whose only relationship with their customers is through their app are effectively foreclosed from providing this information. Communication through an app is low-cost and efficient. But Google stops any such communication that threatens its in-app-payment- processing monopoly, thus distorting the competitive process and harming consumers, many of whom are unable to learn about better deals.

211. There are no procompetitive efficiencies from Google's tie of distribution and payment processing that outweigh the harm to consumers, developers, and potentially competitive payment processors. All market participants are harmed by Google's forced use of in-app payments.

212. As with app distribution, Google pretextually defends the tie by citing security concerns, but there are many highly secure and reliable payment processing systems. If Google were truly concerned about security, it would simply require that payment processors use reasonable technical security protocols. In fact, security is equally important to payment systems for both digital and physical content, and yet Google locks in Google Play Billing only for digital content. Google's internal strategy around pricing and policy for in-app payments reveals that its invocation of security concerns is simply a public-relations strategy—a means of justifying Google's anticompetitive conduct as opposed to a genuine security concern.

213. Google's tie of app distribution through the Google Play Store with developers' exclusive use of Google Play Billing to process in-app purchases of digital content also enables Google to gather information on consumers making in-app purchases, thereby harming consumers who would otherwise have the choice to use payment processors that do not share their information with Google. There are no welfare-enhancing or otherwise legitimate justifications for this tie. Any security or consistency that Google can offer consumers in the payment processing market can still be offered in a competitive market, at a competitive price. Nor does Google need to monetize the Play Store in this manner in order to maintain the Android ecosystem at large.

214. In short, Google has used its monopolistic control over the Android App Distribution Market to force developers to use Google Play Billing as their exclusive in-app payment processor. Google thus deprives developers from choosing between competing in-app payment options, which could result in higher revenues and even more security.

VI. INTERSTATE TRADE AND COMMERCE

215. The activities of Google as alleged in this complaint were within the flow of, and substantially affected, interstate commerce. Google Play sells distribution and payment-processing services across, and without regard to, state lines.

VII. RELEVANT MARKETS

A. First Relevant Market

216. The antitrust injuries alleged herein, including harm to developers and competition, have occurred in the U.S. market for distribution of Android OS apps, i.e., for distribution services provided to U.S. Android app developers.[137] This market is heavily dominated, to the point of monopoly power, by Google, including by way of its Google Play Store, thanks to Google's willful and anticompetitive behavior as described in this complaint. As the European Commission has found, Google and Google Play, via various anticompetitive practices, have acquired some 90 percent of the market worldwide in Android app distribution.[138] There is no reason to believe that Google's share is less than that in the U.S. Accordingly, Google's share of the relevant market for Android app and in-app distribution services is believed, and therefore alleged, to have reached a similar level of dominance.

217. Competitors in the relevant market exist, such as Amazon, Aptoide, and Samsung, but they are weak in terms of their own market power. Google has "cut off the air supply" of each such competitor by its unlawful contracts, policies, and actions. None has made a serious dent in Google's market share.

218. Furthermore, due to the incompatibility of Apple's iOS with Google's Android OS, and the resultant incompatibility of iOS and Android OS apps; due to Google's status as a bottleneck retailer; and due, *inter alia*, to the high switching costs among end users, as well as plaintiffs and putative class members, Apple's App Store and corresponding distribution services for iOS apps offers no competition to, and is not a substitute for, Google's distribution services for Android OS apps.

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[137] *Cf.* "Antitrust: Commission fines Google €4.34 billion for illegal practices regarding Android mobile devices to strengthen dominance of Google's search engine," July 18, 2018, available at: http://europa.eu/rapid/press-release_IP-18-4581_en.htm ("Google is dominant in the worldwide market (excluding China) for app stores for the Android mobile operating system. Google's app store, the Play Store, accounts for more than 90% of apps downloaded on Android devices.").

[138] *See* European Commission, *Google Android*, Case AT 40099, Commission Decision of 18 July 2018, at 92-97, available at https://ec.europa.eu/competition/antitrust/cases/dec_docs/40099/40099_9993_3.pdf (last accessed Aug. 17, 2020).

Developers, industry, and governments understand that the Android market alleged herein is a discrete one, which Google monopolizes.

219. For the reasons alleged herein, including the foregoing, the relevant market is a single-brand market or, alternatively, a submarket of a larger market that includes, *inter alia*, other mobile OS app distribution services.

220. Google's restraints on competition directly impact the U.S. market for Android OS distribution services as alleged herein. Google permits and encourages U.S. app developers to sell their apps via Google Play to non-U.S. nationals, and U.S. developers (including the Plaintiffs) do so. Upon information and belief, these developers' business relationship and dealings are primarily with Google LLC and Google Payment Corp., which are U.S. entities. Therefore, the Foreign Trade Antitrust Improvement Act does not apply. Alternatively, its exceptions apply, including because the conduct alleged has a direct, substantial, and reasonably foreseeable effect on trade or commerce which is not trade or commerce with foreign nations.

221. Google is a direct seller of distribution services to Android developers for the sale of apps in or via the Google Play Store and for add-ons and other products sold in those apps.[139]

222. Plaintiffs seek relief on behalf of themselves and other developers. Insofar as Google Play may be or is a two-sided platform, lower prices would not lead to any discernible negative indirect network effects under the circumstances described herein. For example, unlike on credit-card transaction platforms, lower fees or prices would not mean less money available to pay rebates or rewards to consumers. To the contrary, Google does not share its service fees with consumers. Here, Google's restraints do not help to establish or enhance participation *inter se* developers and consumers, nor do they help to prevent erosion in participation. In fact, Google can point to no considerations that countervail the propriety of the monetary and injunctive relief that Plaintiffs seek.

[139] *See, e.g.*, https://play.google.com/store (offering various digital products to consumers for purchase, including apps, at various price points) (last accessed Aug. 15, 2020). The Google Play mobile client is installed on hundreds of millions of Android OS devices, as alleged herein, and similarly offers various products, including apps, for purchase and sale.

223. *Alternatively*, the antitrust injuries alleged herein, including harm to developers and competition, have occurred in the U.S. Android app distribution market. This market includes the Play Store, other app stores for Google Android devices, such as Samsung's Galaxy Apps store and the Amazon AppStore, and independent app stores, such as Aptoide. It also includes app stores for non-Google ("forked") Android devices, such as the app store Amazon developed for its own Android OS (Fire OS).

224. The relevant market does not include app stores for non-Android smart mobile OSs such as the (now defunct) Windows Mobile Store (compatible only with Microsoft's Windows Mobile OS) or Apple's App Store (compatible only with iOS), because app stores are OS-specific. A consumer who owns an Android smartphone cannot use an app store developed for a non-Android OS, and a device manufacturer that preinstalls an app store on an Android device cannot install an app store that runs on a non-Android OS.

225. Due to the incompatibility of Apple's iOS with Google's Android OS, and the resulting incompatibility of iOS and Android OS apps; due to Google's status as a bottleneck retailer; and due, *inter alia*, to the high switching costs among end users, as well as Plaintiffs and putative class members, Apple's App Store and corresponding distribution services for iOS apps offers no competition to, and are not a substitute for, Google's distribution services for Android OS apps. Developers, industries, and governments understand that the Android market alleged herein is a discrete one, which Google monopolizes.

226. In the alternative, the relevant market is a submarket of a larger market that includes, *inter alia*, Apple's App Store.

B. Second Relevant Market

227. The antitrust injuries alleged herein, including harm to developers and competition, have occurred in the U.S. market for Android in-app payment processing for digital products, i.e., for payment processing provided to U.S. Android app developers for these products.[140] Google has

[140] *Cf.* "Antitrust: Commission fines Google €4.34 billion for illegal practices regarding Android mobile devices to strengthen dominance of Google's search engine," July 18, 2018, available at: http://europa.eu/rapid/press-release_IP-18-4581_en.htm ("Google is dominant in the worldwide

enormous power in this market, thanks to its willful and anticompetitive behavior as described in this complaint. As the European Commission has found, Google and Google Play, via various anticompetitive practices, have acquired some 90 percent of the market worldwide in Android app distribution.[141] And with few exceptions, Google requires the use of Google Play Billing, its in-app payment system for in-app product distributions. There, Google's share of the relevant market for Android in-app payment processing for digital products is believed, and therefore alleged, to have reached monopoly status.

228. Competitors and would-be competitors in the relevant market exist, but their share is exceedingly small given Google's insistence that Android app developers use Google Play Billing for digital products sold in apps acquired from Google Play. These competitors, such as PayPal, Stripe, and Square, charge many magnitudes less than Google,[142] and they provide better service, including quicker access to funds.[143] Google has "cut off the air supply" of each actual and potential competitor in the market for Android in-app payment processing by Google's abusive contracts, policies, and actions. And given the high sales and monetary value of in-app products,[144] certainly the effect on commerce in the market for these services is substantial.

229. Again, due to Google's exclusionary contracts and policies, there is no substitute for Google's payment processing. Developers, industries, and governments understand that the Android market alleged herein is a discrete one, which Google monopolizes.

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market (excluding China) for app stores for the Android mobile operating system. Google's app store, the Play Store, accounts for more than 90% of apps downloaded on Android devices.").

[141] *See* n.158, *supra*.

[142] In fact, PayPal has a microtransactions program for sellers whose transactions average less than $10. Where funds come from a PayPal account in the U.S., PayPal charges a fee of 5.0% of the transaction plus a fixed fee based on currency. *See* "Micropayment Fees," https://www.paypal.com/us/webapps/mpp/merchant-fees (last accessed Aug. 17, 2020).

[143] *Cf.* "Receiving Payout," available at: https://stripe.com/docs/payouts#payoutschedule (referring to two-business-day and seven-calendar-day payout schedule for U.S. accounts, depending on assessed risk level, for the payment processor Stripe) (last accessed Sept. 27, 2019).

[144] *See, e.g.*, *Consumer Spending in Mobile Apps Grew 17% in 2019 to Exceed $83 Billion Globally*, SensorTower (Jan. 6, 2020), https://sensortower.com/blog/app-revenue-and-downloads-2019 ("An estimated $61.7 billion was spent in mobile games across both stores last year, 12.8 percent more than 2018's total of $54.7 billion. This was 74 percent of all in-app spending for 2019[.]") (last accessed Aug. 17, 2020).

230. Based on the reasons alleged herein, including the foregoing, the relevant market is a single-brand market.

231. Google's restraints on competition directly impact the U.S. market for Android in-app payment processing as alleged herein. Google permits and encourages U.S. app developers to sell their in-app digital content to non-U.S. nationals, and U.S. developers (including Plaintiff Pure Sweat Basketball) do so. Upon information and belief, these developers' business relationship and dealings are primarily with Google LLC and Google Payment Corp., which are U.S. entities. Therefore, the Foreign Trade Antitrust Improvement Act does not apply. Alternatively, its exceptions apply, including because the conduct alleged has a direct, substantial, and reasonably foreseeable effect on trade or commerce which is not trade or commerce with foreign nations.

232. Google is a direct seller of Android in-app payment processing services to Android developers for the sale of apps in or via the Google Play Store and for in-app digital content sold using Google Play Billing.[145]

233. Plaintiffs seek relief on behalf of themselves and other developers. Insofar as Google Play may be or is a two-sided platform, lower prices would not lead to any discernible negative indirect network effects under the circumstances described herein. For example, unlike on credit-card transaction platforms, lower fees or prices would not mean less money available to pay rebates or rewards to consumers. To the contrary, Google does not share its service fees with consumers. Here, Google's restraints do not help to establish or enhance participation *inter se* developers and consumers, nor do they help to prevent erosion in participation. In fact, Google can point to no considerations that countervail the propriety of the monetary and injunctive relief that Plaintiffs seek.

VIII. CLASS ALLEGATIONS

234. Plaintiffs bring this proposed class action for damages and injunctive relief pursuant to Fed. R. Civ. P. 23(b)(1), (2), and (3).

[145] *See, e.g.*, https://play.google.com/store (offering various digital products to consumers for purchase, including apps, at various price points) (last accessed Aug. 15, 2020). The Google Play mobile client is installed on hundreds of millions of Android OS devices, as alleged herein, and similarly offers various products, including apps, for purchase and sale.

235. Plaintiffs bring this action on their own behalf and the following nationwide class, on the basis of federal law claims as alleged herein, or California state law claims as alleged herein, or both:

> All U.S. persons or entities that paid Google a "service fee" on: (a) any paid Android OS app sold in or via the Google Play store, in or via any U.S. or foreign Google Play storefront; or (b) any paid in-app digital content (including subscriptions) sold via Google Play Billing on an Android OS app distributed via the Google Play Store, in or via any U.S. or foreign Google Play storefront.

Excluded from this proposed class are the defendants; defendants' affiliates and subsidiaries; defendants' current or former employees, officers, directors, agents, and representatives; the district judge or magistrate judge to whom this case is assigned, as well as those judges' immediate family members; and all governmental entities.

236. **Numerosity:** The exact number of the members of the proposed class is unknown and is not available to the Plaintiffs at this time, but upon information and belief, the class will consist of many thousands of members such that individual joinder in this case is impracticable.

237. **Commonality:** Numerous questions of law and fact are common to the claims of the Plaintiffs and members of the proposed class. These include, but are not limited to:

a. Whether Google unlawfully has conditioned the contractual right of any manufacturer of any Android OS mobile telephone or tablet to preinstall desired Google applications such as the YouTube or Google Maps apps on the manufacturer's agreement also to install the Google Play client, with the object of acquiring or maintaining monopoly status in the U.S. market for Android OS app distribution (and correspondingly high market shares in the markets for Android OS distribution services and in-app payment processing);

b. Whether there is a U.S. antitrust market (or submarket) for Android OS app distribution services, i.e., for distribution services provided to U.S. Android app developers;

c. Whether there is a U.S. market for Android in-app payment processing, i.e., for payment processing provided to U.S. Android app developers;

d. Whether Google has unlawfully monopolized, or attempted to monopolize, the foregoing markets or submarket;

e. Whether competition in the U.S. market for Android OS distribution services, or payment processing, has been restrained and harmed by Google's monopolization, or attempted monopolization, of such market(s);

f. Whether Google has imposed contracts on developers that restrain trade as alleged herein;

g. Whether developers have been harmed, including by way of having paid more for app service or distribution fees, or in-app product payment processing fees, than they would have but for Google's unlawful conduct, as a result of Google's unlawful practices;

h. Whether Plaintiffs and members of the proposed class are entitled to declaratory or injunctive relief to halt Google's unlawful practices, and to their attorney fees, costs, and expenses;

i. Whether Plaintiffs and members of the proposed class are entitled to any damages or restitution incidental to the declaratory or injunctive relief they seek, and to their attorney fees, costs, and expenses related to any recovery of such monetary relief; and

j. Whether Plaintiffs and members of the proposed class are otherwise entitled to any damages or restitution, and to their attorney fees, costs, and expenses related to any recovery of such monetary relief.

238. **Typicality:** Plaintiffs' claims are typical of the claims of the members of the proposed class. The factual and legal bases of Google's liability are the same and resulted in injury to Plaintiffs and all of the other members of the proposed class.

239. **Adequate representation:** Plaintiffs will represent and protect the interests of the proposed class both fairly and adequately. They have retained counsel competent and experienced in complex class-action litigation. Plaintiffs have no interests that are antagonistic to those of the proposed class, and their interests do not conflict with the interests of the proposed class members they seek to represent.

240. **Prevention of inconsistent or varying adjudications:** If prosecution of myriad individual actions for the conduct complained of were undertaken, there likely would be inconsistent or varying results. This would have the effect of establishing incompatible standards of conduct for the Defendants. Certification of Plaintiffs' proposed class would prevent these undesirable outcomes.

241. **Injunctive and declaratory relief:** By way of its conduct described in this complaint, the Defendants have acted on grounds that apply generally to the proposed class. Accordingly, final injunctive relief or corresponding declaratory relief is appropriate respecting the class as a whole.

242. **Predominance and superiority:** This proposed class action is appropriate for certification. Class proceedings on these facts and this law are superior to all other available methods for the fair and efficient adjudication of this controversy, given that joinder of all members is impracticable. Even if members of the proposed class could sustain individual litigation, that course would not be preferable to a class action because individual litigation would increase the delay and expense to the parties due to the complex factual and legal controversies present in this matter. Here, the class action device will present far fewer management difficulties, and it will provide the benefit of a single adjudication, economies of scale, and comprehensive supervision by this Court. Further, uniformity of decisions will be ensured.

IX. APPLICABILITY OF CALIFORNIA LAW

243. There is a California law provision incorporated by reference in the Google Play Terms of Service.[146] Accordingly, Plaintiffs allege that California law applies to the state law claims they assert on their own behalf, and on behalf of the proposed nationwide class.

244. Furthermore, upon information and belief, the unlawful conduct alleged in this complaint, including the drafting, dissemination, and consummation of anticompetitive contracts and policies, as well as the levying and collection of Google's supracompetitive 30% (or 15%) service fee on Google Play purchases, and the enforcement of minimum-price terms, was effected, implemented, adopted, and ratified in the state of California, where Google LLC and Google Payment Corp. maintain their U.S. headquarters. Therefore, a substantial part of the anticompetitive conduct took place in

[146] *See* Google Play Terms of Service, available at: https://play.google.com/about/play-terms/index.html, which incorporates the Google Terms of Service, the latter of which is available at: https://policies.google.com/terms ("California law will govern all disputes arising out of or relating to these terms, service-specific additional terms, or any related services, regardless of conflict of laws rules. These disputes will be resolved exclusively in the federal or state courts of Santa Clara County, California, USA, and you and Google consent to personal jurisdiction in those courts.").

California. For these reasons, too, Plaintiffs allege that they and the proposed nationwide class are entitled to monetary and injunctive relief pursuant to California law.

FIRST CAUSE OF ACTION:
VIOLATION OF THE SHERMAN ACT – MONOPOLIZATION
OF U.S. ANDROID APP DISTRIBUTION MARKET
(15 U.S.C. § 2)

245. Plaintiffs repeat and re-allege every allegation above as if set forth herein in full.

246. Plaintiffs bring this federal law claim on their own behalf and on behalf of each member of the proposed nationwide class described above.

247. Google possesses monopoly power in the U.S. market for distribution of Android OS apps, i.e., for distribution services provided to U.S. Android app developers. Alternatively, Google possesses monopoly power in the U.S. market for Android app distribution.

248. For the reasons stated herein, substantial barriers to entry and expansion exist in the relevant market.

249. Google has the power to exclude competition in the relevant market, and it has willfully used that power, including by way of its unlawful practices in restraint of trade as described herein, in order to achieve, maintain, and expand its monopoly power in that market.

250. Furthermore, in an exercise of its monopoly market power, and in order to willfully obtain, maintain, and enhance that power in the Android app distribution market, Google has tied in-app payment processing via its Google Pay Billing product to Android OS app distribution via Google Play. Google has done so via policy, practice, and contract as alleged herein. In-app payments to U.S. developers run to millions of dollars each year, on millions of transactions. Therefore, the effect on the tied market for in-app payment processing, as well as on the tying market for distribution services, is substantial. Accordingly, Google's tying conduct is *per se* unlawful. And alternatively, it is unlawful under a rule of reason analysis given the facts and circumstances described herein.

251. Given this tie, Google's immense market power in the tying market for distribution services, and the substantial effect on commerce in the tied market for Android in-app payment processing, is *per se* unlawful.

252. Google's conduct as described herein, including its unlawful practices in restraint of trade, is exclusionary vis-à-vis its rivals in the U.S. market for Android OS app distribution.

253. Google has behaved as alleged herein to achieve, maintain, and grow its monopoly in the U.S. market for Android OS app distribution, with the effect being that competition is foreclosed and that developer choice is gravely diminished. So is innovation. Additionally, Google has abused its market power by imposing supracompetitive 30% (or 15%) developer service fees[147] and minimum price fixing. Further, Google's actions have depressed output as alleged herein.

254. There is no valid business necessity or pro-competitive justification for Google's conduct. Instead, Google's actions are designed to destroy competition as alleged herein.

255. Plaintiffs and the class have been injured, and will continue to be injured, in their businesses and property as a result of Google's conduct, including by way of overpaying for distribution services.

256. Finally, developers, including the Plaintiffs, are inclined to sell Android OS applications, in-app purchases, and subscriptions via Google Play, or apps purchased therein, in the future, in part because of their investment in their development for the Android OS ecosystem, which is incompatible with Apple's iOS ecosystem. Plaintiffs and the class are entitled to an injunction to prevent Google from persisting in its unlawful behavior to their detriment, including the harm that its behavior is causing to their businesses.

SECOND CAUSE OF ACTION:
VIOLATION OF THE SHERMAN ACT – ATTEMPTED MONOPOLIZATION OF U.S. ANDROID APP DISTRIBUTION MARKET
(15 U.S.C. § 2)

257. Plaintiffs repeat and re-allege every allegation above as if set forth herein in full.

258. Plaintiffs bring this claim on their own behalf and on behalf of each member of the proposed nationwide class described above.

[147] Or, alternatively, a still supracompetitive 15% commission on certain subscriptions, for what amounts to payment processing services that could be purchased much cheaper from other providers if Google permitted developers to use them.

259. Google has attempted to monopolize the U.S. market for distribution of Android OS apps, i.e., for distribution services provided to U.S. Android app developers. Alternatively, Google has attempted to monopolize the U.S. market for Android OS app distribution.

260. Google's anticompetitive conduct has created a dangerous probability that it will achieve monopoly power in the U.S. market for Android OS app distribution.

261. Google has a specific intent to achieve monopoly power in the U.S. market for Android OS app distribution.

262. Google has the power to exclude competition in the U.S. market for Android OS app distribution, and it has used that power, including by way of its unlawful practices in restraint of trade as described herein, in an attempt to monopolize that relevant market.

263. Google's conduct as described herein, including its unlawful practices in restraint of trade, is exclusionary vis-à-vis its rivals in the U.S. market for Android OS app distribution.

264. Google has behaved as alleged herein in a willful attempt to obtain a monopoly in the U.S. market for Android OS app distribution, with the effect being that competition is foreclosed and that consumer choice is gravely diminished. So is innovation. Additionally, Google has abused its market power by insisting on up to 30% service fees[148] and minimum price fixing. Further, Google's actions have depressed output as alleged herein.

265. There is no valid business necessity or pro-competitive justification for Google's conduct.

266. Plaintiffs and the class have been injured, and will continue to be injured, in their businesses and property as a result of Google's conduct, including by way of overpaying for distribution services.

267. Finally, developers, including Plaintiffs, are inclined to sell Android OS applications, in-app purchases, and subscriptions via Google Play, or apps purchased therein, in the future, in part because of their investment in their development for the Android OS ecosystem, which is incompatible

[148] Or, alternatively, a still supracompetitive 15% commission on certain subscriptions, for what amounts to payment processing services that could be purchased much cheaper from other providers if Google permitted developers to use them.

with Apple's iOS ecosystem. Plaintiffs and the class are entitled to an injunction to prevent Google from persisting in its unlawful behavior to their detriment, including the harm that its behavior is causing to their businesses.

THIRD CAUSE OF ACTION:
VIOLATION OF THE SHERMAN ACT - MONOPOLIZATION OF U.S. MARKET FOR ANDROID IN-APP PAYMENT PROCESSING
(15 U.S.C. § 2)

268. Plaintiffs repeat and re-allege every allegation above as if set forth herein in full.

269. Plaintiffs bring this federal law claim on their own behalf and on behalf of each member of the proposed nationwide class described above.

270. For this count, the relevant market is the U.S. market for Android in-app payment processing, i.e., for payment processing provided to U.S. Android app developers.

271. Google possesses monopoly power in the relevant market.

272. For the reasons stated herein, substantial barriers to entry and expansion exist in the relevant markets.

273. Google has the power to exclude competition in the relevant market, and it has willfully used that power, including by way of its unlawful practices in restraint of trade as described herein, in order to achieve, maintain, and expand its monopoly power in that market.

274. Google's conduct as described herein, including its unlawful practices in restraint of trade, is exclusionary vis-à-vis its rivals in the relevant market is the U.S. market for Android in-app payment processing, i.e., for payment processing provided to U.S. Android app developers.

275. Google has behaved as alleged herein to achieve, maintain, and grow its monopoly in the U.S. market for Android in-app payment processing, i.e., for payment processing provided to U.S. Android app developers, with the effect being that competition is foreclosed and that developer choice is gravely diminished. So is innovation. Additionally, Google has abused its market power by imposing

supracompetitive 30% (or 15%) developer service fees[149] and minimum price fixing. Further, Google's actions have depressed output as alleged herein.

276. There is no valid business necessity or pro-competitive justification for Google's conduct. Instead, Google's actions are designed to destroy competition as alleged herein.

277. Plaintiffs and the class have been injured, and will continue to be injured, in their businesses and property as a result of Google's conduct, including by way of overpaying for payment processing.

278. Finally, developers, including Plaintiffs, are inclined to sell Android OS applications, in-app purchases, and subscriptions via Google Play, or apps purchased therein, in the future, in part because of their investment in their development for the Android OS ecosystem, which is incompatible with Apple's iOS ecosystem. Plaintiffs and the class are entitled to an injunction to prevent Google from persisting in its unlawful behavior to their detriment, including the harm that its behavior is causing to their businesses.

FOURTH CAUSE OF ACTION:
VIOLATION OF THE SHERMAN ACT – ATTEMPTED MONOPOLIZATION OF U.S. MARKET FOR ANDROID IN-APP PAYMENT PROCESSING
(15 U.S.C. § 2)

279. Plaintiffs repeat and re-allege every allegation above as if set forth herein in full.

280. Plaintiffs bring this claim on their own behalf and on behalf of each member of the proposed nationwide class described above.

281. Google has attempted to monopolize the U.S. market for Android in-app payment processing, i.e., for payment processing provided to U.S. Android app developers.

282. Google's anticompetitive conduct has created a dangerous probability that it will achieve monopoly power in the U.S. market for Android in-app payment processing, i.e., for payment processing provided to U.S. Android app developers.

[149] Or, alternatively, a still supracompetitive 15% commission on certain subscriptions, for what amounts to payment processing services that could be purchased much cheaper from other providers if Google permitted developers to use them.

283. Google has a specific intent to achieve monopoly power in the U.S. market for Android in-app payment processing, i.e., for payment processing provided to U.S. Android app developers.

284. Google has the power to exclude competition in the U.S. market for Android in-app payment processing, i.e., for payment processing provided to U.S. Android app developers, and it has used that power, including by way of its unlawful practices in restraint of trade as described herein, in an attempt to monopolize that relevant market.

285. Google's conduct as described herein, including its unlawful practices in restraint of trade, is exclusionary vis-à-vis its rivals in the U.S. market for Android in-app payment processing, i.e., for payment processing provided to U.S. Android app developers.

286. Google has behaved as alleged herein in a willful attempt to obtain a monopoly in the U.S. market for Android in-app payment processing, i.e., for payment processing provided to U.S. Android app developers, with the effect being that competition is foreclosed and that consumer choice is gravely diminished. So is innovation. Additionally, Google has abused its market power by insisting on up to 30% service fees[150] and minimum price fixing. Further, Google's actions have depressed output as alleged herein.

287. There is no valid business necessity or pro-competitive justification for Google's conduct.

288. Plaintiffs and the class have been injured, and will continue to be injured, in their businesses and property as a result of Google's conduct, including by way of overpaying for payment processing.

289. Finally, developers, including Plaintiffs, are inclined to sell Android OS applications, in-app purchases, and subscriptions via Google Play, or apps purchased therein, in the future, in part because of their investment in their development for the Android OS ecosystem, which is incompatible with Apple's iOS ecosystem. Plaintiffs and the class are entitled to an injunction to prevent Google

[150] Or, alternatively, a still supracompetitive 15% commission on certain subscriptions, for what amounts to payment processing that could be purchased much cheaper from other providers if Google permitted developers to use them.

from persisting in its unlawful behavior to their detriment, including the harm that its behavior is causing to their businesses.

FIFTH CAUSE OF ACTION:
VIOLATION OF THE SHERMAN ACT – RESTRAINT OF TRADE RE: IN-APP PAYMENT PROCESSING
(15 U.S.C. §§ 1, 3)

290. Plaintiffs repeat and re-allege every allegation above as if set forth herein in full.

291. Google's conduct violates Sections 1 and 3 of the Sherman Act, which prohibit "[e]very contract, combination in the form of trust or otherwise, or conspiracy, in restraint of trade or commerce. . . ." 15 U.S.C. §§ 1, 3.

292. Google requires app developers to enter its standardized DDA, including Developer Program Policies integrated into that Agreement, as a condition of having their apps distributed through Google's monopolized app store, Google Play. The relevant provisions of these agreements unreasonably restrain competition in the U.S. market for Android in-app payment processing, i.e., for payment processing provided to U.S. Android app developers.

293. Section 3.2 of the DDA requires that Android app developers enter into a separate agreement with Google's payment processor, Defendant Google Payment, in order to receive payment for apps and content distributed through Google Play. This includes payments related to in-app purchases of digital content. Further, Google's Developer Program Policies, compliance with which Section 4.1 of the DDA makes obligatory, require that apps distributed through Google Play "must use Google Play In-app Billing [offered by Google Payment] as the method of payment" for such in-app purchases. While Google's Policies exclude certain types of transactions from this requirement, such as the purchase of "solely physical products" or of "digital content that may be consumed outside of the app itself," Google expressly applies its anticompetitive mandate to every "game downloaded on Google Play" and to all purchased "game content."

294. The challenged provisions serve no sufficient legitimate or pro-competitive purpose and unreasonably restrain competition in the U.S. market for Android app distribution and Android in-app payment processing, i.e., for payment processing provided to U.S. Android app developers.

295. Google's conduct affects a substantial volume of interstate commerce.

296. Google's conduct has substantial anticompetitive effects, including increased prices and costs, reduced innovation and quality of service, and lowered output

297. Plaintiffs and putative class members have been harmed by Google's anticompetitive conduct in a manner that the antitrust laws were intended to prevent. They have suffered and continue to suffer damages and irreparable injury, including harm to their businesses, and such damages and injury will not abate unless an injunction issues that will stop Google's anticompetitive conduct.

298. Developers, including the Plaintiffs, are inclined to sell Android OS applications, in-app purchases, and subscriptions via Google Play, or apps purchased therein, in the future, in part because of their investment in their development for the Android OS ecosystem, which is incompatible with Apple's iOS ecosystem. Plaintiffs and the class are entitled to an injunction to prevent Google from persisting in its unlawful behavior to their detriment.

SIXTH CAUSE OF ACTION:
VIOLATION OF THE SHERMAN ACT – TYING AS ALTERNATIVE BASIS FOR RESTRAINT OF TRADE RE: IN-APP PAYMENT-PROCESSING
(15 U.S.C. §§ 1, 3)

299. Plaintiffs repeat and re-allege every allegation above as if set forth herein in full.

300. Google's conduct violates Sections 1 and 3 of the Sherman Act, which prohibit "[e]very contract, combination in the form of trust or otherwise, or conspiracy, in restraint of trade or commerce. . . ." 15 U.S.C. §§ 1, 3.

301. Google has unlawfully tied distribution services for Google Play to its in-app payment processor, Google Play Billing, through its DDAs with app developers and its Developer Program Policies.

302. As demonstrated herein, Google has immense, monopoly power in the tying market—the U.S. market for Android OS app distribution. Put another way, with Google Play installed on nearly all Android OS devices and over 90% of downloads on Android OS devices being performed via Google Play, Google has overwhelming market power. Google's market power is further evidenced by its ability to extract supracompetitive taxes on the sale of apps via Google Play.

303. The availability of Google Play for app distribution is conditioned on the app developer accepting a second product, Google's in-app payment processing. Google's substantial foreclosure of

alternative app distribution channels thus forces developers, including the Plaintiffs and putative class members, to use Google's in-app payment processing.

304. The tying product, Android app distribution, is distinct from the tied product, Android in-app payment processing, because app developers have alternative in-app payment processing options and would prefer to choose among them independently of how an Android app is distributed. Google's unlawful tying arrangement thus ties two separate products that are in separate markets. Google's contract and written policies underscore their separate nature.[151]

305. Google's conduct forecloses competition in the U.S. market for Android in-app payment processing, i.e., for payment processing provided to U.S. Android app developers. Given the volume of transactions and the money at issue, Google's conduct thus affects a substantial volume of commerce in that market.

306. Google has thus engaged in a *per se* illegal tying arrangement. *See* ¶¶ 190-195, *supra*.

307. In the alternative only, even if Google's tying conduct does not constitute a *per se* violation of the law, a rule-of-reason analysis of Google's tying arrangement also would demonstrate that it violates the law.

308. As app developers that consume in-app payment processing for in-app subscription products, Plaintiffs have been harmed by Google's anticompetitive conduct. Plaintiffs and members of the putative class have suffered and continue to suffer damages and irreparable injury, including ongoing harm to their businesses, and such damages and injury will not abate until the Court issues an injunction ending Google's anticompetitive conduct issues.

309. Developers, including the Plaintiffs, are inclined to sell Android OS applications, in-app purchases, and subscriptions via Google Play, or apps purchased therein, in the future, in part because of their investment in their development for the Android OS ecosystem, which is incompatible with Apple's iOS ecosystem. Plaintiffs and the class are entitled to an injunction to prevent Google from persisting in its unlawful behavior to their detriment.

[151] *See* supra ¶¶ 190-195.

SEVENTH CAUSE OF ACTION:
VIOLATION OF THE UNFAIR COMPETITION ACT
(CAL. BUS. & PROF. CODE §§ 17200 *ET SEQ.*)

310. Plaintiffs repeat and re-allege every allegation above as if set forth herein in full.

311. Plaintiffs bring this claim on their own behalf and on behalf of each member of the proposed nationwide class described above.

312. California's Unfair Competition Law (UCL) defines "unfair competition" to include any "unlawful, unfair, or fraudulent" business act or practice. CAL. BUS. & PROF. CODE §§ 17200 *et seq.* As these are stated in the disjunctive, the UCL sets up three prongs—the unlawful, unfair, and fraudulent prongs—the violation of any of which constitutes a violation of the UCL.

313. Google has engaged in, and continues to engage in, acts of unfair competition as defined in California's UCL. More specifically, Google, based upon the conduct alleged herein, has violated the unlawful, unfair, and fraudulent prongs of the UCL.

A. Google's Conduct is Unlawful

314. Google's acts of unfair competition include its violations of the Sherman and Cartwright Acts as alleged herein. Therefore, Google has violated the unlawful prong of the UCL.

315. Google's unlawful conduct has caused Plaintiffs and Class members to suffer injury in fact. Because developers have overpaid for distribution and in-app payment processing fees, they have lost money or property as a result of Google's unlawful behavior.

316. Finally, developers, including the Plaintiffs, are inclined to sell Android OS applications, in-app purchases, and subscriptions via Google Play, or apps purchased therein, in the future, in part because of their investment in their development for the Android OS ecosystem, which is incompatible with Apple's iOS ecosystem. Plaintiffs and the class are entitled to an injunction to prevent Google from persisting in its unlawful behavior to their detriment.

B. Google Has Behaved Unfairly

317. Google's acts of unfair competition include its violations of the Sherman Act and Cartwright Acts and the policies underlying those statutes, as alleged herein. Additionally, Google has behaved unfairly and in violation of public policy as alleged herein. Therefore, Google has violated the unfair prong of the UCL.

318. Google's unfair conduct has caused Plaintiffs and class members to suffer injury in fact. Because developers have overpaid for distribution and in-app payment processing fees, they have lost money or property as a result of Google's unfair behavior.

319. Finally, developers, including the Plaintiffs, are inclined to sell Android OS applications, in-app purchases, and subscriptions via Google Play, or apps purchased therein, in the future, in part because of their investment in their development for the Android OS ecosystem, which is incompatible with Apple's iOS ecosystem. Plaintiffs and the class are entitled to an injunction to prevent Google from persisting in its unlawful behavior to their detriment.

C. Google Has Behaved Fraudulently

320. Google's acts of unfair competition include its fraudulent business acts and practices. Therefore, Google has violated the fraudulent prong of the UCL.

321. Google's fraudulent conduct has caused Plaintiffs and class members to suffer injury in fact. Because developers have overpaid for distribution and in-app payment processing fees, they have lost money or property as a result of Google's fraudulent business acts and practices.

322. Finally, developers, including the Plaintiffs, are inclined to sell Android OS applications, in-app purchases, and subscriptions via Google Play, or apps purchased therein, in the future, in part because of their investment in their development for the Android OS ecosystem, which is incompatible with Apple's iOS ecosystem. Plaintiffs and the class are entitled to an injunction to prevent Google from persisting in its fraudulent behavior to their detriment.

EIGHTH CAUSE OF ACTION:
VIOLATION OF THE CARTWRIGHT ACT
(CA. BUS & PROF. CODE §§ 16700 *ET SEQ.*)

323. Plaintiffs repeat and re-allege every allegation above as set forth herein in full.

324. Google's acts and practices detailed above violate the Cartwright Act, Cal. Bus. & Prof. Code § 16700 *et seq.*, which prohibits, *inter alia*, the combination of resources by two or more persons to restrain trade or commerce or to prevent market competition. *See* §§ 16720, 16726.

325. Under the Cartwright Act, a "combination" is formed when the anti-competitive conduct of a single firm coerces other market participants to involuntarily adhere to the anti-competitive scheme.

326. The U.S. market for distribution of Android OS apps, i.e., for distribution services provided to U.S. Android app developers, is a valid antitrust market. Alternatively, the Android app distribution market is a valid antitrust market.

327. Google has executed agreements with OEMs that unreasonably restrict competition in the U.S. market for distribution of Android OS apps. Namely, Google has entered into MADAs with OEMs that require OEMs to offer the Google Play Store as the primary—and practically the only—app store on Android mobile devices. These agreements further prevent OEMs from offering alternative app stores on Android mobile devices in any prominent visual positioning.

328. Google requires app developers to enter its standardized DDA, including Developer Program Policies integrated into that Agreement, as a condition of having their apps distributed through Google's monopolized app store, Google Play. The relevant provisions of these agreements unreasonably restrain competition in the U.S. market for Android in-app payment processing, i.e., for payment processing provided to U.S. Android app developers.

329. Section 3.2 of the DDA requires that Android app developers enter into a separate agreement with Google's payment processor, Defendant Google Payment, in order to receive payment for apps and content distributed through Google Play. This includes payments related to in-app purchases of digital content. Further, Google's Developer Program Policies, compliance with which Section 4.1 of the DDA makes obligatory, require that apps distributed through Google Play "must use Google Play In-app Billing [offered by Google Payment] as the method of payment" for such in-app purchases. While Google's Policies exclude certain types of transactions from this requirement, such as the purchase of "primarily physical" goods and services or of "digital content that may be consumed outside of the app itself," Google expressly applies its anticompetitive mandate to all "Play-distributed apps . . . if they require or accept payment for access to features or services, including any app functionality, digital content or goods".

330. The challenged provisions serve no sufficient legitimate or pro-competitive purpose and unreasonably restrain competition in the U.S. market for Android app distribution and Android in-app payment processing, i.e., for payment processing provided to U.S. Android app developers.

331. Google's conduct has substantial anticompetitive effects, including increased prices and costs, reduced innovation and quality of service, and lowered output.

332. Plaintiffs and putative class members have been harmed by Google's anticompetitive conduct in a manner that the Cartwright Act was intended to prevent. They have suffered and continue to suffer damages and irreparable injury, including harm to their businesses, and such damages and injury will not abate unless an injunction issues that will stop Google's anticompetitive conduct.

333. Developers, including the Plaintiffs, are inclined to sell Android OS applications, in-app purchases, and subscriptions via Google Play, or apps purchased therein, in the future, in part because of their investment in their development for the Android OS ecosystem, which is incompatible with Apple's iOS ecosystem. Plaintiffs and the class are entitled to an injunction to prevent Google from persisting in its unlawful behavior to their detriment.

NINTH CAUSE OF ACTION:
VIOLATION OF THE CARTWRIGHT ACT;
TYING AS ALTERNATIVE BASIS FOR RESTRAINT OF TRADE REGARDING IN-APP PAYMENT PROCESSING
(CA. BUS & PROF. CODE §§ 16700 ET SEQ.)

334. Plaintiffs repeat and re-allege every allegation above as if set forth herein in full.

335. Google's acts and practices detailed above violate the Cartwright Act, Cal. Bus. & Prof. Code § 16700 *et seq.*, which prohibits, *inter alia*, the combination of resources by two or more persons to restrain trade or commerce or to prevent market competition. *See* §§ 16720, 16726.

336. Under the Cartwright Act, a "combination" is formed when the anti-competitive conduct of a single firm coerces other market participants to involuntarily adhere to the anti-competitive scheme.

337. Google has unlawfully tied distribution services for Google Play to its in-app payment processor, Google Play Billing, through its DDAs with app developers and its Developer Program Policies.

338. As demonstrated herein, Google has immense, monopoly power in the tying market—the U.S. market for Android OS app distribution. Put another way, with Google Play installed on nearly all Android OS devices and over 90% of downloads on Android OS devices being performed

via Google Play, Google has overwhelming market power. Google's market power is further evidenced by its ability to extract supracompetitive taxes on the sale of apps via Google Play.

339. The availability of Google Play for app distribution is conditioned on the app developer accepting a second product, Google's in-app payment processing. Google's substantial foreclosure of alternative app distribution channels thus forces developers, including the Plaintiffs and putative class members, to use Google's in-app payment processing.

340. The tying product, Android app distribution, is distinct from the tied product, Android in-app payment processing, because app developers have alternative in-app payment processing options and would prefer to choose among them independently of how an Android app is distributed. Google's unlawful tying arrangement thus ties two separate products that are in separate markets. Google's contract and written policies underscore their separate nature.[152]

341. Google's conduct forecloses competition in the U.S. market for Android in-app payment processing, i.e., for payment processing provided to U.S. Android app developers. Given the volume of transactions and the money at issue, Google's conduct thus affects a substantial volume of commerce in that market.

342. Google has thus engaged in a *per se* illegal tying arrangement. *See* ¶¶ 190-195, *supra*.

343. In the alternative only, even if Google's tying conduct does not constitute a *per se* violation of the law, a rule-of-reason analysis of Google's tying arrangement also would demonstrate that it violates the law.

344. As app developers that consume in-app payment processing for in-app subscription products, Plaintiffs have been harmed by Google's anticompetitive conduct. Plaintiffs and members of the putative class have suffered and continue to suffer damages and irreparable injury, including ongoing harm to their businesses, and such damages and injury will not abate until the Court issues an injunction ending Google's anticompetitive conduct issues.

345. Developers, including the Plaintiffs, are inclined to sell Android OS applications, in-app purchases, and subscriptions via Google Play, or apps purchased therein, in the future, in part

[152] *See* supra ¶¶ 155-57.

because of their investment in their development for the Android OS ecosystem, which is incompatible with Apple's iOS ecosystem. Plaintiffs and the class are entitled to an injunction to prevent Google from persisting in its unlawful behavior to their detriment.

PRAYER FOR RELIEF

WHEREFORE, Plaintiffs respectfully request the following relief:

A. That the Court certify this case as a class action and that it appoint Plaintiffs as class representatives and their counsel as class counsel;

B. That the Court award them and the proposed class all appropriate relief, to include, but not be limited to, injunctive relief requiring that Google cease the abusive, unlawful, and anticompetitive practices described herein (including pursuant to federal antitrust law, *see, e.g.*, 15 U.S.C. § 26, and state law, *see, e.g.*, Cal. Bus. & Prof. Code §§ 16750 and 17203, as requested herein); declaratory relief, adjudging such practices unlawful; as well as monetary relief, whether by way of restitution (*see, e.g.*, Cal. Bus. & Prof. Code § 17203) or damages, including treble damages (*see, e.g.*, 15 U.S.C. § 15(a), and Cal. Bus. & Prof. Code § 16750), or other multiple or punitive damages, or restitution, where mandated by law (including federal antitrust law, *see, e.g.*, 15 U.S.C. § 15(a)) or equity or as otherwise available; together with recovery of their costs of suit, to include their reasonable attorneys' fees, costs, and expenses (including pursuant to federal and state antitrust law, *see, e.g.*, 15 U.S.C. § 15(a) and/or 15 U.S.C. § 26 and Cal. Bus. & Prof. Code § 16750; *see also* Cal. Code Civ. Pro. § 1021.5)), together with pre- and post-judgment interest to the maximum levels permitted by law or equity.

C. That the Court grant such additional orders or judgments as may be necessary to prevent the unlawful practices complained of herein; and

D. That the Court award Plaintiffs and the proposed class such other, favorable relief as may be available and appropriate under federal or state law, or at equity.

JURY TRIAL DEMANDED

Plaintiffs demand a trial by jury on all issues so triable.

DATED: July 21, 2021

Respectfully submitted,

HAGENS BERMAN SOBOL SHAPIRO LLP

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Interim Co-Lead Class Counsel

Exhibit A

EXECUTABLE

MOBILE APPLICATION DISTRIBUTION AGREEMENT (ANDROID)

Google

Google Inc.
1600 Amphitheatre Parkway
Mountain View, CA 94043

Google BD Rep: Christine Moon

Google Sales Engineer: Lan Roche

Google Legal Contact: Helen Tsao

COMPANY: Samsung Electronics Co., Ltd.

	Company Contact Information:	Company Technical Contact:	Company Legal Notices to:
Attention:	Justin Cho	JH Saling	CS Han
Title:	Senior Manager	Principle Engineer	Senior Legal Counsel
Address, City, State, Postal Code, Country:	416, Maetan- 3Dong, Yeongtong-gu Suwon Si, Gyeonggi-do 443-742	416, Maetan- 3Dong, Yeongtong-gu Suwon Si, Gyeonggi-do 443-742	416, Maetan- 3Dong, Yeongtong-gu Suwon Si, Gyeonggi-do 443-742
Phone:	82-10-2626-2567	82-10-7262-0098	82-10-7217-7242
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Email:	justin.cho@samsung.com	j.saling@samsung.com	shangsu.han@samsung.com

Effective Date: January 1, 2011

Term: Starting on the Effective Date and continuing through December 31, 2012 (inclusive)

Renewal Term: None.

This Mobile Application Distribution Agreement, (referred to as the "**Agreement**"), effective as of the date noted above (the "**Effective Date**"), is made by and between Samsung Electronics Co., Ltd., a Korean corporation with offices at the address noted above ("**Company**"), and Google Inc., for itself and its Affiliates, (which, with its affiliates, shall be referred to herein as "**Google**") with offices at the address noted above.

1. **Definitions.** The following capitalized terms shall have the meanings set forth below:

1.1. "**Actively Promote**" or "**Actively Promoting**" means the proactive promotion of a Google Application on any Device as a key value proposition of the device, including point of sale promotion, media advertising, and general consumer-focused promotion of a Google Application or Google services on any Device.

1.2. "**Affiliates**" of a party means a company that controls or is controlled by, or is under common control with that party. For purposes of this definition, "control" means the ability to influence the acts of an entity by virtue of a controlling interest of 50% or more of the voting rights of the capital of such entity.

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(Revd. 11/10)

1.3. **"Android Compatible Device(s)"** means Device(s) that: (i) comply with the Android Compatibility Definition document (which may be updated from time to time), which can be found at the Android compatibility website (http://source.android.com/compatibility); and (ii) successfully pass the Android Compatibility Test Suite (CTS).

1.4. **"Android Market"** means the marketplace Google has created and operates which allows registered Android Market developers to distribute Android Products.

1.5. **"Android Products"** means software, content and digital materials designed for use on Android-based devices.

1.6. **"Client ID"** means unique alphanumeric code(s) provided by Google to Company to be used to identify Google Applications usage on Company Devices, as such Client IDs may be modified by Google from time to time in its sole discretion upon notice to Company.

1.7. **"CTS Report"** means the report that is generated after the CTS is completed.

1.8. **"Default Home Screen"** means the default display of a Device, prior to any changes made by End Users, that appears without scrolling in both portrait and landscape modes when the Device is in active idle mode (i.e. not in sleep mode).

1.9. **"Device"** means the device(s) approved by Google pursuant to Section 4.3 (Google Approval and Launch) and using only the Android operating system which is enabled by Company and used by an End User to access the Service.

1.10. **"End User(s)"** means an end user customer of the Service.

1.11. **"Final Embed Date"** means the latest possible date Company can accept updated Google Applications from Google for a specific Device deployment.

1.12. **"Google Applications"** means the machine-readable binary code version of the Google applications listed below which are provided to Company in connection with this Agreement, and any modifications or updates thereto that Google may make available to Company hereunder from time to time in its sole discretion. List of Google Applications (may be changed by Google from time to time): Set-up Wizard, Google Phone-top Search, Gmail, Google Calendar, Google Talk, YouTube, Google Maps for Mobile, Google Street View, Contact Sync, Android Market Client (not products downloaded from Android Market), Google Voice Search, and Network Location Provider.

1.13. **"Google Applications Agreements"** means (i) the Mobile Services Distribution Agreement between the parties dated January 1, 2011 as applicable to Google Phone-top Search and all related amendments or similar between Google and Company and as updated and amended from time to time without reference to service levels or customizations set out in such agreements.

1.14. **"Google Mobile Branding Guidelines"** means Google's brand treatment guidelines for mobile in effect from time to time (and any content contained or referenced therein), which are located at http://www.google.com/wssynd/mobile_guidelines.html and http://www.google.com/permissions/guidelines.html (or such other URLs as may be provided by Google from time to time), together with such additional brand treatment guidelines for mobile as Google may make available to Company from time to time.

1.15. **"Intellectual Property Rights"** means any and all rights existing from time to time under patent law, copyright law, semiconductor chip protection law, moral rights law, trade secret law, trademark law, unfair competition law, publicity rights law, privacy rights law, and any and all other proprietary rights, as well as, any and all applications, renewals, extensions, restorations and re-instatements thereof, now or hereafter in force and effect worldwide.

1.16. **"Launch"** means the initial distribution of a Device in accordance with the terms of this Agreement.

1.17. **"Optional Google Applications"** are the Google Applications listed below which are provided to Company in connection with this Agreement, and any modifications or updates thereto that Google may make available to

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Company hereunder from time to time in its sole discretion. List of Optional Google Applications (may be changed by Google from time to time): Orkut, Google Goggles, Google Earth, Finance, News & Weather, Google Buzz and Google Voice. Optional Google Applications are licensed, and have the same rights and obligations, as Google Applications except that the requirements set forth in 3.4 (Placement Requirements) shall not apply and Company has the option of including the Optional Google Applications on a Device.

1.18. **"Phone Top"** means with respect to the default navigation hierarchy of a Device UI, the top-most level screen from which applications can be launched by an End User.

1.19. **"Service"** means the wireless service owned and/or operated by Telecom Operator that allows End Users using a Device to access the Internet.

1.20. **"Telecom Operator"** means a company that provides wireless service that allows End Users using a Device to access the Internet approved by Google to distribute Google Applications to End User in the Territories.

1.21. **"Territories"** means the country or countries in which distribution of Google Applications is permitted under the conditions as provided by Google to Company upon execution of this Agreement, which may be updated by Google from time to time. Distribution of Google Applications, products or services outside of the Territories is prohibited.

1.22. **"Trademarks"** means the trade names, trademarks, service marks, logos, domain names and other distinctive brand features of each party as owned by such party from time to time.

2. **Google Applications.**

2.1. **License Grant.** Subject to the terms and conditions of this Agreement (including Section 2.7), Google hereby grants to Company a nontransferable, nonsublicensable (except Company may sublicense to Telecom Operators with whom Company has a written agreement), nonexclusive license during the Term to: (a) reproduce the Google Applications to the extent necessary to exercise the right granted in (b); and (b) distribute the Google Applications for no cost directly to End Users only in the Territories specifically authorized by Google via the distribution methods specified by Google. For the sake of clarity, Company may sublicense the Google Applications to Affiliates, resellers and distributors for distribution or manufacturing purposes only when the Google Applications are pre-loaded on the Devices. Devices may only be distributed if all Google Applications (excluding any Optional Google Applications) authorized for distribution in the applicable Territory are pre-installed on the Device, unless otherwise approved by Google in writing. Initial distribution in each individual Territory, and the appearance and implementation of Google Applications, shall be subject to Google's prior written approval, and shall adhere to the terms and conditions of this Agreement, including but not limited to the Google Mobile Branding Guidelines. Additionally, where Google specifies a specific version of a Google Application to be distributed in a certain Territory, Company shall distribute only such version within such Territory. Company may also sublicense the Google Applications to its contractors for testing, evaluation and development purposes only (not distribution) and only with contractors with which Company has a written agreement that is no less protective of the Google Applications as set forth in this Agreement.

2.2. **License Grant Restrictions.** Company shall not and shall not –assist, instruct, or encourage any third party to: (a) disassemble, de-compile or otherwise reverse engineer the Google Applications or otherwise attempt to learn the source code or algorithms underlying the Google Applications; (b) create derivative works from or based on the Google Applications; (c) except as expressly set forth in this Agreement, provide, sell, license, distribute, lease, lend, or disclose the Google Applications to any third party; (d) exceed the scope of any license granted to Company hereunder; (e) ship, divert, transship, transfer, export or re-export the Google Applications, or any component thereof, into any country or use it in any manner prohibited by any export control laws, restrictions, or regulations administered by the U.S. Commerce Department's Bureau of Export Administration, the U.S. Department of Treasury's Office of Foreign Assets Control or any other applicable government agency; or (f) take any actions that may cause or result in the fragmentation of Android, including but not limited to the distribution by Company of a software development kit (SDK) derived from Android or derived from Android Compatible Devices and Company shall not assist, instruct or encourage any third party to distribute a software development kit (SDK) derived from Android, or derived from Android Compatible Devices.

2.3. **Delivery.** Upon availability, Google shall deliver the Google Applications to Company. For the sake of clarity, the parties acknowledge and agree that Google has no obligation to develop or deliver any Google Application, and any such development or delivery is at Google's sole discretion. Company shall use commercially reasonable efforts to commence distribution of updated versions of Google Applications promptly after such updated versions of Google Applications are made available by Google, but no more than 60 days after availability.

2.4. **Form of Distribution Offering.** (a) During the Term, upon Google's approval as described in Section 4.3, Company shall make the Google Applications available to End Users on the Device as described in this Agreement. For the sake of clarity, Company has no obligation to install the Google Applications on all of its devices. The form of any such offering shall be as set forth in this Agreement, and shall adhere to the Google Mobile Branding Guidelines. Without limiting the foregoing sentence, except for End Users as expressly set forth in this Agreement, Company shall not offer or distribute the Google Applications to any third party (except as set forth in Section 2.1). (b) Company shall not, and shall not assist, instruct or encourage any third party to: (i) serve or otherwise place any advertisements during the launch process of the Google Applications; (ii) offer, download or install, or allow any third party to offer, download or install, any additional products during the launch process of the Google Applications; or (iii) preload, install or launch any Google Application (or otherwise act or fail to act) such that an End User is denied the opportunity to review and accept (or reject) the relevant Google terms of service

2.5. **Accurate Reproduction.** Company agrees that in connection with its exercise of the rights granted in 2.1 of this Agreement, it will accurately reproduce the Google Applications (including any legal notices and marks contained therein) and will not insert into the Google Applications any viruses, worms, date bombs, time bombs, or other code that is specifically designed to cause the Google Applications to cease operating, or to damage, interrupt, allow access to or interfere with any Google Applications or End User data.

2.6. **Open Devices.** The parties will create an open environment for the Devices by making all Android Products and Android Application Programming Interfaces available and open on the Devices and will take no action to limit or restrict the Android platform.

2.7. **Authorization to Distribute Google Applications on the Devices & Compatibility.**

The license to distribute Google Applications in Section 2.1 is contingent upon the Device becoming an Android Compatible Device. Each Device must become an Android Compatible Device at least 30 days prior to the Final Embed Date of the Device. The final software build on Devices must pass the Compatibility Test Suite prior to Launch. Company agrees as follows:

(a) each of its employees that are designated by Company in an email to CTS@android.com is authorized to submit and upload CTS Reports on behalf of Company.

(b) the CTS has not been modified or altered by Company or its employees or agents.

(c) Company will execute the CTS completely.

(d) no CTS Reports have been altered.

(e) the contents of each CTS Report is true to the best of Company's knowledge.

(f) Google and its affiliates may include the name of Android Compatible Devices and Company's name in presentations, marketing materials, press releases, and customer lists (which includes, without limitation, customer lists posted on Google web sites) for marketing purposes only after Company's written approval which shall not be unreasonably withheld. Google may publish the results of each CTS Report after the applicable Device is Launched.

2.8. **Other Agreements.** This Agreement will supersede any agreements between the parties regarding Android-powered devices, but will have no affect on any other agreements between the parties regarding other devices or Google services or applications.

3. **Device Distribution Requirements.**

3.1. Company agrees that it will be solely responsible for the distribution of the Devices and managing its inventory.

3.2. Unless otherwise permitted in writing by Google, Company will ensure that Devices distributed in Germany make use of the "Google Mail" (and not "Gmail") Google Trademark;

3.3. Company understands and agrees that it shall not Actively Promote, and shall not assist or encourage any third party in Actively Promoting Google Applications or any Google services except in those Territories in which such Google Applications or services are expressly authorized by Google in this Agreement. Specific information regarding Territories will be provided to Company after Company's acceptance of this Agreement.

3.4. **Placement Requirements.** Unless otherwise approved by Google in writing: (1) Company will preload all Google Applications approved in the applicable Territory or Territories on each Device; (2) Google Phone-top Search and the Android Market Client icon must be placed at least on the panel immediately adjacent to the Default Home Screen; (3) all other Google Applications will be placed no more than one level below the Phone Top; and (4) Google Phone-top Search must be set as the default search provider for all search access points on the Device. Notwithstanding the foregoing, there are no placement requirements for Optional Google Applications.

3.5. **Distribution.** Company shall preload the Google Applications on the Devices so that, after preload, an icon representing each Google Application shall appear on the Device as specified in the above Placement Requirements. In addition:

(a) Preload by Company of a Google Application shall be limited to installation by Company of the Google Application, and shall not involve launch of the Google Application

(b) End User selection of an icon representing an already preloaded Google Application shall launch such Google Application.

3.6. **Support.** Each party is responsible for customer care and support of its users. Google will provide support for Google Applications as made generally available to users of Google Applications.

3.7. **Branding.** Branding on the hardware of the Devices will be determined by Company, but shall not include any Google branding or Google Trademarks without Google's approval.

3.8. **Network Location Provider.** The following requirements apply to Network Location Provider:

(a) Company shall ensure Network Location Provider will be turned off by default.

(b) Company shall ensure that the appropriate prompts are displayed to the End User seeking the End User's consent to use Network Location Provider as provided by Google. Company shall not prevent the End User from providing consent prior to enabling Network Location Provider or any application making use of Network Location Provider.

(c) Company shall configure Network Location Provider to be the default network-based location provider on all Android Compatible Devices.

(d) Company will enable all features of Network Location Provider, including network-based location resolution, anonymous network location data collection, and reverse-geocoding.

3.9. **Google Legal Terms.** Company shall ensure that the appropriate Google Terms of Service, Privacy Policy and Legal Notices as provided by Google are available to the End User as provided by Google.

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4. **General Requirements.**

4.1. **Payments.** (a) Except as set forth in this Section 4.1, Company and Google shall each retain any and all revenue generated from provision of their respective products or services. For the sake of clarity, except as expressly set forth in this Agreement, neither party shall be required to account to the other or otherwise make any payment to the other regarding the Applications, Google products or services, the Devices, the Service or any revenue generated therefrom.

(b) For each month during the applicable Term of the Google Applications Agreement (as "Term" is defined in the applicable Google Applications Agreement), Google shall make payments to Company in accordance with the applicable Google Applications Agreement. Nothing in this Agreement will change the Term of the Google Applications Agreements (as "Term" is defined in each such Google Applications Agreement).

4.2. **Reports.** Within thirty (30) days of the end of each calendar quarter during the Term, Company shall provide a written report of the total number of Devices distributed with a preloaded version of a Google Application during such calendar quarter (by Google Application, Territory, and Device model within each Territory, to the extent that such reporting is available. These reports will be submitted to android-partner-support@google.com.

4.3. **Google Approval and Launch.** Company's distribution and implementation of the Google Applications shall be subject to Google's prior approval (not to be unreasonably withheld) to ensure adherence to the terms and conditions of this Agreement, including but not limited to the Google Mobile Branding Guidelines. Company shall not Launch any Device incorporating the Google Applications until it has obtained Google's approval as set forth in (a), (b) and (c) (as applicable) below:

(a) For the initial Launch of each Device model, Company will complete a Device Launch Addendum in the form set forth on Exhibit A. Google will review the Device Launch Addendum and will notify Company of any problems. Once the parties mutually agree on the Device Launch Addendum, the parties must sign the Device Launch Addendum to make it effective. Company will: (1) no less than 30 days before the initial Launch, notify Google via email (or via a website provided by Google) of such Launch; (2) provide Device samples in accordance with Section 4.4(a) below; (3) submit a CTS Report for such Launch; and (4) submit the Device's final software build for such Launch.

(b) For any subsequent Launches of a Device model after the initial Launch of such Device model, including software changes for any new Telecom Operator in each new Territory or any software updates for any previously approved Launch, Company must obtain Google's written (which may be by way of email) approval (not to be unreasonably withheld) prior to Launch. Company will: (1) no less than 30 days before each Launch Date, notify Google via email (or via a website provided by Google) before each Launch; (2) submit a CTS Report for each Launch; and (3) if requested by Google, submit the Device's final software build for such Launch.

(c) Google must provide approval (as defined in Sections 4.3(a) or 4.3(b), as applicable) of the implementation of the Google Applications on the Device in writing before distribution of any Device and such Device must only be distributed in Territories and with Telecom Operators as approved by Google. Upon receipt of each such Google approval, Company will begin distribution and implementation in accordance with this Agreement (each a "Launch Date"). Company will provide contact information to facilitate Google's communication regarding approvals to Company. Company will provide written confirmation to Google of Launch promptly following each Launch Date. Company agrees that the restrictions, including restrictions against Active Promotion, set forth at the following web site (or other URL provided by Google and as updated by Google from time-to-time) shall apply to all Launches unless otherwise approved by Google in writing: https://sites.google.com/a/google.com/gms_distribution/geo-availability-of-google-applications. Company will provide a monthly report on shipment volumes and applicable Territories for each Device.

4.4. **Implementation Requirements.** The parties shall provide the materials and information listed below:

(a) At least 30 days prior to the Final Embed Date for each initial Launch of each Device model incorporating the Google Applications, Company shall deliver to Google no less than four (4) Device samples for such Device model for Google's approval as set out in Section 4.3 (Google Approval and Launch). Google may use such Devices to test the operation and presentation of relevant Google products, services and sites on the Device. Devices will be sent to a Google address to be provided by Google to Company.

(b) If at any time the Devices provided under this Section 4.4 are no longer capable of displaying the current implementation of relevant Google products, services or sites, Company will provide Google with replacement Devices as required.

(c) If at any time the software on the Devices as distributed to End Users changes the representation of Google products, services and sites, Company shall make available to Google the new software and / or Devices for approval.

(d) Company agrees to assist Google with ongoing testing of Devices and Android applications. Google may from time to time provide Company with Android-based applications and tests that should be run on Devices (which may represent families of Devices) on which such applications will be loaded to assure the operation and presentation of such application. Company will load such applications on Devices and run such test in a timely manner to help assess the operation and presentation of such applications and provide the test results to Google.

(e) Company shall configure the appropriate Client ID for each Device as provided by Google.

(f) Company shall use its best efforts to provide all other information, equipment and/or assistance reasonably necessary to allow Google to deliver the Google Applications and make the Google Applications (including over-the-air updates thereto) available on the Service and the Devices.

4.5. **Over-the-Air Updates.** Google may auto-update Google Applications over-the-air at Google's discretion. Company shall not prevent such over-the-air auto-updates. In Google's sole discretion, Google may enable Company to provide Device builds to Google for distribution by Google to Devices via an over-the-air update. Company hereby grants Google a non-exclusive, worldwide, license to distribute the Device build during the Term. Nothing in this Agreement shall require Company to provide Device builds for Google to distribute and Google shall not be obligated to distribute such Device builds.

4.6. **Site Pages.** Company shall not, and shall not assist, instruct or encourage any third party to, redirect an End User away from, block access to, frame, or modify or change the look or feel of any web page or web site accessed via a Google Application, or place anything on or near any web site page that in any way implies that Google is responsible for the contents of such page.

4.7. **Data Collection and Reporting.** Each party's applicable privacy and security policies shall apply with respect to the user information collected by it. The parties will provide each other reasonable aggregate information about usage of the Devices during the Term, in order to help each party improve End User's experience with the Device, consistent with each party's privacy policies. Such information will not involve any personally identifiable information.

4.8. **Telecom Operator Customer Restrictions.** The parties acknowledge and agree that the placement and distribution obligations contained in Section 3.4,and Section 4.3 are subject to restrictions placed upon Company by its direct Telecom Operator customers. However, pursuant to Section 3.4 and Section 4.3, any such placement and distribution, including the appearance of Google Applications, shall be subject to Google's prior written approval, and shall adhere to the terms and conditions of this Agreement, including but not limited to the Google Mobile Branding Guidelines.

4.9. **No Connectivity Notice.** When an End User launches a Device's web browser or launches a Google Application and there is no data connectivity available, Company will not block, alter or prevent in any way the presentation of any message to such End User indicating lack of data connectivity.

4.10. **Points of Contact.** Each party shall each appoint a partner manager (the "**Partner Manager**") who shall be the point of contact for all issues concerning this Agreement. Company's primary communication with Google regarding this Agreement will be through email sent to justin.cho@samsung.com.

5. **Term and Termination.**

5.1. **Term.** The term of this Agreement shall begin on the Effective Date and continue for a period of two (2) years after the Effective Date, unless earlier terminated as provided in this Agreement. This Agreement shall not renew unless specifically agreed by the parties in writing.

5.2. **Termination.** (a) Either party may suspend performance or terminate this Agreement if (i) the other party is in material breach of the Agreement and fails to cure that breach within thirty (30) days after written notice; or (ii) the other party ceases its business operations or becomes subject to insolvency proceedings and the proceedings are not dismissed within ninety (90) days. (b) Notwithstanding the foregoing, either party may terminate this Agreement immediately upon written notice upon a breach of Sections 2.1 to 2.2 (License Grant and Restrictions), Section 2.4(b)(iii) (opportunity to review and accept Google terms of service), Section 2.5 (Accurate Reproduction), Section 6.1 (Confidentiality) or Section 7 (Trademarks), or as set forth in Section 12.4 (Change of Control). (c) Notwithstanding anything to the contrary, in the event that the government or controlling body of any country or territory in which the Google Applications are distributed or made available imposes any law, restriction or regulation that makes it illegal to distribute or make available the Google Applications, or any portion thereof, into such country or territory, or if any such law, restriction or regulation places a substantial burden on Google, where substantial is measured with respect to Google's economic benefit under this Agreement, as determined by Google in its reasonable and good faith judgment (such substantial burden, a "**Substantial Burden**"), then Google shall have the right to suspend the distribution and/or availability of such Google Applications in such country or territory until such time as such law, restriction or regulation is repealed or nullified or modified such that there it is no longer illegal or a Substantial Burden, as applicable, for the Google Applications to be distributed or made available in such country or territory ("**Special Suspension**").

5.3. **Effect of Termination.** Upon expiration or termination of this Agreement: (a) all rights and licenses granted hereunder shall immediately cease; (b) Company will immediately stop reproducing, offering or distributing the Google Applications; and (c) each Party shall return or destroy (and a duly appointed officer shall certify to such destruction) all copies of the Google Applications (in the case of Company) and any other Confidential Information in its possession which it is aware and to which it has access and is reasonably able to destroy or delete (which, for the avoidance of doubt, does not include archived backup copies which are not in live working use and which are no longer easily accessible or retrievable), including from all hard disks and memory. Neither party shall be liable to the other for any damages resulting solely from termination of this Agreement as permitted for under this Agreement.

5.4. **Sell-Off Right.** Notwithstanding the provisions of Section 5.3 above, for a period of ninety (90) days following expiration or termination of this Agreement ("**Sell-Off Period**"), Company shall have the right to distribute in accordance with the terms and conditions of this Agreement all Google Application(s) actually preloaded on the Device inventory as of the date of expiration or termination of this Agreement ("**Inventory**"), and such party shall have the right to use the Google Trademarks in accordance with this Agreement in connection with such Inventory ("**Sell-Off Right**"); provided, however, that Company shall provide no less than thirty (30) days prior written notification to Google of its intent to exercise the Sell-Off Right ("**Sell-Off Right Notice**"). Notwithstanding anything to the contrary, the Sell-Off Right shall not apply in the event that either (a) Company does not provide the Sell-Off Right Notice as set forth above in this Section 5.4, or (b) this Agreement (or any right granted hereunder) is suspended or terminated by Google pursuant to Section 5.2 of this Agreement.

5.5. **Survival.** The provisions of Sections 1 (Definitions), 2.2 (License Grant Restrictions), 5.5 (Survival), 6.1 (Confidentiality), 8 (Proprietary Rights), 9.2 (Disclaimer), 10 (Limitation of Liability), 11 (Indemnification) and 12 (General) shall survive expiration or termination of this Agreement.

6. **Confidentiality and PR.**

6.1. **Confidentiality.** (a) Definition. "Confidential Information" is information disclosed by one party to the other party under this Agreement that is marked as confidential or would normally under the circumstances be considered confidential information of the disclosing party. Confidential Information does not include information that the recipient already knew, that becomes public through no fault of the recipient, that was independently developed by the recipient, or that was rightfully given to the recipient by another party. (b) Confidentiality Obligations. The recipient will not disclose the Confidential Information, except to affiliates, employees, and

agents who need to know it and who have agreed in writing to keep it confidential. The recipient, its affiliates, employees, and agents may use Confidential Information only to exercise rights and fulfill obligations under this agreement, while using reasonable care to protect it. The recipient may also disclose Confidential Information when required by law after giving reasonable notice to discloser.

6.2. **Publicity.** Except as set forth in Section 2.7, neither party may make any public statement regarding the relationship contemplated by this Agreement without the other's prior written approval. Requests for marketing, press releases and other publicity issues should be made by submitting a request at http://services.google.com/permissions/application (and selecting the appropriate Android entry in the "Request Type" menu)

7. **Trademarks.**

7.1. **General.** Each party shall own all right, title and interest, including without limitation all Intellectual Property Rights, relating to its Trademarks. Some, but not all examples of Google Trademarks are located at: http://www.google.com/permissions/trademarks.html (or such other URLs Google may provide from time to time). Except to the limited extent expressly provided in this Agreement, neither party grants, and the other party shall not acquire, any right, title or interest (including, without limitation, any implied license) in or to any Trademarks of the first party, and all rights not expressly granted herein are deemed withheld. All use by Google of Company Trademarks (including any goodwill associated therewith) shall inure to the benefit of Company and all use by Company of Google Trademarks (including any goodwill associated therewith) shall inure to the benefit of Google. No party shall challenge or assist others to challenge the Trademarks of the other party (except to protect such party's rights with respect to its own Trademarks) or the registration thereof by the other party, nor shall either party attempt to register any Trademarks or domain names that are confusingly similar to those of the other party.

7.2. **License to Google Trademarks.** Subject to Google's written approval prior to each use of a Google Trademark and to the terms and conditions of this Agreement, Google grants to Company a limited, nonexclusive and nonsublicensable license during the Term to display those Google Trademarks expressly authorized for use in this Agreement, solely for the purposes expressly set forth herein. Notwithstanding anything to the contrary, Google may revoke the license granted herein to use Google's Trademarks upon providing Company with written notice thereof and a reasonable period of time to cease such usage. Furthermore, in its use of any Google Trademarks, Company agrees to adhere to the Google Mobile Branding Guidelines.

Company shall not, and shall not assist, instruct or encourage any third party to produce any consumer packaging or materials for the Device that identifies or suggests that Google is the manufacturer of the Device. In this regard, Company shall ensure that any Device packaging or user guide produced by the Company identifies Company as the manufacturer of the Device and provides contact details in the applicable Territories in which the Device is distributed.

7.3. **License to Company Trademarks.** Subject to the terms and conditions of this Agreement, Company grants to Google a limited, nonexclusive and nonsublicensable license during the Term to display those Company Trademarks expressly authorized for use in Section 2.7 of this Agreement, solely for the purposes expressly set forth herein. Google must get Company's prior written approval for the use of Company Trademarks not set forth in Section 2.7 of this Agreement. Notwithstanding anything to the contrary, Company may revoke the license granted herein to use Company's Trademarks upon providing Google with written notice thereof and a reasonable period of time to cease such usage. Furthermore, in its use of any Company Trademarks, Google agrees to adhere to the Company Mobile Branding Guidelines.

8. **Proprietary Rights.** (a) Company acknowledges that, as between the parties, Google (and/or its licensors) retains all right, title and interest, including without limitation all rights in copyrights, trademarks, trade secrets, patents and know-how, in and to the Google Applications and the Google Trademarks. Company has, and shall acquire, no rights in the foregoing except those expressly granted by this Agreement. Google shall not be restricted from selling, licensing, modifying, or otherwise distributing the Google Applications and/or the Google Trademarks to any third party. (b) Google acknowledges that, as between the parties, Company (and/or its licensors) retains all right, title and interest, including without limitation all rights in copyrights, trademarks, trade secrets, patents and know-how, in and to the Devices and the Company Trademarks. Google has, and shall acquire, no rights in the foregoing except those expressly granted by this

Agreement. Except as set forth in this Agreement, Company shall not be restricted from selling, licensing, modifying, or otherwise distributing the Devices and/or the Company Trademarks to any third party.

9. **Representations, Warranties and Disclaimer.**

9.1. **Representations and Warranties.** Each party represents and warrants to the other that it has full power and authority to enter into this Agreement, and that the execution and delivery of this Agreement, and the performance of its obligations hereunder, will not constitute a breach or default of or otherwise violate any agreement to which such party or any of its affiliates are a party or violate any rights of any third parties arising therefrom. Company represents and warrants that it has and will maintain throughout the Term all rights, authorizations and licenses that are required with respect to the Devices, any materials provided by Company to be distributed by Google (including Company's Device builds but excluding any Google materials and software, that are incorporated in the Device builds) and any Company content or services, and that the Devices, materials provided by Company to Google, and the Company's content or services, and their use, distribution, sale and license, do and shall continue to comply with all applicable foreign, federal, state, and local laws, rules and regulations. Company represents and warrants that any materials provided by Company to be distributed by Google (including Company's Device builds but excluding any Google materials and software that are incorporated in the Device builds) will comply with all applicable open source licensing requirements.

9.2. **Disclaimer.** BETWEEN THE PARTIES, OTHER THAN THE REPRESENTATIONS AND WARRANTIES CONTAINED IN SECTION 9.1, THE GOOGLE APPLICATIONS AND THE ANDROID PLATFORM ARE PROVIDED "AS IS" AND WITHOUT WARRANTY OF ANY KIND AND GOOGLE EXPRESSLY DISCLAIMS ANY AND ALL WARRANTIES, WHETHER EXPRESS, IMPLIED, STATUTORY OR OTHERWISE, INCLUDING WITHOUT LIMITATION WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. GOOGLE DOES NOT WARRANT THAT THE GOOGLE APPLICATIONS AND/OR ANY OTHER GOOGLE PRODUCTS OR SERVICES PROVIDED HEREUNDER WILL MEET ALL OF COMPANY'S REQUIREMENTS OR THAT PERFORMANCE OF SUCH SERVICES WILL BE UNINTERRUPTED, VIRUS-FREE, SECURE OR ERROR-FREE. OTHER THAN THE REPRESENTATIONS AND WARRANTIES CONTAINED IN SECTION 9.1, THE DEVICES ARE PROVIDED "AS IS" AND WITHOUT WARRANTY OF ANY KIND AND COMPANY MAKES NO WARRANTY OF ANY KIND TO GOOGLE WITH RESPECT TO THE DEVICES, AND EXPRESSLY DISCLAIMS ANY AND ALL WARRANTIES, WHETHER EXPRESS, IMPLIED, STATUTORY OR OTHERWISE, INCLUDING WITHOUT LIMITATION WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. EXCEPT AS OTHERWISE PROVIDED IN THIS AGREEMENT, COMPANY DOES NOT WARRANT THAT THE DEVICES WILL BE UNINTERRUPTED, VIRUS-FREE, SECURE OR ERROR-FREE.

10. **Limitation of Liability.**

10.1. **Limitations.** SUBJECT TO SECTION 10.2: (A) LIMITATION ON INDIRECT LIABILITY. NEITHER PARTY MAY BE HELD LIABLE TO THE OTHER PARTY UNDER THIS AGREEMENT FOR ANY DAMAGES OTHER THAN DIRECT DAMAGES, EVEN IF THE PARTY IS AWARE OR SHOULD KNOW THAT SUCH DAMAGES ARE POSSIBLE AND EVEN IF DIRECT DAMAGES DO NOT SATISFY A REMEDY. (B) LIMITATION ON AMOUNT OF LIABILITY. NEITHER PARTY MAY BE HELD LIABLE UNDER THIS AGREEMENT FOR MORE THAN ONE HUNDRED THOUSAND U.S. DOLLARS ($100,000.00 USD).

10.2. **Exceptions to Limitations.** These limitations of liability do not apply to: (a) breaches of confidentiality obligations, violations of Intellectual Property Rights (including without limitation a breach of the license to use Trademarks under Section 7), indemnification obligations; or (b) breaches by COMPANY of Sections 2.1-2.2 (License Grant and Restrictions), Section 2.4(b)(iii) (opportunity to review and accept Google terms of service), or Section 2.5 (Accurate Reproduction).

10.3. **Allocation of Risk.** The parties agree that (a) the mutual agreements made in this Section 10 reflect a reasonable allocation of risk, and (b) that each party would not enter into the Agreement without these limitations on liability.

11. **Indemnification.**

11.1. **By Google.** Google will defend, or at its option settle, any third party lawsuit or proceeding brought against Company based upon or otherwise arising out of: (a) any breach or claimed breach of the first sentence of Section 9.1; (b) any claim that the Google Applications or Google Trademarks infringe any Intellectual Property Right; or (c) any third party claim arising out of or resulting from End User's use of any Google Application. Notwithstanding the foregoing, in no event shall Google have any obligations or liability under this Section 11.1 arising from: (i) modifications of the Google Applications or the Google Trademarks by any party other than Google; and (ii) combination of the Google Applications or the Google Trademarks with any other software or products or any other materials. Google, in its sole and reasonable discretion, reserves the right to terminate Company's continued distribution of or access to the Google Applications or the Google Trademarks which are alleged or believed by Google to infringe the rights of a third party. Google shall have no obligations under this Section 11.1 regarding the Android platform or any third party products distributed through the Android Market.

11.2. **By Company.** Company will defend, or at its option settle, any third party lawsuit or proceeding brought against Google based upon or otherwise arising out of: (a) any breach or claimed breach of Section 9.1; (b) the improper or unauthorized replication, packaging, marketing, distribution, or installation of the Google Applications by Company or its Affiliates in violation of this Agreement, including without limitation claims based on representations, warranties, or misrepresentations made by Company; (c) any breach or claimed breach of Sections 2.4(b)(iii), Section 3.2 (Google Mail), or Section 3.3 (Actively Promote); (d) any claim that any Device (or application installed thereon other than the Google Applications), or any Company Trademark infringes any Intellectual Property Right; or (e) any third party claim arising out of or resulting from End User's use of any Device (or application installed thereon other than the Google Applications), including without limitation any actions or claims in product liability, tort, contract or equity.

11.3. **Conditions of Indemnification.** The party seeking indemnification must promptly notify the other party of the claim and cooperate with the other party in defending the claim. The indemnifying party has full control and authority over the defense, but the other party may join in the defense with its own counsel at its own expense. THE INDEMNITIES ABOVE ARE THE ONLY REMEDY UNDER THIS AGREEMENT FOR VIOLATION OF A THIRD PARTY'S INTELLECTUAL PROPERTY RIGHTS.

12. **General.**

12.1. **Notices.** All notices must be in writing and addressed to the attention of the other party's Legal Department and primary point of contact. Notice will be deemed given (a) when verified by written receipt if sent by personal courier, overnight courier, or mail; or (b) when verified by automated receipt or electronic logs if sent by facsimile or email.

12.2. **Force Majeure.** Neither party will be liable for inadequate performance to the extent caused by a condition (for example, natural disaster, act of war or terrorism, riot, labor condition, governmental action, and Internet disturbance) that was beyond the party's reasonable control.

12.3. **Assignment.** Neither party may assign or transfer any part of this Agreement without the written consent of the other party, except to an affiliate but only if (a) the assignee agrees in writing to be bound by the terms of this Agreement and (b) the assigning party remains liable for obligations under the Agreement. Any other attempt to transfer or assign is void.

12.4. **Change of Control.** Upon a change of control (for example, through a stock purchase or sale, merger, or other form of corporate transaction), (a) the party experiencing the change of control will provide written notice to the other party within 30 days after the change of control, and (b) the other party may immediately terminate this Agreement any time between the change of control and 30 days after it receives the written notice in subsection (a) of this Section 12.4.

12.5. **No Waiver; Severability; No Agency; No Third-Party Beneficiaries.** Failure to enforce any provision will not constitute a waiver. If any provision is found unenforceable, it and any related provisions will be interpreted to best accomplish the unenforceable provision's essential purpose. The parties are independent contractors, and this Agreement does not create an agency, partnership or joint venture. There are no third-party beneficiaries to this Agreement.

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12.6. **Controlling Law.** This Agreement, and all matters arising out of or relating to this Agreement, shall be governed by the laws of the State of New York. All disputes, controversies or difference which may arise between the parties out of or relation to or in connection with this Agreement should be settled amicably through friendly negotiation. In the event of any controversy or claim arising out of or relating to any provision of this Agreement or the breach thereof, except as set forth in the last sentence of this Section 12.6, such controversy or claim shall be finally settled in accordance with the Rules of Arbitration of the International Chamber of Commerce by three (3) arbitrators appointed in accordance with the said Rules unless the parties agree on the name of a sole arbitrator. The arbitration shall be held in Singapore, and shall be conducted in the English language. Notwithstanding anything above, such arbitration proceedings shall in no way impair or limit the right of either party to seek injunctive relief without recourse to arbitration, or to otherwise pursue immediate relief needed to prevent the breach of this Agreement. Notwithstanding the foregoing or anything to the contrary, any and all disputes, controversies or claims relating to one party's alleged or actual infringement of the Intellectual Property Rights related to this Agreement of the other party shall be instituted in a state or federal court in the Manhattan borough of New York City, New York, and Google and Company agree to submit to the exclusive jurisdiction of, and agree that venue is proper in, these courts in any such legal action or proceeding.

12.7. **Entire Agreement; Amendments; Counterparts.** This Agreement is the parties' entire agreement relating to its subject and supersedes any prior or contemporaneous agreements on that subject. Any amendment must be in writing and expressly state that it is amending this Agreement. The parties may execute this Agreement in counterparts, including facsimile, PDF, and other electronic copies, which taken together will constitute one instrument.

5

IN WITNESS WHEREOF, the parties have executed this Agreement by persons duly authorized as of the Effective Date.

COMPANY: Samsung Electronics Co., Ltd.

By
Name Byung-Hoon Kim
Title Senior Vice President
Date January 5, 2011

GOOGLE INC.

By
Name Andy Rubin
Title VP
Date 1/4/2011

Legal Dept AHH Google

15

EXECUTABLE

EXHIBIT A

FORM OF

DEVICE LAUNCH ADDENDUM #__

This Device Launch Addendum is entered under and subject to the Mobile Application Distribution Agreement effective **[INSERT DATE]** between **[INSERT COMPANY NAME]** (Company) and Google Inc. (Google) (the "MADA")

Upon execution of this Addendum, **[INSERT COMPANY NAME]** Google agree to the Launch the Device as set forth below. No Launch may proceed until the both parties confirm Terminal Acceptance in writing. All Launches are subject to the terms and conditions of the MADA.

Device	Device Specifications	Device Image *(optional)*

Initial Territory(ies)	Initial Telecom Operator(s)	Target Launch Date	Device Forecast for the Territory	Target Terminal Acceptance Date	List of Google Applications	Restrictions on Google Applications (e.g., No YouTube in China)	Google Trademark *(if any)*

Additional Terms (if any):

COMPANY: _____

_____
By

_____
Name

_____
Title

_____
Date

GOOGLE INC.

_____
By

_____
Name

_____
Title

_____
Date

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(Revd. 11/10)

Exhibit B

MOBILE APPLICATION DISTRIBUTION AGREEMENT (ANDROID)

Google

Google Inc.
1600 Amphitheatre Parkway
Mountain View, CA 94043

Google SPD Rep: Jennie Ebbitt

Google Sales Engineer: Alex Medina

Google Legal Contact: Frank Montes

COMPANY: HTC Corporation

	Company Contact Information:	Company Technical Contact:	Company Legal Notices to:
Attention:	Jerry Hsiao	Ellen Wang	Grace Lei
Title:	Director	Director	General Counsel
Address, City, State, Postal Code, Country:	No. 23, Xinghua Rd., Taoyuan City, Taoyuan County 330, Taiwan	No. 23, Xinghua Rd., Taoyuan City, Taoyuan County 330, Taiwan	No. 23, Xinghua Rd., Taoyuan City, Taoyuan County 330, Taiwan
Phone:	+886-2-8912-4138 #8451	+886-2-8912-4138 #3176	+886-3-375-3252
Fax:	+886-2-8914-7596	+886-2-8914-7596	+886-3-375-6378
Email:	lotus_chen@htc.com	ellen_wang@htc.com	grace_lei@htc.com

Effective Date: January 1, 2011 (must be start of calendar month)

Term: Starting on the Effective Date and continuing through December 31, 2012 (inclusive)

Renewal Term: None.

This Mobile Application Distribution Agreement, (referred to as the "**Agreement**"), effective as of the date noted above (the "**Effective Date**"), is made by and between HTC Corporation, a Taiwan corporation with offices at the address noted above ("**Company**"), and Google Inc., for itself and its affiliates, (which, with its affiliates, shall be referred to herein as "**Google**") with offices at the address noted above.

1. **Definitions.** The following capitalized terms shall have the meanings set forth below:

1.1. "**Actively Promote**" or "**Actively Promoting**" means the proactive promotion of a Google Application on any Device as a key value proposition of the device, including point of sale promotion, media advertising, and general consumer-focused promotion of a Google Application or Google services on any Device.

1.2. "**Android Compatible Device(s)**" means Device(s) that: (i) comply with the Android Compatibility Definition document (which may be updated from time to time), which can be found at the Android compatibility website (http://source.android.com/compatibility); and (ii) successfully pass the Android Compatibility Test Suite (CTS).

1.3. "**Android Market**" means the marketplace Google has created and operates which allows registered Android Market developers to distribute Android Products.

1.4. "**Android Products**" means software, content and digital materials designed for use on Android-based devices.

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(Revd. 12/10)

1.5. **"Client ID"** means unique alphanumeric code(s) provided by Google to Company to be used to identify Google Applications usage on Company Devices, as such Client IDs may be modified by Google from time to time in its sole discretion upon notice to Company.

1.6. **"CTS Report"** means the report that is generated after the CTS is completed.

1.7. **"Default Home Screen"** means the default display of a Device, prior to any changes made by End Users, that appears without scrolling in both portrait and landscape modes when the Device is in active idle mode (i.e. not in sleep mode).

1.8. **"Device"** means the device(s) approved by Google pursuant to Section 4.3 (Google Approval and Launch) and using only the Android operating system which is enabled by Company and used by an End User to access the Service.

1.9. **"End User(s)"** means an end user customer of the Service.

1.10. **"Final Embed Date"** means the latest possible date Company can accept updated Google Applications from Google for a specific Device deployment.

1.11. **"Google Applications"** means the machine-readable binary code version of the Google applications listed below which are provided to Company in connection with this Agreement, and any modifications or updates thereto that Google may make available to Company hereunder from time to time in its sole discretion. List of Google Applications (may be changed by Google from time to time): Set-up Wizard, Google Phone-top Search, Gmail, Google Calendar, Google Talk, YouTube, Google Maps for Mobile, Google Street View, Contact Sync, Android Market Client (not products downloaded from Android Market), Google Voice Search, and Network Location Provider.

1.12. **"Google Mobile Branding Guidelines"** means Google's brand treatment guidelines for mobile in effect from time to time (and any content contained or referenced therein), which are located at http://www.google.com/wssynd/mobile_guidelines.html and http://www.google.com/permissions/guidelines.html (or such other URLs as may be provided by Google from time to time), together with such additional brand treatment guidelines for mobile as Google may make available to Company from time to time.

1.13. **"Intellectual Property Rights"** means any and all rights existing from time to time under patent law, copyright law, semiconductor chip protection law, moral rights law, trade secret law, trademark law, unfair competition law, publicity rights law, privacy rights law, and any and all other proprietary rights, as well as, any and all applications, renewals, extensions, restorations and re-instatements thereof, now or hereafter in force and effect worldwide.

1.14. **"Launch"** means the initial distribution of a Device in accordance with the terms of this Agreement.

1.15. **"Optional Google Applications"** are the Google Applications listed below which are provided to Company in connection with this Agreement, and any modifications or updates thereto that Google may make available to Company hereunder from time to time in its sole discretion. List of Optional Google Applications (may be changed by Google from time to time): Orkut, Google Goggles, Google Earth, Finance, News & Weather, Google Buzz and Google Voice. Optional Google Applications are licensed, and have the same rights and obligations, as Google Applications except that the requirements set forth in 3.4 (Placement Requirements) shall not apply and Company has the option of including the Optional Google Applications on a Device.

1.16. **"Phone Top"** means with respect to the default navigation hierarchy of a Device UI, the top-most level screen from which applications can be launched by an End User.

1.17. **"Service"** means the wireless service owned and/or operated by Telecom Operator that allows End Users using a Device to access the Internet.

1.18. **"Telecom Operator"** means a company that provides wireless service that allows End Users using a Device to access the Internet approved by Google to distribute Google Applications to End User in the Territories.

1.19. **"Territories"** means the country or countries in which distribution of Google Applications is permitted under the conditions as provided by Google to Company upon execution of this Agreement, which may be updated by

Google from time to time. Distribution of Google Applications, products or services outside of the Territories is prohibited.

1.20. **"Trademarks"** means the trade names, trademarks, service marks, logos, domain names and other distinctive brand features of each party as owned by such party from time to time.

2. **Google Applications.**

2.1. **License Grant.** Subject to the terms and conditions of this Agreement (including Section 2.7), Google hereby grants to Company a nontransferable, nonsublicensable (except Company may sublicense to Telecom Operators with whom Company has a written agreement), nonexclusive license during the Term to: (a) reproduce the Google Applications to the extent necessary to exercise the right granted in (b); and (b) distribute the Google Applications for no cost directly to End Users only in the Territories specifically authorized by Google via the distribution methods specified by Google. For the sake of clarity, Company may sublicense the Google Applications to resellers and distributors solely for distribution purposes and only when the Google Applications are pre-installed on the Devices. Devices may only be distributed if all Google Applications (excluding any Optional Google Applications) authorized for distribution in the applicable Territory are pre-installed on the Device, unless otherwise approved by Google in writing. Initial distribution in each individual Territory, and the appearance and implementation of Google Applications, shall be subject to Google's prior written approval, and shall adhere to the terms and conditions of this Agreement, including but not limited to the Google Mobile Branding Guidelines. Additionally, where Google specifies a specific version of a Google Application to be distributed in a certain Territory, Company shall distribute only such version within such Territory. Company may also sublicense the Google Applications to its contractors for testing, evaluation and development purposes only (not distribution) and only with contractors with which Company has a written agreement that is no less protective of the Google Applications as set forth in this Agreement.

2.2. **License Grant Restrictions.** Company shall not, and shall not allow any third party to: (a) disassemble, de-compile or otherwise reverse engineer the Google Applications or otherwise attempt to learn the source code or algorithms underlying the Google Applications; (b) create derivative works from or based on the Google Applications; (c) except as expressly set forth in this Agreement, provide, sell, license, distribute, lease, lend, or disclose the Google Applications to any third party; (d) exceed the scope of any license granted to Company hereunder; (e) ship, divert, transship, transfer, export or re-export the Google Applications, or any component thereof, into any country or use it in any manner prohibited by any export control laws, restrictions, or regulations administered by the U.S. Commerce Department's Bureau of Export Administration, the U.S. Department of Treasury's Office of Foreign Assets Control or any other applicable government agency; or (f) take any actions that may cause or result in the fragmentation of Android, including but not limited to the distribution by Company of a software development kit (SDK) derived from Android or derived from Android Compatible Devices and Company shall not assist or encourage any third party to distribute a software development kit (SDK) derived from Android, or derived from Android Compatible Devices.

2.3. **Delivery.** Upon availability, Google shall deliver the Google Applications to Company. For the sake of clarity, the parties acknowledge and agree that Google has no obligation to develop or deliver any Google Application, and any such development or delivery is at Google's sole discretion. Company shall commence distribution of updated versions of Google Applications promptly after such updated versions of Google Applications are made available by Google, but no more than 90 days after availability.

2.4. **Form of Distribution Offering.** (a) During the Term, upon Google's approval as described in Section 4.3, Company shall make the Google Applications available to End Users on the Device as described in this Agreement. The form of any such offering shall be as set forth in this Agreement, and shall adhere to the Google Mobile Branding Guidelines. Without limiting the foregoing sentence, except for End Users as expressly set forth in this Agreement, Company shall not offer or distribute the Google Applications to any third party (except as set forth in Section 2.1). (b) Company (or any third party) shall not: (i) serve or otherwise place any advertisements during the launch process of the Google Applications; (ii) offer, download or install, or allow any third party to offer, download or install, any additional products during the launch process of the Google Applications; or (iii) preload, install or launch any Google Application (or otherwise act or fail to act) such that an End User is denied the opportunity to review and accept (or reject) the relevant Google terms of service.

2.5. **Accurate Reproduction.** Company agrees that in connection with its exercise of the rights granted in 2.1 of this Agreement, it will accurately reproduce the Google Applications (including any legal notices and marks contained

therein) and will not insert into the Google Applications any viruses, worms, date bombs, time bombs, or other code that is specifically designed to cause the Google Applications to cease operating, or to damage, interrupt, allow access to or interfere with any Google Applications or End User data.

2.6. **Open Devices.** The parties will create an open environment for the Devices by making all Android Products and Android Application Programming Interfaces available and open on the Devices and will take no action to limit or restrict the Android platform.

2.7. **Authorization to Distribute Google Applications on the Devices & Compatibility.**

The license to distribute Google Applications in Section 2.1 is contingent upon the Device becoming an Android Compatible Device. Each Device must become an Android Compatible Device at least 30 days prior to the Final Embed Date of the Device. The final software build on Devices must pass the Compatibility Test Suite prior to Launch. Company agrees as follows:

(a) each of its employees that are designated by Company in an email to CTS@android.com is authorized to submit and upload CTS Reports on behalf of Company.

(b) the CTS has not been modified or altered by Company or its employees or agents.

(c) Company will execute the CTS completely.

(d) no CTS Reports have been altered.

(e) the contents of each CTS Report is true to the best of Company's knowledge.

(f) Google and its affiliates may include Android Compatible Devices and Company's name in presentations, marketing materials, press releases, and customer lists (which includes, without limitation, customer lists posted on Google web sites) for marketing purposes. Google may publish the results of each CTS Report after the applicable Device is Launched.

2.8. **Other Agreements.** This Agreement will supersede any agreements between the parties regarding Android-powered devices, but will have no affect on any other agreements between the parties regarding other devices or Google services or applications.

3. **Device Distribution Requirements.**

3.1. Company agrees that it will be solely responsible for the distribution of the Devices and managing its inventory.

3.2. Unless otherwise permitted in writing by Google, Company will ensure that Devices distributed in Germany make use of the "Google Mail" (and not "Gmail") Google Trademark;

3.3. Company understands and agrees that it shall not Actively Promote, and shall use its best efforts to prevent any third party (including its affiliates, resellers, distributors and Telecom Operators) from Actively Promoting Google Applications or any Google services except in those Territories in which such Google Applications or services are expressly authorized by Google in this Agreement. Specific information regarding Territories will be provided to Company after Company's acceptance of this Agreement.

3.4. **Placement Requirements.** Unless otherwise approved by Google in writing: (1) Company will preload all Google Applications approved in the applicable Territory or Territories on each Device; (2) Google Phone-top Search and the Android Market Client icon must be placed at least on the panel immediately adjacent to the Default Home Screen; (3) all other Google Applications will be placed no more than one level below the Phone Top; and (4) Google Phone-top Search must be set as the default search provider for all Web search access points on the Device. Notwithstanding the foregoing, there are no placement requirements for Optional Google Applications. For clarity, "Web search" shall not include data on the Device.

In addition, any exceptions to the requirements in this Section 3.4 granted before the Effective Date of this Agreement shall also be exceptions under this Agreement. The Devices listed on Exhibit B are also excepted from the requirements of this Section 3.4 as long as such Devices meet all the other requirements of this Agreement

and the placement requirements from the HTC - Google Mobile Application Distribution Agreement effective March 1, 2009. Any additional exceptions from the requirements of this Section 3.4 for Devices scheduled for release after the first quarter of 2011 will be considered by Google on a case by case basis.

3.5. **Distribution.** Company shall preload the Google Applications on the Devices so that, after preload, an icon representing each Google Application shall appear on the Device as specified in the above Placement Requirements. In addition:

(a) Preload by Company of a Google Application shall be limited to installation by Company of the Google Application, and shall not involve launch of the Google Application

(b) End User selection of an icon representing an already preloaded Google Application shall launch such Google Application.

3.6. **Support.** Company is solely responsible for customer care and support of its users. Google will provide support for Google Applications as made generally available to users of Google Applications.

3.7. **Branding.** Branding on the hardware of the Devices will be determined by Company, but shall not include any Google branding or Google Trademarks.

3.8. **Network Location Provider.** The following requirements apply to Network Location Provider:

(a) Company shall ensure Network Location Provider will be turned off by default.

(b) Company shall ensure that the appropriate prompts are displayed to the End User seeking the End User's consent to use Network Location Provider as provided by Google. Company shall not prevent the End User from providing consent prior to enabling Network Location Provider or any application making use of Network Location Provider.

(c) Company shall configure Network Location Provider to be the default network-based location provider on all Android Compatible Devices. Notwithstanding the foregoing, Company may be permitted to use an alternative network-based location provider for a specific Territory or Telecom Operator if the parties mutually agree and determine that Network Location Provider cannot be used due to inadequate data quality and coverage.

(d) Company will enable all features of Network Location Provider, including network-based location resolution, anonymous network location data collection, and reverse-geocoding.

3.9. **Google Legal Terms.** Company shall ensure that the appropriate Google Terms of Service, Privacy Policy and Legal Notices as provided by Google are available to the End User.

4. **General Requirements.**

4.1. **Payments.** Company and Google shall each retain any and all revenue generated from provision of their respective products or services. For the sake of clarity, except as expressly set forth in this Agreement, neither party shall be required to account to the other or otherwise make any payment to the other regarding the Applications, Google products or services, the Devices, the Service or any revenue generated therefrom.

4.2. **Reports.** Within thirty (30) days of the end of each calendar month during the Term, Company shall provide a written report of the total number of Devices distributed with a preloaded version of a Google Application during such calendar month (by Google Application, Territory and Device model within each Territory). These reports will be submitted to android-partner-support@google.com.

4.3. **Google Approval and Launch.** Company's distribution and implementation of the Google Applications shall be subject to Google's prior approval (not to be unreasonably withheld) to ensure adherence to the terms and conditions of this Agreement, including but not limited to the Google Mobile Branding Guidelines. Company shall not Launch any Device until it has obtained Google's approval as set forth in (a), (b) and (c) (as applicable) below:

(a) For the initial Launch of each Device model, Company will complete a Device Launch Addendum in the form set forth on Exhibit A. Google will review the Device Launch Addendum and will notify Company of any problems. Once the parties mutually agree on the Device Launch Addendum, the parties must sign the Device Launch

Addendum to make it effective. Company will: (1) no less than 30 days before the initial Launch, notify Google via email (or via a website provided by Google) of such Launch; (2) provide Device samples in accordance with Section 4.4(a) below; (3) submit a CTS Report for such Launch; and (4) submit the Device's final software build for such Launch.

(b) For any subsequent Launches of a Device model after the initial Launch of such Device model, including software changes for any new Telecom Operator in each new Territory or any software updates for any previously approved Launch, Company must obtain Google's written (which may be by way of email) approval (not to be unreasonably withheld) prior to Launch. Company will: (1) no less than 30 days before each Launch Date, notify Google via email (or via a website provided by Google) before each Launch; (2) submit a CTS Report for each Launch; and (3) if requested by Google, submit the Device's final software build for such Launch.

(c) Google must provide approval (as defined in Sections 4.3(a) or 4.3(b), as applicable) of the implementation of the Google Applications on the Device in writing before distribution of any Device and such Device must only be distributed in Territories and with Telecom Operators as approved by Google. Upon receipt of each such Google approval, Company will begin distribution and implementation in accordance with this Agreement (each a "Launch Date"). Company will provide contact information to facilitate Google's communication regarding approvals to Company. Company will provide written confirmation to Google of Launch promptly following each Launch Date. Company agrees that the restrictions, including restrictions against Active Promotion, set forth at the following web site (or other URL provided by Google and as updated by Google from time-to-time) shall apply to all Launches unless otherwise approved by Google in writing: https://sites.google.com/a/google.com/gms_distribution/geo-availability-of-google-applications. Company will provide a monthly report on shipment volumes and applicable Territories for each Device.

4.4. **Implementation Requirements.** The parties shall provide the materials and information listed below:

(a) Company shall deliver to Google no less than four (4) Device samples for each Device model for Google's approval as set out in Section 4.3 (Google Approval and Launch). Company shall use commercially reasonable efforts to provide such Devices at least 30 days prior to the Final Embed Date for each initial Launch of each Device model. Google may use such Devices to test the operation and presentation of relevant Google products, services and sites on the Device. Devices will be sent to a Google address to be provided by Google to Company.

(b) If at any time the Devices provided under this Section 4.4 are no longer capable of displaying the current implementation of relevant Google products, services or sites, Company will provide Google with replacement Devices as required.

(c) If at any time the software on the Devices as distributed to End Users changes the representation of Google products, services and sites, Company shall make available to Google the new software and / or Devices for approval.

(d) Company agrees to assist Google with ongoing testing of Devices and Android applications. Google may from time to time provide Company with Android-based applications and tests that should be run on Devices (which may represent families of Devices) on which such applications will be loaded to assure the operation and presentation of such application. Company will load such applications on Devices and run such test in a timely manner to help assess the operation and presentation of such applications and provide the test results to Google.

(e) Company shall configure the appropriate Client ID for each Device as provided by Google.

(f) Company shall provide all other information, equipment and/or assistance reasonably necessary to allow Google to deliver the Google Applications and make the Google Applications (including over-the-air updates thereto) available on the Service and the Devices.

4.5. **Over-the-Air Updates.** Google may auto-update Google Applications over-the-air at Google's discretion. Company shall not prevent such over-the-air auto-updates. In Google's sole discretion, Google may enable Company to provide Device builds to Google for distribution by Google to Devices via an over-the-air update. Company hereby grants Google a non-exclusive, worldwide, license to distribute the Device build during the Term. Nothing in this Agreement shall require Company to provide Device builds for Google to distribute and Google shall not be obligated to distribute such Device builds.

4.6. **Site Pages.** Company shall not, and shall not allow any third party to, redirect an End User away from, block access to, frame, or modify or change the look or feel of any web page or web site accessed via a Google Application, or place anything on or near any web site page that in any way implies that Google is responsible for the contents of such page.

4.7. **Data Collection and Reporting.** Each party's applicable privacy and security policies shall apply with respect to the user information collected by it. The parties will provide each other reasonable aggregate information about usage of the Devices during the Term, in order to help each party improve End User's experience with the Device, consistent with each party's privacy policies. Such information will not involve any personally identifiable information.

4.8. **Telecom Operator Customer Restrictions.** The parties acknowledge and agree that the placement and distribution obligations contained in Section 3.4 and Section 4.3 are subject to restrictions placed upon Company by its direct Telecom Operator customers. However, pursuant to Section 3.4 and Section 4.3, any such placement and distribution, including the appearance of Google Applications, shall be subject to Google's prior written approval, and shall adhere to the terms and conditions of this Agreement, including but not limited to the Google Mobile Branding Guidelines.

4.9. **No Connectivity Notice.** When an End User launches a Device's web browser or launches a Google Application and there is no data connectivity available, Company will not block, alter or prevent in any way the presentation of any message to such End User indicating lack of data connectivity.

4.10. **Points of Contact.** Each party shall each appoint a partner manager (the "**Partner Manager**") who shall be the point of contact for all issues concerning this Agreement. Company's primary communication with Google regarding this Agreement will be through email sent to android-partner-support@google.com.

5. **Term and Termination.**

5.1. **Term.** The term of this Agreement shall begin on the Effective Date and continue for a period of two (2) years after the Effective Date, unless earlier terminated as provided in this Agreement. This Agreement shall not renew unless specifically agreed by the parties in writing.

5.2. **Termination.** (a) Either party may suspend performance or terminate this Agreement if (i) the other party is in material breach of the Agreement and fails to cure that breach within thirty (30) days after written notice; or (ii) the other party ceases its business operations or becomes subject to insolvency proceedings and the proceedings are not dismissed within ninety (90) days. (b) Notwithstanding the foregoing, either party may terminate this Agreement immediately upon written notice upon a breach of Sections 2.1 to 2.2 (License Grant and Restrictions), Section 2.4(b)(iii) (opportunity to review and accept Google terms of service), Section 2.5 (Accurate Reproduction), Section 6.1 (Confidentiality) or Section 7 (Trademarks), or as set forth in Section 12.4 (Change of Control). (c) Notwithstanding anything to the contrary, in the event that the government or controlling body of any country or territory in which the Google Applications are distributed or made available imposes any law, restriction or regulation that makes it illegal to distribute or make available the Google Applications, or any portion thereof, into such country or territory, or if any such law, restriction or regulation places a substantial burden on Google, where substantial is measured with respect to Google's economic benefit under this Agreement, as determined by Google in its reasonable and good faith judgment (such substantial burden, a "**Substantial Burden**") then Google shall have the right to suspend the distribution and/or availability of such Google Applications in such country or territory until such time as such law, restriction or regulation is repealed or nullified or modified such that there it is no longer illegal or a Substantial Burden, as applicable, for the Google Applications to be distributed or made available in such country or territory ("**Special Suspension**").

5.3. **Effect of Termination.** Upon expiration or termination of this Agreement: (a) all rights and licenses granted hereunder shall immediately cease; (b) Company will immediately stop reproducing, offering or distributing the Google Applications; and (c) each Party shall return or destroy (and a duly appointed officer shall certify to such destruction) all copies of the Google Applications (in the case of Company) and any other Confidential Information in its possession which it is aware and to which it has access and is reasonably able to destroy or delete (which, for the avoidance of doubt, does not include archived backup copies which are not in live working use and which are no longer easily accessible or retrievable), including from all hard disks and memory. Neither party shall be

liable to the other for any damages resulting solely from termination of this Agreement as permitted for under this Agreement.

5.4. **Sell-Off Right.** Notwithstanding the provisions of Section 5.3 above, for a period of thirty (30) days following expiration or termination of this Agreement ("**Sell-Off Period**"), Company shall have the right to distribute in accordance with the terms and conditions of this Agreement all Google Application(s) actually preloaded on the Device inventory as of the date of expiration or termination of this Agreement ("**Inventory**"), and such party shall have the right to use the Google Trademarks in accordance with this Agreement in connection with such Inventory ("**Sell-Off Right**"); provided, however, that Company shall provide no less than thirty (30) days prior written notification to Google of its intent to exercise the Sell-Off Right ("**Sell-Off Right Notice**"). Notwithstanding anything to the contrary, the Sell-Off Right shall not apply in the event that either (a) Company does not provide the Sell-Off Right Notice as set forth above in this Section 5.4, or (b) this Agreement (or any right granted hereunder) is suspended or terminated by Google pursuant to Section 5.2 of this Agreement.

5.5. **Survival.** The provisions of Sections 1 (Definitions), 2.2 (License Grant Restrictions), 5.5 (Survival), 6.1 (Confidentiality), 8 (Proprietary Rights), 9.2 (Disclaimer), 10 (Limitation of Liability), 11 (Indemnification) and 12 (General) shall survive expiration or termination of this Agreement.

6. **Confidentiality and PR.**

6.1. **Confidentiality.** (a) Definition. "Confidential Information" is information disclosed by one party to the other party under this Agreement that is marked as confidential or would normally under the circumstances be considered confidential information of the disclosing party. Confidential Information does not include information that the recipient already knew, that becomes public through no fault of the recipient, that was independently developed by the recipient, or that was rightfully given to the recipient by another party. (b) Confidentiality Obligations. The recipient will not disclose the Confidential Information, except to affiliates, employees, and agents who need to know it and who have agreed in writing to keep it confidential. The recipient, its affiliates, employees, and agents may use Confidential Information only to exercise rights and fulfill obligations under this agreement, while using reasonable care to protect it. The recipient may also disclose Confidential Information when required by law after giving reasonable notice to discloser.

6.2. **Publicity.** Except as set forth in Section 2.7, neither party may make any public statement regarding the relationship contemplated by this Agreement without the other's prior written approval. Requests for marketing, press releases and other publicity issues should be made by submitting a request at http://services.google.com/permissions/application (and selecting the appropriate Android entry in the "Request Type" menu).

7. **Trademarks.**

7.1. **General.** Each party shall own all right, title and interest, including without limitation all Intellectual Property Rights, relating to its Trademarks. Some, but not all examples of Google Trademarks are located at: http://www.google.com/permissions/trademarks.html (or such other URLs Google may provide from time to time). Except to the limited extent expressly provided in this Agreement, neither party grants, and the other party shall not acquire, any right, title or interest (including, without limitation, any implied license) in or to any Trademarks of the first party; and all rights not expressly granted herein are deemed withheld. All use by Google of Company Trademarks (including any goodwill associated therewith) shall inure to the benefit of Company and all use by Company of Google Trademarks (including any goodwill associated therewith) shall inure to the benefit of Google. No party shall challenge or assist others to challenge the Trademarks of the other party (except to protect such party's rights with respect to its own Trademarks) or the registration thereof by the other party, nor shall either party attempt to register any Trademarks or domain names that are confusingly similar to those of the other party.

7.2. **License to Google Trademarks.** Subject to Google's written approval prior to each use of a Google Trademark and to the terms and conditions of this Agreement, Google grants to Company a limited, nonexclusive and nonsublicensable license during the Term to display those Google Trademarks expressly authorized for use in this Agreement, solely for the purposes expressly set forth herein. Notwithstanding anything to the contrary, Google may revoke the license granted herein to use Google's Trademarks upon providing Company with written notice thereof and a reasonable period of time to cease such usage. Furthermore, in its use of any Google Trademarks, Company agrees to adhere to the Google Mobile Branding Guidelines.

Company shall not, and shall not allow any third party to produce any consumer packaging or materials for the Device that identifies or suggests that Google is the manufacturer of the Device. In this regard, Company shall ensure that any Device packaging or user guide produced by the Company identifies Company as the manufacturer of the Device and provides contact details in the applicable Territories in which the Device is distributed.

7.3. **License to Company Trademarks.** Subject to the terms and conditions of this Agreement, Company grants to Google a limited, nonexclusive and nonsublicensable license during the Term to display those Company Trademarks expressly authorized for use in this Agreement, solely for the purposes expressly set forth herein. Notwithstanding anything to the contrary, Company may revoke the license granted herein to use Company's Trademarks upon providing Google with written notice thereof and a reasonable period of time to cease such usage.

8. **Proprietary Rights.** (a) Company acknowledges that, as between the parties, Google (and/or its licensors) retains all right, title and interest, including without limitation all rights in copyrights, trademarks, trade secrets, patents and know-how, in and to the Google Applications and the Google Trademarks. Company has, and shall acquire, no rights in the foregoing except those expressly granted by this Agreement. Google shall not be restricted from selling, licensing, modifying, or otherwise distributing the Google Applications and/or the Google Trademarks to any third party. (b) Google acknowledges that, as between the parties, Company (and/or its licensors) retains all right, title and interest, including without limitation all rights in copyrights, trademarks, trade secrets, patents and know-how, in and to the Devices and the Company Trademarks. Google has, and shall acquire, no rights in the foregoing except those expressly granted by this Agreement. Except as set forth in this Agreement, Company shall not be restricted from selling, licensing, modifying, or otherwise distributing the Devices and/or the Company Trademarks to any third party.

9. **Representations, Warranties and Disclaimer.**

9.1. **Representations and Warranties.** Each party represents and warrants to the other that it has full power and authority to enter into this Agreement, and that the execution and delivery of this Agreement, and the performance of its obligations hereunder, will not constitute a breach or default of or otherwise violate any agreement to which such party or any of its affiliates are a party. Company represents and warrants that it has and will maintain throughout the Term all rights, authorizations and licenses that are required with respect to the Devices, any materials provided by Company to be distributed by Google (including Company's Device builds) and any Company content or services, and that the Devices, materials provided by Company to Google, and the Company's content or services, and their use, distribution, sale and license, do and shall continue to comply with all applicable foreign, federal, state, and local laws, rules and regulations. Company represents and warrants that any materials provided by Company to be distributed by Google (including Company's Device builds) will comply with all applicable open source licensing requirements.

9.2. **Disclaimer.** OTHER THAN THE REPRESENTATIONS AND WARRANTIES CONTAINED IN SECTION 9.1, THE GOOGLE APPLICATIONS AND THE ANDROID PLATFORM ARE PROVIDED "AS IS" AND WITHOUT WARRANTY OF ANY KIND AND GOOGLE EXPRESSLY DISCLAIMS ANY AND ALL WARRANTIES, WHETHER EXPRESS, IMPLIED, STATUTORY OR OTHERWISE, INCLUDING WITHOUT LIMITATION WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. GOOGLE DOES NOT WARRANT THAT THE GOOGLE APPLICATIONS AND/OR ANY OTHER GOOGLE PRODUCTS OR SERVICES PROVIDED HEREUNDER WILL MEET ALL OF COMPANY'S REQUIREMENTS OR THAT PERFORMANCE OF SUCH SERVICES WILL BE UNINTERRUPTED, VIRUS-FREE, SECURE OR ERROR-FREE. OTHER THAN THE REPRESENTATIONS AND WARRANTIES CONTAINED IN SECTION 9.1, COMPANY MAKES NO WARRANTY OF ANY KIND TO GOOGLE WITH RESPECT TO THE DEVICES, AND EXPRESSLY DISCLAIMS ANY AND ALL WARRANTIES, WHETHER EXPRESS, IMPLIED, STATUTORY OR OTHERWISE, INCLUDING WITHOUT LIMITATION WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT.

10. **Limitation of Liability.**

10.1. **Limitations.** SUBJECT TO SECTION 10.2: (A) LIMITATION ON INDIRECT LIABILITY. NEITHER PARTY MAY BE HELD LIABLE UNDER THIS AGREEMENT FOR ANY DAMAGES OTHER THAN DIRECT DAMAGES, EVEN IF THE PARTY IS AWARE OR SHOULD KNOW THAT SUCH DAMAGES ARE POSSIBLE AND EVEN IF DIRECT DAMAGES DO NOT SATISFY A REMEDY. (B) LIMITATION ON AMOUNT OF LIABILITY. NEITHER

PARTY MAY BE HELD LIABLE UNDER THIS AGREEMENT FOR MORE THAN ONE HUNDRED THOUSAND U.S. DOLLARS ($100,000.00 USD).

10.2. **Exceptions to Limitations.** These limitations of liability do not apply to: (a) breaches of confidentiality obligations, violations of Intellectual Property Rights (including without limitation a breach of the license to use Trademarks under Section 7), indemnification obligations; or (b) breaches by COMPANY of Sections 2.1-2.2 (License Grant and Restrictions), Section 2.4(b)(iii) (opportunity to review and accept Google terms of service), or Section 2.5 (Accurate Reproduction).

10.3. **Allocation of Risk.** The parties agree that (a) the mutual agreements made in this Section 10 reflect a reasonable allocation of risk, and (b) that each party would not enter into the Agreement without these limitations on liability.

11. **Indemnification.**

11.1. **By Google.** Google will defend, or at its option settle, any third party lawsuit or proceeding brought against Company based upon or otherwise arising out of: (a) any breach or claimed breach of the first sentence of Section 9.1; or (b) any claim that the Google Applications or Google Trademarks infringe any copyright, trade secret or trademark of such third party. Notwithstanding the foregoing, in no event shall Google have any obligations or liability under this Section 11.1 arising from: (i) modifications of the Google Applications or the Google Trademarks by any party other than Google; and (ii) combination of the Google Applications or the Google Trademarks with any other software or products or any other materials. Google, in its sole and reasonable discretion, reserves the right to terminate Company's continued distribution of or access to the Google Applications or the Google Trademarks which are alleged or believed by Google to infringe the rights of a third party. Google shall have no obligations under this Section 11.1 regarding the Android platform or any third party products distributed through the Android Market.

11.2. **By Company.** Company will defend, or at its option settle, any third party lawsuit or proceeding brought against Google based upon or otherwise arising out of: (a) any breach or claimed breach of Section 9.1; (b) Company's or any third party's improper or unauthorized replication, packaging, marketing, distribution, or installation of the Google Applications, including without limitation claims based on representations, warranties, or misrepresentations made by Company; (c) any breach or claimed breach of Sections 2.4(b)(iii), Section 3.2 (Google Mail), or Section 3.3 (Actively Promote); (d) any claim that any Device (or application installed thereon other than the Google Applications), or any Company Trademark infringes any Intellectual Property Right; or (e) any third party claim arising out of or resulting from End User's use of any Device (or application installed thereon other than the Google Applications), including without limitation any actions or claims in product liability, tort, contract or equity.

11.3. **Conditions of Indemnification.** The party seeking indemnification must promptly notify the other party of the claim and cooperate with the other party in defending the claim. The indemnifying party has full control and authority over the defense, but the other party may join in the defense with its own counsel at its own expense. THE INDEMNITIES ABOVE ARE THE ONLY REMEDY UNDER THIS AGREEMENT FOR VIOLATION OF A THIRD PARTY'S INTELLECTUAL PROPERTY RIGHTS.

12. **General.**

12.1. **Notices.** All notices must be in writing and addressed to the attention of the other party's Legal Department and primary point of contact. Notice will be deemed given (a) when verified by written receipt if sent by personal courier, overnight courier, or mail; or (b) when verified by automated receipt or electronic logs if sent by facsimile or email.

12.2. **Force Majeure.** Neither party will be liable for inadequate performance to the extent caused by a condition (for example, natural disaster, act of war or terrorism, riot, labor condition, governmental action, and Internet disturbance) that was beyond the party's reasonable control.

12.3. **Assignment.** Neither party may assign or transfer any part of this Agreement without the written consent of the other party, except to an affiliate but only if (a) the assignee agrees in writing to be bound by the terms of this Agreement and (b) the assigning party remains liable for obligations under the Agreement. Any other attempt to transfer or assign is void.

12.4. **Change of Control.** Upon a change of control (for example, through a stock purchase or sale, merger, or other form of corporate transaction), (a) the party experiencing the change of control will provide written notice to the other party within 30 days after the change of control, and (b) the other party may immediately terminate this Agreement any time between the change of control and 30 days after it receives the written notice in subsection (a) of this Section 12.4.

12.5. **No Waiver; Severability; No Agency; No Third-Party Beneficiaries.** Failure to enforce any provision will not constitute a waiver. If any provision is found unenforceable, it and any related provisions will be interpreted to best accomplish the unenforceable provision's essential purpose. The parties are independent contractors, and this Agreement does not create an agency, partnership or joint venture. There are no third-party beneficiaries to this Agreement.

12.6. **Controlling Law.** This Agreement, and all matters arising out of or relating to this Agreement, shall be governed by the laws of the State of California and shall be deemed to be executed in Mountain View, California. Any legal action or proceeding relating to this Agreement shall be instituted in a state or federal court in Santa Clara County, California. Google and Company agree to submit to the jurisdiction of, and agree that venue is proper in, these courts in any such legal action or proceeding. Nothing in this Agreement will limit either party's ability to seek equitable relief.

12.7. **Entire Agreement; Amendments; Counterparts.** This Agreement is the parties' entire agreement relating to its subject and supersedes any prior or contemporaneous agreements on that subject. Any amendment must be in writing and expressly state that it is amending this Agreement. The parties may execute this Agreement in counterparts, including facsimile, PDF, and other electronic copies, which taken together will constitute one instrument.

IN WITNESS WHEREOF, the parties have executed this Agreement by persons duly authorized as of the Effective Date.

COMPANY: HTC CORPORATION

By [signature]

Name Fred Liu

Title President, Eng & Op

Date 12/28/10

GOOGLE INC.

By [signature]

Name VP

Title 1-3-11

Date

Legal Dept. KM Google

EXHIBIT A

FORM OF

DEVICE LAUNCH ADDENDUM #__

This Device Launch Addendum is entered under and subject to the Mobile Application Distribution Agreement effective **[INSERT DATE]** between **[INSERT COMPANY NAME]** (Company) and Google Inc. (Google) (the "MADA").

Upon execution of this Addendum, **[INSERT COMPANY NAME]** Google agree to the Launch the Device as set forth below. No Launch may proceed until the both parties confirm Terminal Acceptance in writing. All Launches are subject to the terms and conditions of the MADA.

Device	Device Specifications	Device Image *(optional)*

Initial Territory(ies)	Initial Telecom Operator(s)	Target Launch Date	Device Forecast for the Territory	Target Terminal Acceptance Date	List of Google Applications	Restrictions on Google Applications (e.g., No YouTube in China)	Google Trademark *(if any)*

Additional Terms (if any):

COMPANY: _____

_____
By

_____
Name

_____
Title

_____
Date

GOOGLE INC.

_____
By

_____
Name

_____
Title

_____
Date

Confidential
(Revd. 12/10)

EXHIBIT B

LIST OF DEVICES TO BE LAUNCHED IN Q1 2011

PURSUANT TO SECTION 3.4

Device	Device Specifications	Initial Telecom Territory & Operator	Target Launch Date
Speedy	3.6" WVGA Display, MSM7630 CPU, Slider Keyboard, EVDO Rev A + WiMax	US, Sprint	Jan 2011
Mecha	4.3" WVGA Display, MSM8655 + MDM9600 CPU, Bar Type, LTE + CDMA	US, Verizon	Jan 2011
Ace	4.3" WVGA Display, MSM8255, Bar Type, UMTS Tri-Band	US, AT&T	Feb2011
Vivo	4" WVGA Display, MSM8255 CPU, Bar Type, UMTS Tri-Band	EU, Voda	March 2011
Vivo#W	4" WVGA Display, MSM8655 CPU, Bar Type, CDMA + UMTS World Phone	US, Verizon	March 2011
Sega	3.7" WVGA Display, MSM8255 CPU, Bar Type, UMTS Tri-Band	EU, T-Mobile	March 2011
Marvel	3.2" HVGA Display, MSM7227 CPU, Bar Type, UMTS Tri-Band	EU, US HTC Channel, T-Mobile EU and T-Mobile US	March 2011
Flyer	7" 1024x600 Display, MSM8255 CPU, Tablet UMTS Tri-Band or Wifi only (CDMA version is called Express)	Global HTC Channel	March 2011
Express (Flayer CDMA version)	7" 1024x600 Display, MSM8655 CPU, Tablet EVDO Rev A + WiMax	US Sprint	March 2011
Pyramid	4.3" QHD Display, MSM8655 CPU, Bar Type, UMTS Tri-Band	Global HTC Channel	March 2011
Icon	3.4" HVGA Display, MSM7227 CPU, Bar Type, UMTS Tri-Band	Global, US HTC Channel (March or April), T-Mobile (April or May)	March/April 2011
ChaCha	2.6" HVGA Display, MSM7227 CPU, QWERTY Bar, UMTS Tri-Band	US, Global, US HTC Channel(March or April), T-Mobile (April or May)	March/April 2011