IN THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF COLUMBIA

| UNITED STATES OF AMERICA, STATE OF ARKANSAS, STATE OF CALIFORNIA, STATE OF FLORIDA, STATE OF GEORGIA, STATE OF INDIANA, COMMONWEALTH OF KENTUCKY, STATE OF LOUISIANA, STATE OF MICHIGAN, STATE OF MISSISSIPPI, STATE OF MISSOURI, STATE OF MONTANA, STATE OF MISSOURI, STATE OF MONTANA, STATE OF SOUTH CAROLINA, STATE OF TEXAS, AND STATE OF WISCONSIN Plaintiffs, | Case No. 1:20-cv-03010-APM HON. AMIT P. MEHTA |
|--|--|
| V. | |
| GOOGLE LLC, | |
| | |
| Defendant. | |
| STATE OF COLORADO, STATE OF NEBRASKA, STATE OF ARIZONA, STATE OF IOWA, STATE OF NEW YORK, STATE OF NORTH CAROLINA, STATE OF TENNESSEE, STATE OF UTAH, STATE OF ALASKA, STATE OF CONNECTICUT, STATE OF DELAWARE, DISTRICT OF COLUMBIA, TERRITORY OF GUAM, STATE OF HAWAII, STATE OF ILLINOIS, STATE OF KANSAS, STATE OF MAINE, STATE OF MARYLAND, COMMONWEALTH OF MASSACHUSETTS, STATE OF MINNESOTA, STATE OF NEVADA, STATE OF NEW HAMPSHIRE, STATE OF NEW JERSEY, STATE OF NEW MEXICO, STATE OF NORTH DAKOTA, STATE OF OHIO, STATE OF OKLAHOMA, STATE OF OREGON, COMMONWEALTH OF PENNSYLVANIA, COMMONWEALTH OF PUERTO RICO, STATE OF RHODE ISLAND, STATE OF SOUTH DAKOTA, STATE OF VERMONT, COMMONWEALTH OF VIRGINIA, STATE OF WASHINGTON, | Case No. 1:20-cv-03715-APM HON. AMIT P. MEHTA |

STATE OF WEST VIRGINIA, AND STATE OF WYOMING

Plaintiffs,

v.

GOOGLE LLC,

Defendant.

PLAINTIFFS' STATEMENT OF GENUINE ISSUES

TABLE OF CONTENTS

| INTR | ODUCTION |
|-------------------|--|
| | iffs' Responses to Defendant's Statement of Material Undisputed Facts in Support of Motion for Summary Judgment |
| I. | The Browser Default Agreements |
| A. | The Agreements with Apple7 |
| 1 2 3 B. | 2. Apple's Agreements with Google and Evaluations of Other Search Engines |
| | . Mozilla's Firefox Browser and Its Default Search Engine |
| 2 | |
| с. | The Agreements with Other Browser and Software Developers |
| | . The Agreements with Opera and UC Web |
| II. | The Agreements with Android Original Equipment Manufacturers and Wireless Carriers |
| A. | The Android Operating System and Android Agreements Generally 116 |
| В. | Android Compatibility Commitment (ACC) and Anti-Fragmentation Agreement (AFA) |
| C. | Mobile Application Distribution Agreement (MADA) 129 |
| D. | Revenue Share Agreements (RSA) |
| III. | Plaintiffs' Experts' Opinions Regarding the Agreements 154 |
| IV. | Plaintiffs' Additional Contentions Regarding the ACC and AFA 177 |
| A. | The Role of Compatibility in the Development of Android 177 |
| B. | AFAs, ACCs, and the Android Compatibility Definition Document 181 |
| C. | Amazon's Fire Phone |
| D. | Self-Certification of CDD Compliance |

Case 1:20-cv-03010-APM Document 544-1 Filed 03/13/23 Page 4 of 271

| V. | Agreements Relating to Google Assistant and Internet-of-Things Devices | |
|-----|--|-----|
| A. | Virtual Assistant Offerings | |
| B. | Uses of Virtual Assistants | |
| C. | Google's Third-Party Assistant Agreements | |
| VI. | The Development of Open-Source Applications | 224 |
| A. | The Role of Early AOSP Apps and Third-Party Alternatives | 225 |
| B. | The Evolution of AOSP Apps | 229 |

ABBREVIATIONS

| Colorado Plaintiffs | Plaintiffs in <i>State of Colorado v. Google. LLC</i> , No. 1:20-cv-03715- APM (D.D.C.): the States of Colorado, Nebraska, Arizona, Iowa, New York, North Carolina, Tennessee, Utah, Alaska, Connecticut, Delaware, Hawaii, Idaho, Illinois, Kansas, Maine, Maryland, Minnesota, Nevada, New Hampshire, New Jersey, New Mexico, North Dakota, Ohio, Oklahoma, Oregon, Rhode Island, South Dakota, Vermont, Washington, Virginia, and Wyoming; the Commonwealths of Massachusetts, Pennsylvania, Puerto Rico, and Virginia; the District of Columbia; and the Territory of Guam | |
|--|--|--|
| COMF | Plaintiffs' Counterstatement of Material Facts [in Opposition to Defendants' Motion for Summary Judgment] | |
| Def. Br. | Defendant's Memorandum of Points and Authorities in Support of Its Motion for Summary Judgment (ECF No. 422) | |
| Def. SMF | Defendants' Statement of Material Facts as to Which There Is No Genuine Issue in Support of Its Motion for Summary Judgment (ECF No. 423) | |
| Defendant or Google Defendant Google LLC | | |
| Plaintiffs | U.S. Plaintiffs and Colorado Plaintiffs | |
| SOGI | Plaintiffs' Statement of Genuine Issues [in Response to Defendants' Statement Of Material Facts As To Which There Is No Genuine Issue In Support of Its Motion For Summary Judgment] | |
| U.S. Plaintiffs | Plaintiffs in <i>United States v. Google. LLC</i> , No. 1:20-cv-03010-APM (D.D.C.): United States of America; the States of Arkansas, California, Florida, Georgia, Indiana, Louisiana, Michigan, Mississippi, Missouri, Montana, South Carolina, Texas, and Wisconsin; and the Commonwealth of Kentucky | |

INTRODUCTION

Plaintiffs respectfully submit this Statement of Genuine Issues, pursuant to Local Rule

7(h) of the U.S. District Court for the District of Columbia, in support of their opposition to

Defendant Google LLC's Motion for Summary Judgment (ECF No. 421). This document

contains Plaintiffs' response to each statement in Defendants' Statement of Undisputed Facts in

Case 1:20-cv-03010-APM Document 544-1 Filed 03/13/23 Page 6 of 271

Support of Its Motion for Summary Judgment (ECF No. 423) ("Google SMF").¹ Plaintiffs will set forth additional relevant material facts in a contemporaneously filed document.

I. Overarching Issues Relating To Google's Statement Of Undisputed Material Facts

First, there are often important discrepancies between (a) the statements contained in some of the paragraphs in Google's SMF and (b) the statements in Defendant's Memorandum of Points and Authorities in Support of Its Motion for Summary Judgment (ECF No. 422) ("Google SJ Brief") that those paragraphs in the Google SMF allegedly support. Some Statements in the Google SMF may be correct and correctly supported, but that Statement is then cited in the Google SJ Brief for a different or broader proposition that is disputed or is not supported by the Statement or the corresponding cites to the factual record. Plaintiffs' responses in this document only address Google's SMF, and Plaintiffs reserve the right to challenge all inconsistent factual statements in Google's SJ Brief. In some instances, to assist the Court, Plaintiffs have noted this discrepancy—for example, Plaintiffs' responses to Statements 15 and 206.

Second, Google's SMF frequently makes overarching, universal statements about the agreements they have entered into with browsers, original equipment manufacturers (OEMs), and other relevant parties while citing only one or two agreements over a limited period in support. For example, Google claims in Statement 61 that "Google and Apple have never entered an agreement that restricts Apple from integrating search engines other than Google into the Safari browser." However, in support, Google cites only

"see, e.g." disclaimer. *See* SMF 61 (citing Def. Ex. 7, ; Def. Ex. 16,

¹ Plaintiffs refer to individual paragraphs in Google's SMF as "Statement [XX]"

).² This is not an isolated error, but one repeated dozens of times in Google's SMF regarding its contracts with counterparties.

Google's reliance on example documents that do not cover the period of the Statement violates LCvR 7(h)'s requirement that Google "include references to the parts of the record relied on to support the statement," and runs counter to the D.C. Circuit's direction that the "moving party's statement specifies the material facts and directs the district judge and the opponent of summary judgment to the parts of the record which the movant believes support his statement" to adequately permit the opposing party the "opportunity to respond." *Gardels v. Cent. Intelligence Agency*, 637 F.2d 770, 773 (1980). For that reason, Statements containing this type of inadequate support should be limited to the period covered by the cited agreements and before any amendments to those agreements. Where relevant, Plaintiffs have identified these Statements in their individual narrative responses.

II. Plaintiffs Respond For Purposes Of This Motion Only

Any statements herein that a fact is disputed, undisputed, or disputed in part is made for purposes of this motion only, and should not bind Plaintiffs at trial or otherwise other than for purposes of this motion, nor limit Plaintiffs' proof at trial to the materials cited herein. *See* Fed. R. Civ. P. 56(g) & Advisory Committee's Note to 2010 Amendment (noting "a party's ability to accept a fact for purposes of the [summary judgment] motion only."); LcVR7(h) ("*In determining a motion for summary judgment*, the Court may assume that facts identified by the moving party in its statement of material facts are admitted, unless such a fact is controverted in

² Prof. Whinston's Initial Report identified

between Google and Apple, Pls. Ex. 22, Whinston (DOJ Pls.' Expert) Initial Report, App. E, tbl. E.1, and Plaintiffs identified agreements with Apple in its responses to Google's Interrogatory #1, which requested Plaintiffs identify the agreements they allege to have harmed competition.

Case 1:20-cv-03010-APM Document 544-1 Filed 03/13/23 Page 8 of 271

the statement of genuine issues filed in opposition to the motion.") (emphasis added); *Garcia v. Vill. Red Rest. Corp.*, 2018 U.S. Dist. LEXIS 26987, at *4 (S.D.N.Y. Feb. 15, 2018) ("By providing that a party may agree to a fact as undisputed for purposes of summary judgment 'only,' Rule 56 necessarily and implicitly recognizes that there can be instances where a party may later dispute a fact, such as at trial, that was not disputed on summary judgment.").

PLAINTIFFS' RESPONSES

Notes:

- Below, Plaintiffs repeat each of Google's Statements and then provide a response.
- Plaintiffs refer to individual paragraphs in Google's SMF as "Statement [XX]."
- Where a date or name has a leading asterisk (e.g., *Mar. 1969, *John Doe) that information was taken from the metadata produced with the exhibit or inferred from the contents of the document and the metadata.
- For the convenience of the Court Plaintiffs have included the headings that Google used in its SMF.

I. The Browser Default Agreements

A. The Agreements with Apple

1. Apple's Safari Browser and Safari's Default Search Engine

1. Apple released the first version of its Safari web browser to the public in 2003. *Apple Unveils Safari*, available at https://www.apple.com/newsroom/2003/01/07Apple-Unveils-Safari/ (Jan. 7, 2003) (Def. Ex. 1).

Undisputed.

2. Apple decided to make its Safari browser the preinstalled default browser on Apple computers and mobile devices, including the iPhone. Cue (Apple) Tr. 126:3-6 (Def. Ex. 2).

Undisputed.

3. Before releasing the first version of Safari in 2003, Apple decided that the browser's interface would include a built-in "search box" that enabled users to search the web by entering a query in the box, without having to first navigate to a search engine's website or install a search engine's browser extension. *Apple Unveils Safari*, available at https://www.apple.com/newsroom/2003/01/07Apple-Unveils-Safari/ (Jan. 7, 2003) (Def. Ex. 1); Cue (Apple) Tr. 23:13-24:15 (Def. Ex. 2).

Disputed in part.

Plaintiffs object to the term "search box" as vague and undefined and to Statement 3 as

(1) not supported by the cited material, as required by Federal Rule of Civil Procedure 56(c)(1)

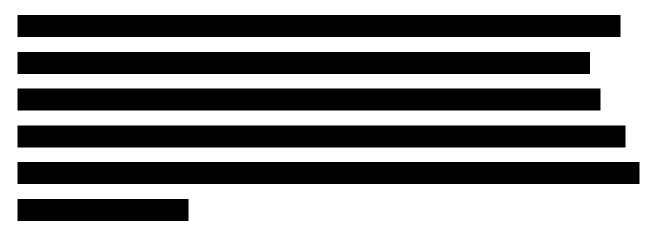
and Local Rule 7(h); (2) misstating Mr. Cue's testimony; and (3) incomplete as to

decision/negotiation dynamics in light of the ISA agreement between Google and Apple.

Case 1:20-cv-03010-APM Document 544-1 Filed 03/13/23 Page 10 of 271

Undisputed that the version of Safari that Apple released in 2003 included the ability for users to type a search query into a field in the browser's interface and receive Google search results for that query, without first navigating to google.com or installing a search engine browser extension.

Otherwise disputed. The testimony cited in Statement 3 refers to a feature allowing users to type a search query "in the same field that you type in th[e] URL," rather than a dedicated "search box." Pls. Ex. 25, Cue (Apple) Dep., 23:16–24. *See also* Pls. Ex. 152,



In addition, Apple's actions were influenced by its interactions with Google and the resulting agreement. *See* Def. Ex. 6,

4. Apple concluded that its Safari browser is more appealing to users if they are able to search the web by entering a query in a search box integrated with the browser's interface. Apple 30(b)(6) (Cue) Tr. 46:22-48:11 (Def. Ex. 3).

Disputed in part.

Plaintiffs object to the terms "appealing," "search box," and "integrated" as vague and undefined and to Statement 4 as (1) not supported by the cited material, as required by Federal Rule of Civil Procedure 56(c)(1) and Local Rule 7(h); (2) misstating Mr. Cue's testimony; (3) vague as to time; and (4) incomplete as to decision/negotiation dynamics in light of the ISA agreement between Google and Apple.

Case 1:20-cv-03010-APM Document 544-1 Filed 03/13/23 Page 11 of 271

Undisputed that Apple viewed the ability for users to type a search query into a field in the Safari browser's interface and receive search results for that query as "ha[ving] significant value to [Apple's users]." Pls. Ex. 25, Cue (Apple) Dep., 47:2–13.

Otherwise disputed. The testimony cited in Statement 4 refers to a feature allowing users to type a search query "in the same field that you type in th[e] URL," rather than a dedicated "search box." Pls. Ex. 25, Cue (Apple) Dep., 23:16–24. *See also* Pls. Ex. 152,

| In addition, Apple's actions were influenced by its interactions with Google and the |
|--|

resulting agreement. See Def. Ex. 6,

5. Apple decided before releasing the first version of Safari in 2003 that queries entered in the built-in search box should be routed to one search engine, without the user having to take any further action to select a search engine. Cue (Apple) Tr. 23:13-27:10 (Def. Ex. 2); Apple 30(b)(6) (Cue) Tr. 119:14-120:19 (Def. Ex. 3).

Disputed in part.

Plaintiffs object to the term "search box" as vague and undefined and to Statement 5 as

(1) not supported by the cited material, as required by Federal Rule of Civil Procedure 56(c)(1)

and Local Rule 7(h); (2) misstating Mr. Cue's testimony; and (3) incomplete as to

decision/negotiation dynamics in light of the ISA agreement between Google and Apple.

Case 1:20-cv-03010-APM Document 544-1 Filed 03/13/23 Page 12 of 271

Undisputed that in the version of Safari that Apple released in 2003, search queries entered into a field in the browser's interface were routed to one search engine, without the user having to take any further action to select a search engine.

Otherwise disputed. The testimony cited in Statement 5 refers to a feature allowing users to type a search query "in the same field that you type in th[e] URL," rather than a dedicated "search box." Pls. Ex. 25, Cue (Apple) Dep., 23:16–24. *See also* Pls. Ex. 152,

| In addition, Apple's actions were influenced by its interactions with Google and the |
|--|

resulting agreement. See Def. Ex. 6,

6. Apple concluded that its Safari browser is more appealing to users if the browser includes a default search engine to which queries entered in the built-in search box are automatically routed. Cue (Apple) Tr. 24:16-26:8 (Def. Ex. 2); Apple 30(b)(6) (Cue) Tr. 119:14-120:19 (Def. Ex. 3).

Disputed in part.

Plaintiffs object to the terms "search box," "appealing," and "default search engine" as

vague and undefined and to Statement 6 as (1) not supported by the cited material, as required by

Federal Rule of Civil Procedure 56(c)(1) and Local Rule 7(h); (2) misstating Mr. Cue's

testimony; (3) vague as to time and whether the referenced default search engine is preset or

Case 1:20-cv-03010-APM Document 544-1 Filed 03/13/23 Page 13 of 271

user-selected; and (4) incomplete as to decision/negotiation dynamics in light of the ISA agreement between Google and Apple.

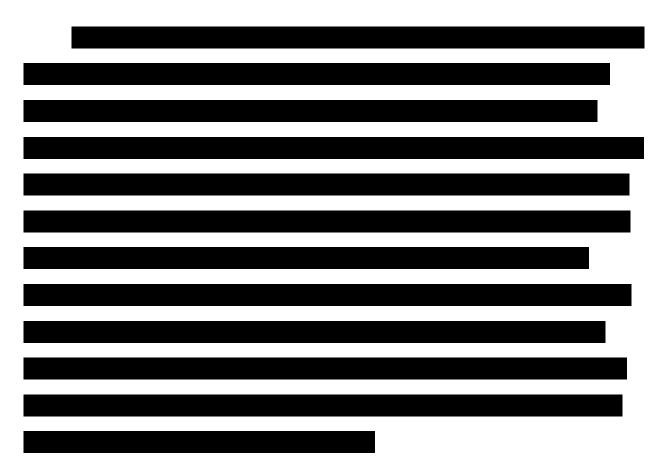
Undisputed that Apple viewed the ability for users to type a search query into a field in the Safari browser's interface and receive search results for that query as easy for users to use.

Otherwise disputed. The testimony cited in the Statement 6 refers to a feature allowing users to type a search query "in the same field that you type in th[e] URL," rather than a dedicated "search box." Pls. Ex. 25, Cue (Apple) Dep., 23:16–24. *See also* Pls. Ex. 152,

| In addition, Apple's actions were influenced by its interactions with Google and the |
|--|
| resulting agreement. See Def. Ex. 6, |
| |
| 7. |
| |
| |

Disputed.

Plaintiffs object to the Statement 7 as (1) vague as to time; (2) incomplete; and (3) as not supported by the cited material, as required by Federal Rule of Civil Procedure 56(c)(1) and Local Rule 7(h).



8. In determining which search engine to set as the default in Safari, the most important factor that Apple considers is which search engine will provide the highestquality results and experience for Apple's customers. Apple 30(b)(6) (Cue) Tr. 49:20-51:8, 67:2-25, 69:3-20, 88:5-12, 120:20-121:24 (Def. Ex. 3).

Disputed in part.

Plaintiffs object to the phrases "most important factor" and "highest-quality search results and experience for Apple's customers" as vague and undefined and to Statement 8 as (1) not supported by the cited material, as required by Federal Rule of Civil Procedure 56(c)(1) and Local Rule 7(h) and (2) misstating Mr. Cue's testimony.

Undisputed that Apple considers the quality of the search engine in determining which search engine to set as the default in Safari.

Otherwise disputed. Apple considers

See Pls. Ex. 25, Cue (Apple) Dep., 98:15–25

| <i>id.</i> at 217:9–2 | 218:11 (|
|--|------------------|
| | |
|); Pls. Ex. 3, Apple 30(b)(6) (Cue) Dep., 140:7–19 ("Q. At the | e bottom of that |
| paragraph, the final sentence reads, | |
| | What were you |
| recounting there for Mr. Cook? | |
| | |
| | |

9. Apple has determined that in the U.S. and a number of other countries, Google provides the highest-quality search results and experience for Apple's customers. Cue (Apple) Tr. 31:18-32:6, 35:12-36:20 (Def. Ex. 2).

Disputed in part.

Plaintiffs object to the phrase "highest-quality search results and experience for Apple's customers" as vague and undefined and to Statement 9 as (1) vague as to time and (2) not supported by the cited material, as required by Federal Rule of Civil Procedure 56(c)(1) and Local Rule 7(h).

Undisputed that the cited witness testified that, in **Constant of Constant of**

Otherwise disputed. The cited testimony relates to the **period**, and therefore any propositions derived from that testimony must be limited to that period. Pls. Ex. 25, Cue (Apple) Dep., 31:18–32:6, 35:12–36:20. Moreover, the cited testimony does not discuss the geographic area or types of devices to

which the alleged determination applied. Pls. Ex. 25, Cue (Apple) Dep., 31:18–32:6, 35:12–

36:20.

Pls. Ex. 4,

APLGOOGDOJ-01166675, at -681.

10. Apple has periodically evaluated whether to set a search engine other than Google as the default in Safari in the U.S. Cue (Apple) Tr. 31:8-32:6 (Def. Ex. 2); Giannandrea (Apple) Tr. 126:6-127:25, 206:24-209:10, 254:19-255:12 (Def. Ex. 5).

Undisputed

Plaintiffs object to the word "periodically" as vague and undefined.

11. Each time Apple has evaluated whether to set a search engine other than Google as the default in Safari in the U.S., it has determined that selecting another search engine as the default would be inconsistent with its objective of providing the highestquality results and experience for Apple's customers. Cue (Apple) Tr. 31:8-32:6, 35:12-36:20, 66:4-67:11 (Def. Ex. 2); Apple 30(b)(6) (Cue) Tr. 55:3-9, 67:2-25, 121:11-122:14, 146:22-147:18 (Def. Ex. 3); Giannandrea (Apple) Tr. 255:2-258:2 (Def. Ex. 5).

Disputed in part.

Plaintiffs object to the terms "evaluated," "default," and "highest quality-results and experience for Apple's customers" as vague and undefined and to Statement 11 as (1) not supported by the cited material, as required by Federal Rule of Civil Procedure 56(c)(1) and Local Rule 7(h); (2) misstating Mr. Cue's and Mr. Giannandrea's testimony; (3) vague as to time; and (4) incomplete as to decision/negotiation dynamics.

Undisputed that, at certain points in time, Apple has considered whether to set a search

engine other than Google as the default in Safari in the United States,

Case 1:20-cv-03010-APM Document 544-1 Filed 03/13/23 Page 17 of 271

and has decided to provide Google the default in exchange for the benefits in the ISA agreements.³

| Otherwise disputed. The cited testimony does not refer to "highest quality" or identify the |
|---|
| criteria on which such a determination would be based. |
| |
| . Pls. Ex. 3, Apple 30(b)(6) |
| (Cue) Dep., 42:04–42:23. |
| Moreover, the cited testimony is limited to discrete time periods and not specific to the |
| United States. See, e.g., Pls. Ex. 25, Cue (Apple) Dep., 217:9–218:11 (|
|); Pls. |
| Ex. 25, Cue (Apple) Dep., 31:8–32:6, 35:12–36:20, 66:4–67:11 (|
|); Pls. Ex. 155, Giannandrea (Apple) Dep., 255:2- |
| 258:2 (); <i>see also id.</i> at |
| 255:12-22 (responding in part, |
| |



Case 1:20-cv-03010-APM Document 544-1 Filed 03/13/23 Page 18 of 271

| |). The cited testimony at Pls. Ex. 3, Apple 30(b)(6) (Cue) Dep., 146:22–147:18 is in |
|----------|--|
| response | e to questions |
| | . See |
| Pls. Ex. | 3, Apple 30(b)(6) (Cue) Dep., 145:20–147:18 (discussing Pls. Ex. 4, |
| | , APLGOOGDOJ-01166675 (Apple 30(b)(6) (Cue) Ex. 10), at |
| -681). | |
| F | Finally, |
| | . See Pls. Ex. |

25, Cue (Apple) Dep., 217:9–218:11.

12. If Apple had determined that a search engine other than Google would have provided a better user experience for Apple's customers, then it would have pursued an agreement to make that search engine the default in Safari instead of Google. Apple 30(b)(6) (Cue) Tr. 49:12-51:11, 122:25-124:24 (Def. Ex. 3).

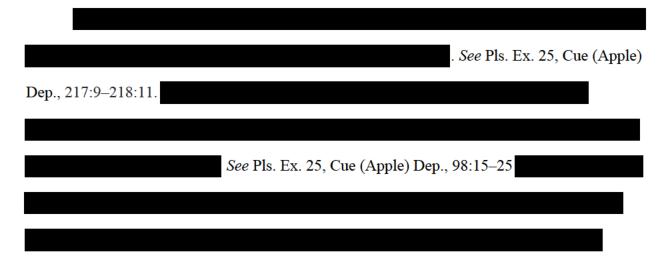
Disputed.

Plaintiffs object to Statement 12 as inherently speculative and therefore not properly

included in a Statement of Material Facts under Federal Rule of Civil Procedure 56(c)(1) or

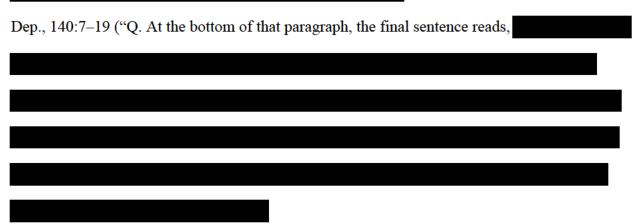
Local Rule 7(h). The cited testimony similarly consists of the witness's speculation as to what

would have happened under a general set of potential circumstances.



Case 1:20-cv-03010-APM Document 544-1 Filed 03/13/23 Page 19 of 271

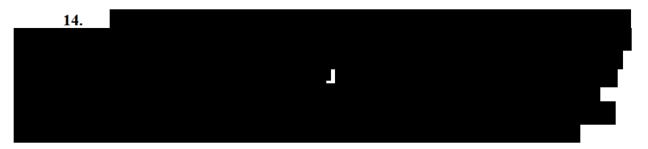
Pls. Ex. 3, Apple 30(b)(6) (Cue)



1. Apple's Agreements with Google and Evaluations of Other Search Engines



Undisputed.





Disputed in part.

Plaintiffs object to Statement 14 as not supported by the cited material, as required by

Federal Rule of Civil Procedure 56(c)(1) and Local Rule 7(h).

| 15. | |
|---|-------------------|
| | |
| | |
| Undisputed. | |
| Plaintiffs note that Statements 14 and 15 do not support the follow | ving statement in |
| | ving statement in |

Google's Memorandum of Law for which they are cited: "In 2005,

(Def. Br. at 8) (citing SMF ¶¶ 14–15) (emphasis added)).

Case 1:20-cv-03010-APM Document 544-1 Filed 03/13/23 Page 21 of 271

| Google's citation addresses only the substance of the contract terms, not their origin. |
|---|
| |
| |
| |
| |
| |
| Pls. Ex. 3, Apple 30(b)(6) (Cue) Dep., at 26:8–21). |
| |
| |
| |
| |
| 16. |
| |
| |
| Undisputed. 17. |
| |
| |

Undisputed.

18. In 2005, Safari accounted for an estimated 1.3% of worldwide browser usage. *Mozilla's browsers global usage share is 8.69 percent according to OneStat.com*, previously available at http://www.onestat.com/html/aboutus_pressbox37.html (Def. Ex. 8).

Undisputed.

19. In 2005, Microsoft's Internet Explorer was estimated to account for more than 80% of worldwide browser usage. Murphy (Google's Expert) Opening Rep. ¶ 174 Fig. 18 (Ex. 9); *Mozilla's browsers global usage share is 8.69 percent according to OneStat.com*, previously available at http://www.onestat.com/html/aboutus_pressbox37.html (Def. Ex. 8).

Undisputed.

20. Apple released the first version of its iPhone to the public in 2007. *Apple Reinvents the Phone with iPhone*, available at https://www.apple.com/newsroom/2007/01/09Apple-Reinvents-the-Phone-with-iPhone/ (Jan. 9, 2007).

Undisputed.



Disputed in Part.

Plaintiffs object to Statement 21 as (1) not supported by the cited material, as required by Federal Rule of Civil Procedure 56(c)(1) and Local Rule 7(h) and (2) incomplete as to the cited contract terms.

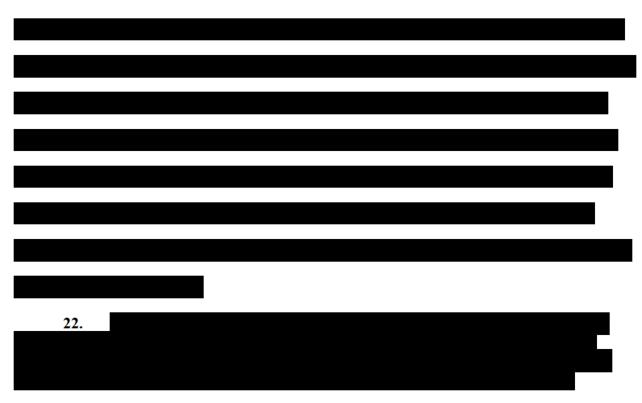
Undisputed that the referenced agreement contains terms that include the language

quoted in Statement 21.

Otherwise disputed. Statement 21 omits language



Case 1:20-cv-03010-APM Document 544-1 Filed 03/13/23 Page 23 of 271



Disputed in Part.

Plaintiffs object to Statement 22 as (1) not supported by the cited material, as required by Federal Rule of Civil Procedure 56(c)(1) and Local Rule 7(h) and (2) incomplete as to the cited contract terms.

Undisputed that the referenced agreement contains a term that includes the language quoted in Statement 21.

Otherwise disputed. Statement 22 omits language that Google added to the cited contract

terms to clarify that

Case 1:20-cv-03010-APM Document 544-1 Filed 03/13/23 Page 24 of 271

| 23. |
|--|
| |
| |
| Disputed in part. |
| Plaintiffs object to Statement 23 as incomplete. |
| |
| |
| |
| |
| |
| |
| |
| |
| |
| Disputed to the extent Statement 23's simplified characterization of |
| |
| |
| |
| 24 |
| 24. |
| |

| Case 1:20-cv-03010-APM | Document 544-1 | Filed 03/13/23 | Page 25 of 271 |
|------------------------|----------------|----------------|----------------|
|------------------------|----------------|----------------|----------------|

| Dispu | ited in part. |
|--------|--|
| Plaint | iffs object to Statement 25 as incomplete. |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| Dispu | tted to the extent Statement 24's simplified characterization of |
| | |
| | |
| | |
| 25. | |
| 23. | |
| | |
| | |
| Undis | sputed. |
| 26. | |
| | |
| | |
| Undis | sputed. |
| 27. | |
| 27. | |
| | |
| Undis | sputed. |

| 28. When Apple it believed that Google was the best search engine, that Google was continuing to improve, and that Apple's customers liked Google. Apple 30(b)(6) (Cue) Tr. 41:17-42:3 (Def. Ex. 3). |
|--|
| Disputed in part. |
| Plaintiffs object to Statement 28 as (1) incomplete and (2) misleading. |
| Undisputed that |
| |
| |
| Otherwise disputed. |
| |
| Pls. Ex. 3, Apple 30(b)(6) (Cue) Dep., 42:04-42:23. In addition, Statement 28 |
| suggests a causal relationship between and Google's quality, |
| improvement, and acceptability by consumers, but |
| |
| <i>Id.</i> at 39:2–41:16. |
| 29. |
| |
| |
| Undisputed. |
| 30. |
| |
| |
| Undisputed. |

31. Apple released the first version of its iPad to the public in 2010. *Apple Launches iPad*, available at https://www.apple.com/newsroom/2010/01/27Apple-Launches-iPad/ (Jan. 27, 2010).

| Undisputed. |
|------------------|
| 32. |
| |
| |
| Undisputed. |
| 33. |
| |
| |
| Undisputed. |
| 34. |
| J 1 . |
| |
| Undisputed. |
| 35. |
| |
| |
| Undisputed. |
| 36. |
| |
| |

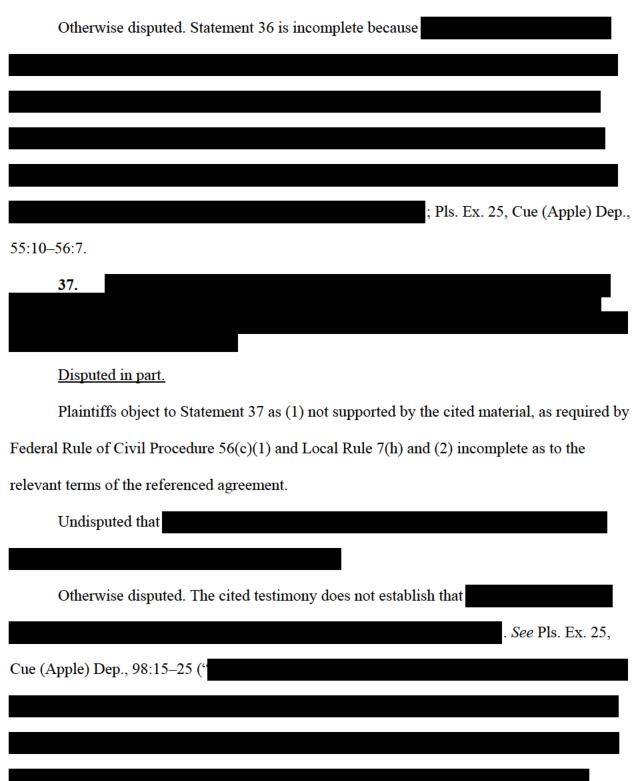
Disputed in part.

Plaintiffs object to Statement 36 as (1) not supported by the cited material, as required by Federal Rule of Civil Procedure 56(c)(1) and Local Rule 7(h) and (2) incomplete as to the cited contract terms.

Case 1:20-cv-03010-APM Document 544-1 Filed 03/13/23 Page 28 of 271

Undisputed that the referenced agreement contains a term that includes the language

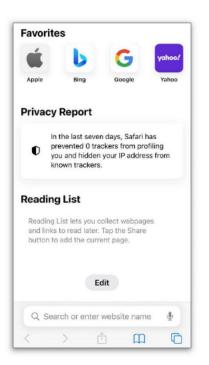
quoted in Statement 36.



Case 1:20-cv-03010-APM Document 544-1 Filed 03/13/23 Page 29 of 271

| Pls. Ex. 3, Apple 30(b)(6) (Cue) Dep., 140:7–19 ("Q. At the bottom of that | |
|--|-----|
| paragraph, the final sentence reads, | |
| | |
| | |
| | |
| In addition, Statement 37 is incomplete because | |
| | |
| | |
| | |
| ; Pls. Ex. 25, Cue (Apple) Dep |)., |
| 55:10–56:7. | |
| 38. | |
| | |
| Lindianutad | |
| Undisputed. 39. | |
| | |
| Undisputed. | |

40. When a new Apple user opens Safari for the first time, default bookmarks for Bing, Google, and Yahoo are each displayed with the same prominence in the Safari browser interface, as indicated in the following image from an iPhone. Cue (Apple) Tr. 237:22-241:9 (Def. Ex. 2).



Disputed.

Plaintiffs object to the phrases "new Apple user" and "for the first time" as vague, and to Statement 40 as (1) vague as to time; (2) not supported by the cited material, as required by Federal Rule of Civil Procedure 56(c)(1) and Local Rule 7(h); and (3) duplicative of Statement 80. Plaintiffs also object that Statement 40 purports to provide "an image from an iPhone," but does not identify the source of or any other information regarding the image, which appears nowhere in the document discussed in the cited testimony. *See* Pls. Ex. 183,), APLGOOGDOJ-00418307 (Cue Ex. 12)).

Disputed because users who start a new Apple device for the first time will often, if not always, see the bookmarks that existed on their other or previous Apple devices unless they are a first-time Apple user.

Case 1:20-cv-03010-APM Document 544-1 Filed 03/13/23 Page 31 of 271

| 41. |
|--|
| |
| |
| Undisputed. |
| 42. |
| Disputed in part. |
| Plaintiffs object to the terms |
| as vague and undefined and to Statement 42 as not |
| supported by the cited material, as required by Federal Rule of Civil Procedure 56(c)(1) and |
| Local Rule 7(h). |
| Undisputed that, in |
| |
| |
| |
| |

Case 1:20-cv-03010-APM Document 544-1 Filed 03/13/23 Page 32 of 271

| Pls. Ex |
|--|
| 25, Cue (Apple) Dep., 65:16-67:18. |
| Otherwise disputed, |
| |
| 43. |
| |
| Disputed in part. |
| Plaintiffs object to the phrases |
| as vague and undefined and to Statement 43 as (1) incomplete and (2) |
| misleading. |
| Undisputed that |
| |
| |
| Otherwise disputed. |
| |
| |
| See Pls. Ex. 25, Cue (Apple) Dep., |
| 98:15–25 (" |
| |
| |
| ; <i>id</i> . at |
| 217:9–218:11 |
|); Pls. Ex. 3, Apple 30(b)(6) (Cue) Dep., 140:7–19 |

| ("Q. At the bottom of that paragraph, the f | inal sentence reads, | |
|---|----------------------|--|
| | | |
| | | |
| | | |
| | | |
| | | |
|). | | |
| 44. | | |
| | | |
| | | |
| | | |
| | | |

Disputed in part.

Plaintiffs object to Statement 44 as (1) not supported by the cited material, as required by Federal Rule of Civil Procedure 56(c)(1) and Local Rule 7(h) and (2) incomplete as to the cited contract terms.

Undisputed that the referenced agreement contains a term that includes the language quoted in Statement 44.

Otherwise disputed. Statement 44





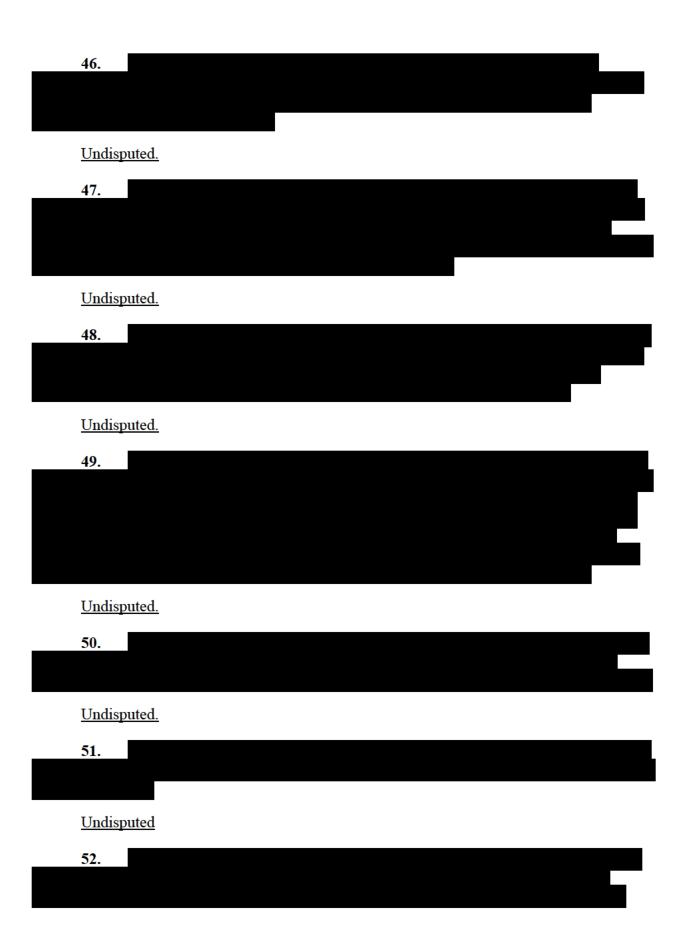
Disputed in part.

Plaintiffs object to Statement 45 as (1) not supported by the cited material, as required by Federal Rule of Civil Procedure 56(c)(1) and Local Rule 7(h) and (2) incomplete as to the cited contract terms.

Undisputed that the referenced agreement contains a term that includes the language quoted in Statement 45.

| Otherwise disputed. | |
|---------------------|--|
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |

Case 1:20-cv-03010-APM Document 544-1 Filed 03/13/23 Page 35 of 271



Case 1:20-cv-03010-APM Document 544-1 Filed 03/13/23 Page 36 of 271

| Undisputed. |
|---|
| 53. |
| |
| |
| Disputed in part. |
| Plaintiffs object to the phrase |
| vague and undefined and to Statement 53 as (1) not supported by the cited material, as required |
| by Federal Rule of Civil Procedure 56(c)(1) and Local Rule 7(h) and (2) incomplete. |
| Undisputed that |
| |
| |
| Otherwise disputed. |
| Otherwise disputed. |
| |
| |
| |
| 54. |
| |
| Undisputed. |
| Plaintiffs do not dispute Statement 54 but clarify that "in 2020 and 2021" |
| |
| |

Case 1:20-cv-03010-APM Document 544-1 Filed 03/13/23 Page 37 of 271

 55.

 Undisputed.

 56.

Disputed in part.

Plaintiffs object to Statement 56 as (1) not supported by the cited material, as required by Federal Rule of Civil Procedure 56(c)(1) and Local Rule 7(h) and (2) incomplete as to the cited contract terms.

Undisputed that the referenced agreement contains a term that includes the language quoted in Statement 56.

Otherwise disputed. Statement 56 omits language that provides for

57. The ISA and the amendments thereto have been negotiated at arms-length, with Google and Apple each making compromises to reach an agreement that the parties deem mutually beneficial. Cue (Apple) Tr. 99:2-100:12 (Ex. 2); Apple 30(b)(6) (Cue) Tr. 127:15- 128:9 (Def. Ex. 3).

Disputed.

Plaintiffs object to the phrase "arms-length" as misleading and to Statement 57 as (1)

incomplete and (2) misleading.

Case 1:20-cv-03010-APM Document 544-1 Filed 03/13/23 Page 38 of 271

| From August 29, 2006, to July 31, 2009, when | | Eric |
|--|------------|------|
| Schmidt was Google's CEO and sat on the boards of both Apple and Google. | | |
| | | |
| | | |
| | Pls. Ex. 1 | 14, |

Apple, Form 8-K (Aug. 31, 2006) (appointment of Eric Schmidt (CEO, Google) to the Board of Directors); Pls. Ex. 15, Apple, Schedule 14A, Proxy Statement & Notice of 2010 Annual Meeting of Shareholders (Dec. 23, 2009).

In addition, given their many interconnecting interests across their ecosystems, Apple wanted to work together with Google "as if we are one company." Pls. Ex. 269,

GOOG-DOJ-04830531, at -531.

Finally, Google's monopoly power has influenced the terms of the agreements between Google and Apple, enabling Google to capture a large share of the profits resulting from these agreements. Pls. Ex. 22, Whinston (DOJ Pls.' Expert) Initial Report, ¶¶ 563–576, § IV.C.2.a.i.



Disputed.

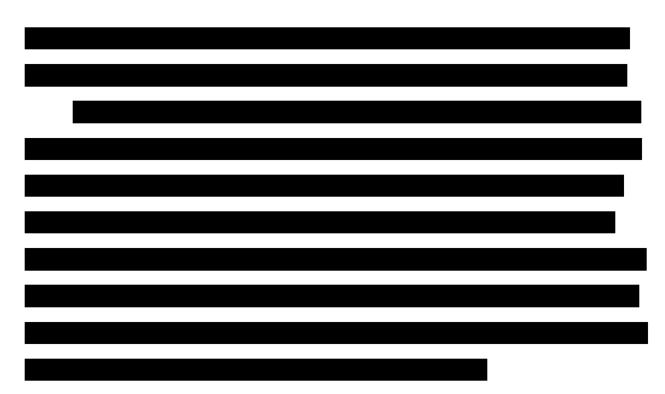
Plaintiffs object to Statement 59 as not supported by the cited material as required by Federal Rule of Civil Procedure 56(c)(1) and Local Rule 7(h).

Case 1:20-cv-03010-APM Document 544-1 Filed 03/13/23 Page 39 of 271

| <u>60.</u> |
|---|
| |
| Disputed |
| Plaintiffs object as not supported by the cited material as required by Federal Rule of |

| Civil Procedure | 56(c)(1) | and Local | Rule 7(h). |
|-----------------|----------|-----------|------------|
|-----------------|----------|-----------|------------|

Case 1:20-cv-03010-APM Document 544-1 Filed 03/13/23 Page 40 of 271



2. Apple's Promotion of Other Search Engines

61. Google and Apple have never entered an agreement that restricts Apple from integrating search engines other than Google into the Safari browser. *See, e.g.*,

Disputed.

Plaintiffs object to the terms "restricts" and "integrating" as vague and undefined; to Google's attempt to apply Statement 61 outside of the time period covered by the contracts it

cites; and to Statement 61 as (1) vague and (2) not supported by the cited material as required by

Federal Rule of Civil Procedure 56(c)(1) and Local Rule 7(h).

Google's current distribution agreement with Apple requires

Thus, Apple

users can query a rival search engine only by navigating to the rival's website (including via a

Case 1:20-cv-03010-APM Document 544-1 Filed 03/13/23 Page 41 of 271

bookmark) or by changing the default search engine in Safari's settings. Pls. Ex. 24, Whinston

(DOJ Pls.' Expert) Rebuttal Report, ¶ 412.

62. Google and Apple have never entered an agreement specifying which other search engines Apple may integrate into the Safari browser. See, e.g.,

Disputed.

Plaintiffs object to the terms "specifying" and "integrate" as vague and undefined and to

Statement 62 as not supported by the cited material as required by Federal Rule of Civil

Procedure 56(c)(1) and Local Rule 7(h) and to the extent Google seeks to apply Statement 62

beyond the terms of the agreements Google cites.

Google's current distribution agreement with Apple requires

Thus, Apple users can query a rival search engine only by navigating to the rival's website (including via a bookmark) or by changing the default search engine in Safari's settings. Pls. Ex. 24, Whinston (DOJ Pls.' Expert) Rebuttal Report, ¶ 412.

Case 1:20-cv-03010-APM Document 544-1 Filed 03/13/23 Page 42 of 271

63. As of 2022, Bing, Yahoo, DuckDuckGo, and Ecosia have been integrated into Safari in the U.S. Perica (Apple) Tr. 54:21-57:6 (Ex. 17); Cue (Apple) Tr. 122:15-24 (Def. Ex. 2).

Disputed.

Plaintiffs object to the term "integrated" as vague and undefined and to Statement 62 as incomplete.

By default, what Google refers to as the "integrat[ion]" of Bing, Yahoo, DuckDuckGo, and Ecosia into Safari is inaccessible within Safari on iOS. Pls. Ex. 23, Rangel (DOJ Pls.' Expert) Initial Report, ¶ 84 & Fig. 8. In order to experience this "integrat[ion]," the user must leave Safari, locate and open the Settings app, locate and select the Safari tab, select the Search Engine option, select the desired alternative search engine, and navigate back to the Safari app. Pls. Ex. 23, Rangel (DOJ Pls.' Expert) Initial Report, ¶ 84 & Fig. 8. Google itself views similar multi-step processes as significant obstancles to switching defaults in cases where it is not the default: "Firefox announced changes today to their search interface Previously, it was **two clicks** to change your default search engine. Now, it will be **five clicks**, which means more friction for users to switch back to Google." Pls. Ex. 310, Email from Hopkins (Google), Firefox Redesigns Its Search Interface Ahead Of Yahoo Switch (Dec. 1, 2014), GOOG-DOJ-03526001, at -001 (emphasis in original).

Users are highly unlikely to avail themselves of these options because they are not available by default. Pls. Ex. 23, Rangel (DOJ Pls.' Expert) Initial Report, ¶¶ 14–122, §§ II–VII; Pls. Ex. 22, Whinston (DOJ Pls.' Expert) Initial Report, ¶¶ 846–965, § VII.A.



Disputed.

Plaintiffs object to the term "integration" as vague and undefined and to Statement 64 as incomplete.

By default, what Google refers to as the "integrat[ion]" of Bing, Yahoo, DuckDuckGo, and Ecosia into Safari is inaccessible within Safari on iOS. Pls. Ex. 23, Rangel (DOJ Pls.' Expert) Initial Report, ¶ 84 & Fig. 8. In order to experience this "integrat[ion]," the user must leave Safari, locate and open the Settings app, locate and select the Safari tab, select the Search Engine option, select the desired alternative search engine, and navigate back to the Safari app. Pls. Ex. 23, Rangel (DOJ Pls.' Expert) Initial Report, ¶ 84 & Fig. 8. Google itself views similar multi-step processes as significant obstancles to switching defaults in cases where it is not the default: "Firefox announced changes today to their search interface Previously, it was **two clicks** to change your default search engine. Now, it will be **five clicks**, which means more friction for users to switch back to Google." Pls. Ex. 310, Email from Hopkins (Google), Firefox Redesigns Its Search Interface Ahead Of Yahoo Switch (Dec. 1, 2014), GOOG-DOJ-03526001, at -001.

Users are highly unlikely to avail themselves of these options because they are not available by default. Pls. Ex. 23, Rangel (DOJ Pls.' Expert) Initial Report, ¶¶ 14–122, §§ II–VII; Pls. Ex. 22, Whinston (DOJ Pls.' Expert) Initial Report, ¶¶ 846–965, § VII.A.



Disputed in part.

Plaintiffs object to Statement 65 as incomplete and misleading.

Undisputed that Apple and Microsoft signed an agreement that includes the term quoted in Statement 65.

Otherwise disputed. By default, what Google refers to as the "integrat[ion]" of Bing into Safari is inaccessible within Safari on iOS. Pls. Ex. 23, Rangel (DOJ Pls.' Expert) Initial Report, ¶ 84 & Fig. 8. In order to experience this "integrat[ion]," the user must leave Safari, locate and open the Settings app, locate and select the Safari tab, select the Search Engine option, select the desired alternative search engine, and navigate back to the Safari app. Pls. Ex. 23, Rangel (DOJ Pls.' Expert) Initial Report, ¶ 84 & Fig. 8. Google itself views similar multi-step processes as significant obstancles to switching defaults in cases where it is not the default: "Firefox announced changes today to their search interface Previously, it was **two clicks** to change your default search engine. Now, it will be **five clicks**, which means more friction for users to switch back to Google."

Users are highly unlikely to avail themselves of the option to use Bing because it is not available by default. Pls. Ex. 23, Rangel (DOJ Pls.' Expert) Initial Report, ¶¶ 14–122, §§ II–VII; Pls. Ex. 22, Whinston (DOJ Pls.' Expert) Initial Report, ¶¶ 846–965, § VII.A.



Case 1:20-cv-03010-APM Document 544-1 Filed 03/13/23 Page 45 of 271



Disputed.

Plaintiffs object to the term "integration" as vague and undefined and to Statement 68 as (1) incomplete, (2) time, and (3) not supported by the cited material as required by Federal Rule of Civil Procedure 56(c)(1) and Local Rule 7(h).

By default, what Google refers to as the "integrat[ion]" of Yahoo into Safari is inaccessible within Safari on iOS. Pls. Ex. 23, Rangel (DOJ Pls.' Expert) Initial Report, ¶ 84 & Fig. 8. In order to experience this "integrat[ion]," the user must leave Safari, locate and open the Settings app, locate and select the Safari tab, select the Search Engine option, select the desired alternative search engine, and navigate back to the Safari app. Pls. Ex. 23, Rangel (DOJ Pls.' Expert) Initial Report, ¶ 84 & Fig. 8. Google itself views similar multi-step processes as significant obstancles to switching defaults in cases where it is not the default: "Firefox announced changes today to their search interface Previously, it was **two clicks** to change your default search engine. Now, it will be **five clicks**, which means more friction for users to Pls. Ex. 310, Email from Hopkins (Google), Firefox Redesigns Its

Search Interface Ahead Of Yahoo Switch (Dec. 1, 2014), GOOG-DOJ-03526001, at -001.

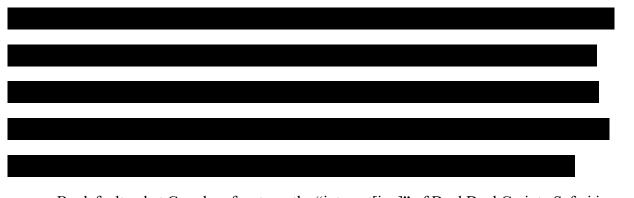
Users are highly unlikely to avail themselves of the option to use Yahoo because it is not available by default. Pls. Ex. 23, Rangel (DOJ Pls.' Expert) Initial Report, ¶¶ 14–122, §§ II–VII; Pls. Ex. 22, Whinston (DOJ Pls.' Expert) Initial Report, ¶¶ 846–965, § VII.A.

| 69. |
|---|
| |
| Undisputed. |
| 70. |
| |
| |
| |
| Disputed in part. |
| Plaintiffs object to Statement 70 as (1) incomplete and (2) misleading. |
| Undisputed that the cited document contains the quoted text. |
| Otherwise disputed. |

| 71. |
|---|
| |
| |
| |
| Disputed in part. |
| Plaintiffs object to Statement 70 as (1) incomplete and (2) misleading. |
| Undisputed that the cited document contains the quoted text. |
| Otherwise disputed. |
| omerwise uspared. |
| |
| 72. |
| |
| |
| Undisputed. |
| 73. |
| |
| Undisputed. |
| 74. |
| |
| |
| |
| Disputed. |

Case 1:20-cv-03010-APM Document 544-1 Filed 03/13/23 Page 48 of 271

Plaintiffs object to the term "integration" as vague and undefined and to Statement 74 as (1) incomplete; (2) vague as to time; and (3) not supported by the cited material as required by Federal Rule of Civil Procedure 56(c)(1) and Local Rule 7(h).



By default, what Google refers to as the "integrat[ion]" of DuckDuckGo into Safari is inaccessible within Safari on iOS. Pls. Ex. 23, Rangel (DOJ Pls.' Expert) Initial Report, ¶ 84 & Fig. 8. In order to experience this "integrat[ion]," the user must leave Safari, locate and open the Settings app, locate and select the Safari tab, select the Search Engine option, select the desired alternative search engine, and navigate back to the Safari app. Pls. Ex. 23, Rangel (DOJ Pls.' Expert) Initial Report, ¶ 84 & Fig. 8. Google itself views similar multi-step processes as significant obstancles to switching defaults in cases where it is not the default: "Firefox announced changes today to their search interface Previously, it was **two clicks** to change your default search engine. Now, it will be **five clicks**, which means more friction for users to switch back to Google." Pls. Ex. 310, Email from Hopkins (Google), Firefox Redesigns Its Search Interface Ahead Of Yahoo Switch (Dec. 1, 2014), GOOG-DOJ-03526001, at -001.

Users are highly unlikely to avail themselves of the option to use DuckDuckGo because it is not available by default. Pls. Ex. 23, Rangel (DOJ Pls.' Expert) Initial Report, ¶¶ 14–122, §§ II-VII; Pls. Ex. 22, Whinston (DOJ Pls.' Expert) Initial Report, ¶¶ 846–965, § VII.A.

46

| 75. |
|---|
| Disputed. |
| Plaintiffs object to the term "as vague and misleading and to Statement 75 as |
| (1) incomplete, and (2) not supported by the cited material as required by Federal Rule of Civil |
| Procedure 56(c)(1) and Local Rule 7(h). |
| The agreement between Apple and Ecosia creates no obligation for Apple to " |
| . Def. Ex. 28, |
| , APLGOOGDOJ-00013476, at |
| . Def. Ex. 28, |
| 2020 Apple-Ecosia Agreement (Oct. 9, 2020), APLGOOGDOJ-00013476, at |
| By default, what Google refers to as the "of Ecosia into Safari is |
| inaccessible within Safari on iOS. Pls. Ex. 23, Rangel (DOJ Pls.' Expert) Initial Report, ¶ 84 & |
| Fig. 8. In order to experience this the user must leave Safari, locate and open the |
| Settings app, locate and select the Safari tab, select the Search Engine option, select the desired |
| alternative search engine, and navigate back to the Safari app. Pls. Ex. 23, Rangel (DOJ Pls.' |
| Expert) Initial Report, ¶ 84 & Fig. 8. Google itself views similar multi-step processes as |
| significant obstancles to switching defaults in cases where it is not the default: "Firefox |
| announced changes today to their search interface Previously, it was two clicks to change |
| your default search engine. Now, it will be five clicks, which means more friction for users to |
| switch back to Google." Pls. Ex. 310, Email from Hopkins (Google), Firefox Redesigns Its |
| Search Interface Ahead Of Yahoo Switch (Dec. 1, 2014), GOOG-DOJ-03526001, at -001. |

Case 1:20-cv-03010-APM Document 544-1 Filed 03/13/23 Page 50 of 271

Users are highly unlikely to avail themselves of the option to use Ecosia because it is not available by default. Pls. Ex. 23, Rangel (DOJ Pls.' Expert) Initial Report, ¶¶ 14–122, §§ II-VII; Pls. Ex. 22, Whinston (DOJ Pls.' Expert) Initial Report, ¶¶ 846–965, § VII.A.

76. Google and Apple have never entered an agreement that restricts an end user from changing the search engine that receives queries entered in Safari's built-in search box. Cue (Apple) Tr. 108:19-109:7, 244:14-249:11 (Def. Ex. 2); see, e.g.,

Disputed in part.

Plaintiffs object to the terms "restricts" and "search box" as vague and undefined and to Statement 76 as (1) incomplete and (2) misleading.

Undisputed that there is no direct, express, written agreement between Google and Apple

to limit an end user from changing the search engine that receives queries entered in Safari.

Otherwise disputed. The ISA between Google and Apple creates financial incentives for

Apple to increase the number of search queries Apple sends to Google, and thereby affects

Apple's decision-making including with respect to product design. See Statement 11 response,

supra (); Pls. Ex. 173, Schindler (Google) Dep., 330:23-331:20 (

77. Google and Apple have never entered an agreement that restricts Apple from determining how many steps a user must take or which menus a user must navigate in order to change the search engine that receives queries entered in Safari's built-in search box. Cue (Apple) Tr. 108:19-109:7, 244:14-249:11 (Def. Ex. 2); see, e.g.,

Disputed in part.

Plaintiffs object to the terms "restricts" and "search box" as vague and undefined and to Statement 77 as vague and incomplete.

Case 1:20-cv-03010-APM Document 544-1 Filed 03/13/23 Page 51 of 271

Undisputed that there is no direct, express, written agreement between Google and Apple dictating the number of steps required of an end user to change the search engine that receives queries entered in Safari.

Otherwise disputed. The ISA between Google and Apple creates financial incentives for Apple to increase the number of search queries Apple sends to Google, and thereby affects Apple's decision-making including with respect to product design. *See* Statement 11 response,

supra (Google) Dep., 330:23-331:20 (

78. Google and Apple have never entered an agreement that restricts an end user from navigating to a search engine's website in the Safari browser by entering the applicable URL. Cue (Apple) Tr. 243:2-6 (Def. Ex. 2); see, e.g.,

Disputed in part.

supra (

Plaintiffs object to the term "restricts" as vague and undefined and to Statement 78 as vague and incomplete.

Undisputed that there is no direct, express, written agreement between Google and Apple that prevents an end user from navigating directly to a search engine's website in Safari by entering that search engine's URL.

Otherwise disputed. The ISA between Google and Apple creates financial incentives for Apple to increase the number of search queries Apple sends to Google, and thereby affects Apple's decision-making including with respect to product design. *See* Statement 11 response,

); Pls. Ex. 173, Schindler (Google) Dep., 330:23-331:20 (

79. Google and Apple have never entered an agreement that restricts Apple from including in the Safari browser a preset or default bookmark for a search engine other than Google that is displayed for the user upon first opening the Safari browser. Cue (Apple) Tr. 237:22-241:9 (Def. Ex. 2); see, e.g.,

Disputed in part.

).

Plaintiffs object to the term "restricts" as vague and undefined and to Statement 79 as vague and incomplete.

Undisputed that the agreement between Google and Apple does not prevent Apple from

displaying certain preset or default bookmarks in Safari, and that Apple displays a Google

bookmark and bookmarks to certain other search engines.

Otherwise disputed.

supra (

. Pls. Ex. 24, Whinston (DOJ Pls.' Expert) Rebuttal

Report, ¶¶ 412–413. Further, the ISA between Google and Apple creates financial incentives for

Apple to increase the number of search queries Apple sends to Google, and thereby affects

Apple's decision-making including with respect to product design. See Statement 11 response,

); Pls. Ex. 173, Schindler (Google) Dep., 330:23-331:20 (

80. Apple has included in the Safari browser a preset or default bookmark for each of Bing and Yahoo that is displayed to a new Apple user upon first opening the Safari browser. Cue (Apple) Tr. 220:3-221:20 (Def. Ex. 2); see, e.g.,

Disputed in part.

Case 1:20-cv-03010-APM Document 544-1 Filed 03/13/23 Page 53 of 271

Plaintiffs object to the term "new Apple user" as vague, and to Statement 80 as (1) incomplete and (2) duplicative of Statement 40.

Undisputed that when a person who has never owned an Apple device starts a new Apple device and opens the Safari browser for the first time, it displays a preset or default bookmark for each of Bing and Yahoo in additional to a Google bookmark.

Disputed as incomplete because bookmarks (1) require users to take additional steps to search as compared to the use of Google, (2) are no longer visible once a user visits any web page, and (3) carry over from one Apple device to the next. Pls. Ex. 24, Whinston (DOJ Pls.' Expert) Rebuttal Report, ¶ 413 ("While Apple places links to rival general search engines Bing and Yahoo in the 'Favorites' on the Safari homepage, Apple users cannot enter searches there, so use of rival search engines requires an extra step compared to use of [Google]. Moreover, the homepage and its bookmarks—unlike the address bar—are not visible while the user is surfing the web. And after the first use of Safari on a device, the homepage and its bookmarks are often not visible, even when the user opens Safari. As Apple's Senior Vice President of Services Eduardo Cue explained, '[T]ypically, . . . when you open Safari, it just goes to the last window you used[,]' meaning the last website the user visited." (quoting Pls. Ex. 25, Cue (Apple) Dep., 237:22–238:14);

See Pls. Ex. 25, Cue (Apple) Dep., 227:12-17

81. Google and Apple have never entered an agreement that restricts Apple from making any other search engine available in the Apple App Store. Cue (Apple) Tr. 243:7-13 (Def. Ex. 2); see, e.g.,

Undisputed.

Plaintiffs object to the term "restricts" as vague.

82. Google and Apple have never entered an agreement that restricts Apple from accepting payments from other search engines in exchange for promoting their search applications, search widgets, browsers, or other services in the Apple App Store. See, e.g.,

Disputed in part.

Plaintiffs object to the terms "restricts" and "promoting" as vague and undefined, and to

Statement 82 as vague and incomplete.

Undisputed that the ISA between Google and Apple permits Apple to accept payments

from search engines other than Google.

Otherwise disputed. The ISA between Google and Apple creates financial incentives for

Apple to increase the number of search queries Apple sends to Google, and thereby affects

Apple's decision-making including with respect to promotion and product design. See Statement

11 response, supra (); Pls. Ex. 173, Schindler (Google) Dep., 330:23–331:20

83. Google and Apple have never entered an agreement that restricts Apple from determining how many steps a user must take or which menus a user must navigate in order to download a search application, search widget, or browser to an Apple device. See, e.g.,

Disputed in part.

Plaintiffs object to the term "restricts" as vague and undefined, and to Statement 83 as vague and incomplete.

Undisputed that there is no direct, express, written agreement between Google and Apple dictating the number of steps required of an end user to download search applications, search widgets, or browsers to an Apple device.

Otherwise disputed. The ISA between Google and Apple creates financial incentives for

Apple to increase the number of search queries Apple sends to Google, and thereby affects

Apple's decision-making including with respect to product design. See Statement 11 response,

supra (); Pls. Ex. 173, Schindler (Google) Dep., 330:23-331:20 (

84. Google and Apple have never entered an agreement that restricts Apple from determining how many steps a user must take or which menus a user must navigate in order to change the default browser on an Apple device to a browser with a different default search engine, such as Microsoft's Edge Browser or DuckDuckGo's Privacy Browser. See, e.g.,

Disputed in part.

Case 1:20-cv-03010-APM Document 544-1 Filed 03/13/23 Page 56 of 271

Plaintiffs object to the term "restricts" as vague and undefined, and to Statement 84 as vague and incomplete.

Undisputed that there is no direct, express, written agreement between Google and Apple dictating the number of steps a user must take or which menus a user must navigate in order to change the default browser on an Apple device.

Otherwise disputed. The ISA between Google and Apple creates financial incentives for

Apple to increase the number of search queries Apple sends to Google, and thereby affects

Apple's decision-making including with respect to product design. See Statement 11 response,

supra (); Pls. Ex. 173, Schindler (Google) Dep., 330:23–331:20 (

85. In 2009, Microsoft released a Bing app for download from the Apple App Store. *Bing for mobile comes to the iPhone*, available at <u>https://blogs.bing.com/search/2009/12/15/bing-for-mobile-comes-to-the-iphone</u> (Dec. 15, 2009).

Undisputed.

86. Bing is the default search engine in Microsoft's Edge Browser, which can be downloaded from the Apple App Store. Microsoft Edge now available for iOS and Android (Updated), available at

https://blogs.windows.com/windowsexperience/2017/11/30/microsoft-edge-now-available-for-ios-and-android/ (Nov. 30, 2017).

Undisputed.

87. DuckDuckGo is the only search engine integrated into DuckDuckGo's Privacy Browser, which can be downloaded from the Apple App Store. Weinberg (DuckDuckGo) Tr. 217:24-218:24 (Def. Ex. 29).

Undisputed.

88. In some versions of the Microsoft Windows operating system, such as Windows 11 in S Mode, it is not possible for a user to change the default search engine

from Bing to Google in Microsoft's Edge Browser. Windows 10 and Windows 11 in S mode FAQ, available at https://support.microsoft.com/en-us/windows/windows-10-and-windows-11-in-s-mode-faq-851057d6-1ee9-b9e5-c30b-93baebeebc85#WindowsVersion=Windows 11.

Disputed.

Plaintiffs object to Statement 88 as (1) incomplete; (2) misleading; and (3) not supported

by the cited material as required by Federal Rule of Civil Procedure 56(c)(1) and Local Rule

7(h).

First, S Mode, as the name suggests, is a mode that the Windows 10 and 11 operating

systems can be set to; the mode itself can also be turned off. Pls. Ex. 26, Windows 10 and

Windows 11 in S Mode FAQ, Microsopft Support. So the user may change the default by

switching out of S Mode.

Second, the cited material discusses only Windows 10 and 11, no other edition of

Windows. Pls. Ex. 26, Windows 10 and Windows 11 in S Mode FAQ, Microsopft Support.

89. It is not possible for a user to change the default search engine from DuckDuckGo to Google in DuckDuckGo's Privacy Browser. Weinberg (DuckDuckGo) Tr. 217:24-218:24 (Def. Ex. 29).

Undisputed.

90. Google has marketed its Chrome browser to Apple device users since 2012, and it is available through the Apple App Store alongside other browsers such as Microsoft's Edge. Chrome & Apps @ Google I/O: Your web, everywhere, available at https://blog.google/products/chrome/chrome-apps-google-io-your-web/ (June 28, 2012); Whinston (DOJ Pls.' Expert) 214:20-215:4 (Def. Ex. 4).

Disputed in part.

Plaintiffs object to Statement 90 as misleading.

Undisputed that Google has marketed its Chrome browser to Apple users in some ways.

Otherwise disputed.

91. Google and Apple have never entered an agreement that requires Apple to make Safari the only preinstalled web browser on any Apple device. See, e.g.,

Disputed.

Plaintiffs object to Statement 91 as (1) incomplete and (2) misleading.

Apple's express policy is that it has not and will not preinstall third-party applications, including web browsers. Pls. Ex. 25, Cue (Apple) Dep., 118:15–18; Pls. Ex. 3, Apple 30(b)(6) (Cue) Dep., 90:21–24, 91:24–92:4, 92:15–22. Google was aware of this policy when it set the terms in the ISA; thus although the ISA Apple's policy was an understood term between the contracting parties.

Further, the ISA between Google and Apple creates financial incentives for Apple to increase the number of search queries Apple sends to Google, and thereby affects Apple's decision-making including with respect to product design. *See* Statement 11 response, supra

); Pls. Ex. 173, Schindler (Google) Dep., 330:23-331:20 (

92. Google and Apple have never entered an agreement that restricts Apple from preinstalling a search application or widget on the home screen or desktop of any Apple device. See, e.g.,

56

Disputed.

Plaintiffs object to the term "restricts" as vague and undefined and to Statement 92 as incomplete and misleading.

Apple's express policy is that it has not and will not preinstall third-party applications, including web browsers. Pls. Ex. 25, Cue (Apple) Dep., 118:15–18; Pls. Ex. 3, Apple 30(b)(6) (Cue) Dep., 90:21–24, 91:24–92:4, 92:15–22. Google was aware of this policy when it set the terms in the ISA; thus although the ISA does not for the terms in the ISA; thus although the ISA does not for the terms in the ISA; thus although the ISA does not for the terms in the ISA; thus although the ISA does not for the terms in the ISA; thus although the ISA does not for the terms in the ISA; thus although the ISA does not for the terms in the ISA; thus although the ISA does not for the terms in the ISA; thus although the ISA does not for the terms in the ISA; thus although the ISA does not for the terms in the ISA; thus although the ISA does not for the terms in the ISA; thus although the ISA does not for the terms in the ISA; thus although the ISA does not for the terms in the ISA; thus although the ISA does not for the terms in the ISA; thus although the ISA does not for the terms in the ISA; thus although the ISA does not for the terms in the ISA; thus although the ISA does not for the terms in the ISA; thus although the terms in the ISA; thus although the ISA does not for the terms in the ISA; the terms in the ISA does not for the terms in the ISA; the terms in the ISA does not for the terms in the ISA does not for the terms in the ISA does not for the terms in the terms in the ISA does not for the terms in terms in the terms in terms in terms in the terms in terms

Further, the ISA between Google and Apple creates financial incentives for Apple to increase the number of search queries Apple sends to Google, and thereby affects Apple's decision-making including with respect to product design. *See* Statement 11 response, supra

); Pls. Ex. 173, Schindler (Google) Dep., 330:23-331:20 (

93. Google and Apple have never entered an agreement that places a contractual cap or limit on the number of Apple customers who can use a search engine other than Google. See, e.g.,

Undisputed.

94. Google and Apple have never entered an agreement that authorizes Google to terminate the contract or alter the payment terms if a particular number of Apple customers use a rival search engine. See, e.g.,

Disputed.

Case 1:20-cv-03010-APM Document 544-1 Filed 03/13/23 Page 60 of 271

Plaintiffs object to the phrase "alter the payment terms" as vague and to Statement 94 as incomplete and misleading.

Otherwise disputed. Google and Apple's agreement is based on sharing revenue that Google gets from searches on Apple. If a particular number of Apple customers use a rival search engine, Google will make less money and pay Apple less money under the ISA.

95. Google and Apple have never entered an agreement that requires Apple to ensure that any particular volume of search traffic flows to Google. See, e.g.

Disputed in part.

Plaintiffs object to Statement 95 as incomplete and misleading.

Undisputed that there is no direct, express, written agreement between Google and Apple

dictating that any specific volume of search traffic must flow to Google.

Otherwise disputed. The ISA between Google and Apple creates financial incentives for

Apple to increase the number of search queries Apple sends to Google, and thereby affects

Apple's decision-making including with respect to product design. See Statement 11 response,

96. Google and Apple have never entered an agreement in which the revenue share percentage varied based on the amount of search traffic that flowed to search engines other than Google. See, e.g., Undisputed.

B. The Agreements with Mozilla

1. Mozilla's Firefox Browser and Its Default Search Engine

97. The Mozilla Foundation was established in 2003 as "a non-profit organization dedicated to preserving choice and promoting innovation on the Internet." Mozilla Foundation releases the highly anticipated Mozilla Firefox 1.0 web browser, available at https://blog.mozilla.org/press/2004/11/mozilla-foundation-releases-the-highly-anticipated-mozilla-firefox-1-0-web-browser/ (Nov. 9, 2004) (Def. Ex. 30).

Undisputed.

98. Mozilla released the first version of its Firefox web browser to the public in 2004. Mozilla Foundation releases the highly anticipated Mozilla Firefox 1.0 web browser, available at https://blog.mozilla.org/press/2004/11/mozilla-foundation-releases-the-highly-anticipated-mozilla-firefox-1-0-web-browser/ (Nov. 9, 2004) (Def. Ex. 30).

Undisputed.

99. Before releasing the first version of Firefox to the public, Mozilla decided that the browser's interface would include a built-in "search box" that enabled users to search the web by entering a query in the box, without having to first navigate to a search engine's website or install a search engine's browser extension. Mozilla Foundation releases the highly anticipated Mozilla Firefox 1.0 web browser, available at https://blog.mozilla.org/press/2004/11/mozilla-foundation-releases-the-highly-anticipated-mozilla-firefox-1-0-web-browser/ (Nov. 9, 2004) (Def. Ex. 30); Baker (Mozilla) Tr. 47:24-49:15 (Def. Ex. 31).

Undisputed.

Plaintiffs object to the term "search box" as vague and undefined.

100. Mozilla decided before releasing the first version of Firefox in 2004 that queries entered in the built-in search box should be routed to one search engine, without the user having to take any further action to select a search engine. Baker (Mozilla) Tr. 46:24-47:23, 51:20-54-16 (Def. Ex. 31).

Disputed in part.

Plaintiffs object to the term "search box" as vague and undefined and to Statement 100 as

(1) not supported by the cited material, as required by Federal Rule of Civil Procedure 56(c)(1)

Case 1:20-cv-03010-APM Document 544-1 Filed 03/13/23 Page 62 of 271

and Local Rule 7(h), (2) misstating Ms. Baker's testimony; (3) incomplete as to the decision to route to "one" search engine.

Undisputed that Ms. Baker testified that: "[S]omewhere early in the Firefox development cycle there was a search box. That's always been there. The search box used to be separate from the awesome (*sic*) bar, so the place of it has moved a little bit. That's changed." Pls. Ex. 28, Baker (Mozilla) Dep., 46:24-48:9.

Otherwise disputed. Ms. Baker explicitly did *not* say that Mozilla believed that queries should be routed to "one" search engine, but rather that "the existence of multiple search engines in the product has always been there" and "[i]t's right there in the UR and we reject exclusivity." *See* Pls. Ex. 28, Baker (Mozilla) Dep., 47:24–47:23.

101. Mozilla determined that the Firefox browser is more appealing to users if the browser includes a default search engine to which queries entered in the built-in search box are automatically routed. Baker (Mozilla) Tr. 46:24-49:11, 55:2-56:7 (Def. Ex. 31).

Disputed in part.

Plaintiffs object to the terms "more appealing," "search box," and "default search engine," as vague and undefined and to Statement 101 as (1) vague as to time; (2) vague as to whether the referenced default search engine is user-selected; and (3) not supported by the cited material, as required by Federal Rule of Civil Procedure 56(c)(1) and Local Rule 7(h).

Undisputed that Ms. Baker testified that "[y]ou want the browser to work when it starts" and that having a preset default search engine is not "at odds" with Mozilla's mission. Pls. Ex. 28, Baker (Mozilla) Dep., 46:24-47:23, 55:2–56:7.

Otherwise disputed. Ms. Baker's cited testimony did not address users generally, but addressed "many users" (i.e. not all users or even necessarily most users) and did not testify that a preset search engine is the only or even the most effective way of ensuring a browser "work[s] when it starts" or "is easy for people [to use]." Pls. Ex. 28, Baker (Mozilla) Dep., 46:24-47:23.

Case 1:20-cv-03010-APM Document 544-1 Filed 03/13/23 Page 63 of 271

Moreover, because Google's Chrome distribution tactics impede Mozilla's ability to distribute its browser through OEMs and carriers, Pls. Ex. 272, Mozilla presentation: Firefox Mobile Distribution (UNDATED), MOZ-002233 (Baker (Mozilla) Ex. 3), at -234

), -239

); Pls. Ex. 28, Baker (Mozilla) Dep., 185:1-5 (

), Ms. Baker's testimony necessarily related only to the actions of users after diverting from a device's default browser or search access point and downloading a Mozilla product. Ms. Baker's testimony thus related only to user conduct in the course of a limited and inefficient means of browser distribution. Pls. Ex. 28, Baker (Mozilla) Dep., 139:20–140:24 ("[M]erely having an app in the app store is a very difficult way to compete with the preloaded defaults. Q. And why is that? A. Because each person who gets that phone has to make a conscious decision and go through a lot of work to get your product.").

102. In designing and updating the Firefox browser, Mozilla has determined that multiple search engines should be integrated into the product and that users should be able to choose a different search engine if they wish to do so. Baker (Mozilla) Tr. 47:24-49:15, 55:2-56:7 (Def. Ex. 31).

Disputed in part.

Plaintiffs object to the term "integrated" as vague and undefined and to Statement 102 as (1) incomplete; (2) misleading; and (3) not supported by the cited material as required by Federal Rule of Civil Procedure 56(c)(1) and Local Rule 7(h). Google does not define "integrated into the product," leaving it unclear what "integration" Mozilla determined non-Google search engines would enjoy, and does not describe how or when users "should be able to choose a different search engine."

Case 1:20-cv-03010-APM Document 544-1 Filed 03/13/23 Page 64 of 271

Undisputed that Ms. Baker testified that Mozilla "reject[s] exclusivity," and "tr[ies] to make it easy for people to pick a different search engine if they want it." Pls. Ex. 28, Baker (Mozilla) Dep., 47:2-23.

Otherwise disputed. The RSA between Google and Mozilla creates financial incentives for Mozilla to support Google, including with respect to increasing the number of search queries Mozilla sends to Google, and thereby affects Mozilla's decision-making including with respect to product design. Pls. Ex. 28, Baker (Mozilla) Dep., 41:18-24 (estimating that " percent" of Mozilla's revenue comes from its revenue sharing agreement with Google), 47:2–23 ("if you [the user] make no other choice, you'll get the default [Google]"); *cf.* Pls. Ex. 173, Schindler (Google) Dep., 330:23–331:20 (). For example, Mozilla

Email from Bautista (Mozilla), Should we (Apr. 6, 2020), MOZ-LIT-

Pls. Ex. 234,

009028, at -028.

103. Mozilla has determined that the quality of the integrated search experience offered by the web browser is one of the most critical characteristics or features of the browser. Baker (Mozilla) Tr. 33:21-34:14 (Def. Ex. 31).

Disputed in part.

Plaintiffs object to the terms "integrated," "critical," and "integrated search experience"

as vague and undefined, and to Statement 103 as (1) vague; (2) incomplete; (3) misleading; (4)

misstating Ms. Baker's testimony; and (5) not supported by the cited material as required by

Federal Rule of Civil Procedure 56(c)(1) and Local Rule 7(h).

Case 1:20-cv-03010-APM Document 544-1 Filed 03/13/23 Page 65 of 271

Undisputed that Ms. Baker testified that: "We [Mozilla] have found the search experience in the browser to be fundamental to the browser" and that "the quality of the search experience, whether it works for your users" is either "fundamental" or "if it's not fundamental, it's one of the handful of things that are the most critical about a browser." Pls. Ex. 28, Baker (Mozilla) Dep., 33:20–34:13.

Otherwise disputed. Ms. Baker did not use the word "integrated" in the cited testimony, nor make mention of a "integrated search experience," rendering Statement 103 unsupported by its cited source and misleading, and the terms "integrated" and "integrated search experience" are vague and undefined, rendering Statement 103 vague and misleading.

| 104. |
|---|
| |
| Undisputed. |
| 105. |
| |
| Disputed in part |
| Disputed in part. |
| Plaintiffs object to the term |
| as vague and undefined and to Statement 105 as (1) incomplete; (2) vague as to |
| time; (3) vague as to the covered; and (4) misleading. |
| Undisputed that the quality of the search product and the user experience offered by |
| different search engines are, at certain times, among the factors Mozilla has considered when |
| deciding which search engine should be the preset default search engine in certain countries. |
| Otherwise disputed. Mozilla has also considered |
| |

| Pls. Ex. 29, Mozilla document: Strategic |
|--|
| Discussion Topic #1 - US Search Partnership (*July 2020), MOZ-002220, at -223; see also id. at |
| -223 |
|). |
| Mozilla has considered privacy, |
| |
| Pls. Ex. 28, Baker (Mozilla) Dep., 231:8–232:10; Pls. Ex. 273, Email from Petitt |
| (Mozilla), Re: A longer version from me not the main post (Nov. 17, 2014), MOZ-LIT- |
| 001312, at -313 |
| |
| |
| Mozilla has considered the impact of its partnership on innovation. Pls. Ex. 274, Email |
| from Baker (Mozilla), Re: Mozilla Board update #2 - Search deal (Nov. 8, 2014), MOZ-LIT- |
| 001091, at -093 (|
| |
| |
| |
| |
| Mozilla has also considered whether its partnership with |
| would foster a more competitive search ecosystem. Pls. Ex. 28, Baker (Mozilla) Dep., |
| 224:8–225:4 |
| |
| ; Pls. Ex. 243, Mozilla |

Case 1:20-cv-03010-APM Document 544-1 Filed 03/13/23 Page 67 of 271

document: Mozilla Opening Mediation Brief in *Yahoo v. Mozilla* (July 17, 2019), MOZ-LIT-000296, at -302

cf. Pls. Ex. 294, Mozilla, Spotlight: Too big tech?, Internet Health Report 2018 (Apr. 2018) ("If no search engine can ever challenge Google, and no local apps can ever gain a sustainable market share, the opportunity promised by a free and open Internet erode.").

| 106. | | | | | | |
|--------------|-----------|----------------|------------------------|-------------------|-----------------|----|
| | | | | | | |
| <u>Undis</u> | puted. | | | | | |
| | 2. | | Agreemer arch Engin | Google and Eval | luations of | |
| 107. | | | | | | |
| | | | | | | |
| <u>Undis</u> | puted. | | | | | |
| 108. | | | | | | |
| | | | | | | |
| Dispu | ted in pa | <u>art.</u> | | | | |
| Plaint | iffs obje | ct to the term | ı | as vague and to S | statement 108 a | IS |

incomplete and misleading.

Undisputed that Mozilla determined in 2004 that Google offered the highest quality search experience available at that time, and that Mozilla decided that setting Google as the default search engine would be the best option for Mozilla and its customers.

Case 1:20-cv-03010-APM Document 544-1 Filed 03/13/23 Page 68 of 271

Disputed to the extent this suggests that these were the only considerations. The decision was based, in part, on payments and donations Mozilla was receiving from Google that allowed Mozilla to stay in business; in the deposition testimony cited by Google, Mozilla's CEO testified their decision to go with Google in 2001 was "better for [Mozilla] in a number of different ways," Pls. Ex. 28, Baker (Mozilla) Dep., 52:4-53:3, and Mozilla at the time was offered a revenue share by Google. 109. Undisputed. 110.

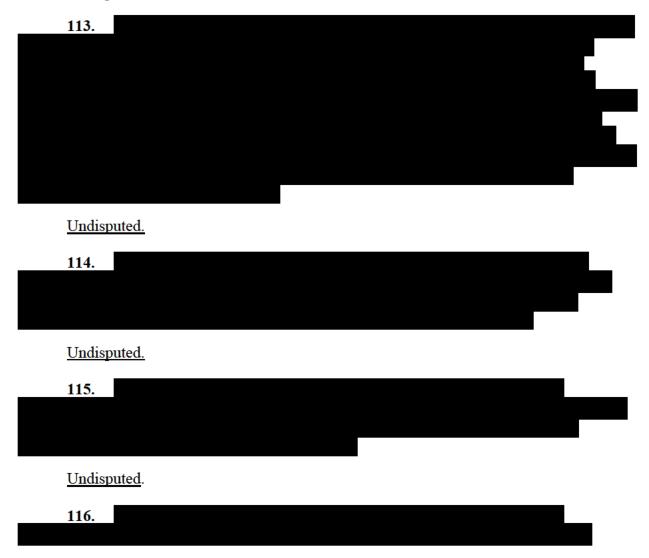


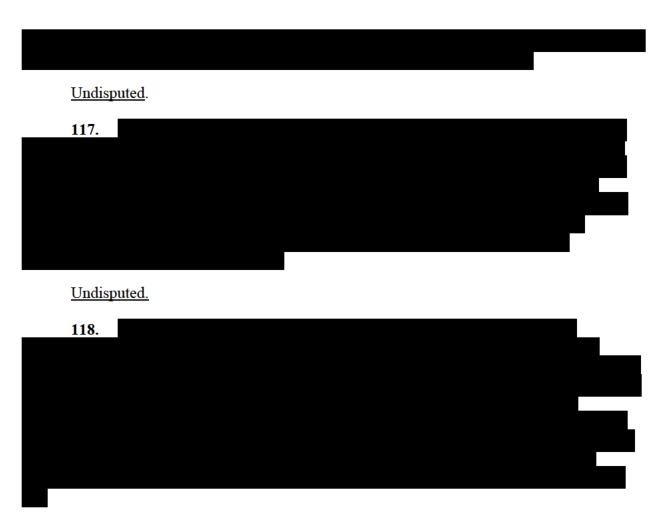
| <u>Undisputed.</u> | - | |
|--------------------|---|--|
| 111. | | |
| | | |

Undisputed.

112. In 2004, Microsoft's Internet Explorer was estimated to account for approximately 90% of worldwide browser usage on desktop computers. Murphy (Google's Expert) Opening Rep. ¶ 174 Fig. 18 (Def. Ex. 9).

Undisputed.

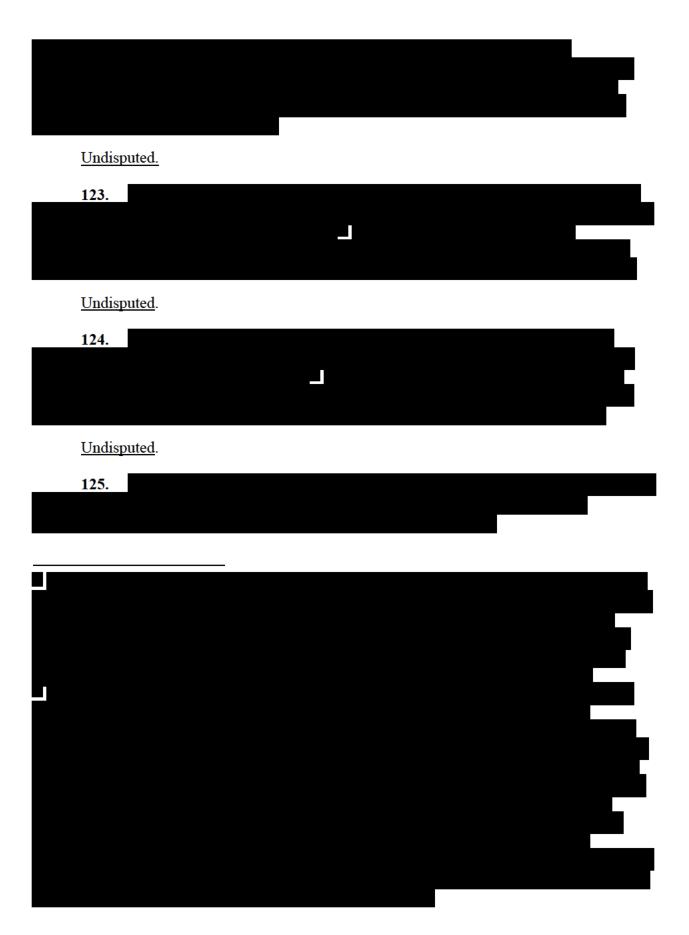




Undisputed. 119. Between 2009 and 2011, Firefox was the second most widely used browser in the U.S., with an estimated 20% or more of browser usage share in the U.S. during that period. Murphy (Google's Expert) Opening Rep. ¶ 282 Fig. 23 (Def. Ex. 9).

<u>Undisputed.</u> 120. Between 2009 and 2011, Microsoft's Internet Explorer remained the most widely used browser in the U.S. Murphy Opening Rep. ¶ 282 Fig. 23 (Def. Ex. 9).





Undisputed.

126. Mozilla decided in 2014 that it would set Yahoo, rather than Google, as the default search engine in the Firefox browser in the U.S. Baker (Mozilla) Tr. 69:22-70:3 (Def. Ex. 31).

Undisputed.

| 127. | |
|------|--|
| | |
| | |
| | |
| | |
| | |

Disputed in part.

Plaintiffs obect to Statement 127 as incomplete and misleading, and not supported by the

cited material as required by Federal Rule of Civil Procedure 56(c)(1) and Local Rule 7(h).

Undisputed that Ms. Baker, CEO of Mozilla, testified that in 2014 Mozilla "selected

Yahoo! for Pls. Ex. 28, Baker (Mozilla) Dep., 70:10-22. Otherwise disputed. See Pls. Ex. 28, Baker (Mozilla) Dep., 70:10-72:20 (saying nothing about how "Yahoo did not have its own competing browser"). Mozilla also selected Yahoo! over Google because of Pls. Ex. 28, Baker (Mozilla) Dep., 68:12–17

; Pls. Ex. 274, Email from Baker (Mozilla), Re: Mozilla Board update #2 -

Search deal (Nov. 8, 2014), MOZ-LIT-001091, at -092

Pls. Ex. 28, Baker (Mozilla) Dep., 231:8-232:10; Pls. Ex. 273, Email

from Petitt (Mozilla), Re: A longer version from me -- not the main post (Nov. 17, 2014), MOZ-

LIT-001312, at -313

Pls. Ex. 274, Email from Baker (Mozilla), Re: Mozilla Board update #2 - Search deal (Nov. 8,

| 2014), MOZ-LIT-001091, at -093 (| |
|---|--|
| | |
| | |
| | |
| | |
| | |
| | |
| | Pls. Ex. 28, Baker (Mozilla) Dep., |
| 224:8-225:4 | |
| | |
| | |
| | Pls. Ex. 243, |
| Mozilla document: Mozilla Opening Mediation Bri | ef in Yahoo v. Mozilla (July 17, 2019), MOZ- |
| LIT-000296, at -302 | |

128. By 2014 Google's Chrome browser, which was released in 2008, was estimated to have approximately the same share of browser usage on desktop computers in the U.S. as Microsoft's Internet Explorer browser. Murphy (Google's Expert) Opening Rep. ¶ 199 Fig. 19 (Def. Ex. 9).

Undisputed.

129. Firefox was estimated to be the fourth most widely used browser in the U.S. in 2014, behind Chrome, Safari, and Internet Explorer. Murphy (Google's Expert) Opening Rep. ¶ 282 Fig. 23 (Def. Ex. 9).

| Undisputed. | | |
|-------------|--|--|
| 130. | | |
| | | |
| | | |
| | | |
| | | |
| Undisputed. | | |
| 131. | | |
| | | |
| Undisputed. | | |

132. Mozilla announced to the public in November 2014 that Yahoo would be the default search engine in Firefox in the U.S., and Mozilla switched the default search engine from Google to Yahoo for Firefox users in the U.S. beginning with the release of Firefox



version 34 in December 2014. Yahoo and Mozilla Form Strategic Partnership, available at https://blog.mozilla.org/press/2014/11/yahoo-and-mozilla-form-strategic-partnership/ (Nov. 19, 2014); Firefox Release Notes for Release 34.0.5, available at https://www.mozilla.org/en-US/firefox/34.0.5/releasenotes/ (Dec. 1, 2014).

| Undisputed. |
|--|
| 133. |
| Undisputed. |
| 134. |
| Undisputed. |
| 135. |
| Undisputed. |
| 136. |
| Undisputed. |
| 137. |
| Disputed in part. |
| Plaintiffs object to Statement 137 as not supported by the cited material as required by |
| Federal Rule of Civil Procedure 56(c)(1) and Local Rule 7(h). |
| Undisputed that " |

Pls. Ex. 28, Baker (Mozilla) Dep., 77:18-79:14.

Case 1:20-cv-03010-APM Document 544-1 Filed 03/13/23 Page 76 of 271

| Otherwise disputed. See Pls. Ex. 28, Baker (Mozilla) Dep., 77:18-79:14 |
|---|
| |
| |
| 138. |
| Directed in cost |
| Disputed in part. |
| Plaintiffs object to the term as vague and undefined and to Statement 138 as |
| (1) incomplete; (2) misleading; (3) and misstating Ms. Baker's testimony. |
| Undisputed that the time period that Yahoo was the preset default search engine in |
| Chrome was subsumed within a broader period when Chrome share increased and Firefox share |
| decreased. |
| Otherwise disputed. Statement 137 is misleading and incomplete because the witness |
| proffering the cited testimony |
| |
| |
| |
| |
| Pls. Ex. 28, Baker (Mozilla) Dep., 76:10-11. |
| 139. |
| |
| |
| Disputed in Part. |
| Plaintiffs object to Statement 139 as incomplete and misleading. |

Case 1:20-cv-03010-APM Document 544-1 Filed 03/13/23 Page 77 of 271

| 140. |
|---|
| Disputed in Part. |
| Plaintiffs object to Statement 140 as (1) incomplete; and (2) misleading. |
| |
| |
| |
| |
| |
| |
| |

141.

Disputed in part.

Plaintiffs object to statement 146 as incomplete.

Undisputed that Ms. Baker testified that "[w]hat our users want" and "[w]hat's the nature of the relationship with the search provider" were two of the factors that Mozilla considered in the process to select a different default search engine. Pls. Ex. 28, Baker (Mozilla) Dep., 79:18–

80:6.

Otherwise disputed. Ms. Baker did not testify that these were the only factors. In fact,

| Mozilla considered | |
|--------------------------------|---|
| | |
| | Pls. Ex. 29, Mozilla document: Strategic Discussion Topic |
| #1 - US Search Partnership (*. | uly 2020), MOZ-002220, at -222. |

| 142. | | |
|------|--|--|
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

Disputed in part.

Plaintiffs object to the terms "default" and "default search engine" as vague and objection to Statement 142 as (1) incomplete and (2) misleading.

Undisputed that Ms. Baker testified that Mozilla entered into an agreement to set Google as the default search engine in Firefox in exchange for a revenue share because when Mozilla's users "get Google Search results and Google as the default, that's what they expect, and they're

Case 1:20-cv-03010-APM Document 544-1 Filed 03/13/23 Page 79 of 271

happy" and because Mozilla was able to reach an agreement with Google. Pls. Ex. 28, Baker (Mozilla) Dep., 80:19–24.

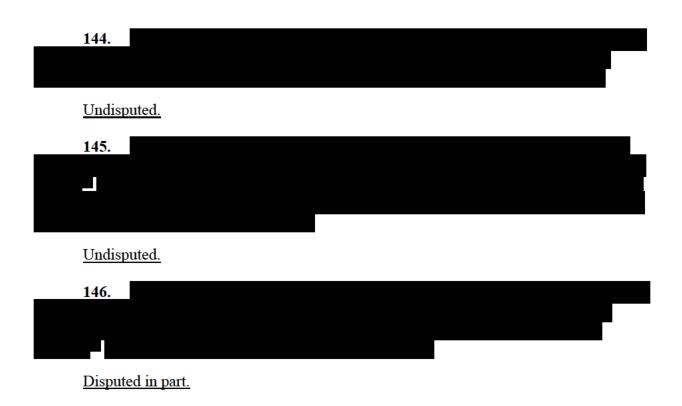
Otherwise disputed. Mozilla also chose Google because Mozilla chose to put a higher premium on as compared to "Pls. Ex. 29, Mozilla document: Strategic and " Discussion Topic #1 - US Search Partnership (*July 2020), MOZ-002220, at -223. Mozilla had previously identified " as a ' " strategic consideration. Pls. Ex. 157, Mozilla presentation: Firefox, Strategic Development: Search Negotiations (July 2014), MOZ-LIT-000710, at 10. Moreover, as Plaintiffs' expert Prof. Whinston notes, any quality or user experience differential between Google and Yahoo was in large part the result of Google's search distribution contracts. Pls. Ex. 24, Whinston (DOJ Pls.' Expert) Rebuttal Report, ¶ 426 ("Prof. Murphy describes evidence that somewhat selectively, but the overall point he makes is correct. However, as elsewhere, he neglects to note that this quality difference is also in large part the result of Google's search distribution contracts, which over many years have denied

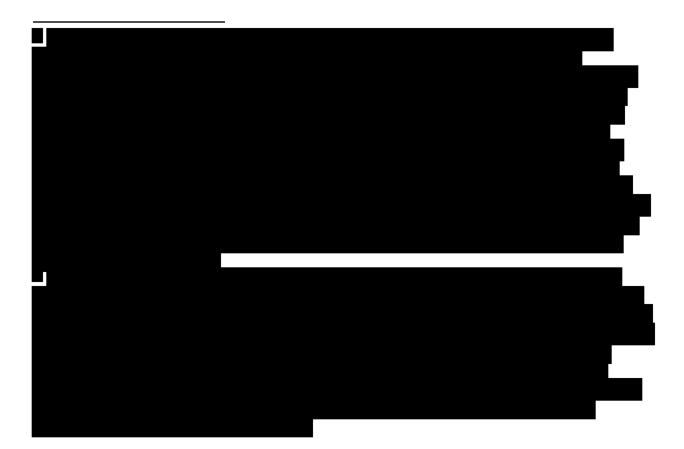
rivals the scale that could enable and incentivize them to improve their quality.")
143.

Undisputed.

77

Case 1:20-cv-03010-APM Document 544-1 Filed 03/13/23 Page 80 of 271





Case 1:20-cv-03010-APM Document 544-1 Filed 03/13/23 Page 81 of 271

Plaintiffs object to statement 146 as incomplete and as not supported by the cited material as required by Federal Rule of Civil Procedure 56(c)(1) and Local Rule 7(h).

| Undisputed that the term states: |
|--|
| |
| |
| |
| |
| Otherwise disputed. Google's Statement excises the boldfaced language when quoting |
| from the |
| |
| |
| |
| |
| |
| |
| |
| |
| |
| |
| |
| |
| 147. |
| |
| Undisputed. |
| 148. |
| |
| |

Case 1:20-cv-03010-APM Document 544-1 Filed 03/13/23 Page 82 of 271

| Undisputed. | |
|-------------|---|
| 149. | |
| | |
| | |
| | |
| Undisputed. | |
| 150. | |
| | |
| Undisputed. | |
| 151. | |
| 151. | |
| | |
| | 1 |
| Undisputed. | |
| 152. | |
| | |
| | |
| | |
| Undisputed. | |
| 153. | |
| | |
| | |

Disputed in part.

Plaintiffs object to Statement 153 as not supported by the cited material, as required by Federal Rule of Civil Procedure 56(c)(1) and Local Rule 7(h).

Case 1:20-cv-03010-APM Document 544-1 Filed 03/13/23 Page 83 of 271

Undisputed that Mitchell Baker, CEO of Mozilla, when asked "why did Mozilla extend the term of its agreement with Google for Google to be the default search engine in Firefox in 2020?" answered, "Because the search experience that Firefox users are receiving from Google when they use Firefox is the search experience that we want" and that Mozilla "reached, you know, an agreement that made sense with Google." Pls. Ex. 28, Baker (Mozilla) Dep., 87:17–24.

Otherwise disputed. Mozilla also chose Google because Mozilla chose to put a higher premium on " as compared to " as compared to " and " and " The second se

" strategic consideration. Pls. Ex. 157, Mozilla presentation: Firefox, Strategic
Development: Search Negotiations (July 2014), MOZ-LIT-000710, at 10. Moreover, as
Plaintiffs' expert Prof. Whinston notes, any quality or user experience differential between
Google and Yahoo was in large part the result of Google's search distribution contracts. Pls. Ex.
24, Whinston (DOJ Pls.' Expert) Rebuttal Report, ¶ 426 ("Prof. Murphy describes evidence that

somewhat selectively, but the overall point he makes is correct. However, as elsewhere, he neglects to note that this quality difference is also in large part the result of Google's search distribution contracts, which over many years have denied rivals the scale that could enable and incentivize them to improve their quality.")



Disputed in part.

Case 1:20-cv-03010-APM Document 544-1 Filed 03/13/23 Page 84 of 271

Plaintiffs object to Statement 154 as not supported by the cited material, as required by Federal Rule of Civil Procedure 56(c)(1) and Local Rule 7(h).

Undisputed that in 2021 and 2022, Mozilla conducted an experiment whereby it

Otherwise disputed. Def. Ex. 43, Mozilla document: Project Waldo – Phase 1 Final Review (Mar. 2, 2022), MOZ-LIT-045096, at -097 (

| 155. | | | |
|-------|--------|--|--|
| | | | |
| | | | |
| Undis | puted. | | |
| 156. | | | |
| | | | |
| | | | |

Disputed.

Plaintiffs object to Statement 156 as (1) vague as to time; (2) not supported by the cited material, as required by Federal Rule of Civil Procedure 56(c)(1) and Local Rule 7(h); and (3) as incomplete. Plaintiffs further object that the cited testimony does not identify the criteria on which any determination of quality would be based.

Statement 156 is facially silent as to time period, but resides within a section of Google's Statement regarding an experiment occurring in 2021 and 2022. However, Statement 156 relies on deposition testimony involving only a letter from Mozilla's counsel describing documents regarding an assessment in 2017. Pls. Ex. 28, Baker (Mozilla) Dep., 100:3–102:13 (discussing

Case 1:20-cv-03010-APM Document 544-1 Filed 03/13/23 Page 85 of 271

Def. Ex. 44, Letter from Mozilla Counsel to Department of Justice (Sept. 30, 2020), MOZ-002532 (Baker Ex. 11), which discusses Pls. Ex. 29, Mozilla document: Strategic Discussion Topic #1 - US Search Partnership (*July 2020), MOZ-002220, at, -223 & Pls. Ex. 30, Mozilla document: Oath/Mozilla: State of the Relationship (*Sept. 2020), MOZ-002224, at -030).

If construed as addressing the 2021-22 experiment, it is therefore not supported by the cited material. If construed as addressing the 2017 assessment, Statement 156 is incomplete. Statement 156 is also unclear regarding the quality of the search product over what period, i.e. long or short term. Pls. Ex. 29, Mozilla document: Strategic Discussion Topic #1 - US Search Partnership (*July 2020), MOZ-002220, at -223

see also Pls. Ex. 157, Mozilla presentation: Firefox, Strategic Development: Search Negotiations (July 2014), MOZ-LIT-000710, at 10

Historically, Mozilla

also considered trying to

. Pls. Ex. 231,

Mozilla presentation: Strategic Development: Search Negotiations (Oct. 2014), MOZ-LIT-000903, at 5; Pls. Ex. 243, Mozilla document: Mozilla Opening Mediation Brief in *Yahoo v*. *Mozilla* (July 17, 2019), MOZ-LIT-000296, at -302.

Moreover, as Plaintiffs' expert Prof. Whinston notes, any quality or user experience differential between Google and Yahoo was in large part the result of Google's search distribution contracts. Pls. Ex. 24, Whinston (DOJ Pls.' Expert) Rebuttal Report, ¶ 426 ("Prof. Murphy describes evidence that somewhat selectively, but the overall point he makes is correct. However, as elsewhere, he neglects to note that this quality difference is also in large part the result of Google's search distribution contracts, which over many years have denied rivals the scale that could enable and incentivize them to improve their quality.")

3. Mozilla's Promotion of Other Search Engines

157. Google and Mozilla have never entered an agreement that restricts Mozilla from integrating search engines other than Google into the Firefox browser. See, e.g.,

Disputed.

Plaintiffs object to the terms "restricts" and "integrating" as vague and undefined, to Google's attempt to apply Statement 157 outside of the temporal terms of the contracts it cites,

and to Statement 157 as (1) vague; (2) misleading; and (3) not supported by the cited material as

required by Federal Rule of Civil Procedure 56(c)(1) and Local Rule 7(h).

Prof. Whinston's Initial Report describes the

. Pls. Ex. 22, Whinston (DOJ Pls.' Expert) Initial

Report, ¶ 818–819. As Prof. Whinston notes—with cites to relevant contracts—Google and

Mozilla entered into agreements

Case 1:20-cv-03010-APM Document 544-1 Filed 03/13/23 Page 87 of 271

158. Google and Mozilla have never entered an agreement specifying which other search engines Mozilla may integrate into the Firefox browser. See, e.g.,

Disputed.

Plaintiffs object to the terms "specifying" and "integrate" as vague and undefined and to Statement 158 as outside of the temporal terms of the contracts it cites, and to Statement 158 as

Case 1:20-cv-03010-APM Document 544-1 Filed 03/13/23 Page 88 of 271

(1) vague; (2) misleading; and (3) not supported by the cited material as required by Federal Rule

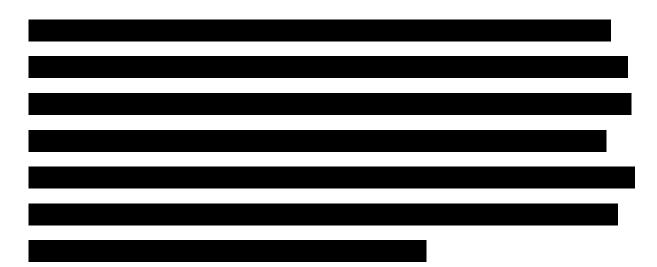
of Civil Procedure 56(c)(1) and Local Rule 7(h).

Prof. Whinston's Initial Report describes the

. Pls. Ex. 22, Whinston (DOJ Pls.' Expert) Initial

Report, ¶ 818–819. As Prof. Whinston notes—with cites to relevant contracts—Google and

| Mozilla entered into agreements |
|---------------------------------|
| |
| |
| |
| |
| |
| |
| |
| |
| |
| |
| |
| |
| |
| |
| |
| |
| |
| |
| |
| |
| |
| |
| |



159. Mozilla has integrated search engines other than Google into the Firefox browser since it released the first version of Firefox to the public in 2004. Mozilla Foundation releases the highly anticipated Mozilla Firefox 1.0 web browser, available at https://blog.mozilla.org/press/2004/11/mozilla-foundation-releases-the-highly-anticipated-mozilla-firefox-1-0-web-browser/ (Nov. 9, 2004) (Def. Ex. 30); Baker (Mozilla) Tr. 41:24-44:8 (Def. Ex. 31).

Disputed in part.

Plaintiffs object to the term "integrated" as vague and to Statement 159 as (1) vague as to

time; (2) misleading; and (3) vague as to whether more than one search engine is intergrated at a

time in any given Mozilla browser.

Undisputed that at times, Mozilla produced browsers with search engines other than

Google in the default search position. How many versions of the browser have these alternatives,

when they have been available, and how much they have been promoted by Mozilla has varied

over the past 19 years.

Otherwise disputed. Prof. Whinston's Initial Report describes the

. Pls. Ex. 22, Whinston

(DOJ Pls.' Expert) Initial Report, ¶ 818-819. As Prof. Whinston notes-with cites to relevant

contracts-Google and Mozilla entered into agreements

Case 1:20-cv-03010-APM Document 544-1 Filed 03/13/23 Page 90 of 271



Case 1:20-cv-03010-APM Document 544-1 Filed 03/13/23 Page 91 of 271

| 160. |
|---|
| |
| |
| |
| |
| Disputed in part. |
| Plaintiffs object to the term as vague and undefined and to Statement 160 as |
| (1) vague as to time, and (2) not supported by the cited material, as required by Federal Rule of |
| Civil Procedure 56(c)(1) and Local Rule 7(h). |
| Undisputed that Mozilla has entered agreements with Microsoft |
| |
| |
| Otherwise disputed. The concernents between Missess ft and Marilla creates as |
| Otherwise disputed. The agreements between Microsoft and Mozilla creates no |
| obligation for Mozilla to |
| Def. Ex. 45, MOZ- |
| LIT-037153, at -156–157, § 3.1; Def. Ex. 46, |
| , MOZ-LIT-037273, at -277-278, § 4.1.2. The agreement is |
| |
| . Def. Ex. 45, |
| |
| , MOZ-LIT-037153, at -156–157, §§ 2, 3.1; Def. Ex. 46, |
| , MOZ-LIT-037273, at -277–278, §§3.1, 3.2, 4.1.2. |
| |
| See Statement 159 response, supra. More generally, users are |

highly unlikely to avail themselves of the option to use Bing because it is not available by

default. Pls. Ex. 23, Rangel (DOJ Pls.' Expert) Initial Report, § II–VII; Pls. Ex. 22, Whinston (DOJ Pls.' Expert) Initial Report, § VII.A.



Disputed in part.

Plaintiffs object to the term **and the set of** as vague and undefined and to Statement 161 as (1) incomplete, (2) vague as to time, and (3) not supported by the cited material as required by Federal Rule of Civil Procedure 56(c)(1) and Local Rule 7(h).

Undisputed that Mozilla has previously entered agreements with Yahoo! pursuant to which Yahoo! makes revenue share payments to Mozilla for search traffic.

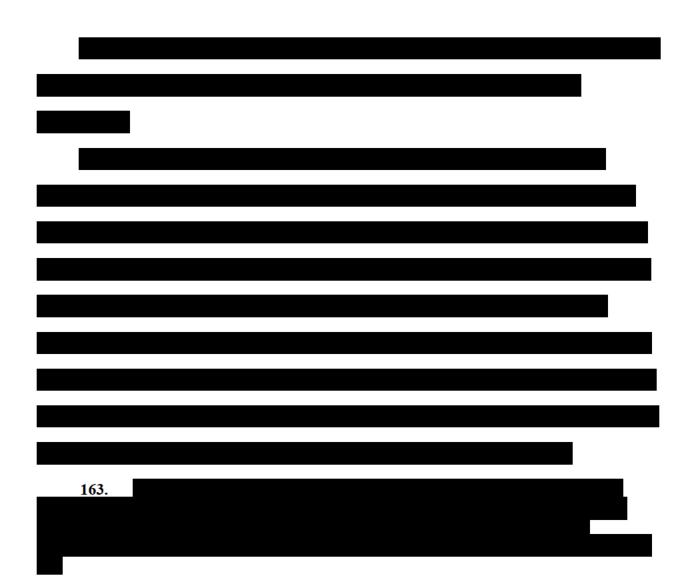
Otherwise disputed. Plaintiffs dispute that Mozilla has agreements with Yahoo "pursuant to which Yahoo makes revenue share payments to Mozilla." The sole source Google cites states Yahoo makes no current revenue share payments to Mozilla. Pls. Ex. 28, Baker (Mozilla) Dep., 42:24–43:10 (noting Mozilla had agreements with Yahoo "[u]ntil Yahoo! went out of business.").



Disputed in part.

Plaintiffs object to the term **and the second secon**

Case 1:20-cv-03010-APM Document 544-1 Filed 03/13/23 Page 93 of 271



Disputed in part.

Plaintiffs object to the term **and the second secon**

Undisputed that Mozilla has entered an agreement with Ecosia pursuant to which Ecosia makes revenue share payments to Mozilla for search traffic directed to Ecosia.

Otherwise disputed. The agreement between Mozilla and Ecosia creates no obligation for

Mozilla to Def. Ex. 50,

2018 Ecosia-Mozilla Internet Search Services Agreement (Feb. 15, 2018), MOZ-LIT-037505, at

Case 1:20-cv-03010-APM Document 544-1 Filed 03/13/23 Page 94 of 271

-505, §§ 1.1, 1.2. The agreement is and a promise by Ecosia to share revenue . Def. Ex. 50, 2018 Ecosia–Mozilla Internet Search Services Agreement (Feb. 15, 2018), MOZ-LIT-037505, at -505, §§ 1.1–1.2; -506, -511–512, 8 2

| § 2 | |
|-----|-------------------------------------|
| |). More generally, users are highly |

unlikely to avail themselves of the option to use Ecosia because it is not available by default. Pls.

Ex. 23, Rangel (DOJ Pls.' Expert) Initial Report, §§ II-VII; Pls. Ex. 22, Whinston (DOJ Pls.'

Expert) Initial Report, § VII.A.

164. Google and Mozilla have never entered an agreement that restricts an end user from changing the default search engine that receives queries entered in Firefox's built-in search box. *See, e.g.*,

Disputed in part.

Plaintiffs object to the terms "restricts" and "search box" as vague and undefined and to Statement 164 as (1) incomplete and (2) misleading.

Undisputed that there is no direct, express, written agreement between Google and Mozilla to limit an end user from changing the search engine that receives queries entered in Firefox.

Otherwise disputed. The RSA between Google and Mozilla creates financial incentives for Mozilla to support Google, including with respect to increasing the number of search queries Mozilla sends to Google, and thereby affects Mozilla's decision-making including with respect to product design. Pls. Ex. 28, Baker (Mozilla) Dep., 41:18–24 (estimating that " percent" of Mozilla's revenue comes from its revenue sharing agreement with Google), 47:2–23 ("if you [the user] make no other choice, you'll get the default [Google]"); *cf.* Pls. Ex. 173, Schindler (Google) Dep., 330:23–331:20 (

Case 1:20-cv-03010-APM Document 544-1 Filed 03/13/23 Page 95 of 271

| |). For example, |
|--|----------------------------|
| Mozilla | |
| | Pls. Ex. 234, |
| Email from Bautista (Mozilla), Should we | ? (Apr. 6, 2020), MOZ-LIT- |

009028, at -028.

165. Google and Mozilla have never entered an agreement that restricts Mozilla from determining how many steps a user must take or which menus a user must navigate in order to change the default search engine that receives queries entered in Firefox's built-in search box. *See, e.g.*,

Disputed in part.

Plaintiffs object to the terms "restricts" and "search box" as vague and undefined and to Statement 83 as (1) misleading and (2) incomplete.

Undisputed that there is no direct, express, written agreement between Google and Mozilla dictating the number of steps a user must take or which menus a user must navigate in order to change the default search engine that receives queries entered in Firefox.

Otherwise disputed. The RSA between Google and Mozilla creates financial incentives for Mozilla to support Google, including with respect to increasing the number of search queries Mozilla sends to Google, and thereby affects Mozilla's decision-making including with respect to product design. Pls. Ex. 28, Baker (Mozilla) Dep., 41:18–24 (estimating that "percent" of Mozilla's revenue comes from its revenue sharing agreement with Google), 47:2–23 ("if you [the user] make no other choice, you'll get the default [Google]"); *cf.* Pls. Ex. 173, Schindler (Google) Dep., 330:23–331:20 (

). For example,

Case 1:20-cv-03010-APM Document 544-1 Filed 03/13/23 Page 96 of 271

| Mozilla considered | | |
|--|----|-------------------------|
| | | Pls. Ex. 234 |
| Email from Bautista (Mozilla), Should we | (A | Apr. 6, 2020), MOZ-LIT- |
| 009028, at -028. | | |

166. Google and Mozilla have never entered an agreement that restricts an end user from navigating to a search engine's website in the Firefox browser by entering the applicable URL. *See, e.g.*,

Disputed in part.

Plaintiffs object to the terms "restricts" as vague and undefined and to Statement 166 as (1) misleading and (2) incomplete.

Undisputed that there is no direct, express, written agreement between Google and Mozilla that restricts an end user from navigating to a search engine's website in the Firefox browser by entering the applicable URL.

Otherwise disputed. The RSA between Google and Mozilla creates financial incentives for Mozilla to support Google, including with respect to increasing the number of search queries Mozilla sends to Google, and thereby affects Mozilla's decision-making including with respect to product design. Pls. Ex. 28, Baker (Mozilla) Dep., 41:18–24 (estimating that percent" of Mozilla's revenue comes from its revenue sharing agreement with Google), 47:2–23 ("if you [the user] make no other choice, you'll get the default [Google]"); *cf.* Pls. Ex. 173, Schindler (Google) Dep., 330:23–331:20 (

). For example,

Mozilla

Pls. Ex. 234,

Case 1:20-cv-03010-APM Document 544-1 Filed 03/13/23 Page 97 of 271

Email from Bautista (Mozilla), Should we

(Apr. 6, 2020), MOZ-LIT-

009028, at -028.

167. Mozilla has displayed "This time, search with" messaging that allows end users to send their queries to other search engines at the moment the user is entering a search in Firefox's built-in search box. Get where you're going faster, with Firefox Suggest, available at https://blog.mozilla.org/en/products/firefox/firefox-news/firefox-suggest/; Baker (Mozilla) Tr. 88:3-92:25 (Def. Ex. 31).

Disputed in part.

Plaintiffs object to the term "other search engines" as vague and object to Statement 167 as (1) vague as to time; (2) incomplete; and (3) not supported by the cited material as required by Federal Rule of Civil Procedure 56(c)(1) and Local Rule 7(h).

Undisputed that, in 2014, Mozilla released Firefox 34, which simultaneously (1) changed the preset default search engine in Firefox to Yahoo and (2) introduced a "One Click Search" feature, which, when a user began typing in a search term, displayed a menu allowing users to select any search engine to perform the search. Pls. Ex. 309, Email from Grupp (Microsoft), Quick recap - Y! search default in Firefox (Dec. 5, 2014), MSFT-LIT2_0005802135, at -135; *see also* Def. Ex. 38, 2014 Yahoo-Mozilla Strategic Agreement (Dec. 1, 2014), MOZ-LIT-002685, at -697, §(h) (

). It is also undisputed that Mozilla maintained the one-click search feature (now accompanied by "This time, search with" messaging) in Firefox when switching its preset default search engine back to Google in 2016.

Otherwise disputed.

First, the web page Google cites in support of Statement 167 does not describe the oneclick search feature, but instead contains an incidental illustration of one-click search while describing a wholly different feature implemented years later and known as "Firefox

95

Case 1:20-cv-03010-APM Document 544-1 Filed 03/13/23 Page 98 of 271

Suggestions." *See* Pls. Ex. 28, Baker (Mozilla) Dep., 92:5-24 ("[T]hat bottom set of options for search is a much older, more basic Firefox feature. Q. You're referring to the 'this time search with' feature? A. Yes.") (discussing Pls. Ex. 277, Mozilla, Get where you're going faster, with Firefox Suggest, dist:lled Blog (Sept. 15, 2021) (Baker (Mozilla) Ex. 10¹⁶). Firefox Suggestions are not discussed in Statement 167, and Statement 167's use of a web page created in 2021 to support its narrative of a feature first introduced in a 2014 contract between Mozilla and Yahoo is misleading.

Second, Firefox's one-click search option does not change the default search engine for any future searches, even follow-on searches. Google recognizes this, stating at the time of its introduction that one-click search "introduces confusion" because "[u]sers who are used to the old interface may think they are changing their default search engine when in fact, they are only changing it for the current query." Pls. Ex. 310, Email from Hopkins (Google), Firefox Redesigns Its Search Interface Ahead Of Yahoo Switch (Dec. 1, 2014), GOOG-DOJ-03526001, at -003; *see also* Pls. Ex. 28, Baker (Mozilla) Dep., 268:14–269:8 ("Q. And if you select from the awesome bar one of the other search providers, say Amazon, it applies Amazon to that particular search; correct? A. Yes. Q. It doesn't reset the default to Amazon; right? Q. That's right.").

168. Mozilla has displayed clickable icons for Bing, DuckDuckGo, and other search engines that enable end users to send their queries to those search engines with a single click or tap in the Firefox browser. Get where you're going faster, with Firefox Suggest, available at https://blog.mozilla.org/en/products/firefox/firefox-news/firefoxsuggest/; Baker (Mozilla) Tr. 88:3-92:25 (Def. Ex. 31).

¹⁶ This is a hard copy of the website Statement 167 relies on, which was marked as Exhibit 10 at the deposition of Mozilla's CEO.

Case 1:20-cv-03010-APM Document 544-1 Filed 03/13/23 Page 99 of 271

Plaintiffs object to Statement 168 as (1) vague as to time; (2) incomplete; (3) not supported by the cited material as required by Federal Rule of Civil Procedure 56(c)(1) and Local Rule 7(h); and (4) duplicative of Statement 167.

Undisputed that, in 2014, Mozilla released Firefox 34, which simultaneously (1) changed the preset default search engine in Firefox to Yahoo and (2) introduced a "One Click Search" feature, which, when a user began typing in a search term, displayed a menu allowing users to select any search engine to perform the search. Pls. Ex. 309, Email from Grupp (Microsoft), Quick recap - Y! search default in Firefox (Dec. 5, 2014), MSFT-LIT2_0005802135, at -135; *see also* Def. Ex. 38, 2014 Yahoo-Mozilla Strategic Agreement (Dec. 1, 2014), MOZ-LIT-002685, at -697, §(h) ; -720 (Attachment D)). It is also undisputed that Mozilla maintained

the one-click search feature (now accompanied by "This time, search with" messaging) in Firefox when switching its preset default search engine back to Google in 2016.

Otherwise disputed.

First, the feature described in Statement 168 is the same one-click search feature described in Statement 167 and the two Statements rely on identical citations. Pls. Ex. 28, Baker (Mozilla) Dep., 92:5-24 ("At the bottom it says 'this time search with,' and it's right there. So you can search with Amazon or Bing or DuckDuckGo, you know, whatever these are [T]hat bottom set of options for search is a much older, more basic Firefox feature."). Thus, as with Statement 167, the web page Google cites in support primarily describes a feature implemented years after the feature Statement 168 describes, rendering Statement 168 misleading.

Second, Firefox's one-click search option does not change the default search engine for any future searches, even follow-on searches. Google recognizes this, stating at the time of its

97

Case 1:20-cv-03010-APM Document 544-1 Filed 03/13/23 Page 100 of 271

introduction that one-click search "introduces confusion" because "[u]sers who are used to the old interface may think they are changing their default search engine when in fact, they are only changing it for the current query." Pls. Ex. 310, Email from Hopkins (Google), Firefox Redesigns Its Search Interface Ahead Of Yahoo Switch (Dec. 1, 2014), GOOG-DOJ-03526001, at -003; *see also* Pls. Ex. 28, Baker (Mozilla) Dep., 268:14–269:8 ("Q. And if you select from the awesome bar one of the other search providers, say Amazon, it applies Amazon to that particular search; correct? A. Yes. Q. It doesn't reset the default to Amazon; right? Q. That's right.").

169. Mozilla has introduced a "search shortcuts" feature, which allows Firefox users to assign their own keywords for search engines (such as @ddg for DuckDuckGo or @shopping for Amazon) to make it easier for users to perform a search using those search engines. Assign shortcuts to search engines, available at https://support.mozilla.org/en-US/kb/assign-shortcuts-search-engines.

Disputed in part.

Plaintiffs object to the term "search engine" as vague and to Statement 169 as (1) vague

as to time; and (2) incomplete.

Undisputed that Mozilla presently has agreements" with Amazon, DuckDuckGo, and Microsoft Corporation, and has incorporated a feature allowing Firefox users to assign their own keywords to perform searches on those sites and on Google. Pls. Ex. 278, Mozilla Supp. Response to DOJ CID No. 30243 (July 15, 2020), MOZ-002479 (Baker (Mozilla) Dep. Ex. 3), at –485.

Otherwise disputed that this has always been the case or that this changes the default for future searches. Pls. Ex. 278, Mozilla Supp. Response to DOJ CID No. 30243 (July 15, 2020), MOZ-002479 (Baker (Mozilla) Dep. Ex. 3), at –485 (Firefox "maintains" previous default setting during secondary search). Mozilla's CEO testified at deposition that she was not even aware of this feature. Pls. Ex. 28, Baker (Mozilla) Dep., 60:18–61:1.

Case 1:20-cv-03010-APM Document 544-1 Filed 03/13/23 Page 101 of 271

170. Mozilla has displayed sponsored tiles or shortcuts for other search services, including Amazon, on the default home page and new tab page in the Firefox browser. Sponsored shortcuts on the New Tab page, available at https://support.mozilla.org/en-US/kb/sponsor-privacy; Baker (Mozilla) Tr. 40:11-42:14 (Def. Ex. 31).

Disputed in part.

Plaintiffs object to the term "other search services" and to Statement 170 as (1) vague as to time; (2) incomplete; and (3) not supported by the cited material as required by Federal Rule of Civil Procedure 56(c)(1) and Local Rule 7(h).

Undisputed that Mozilla presently displays sponsored tiles or shortcuts for other websites,

including Amazon, on the default home page and new tab page in the Firefox browser.

Otherwise disputed. Google's sources only show Amazon and eBay featured in

sponsored tiles or shortcuts. Pls. Ex. 28, Baker (Mozilla) Dep., 40:11-42:14 ("

"). Neither are general search services, as defined in Plaintiffs'

Complaint in allegations Google does not challenge in its Motion, and Statement 170's use of the vague term "other search services" misleadingly fails to differentiate between general and specialized search services.

Statement 170's vagueness as to time period also obscures the minimal role sponsored

"Pls. Ex. 28, Baker (Mozilla) Dep.,

tiles play in Mozilla's business: as its CEO testified,

40:11–17. As compared to the "**Compared**" revenue Google realizes from the products discussed in Statement 170, the revenue Mozilla receives from Google for default placement comprises "about percent" of Google's revenue." Pls. Ex. 28, Baker (Mozilla) Dep., 41:18-25.

Case 1:20-cv-03010-APM Document 544-1 Filed 03/13/23 Page 102 of 271

171. Mozilla receives revenue in exchange for placing sponsored tiles or shortcuts for other search services, including Amazon, on the default home page and new tab page in the Firefox browser. Baker (Mozilla) Tr. 40:11-42:14 (Def. Ex. 31).

Disputed in part.

Plaintiffs object to the term "other search services" and to Statement 171 as (1) vague as

to time; (2) incomplete; and (3) not supported by the cited material as required by Federal Rule

of Civil Procedure 56(c)(1) and Local Rule 7(h).

Undisputed that Mozilla presently displays sponsored tiles or shortcuts for other websites,

including Amazon, on the default home page and new tab page in the Firefox browser.

Otherwise disputed. Google's sources only show Amazon and eBay featured in

sponsored tiles or shortcuts. Pls. Ex. 28, Baker (Mozilla) Dep., 40:11-42:14 ("

"). Neither are general search services, as defined in Plaintiffs'

Complaint in allegations Google does not challenge in its Motion, and Statement 170's use of the vague term "other search services" misleadingly fails to differentiate between general and specialized search services.

Statement 171's vagueness as to time period also obscures the minimal role sponsored tiles play in Mozilla's business: as its CEO testified,

"Pls. Ex. 28, Baker (Mozilla) Dep.,

40:11–17. As compared to the "quite small" revenue Google realizes from the products discussed

in Statement 170, the revenue Mozilla receives from Google for default placement comprises

"about percent" of Google's revenue." Pls. Ex. 28, Baker (Mozilla) Dep., 41:18–25.

172. Google and Mozilla have never entered an agreement that places a contractual cap or limit on the number of Firefox users who can use a search engine other

Case 1:20-cv-03010-APM Document 544-1 Filed 03/13/23 Page 103 of 271

than Google. See, e.g.,

Disputed.

Plaintiffs object to Statement 172 as (1) vague and misleading and (2) incomplete.

As Prof. Whinston notes,

Whinston (DOJ Pls.' Expert) Initial Report, ¶ 819 (citing GOOG-DOJ-02696612, at -619 (same document as

Moreover, the RSA between Google and Mozilla creates financial incentives for Mozilla to support Google, including with respect to increasing the number of search queries Mozilla sends to Google, and thereby affects Mozilla's decision-making including with respect to product design. Pls. Ex. 28, Baker (Mozilla) Dep., 47:2–23 ("if you [the user] make no other choice, you'll get the default [Google]"); *cf.* Pls. Ex. 173, Schindler (Google) Dep., 330:23–

331:20 (

173. Google and Mozilla have never entered an agreement that authorizes Google to terminate the contract or alter the payment terms if a particular number of Firefox users use a rival search engine. *See, e.g.*,

Disputed.

Case 1:20-cv-03010-APM Document 544-1 Filed 03/13/23 Page 104 of 271

Plaintiffs object to the phrase "alter the payment terms" as vague and to Statement 173 as (1) misleading; and (2) incomplete.

Google and Mozilla's agreement is based on sharing revenue that Google gets from searches on Mozilla. If a particular number of Mozilla customers use a rival search engine, Google will make less money and pay Mozilla less money under the agreement.

Thus while the percentage paid does not depend on the number of Mozilla customers that perform searches on Google, the amount paid does.

| As Prof. Whinston notes, | |
|--------------------------|--------------|
| | |
| | |
| | |
| | |
| | |
| | |
| | Pls. Ex. 22, |
| | |

Whinston (DOJ Pls.' Expert) Initial Report, ¶ 819 (citing GOOG-DOJ-02696612, at -619 (same document as

Otherwise disputed. The RSA between Google and Mozilla creates financial incentives for Mozilla to support Google, including with respect to increasing the number of search queries Mozilla sends to Google, and thereby affects Mozilla's decision-making including with respect to product design. Pls. Ex. 28, Baker (Mozilla) Dep., 47:2–23 ("if you [the user] make no other choice, you'll get the default [Google]"); *cf.* Pls. Ex. 173, Schindler (Google) Dep., 330:23–

331:20 (

| "). |
|--|
| 174. Google and Mozilla have never entered an agreement that requires Mozilla to ensure that any particular volume of search traffic flows to Google. See, e.g., |
| |
| Disputed. |
| Plaintiffs object to the phrase "any particular volume of search traffic flows to Google" as |
| vague and to Statement 174 as (1) misleading; and (2) incomplete. |
| As Prof. Whinston notes, " |
| |
| |
| |
| |
| |
| ."" Pls. Ex. 22, |

Whinston (DOJ Pls.' Expert) Initial Report, ¶ 819 (citing GOOG-DOJ-02696612, at -619 (same

document as)).

Moreover, the RSA between Google and Mozilla creates financial incentives for Mozilla to support Google, including with respect to increasing the number of search queries Mozilla sends to Google, and thereby affects Mozilla's decision-making including with respect to product design. Pls. Ex. 28, Baker (Mozilla) Dep., 47:2–23 ("if you [the user] make no other choice, you'll get the default [Google]"); *cf.* Pls. Ex. 173, Schindler (Google) Dep., 330:23–331:20 (

175. Google and Mozilla have never entered an agreement in which the revenue share percentage varied based on the amount of search traffic that flowed to search engines other than Google. See, e.g.,

).

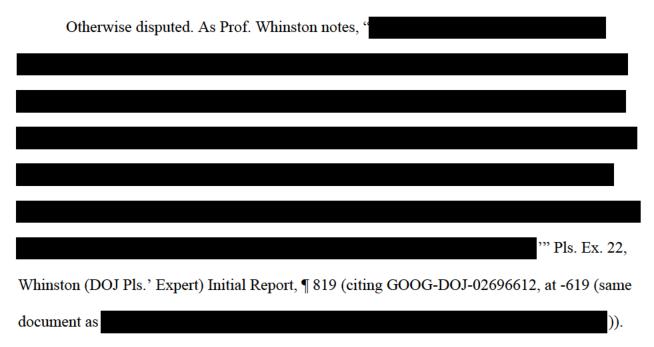
Disputed in part.

Plaintiffs object to Statement 175 as (1) incomplete; and (2) misleading.

Undisputed that there is no direct, express, written agreement between Google and Apple

in which the revenue share percentage varied based on the amount of search traffic that flowed to

search engines other than Google.



Moreover, the RSA between Google and Mozilla creates financial incentives for Mozilla to support Google, including with respect to increasing the number of search queries Mozilla sends to Google, and thereby affects Mozilla's decision-making including with respect to product design. Pls. Ex. 28, Baker (Mozilla) Dep., 47:2–23 ("if you [the user] make no other choice, you'll get the default [Google]"); *cf.* Pls. Ex. 173, Schindler (Google) Dep., 330:23–

Case 1:20-cv-03010-APM Document 544-1 Filed 03/13/23 Page 107 of 271

331:20 (

C. The Agreements with Other Browser and Software Developers

1. The Agreements with Opera and UC Web

176. Google and Opera have never entered an agreement that restricts Opera from integrating search engines other than Google Search into the Opera browser. *See, e.g.*,

Disputed.

Plaintiffs object to the terms "restricts" and "integrating" as vague and undefined, to

Google's attempt to apply Statement 176 outside of the temporal terms of the contracts it cites,

and to Statement 176 as (1) vague; (2) misleading; and (3) not supported by the cited material as

required by Federal Rule of Civil Procedure 56(c)(1) and Local Rule 7(h).

Case 1:20-cv-03010-APM Document 544-1 Filed 03/13/23 Page 108 of 271

| | |
|--|------|
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |

Third, Prof. Whinston's Opening Report describes the restrictions on integration imposed by Google's contracts with Opera. *See* Pls. Ex. 22, Whinston (DOJ Pls.' Expert) Initial Report, ¶ 820. As Prof. Whinston notes,

177. Google and Opera have never entered an agreement that restricts Opera from accepting payments from other search engines in exchange for directing traffic to those search engines in the Opera browser. See, e.g.,

Disputed.

Plaintiffs object to the terms "restricts" and "promoting" as vague and undefined and to Statement 177 as (1) vague; (2) incomplete; and (3) not supported by the cited material as required by Federal Rule of Civil Procedure 56(c)(1) and Local Rule 7(h).

Undisputed that the 2012 Opera Agreement between Google and Opera permits Opera to accept payments from search engines other than Google.

Otherwise disputed. The RSA between Google and Opera creates financial incentives for

Pls.

).

Opera to increase the number of search queries Opera sends to Google, and thereby affects

Opera's decision-making including with respect to promotion and product design.

Ex. 173, Schindler (Google) Dep., 330:23-331:20 (

Furthermore, carriers and browsers may make different determinations with respect to distribution of search engines, and search defaults, absent Google's search distribution contracts. *See, e.g.*, Pls. Ex. 156, Ramaswamy (Neeva) Dep., 235:8–17

178. Google and Opera have never entered an agreement that restricts an end user from changing the default search engine that receives queries entered in Opera's built-in search box. See, e.g.,

Plaintiffs object to the terms "restricts" and "search box" as vague and undefined and to Statement 178 as (1) incomplete; and (2) misleading.

Undisputed that there are no direct, express, written agreement between Google and

Opera to limit an end user from changing the search engine that receives queries entered in

Opera.

Otherwise disputed. The RSA between Google and Opera creates financial incentives for

Opera to support Google, including with respect to increasing the number of search queries

Opera sends to Google, and thereby affects Opera's decision-making including with respect to

product design. cf. Pls. Ex. 173, Schindler (Google) Dep., 330:23-331:20 (

179. There is no evidence that Opera would have refused to set a search engine other than Google as the default in place of Google in the U.S. if Opera determined that the rival search engine would provide a superior user experience and Opera was able to reach agreement with the rival.

Disputed.

Plaintiffs object to Statement 179 as improper for three reasons. First, it is a bare statement that the record contains "no evidence," and is, therefore, not proper for inclusion in a Statement of Material Facts. *Gipson v. LeBlanc*, No. 1:17-CV-01394, 2019 U.S. Dist. LEXIS 171137, at *14-15 (W.D. La. Sep. 6, 2019) (statements that nonmovant "has no evidence

Case 1:20-cv-03010-APM Document 544-1 Filed 03/13/23 Page 111 of 271

are not material facts that support Defendants' initial burden at the summary judgment stage. Rather, they are declarations that [nonmovant] will not carry his ultimate burden of proof at trial."). Second, Federal Rule of Civil Procedure 56(c)(1) and Local Rule 7(h) require citations to record evidence in a Statement of Material Facts and Google provides none. Third, Statement 179 is framed as a hypothetical, as such it is incomplete and not subject to answer.

Furthermore, the record contains evidence that both (1) "rival search engine[s] would provide a superior user experience" absent Google's search distribution contracts, *see* Pls. Ex. 22, Whinston (DOJ Pls.' Expert) Initial Report, § VIII.A.2.c ("Google's anticompetitive search distribution contracts also reduce rivals' abilities and incentives to improve their general search services") & § VIII.A.2.d ("Google's anticompetitive search distribution contracts reduce potential entrants' incentives to develop improved or alternative approaches to general search"); and (2) carriers and browsers may make different determinations with respect to distribution of search engines, and search defaults, absent Google's search distribution contracts. *See, e.g.*, Pls. Ex. 156, Ramaswamy (Neeva) Dep., 235:8–17

180. According to StatCounter data cited by Plaintiffs' expert witness, approximately 0.8% of page views in a web browser in the U.S. in 2021 occurred using the Opera browser. Whinston (DOJ Pls.' Expert) Opening Rep. ¶ 820 n.1087 (Def. Ex. 40).

Undisputed.

181. Disputed in part.

109

Statement 181 is not properly framed as a material fact, what Plaintiffs do or do not

"contend" is not a material fact subject to proof at trial and is therefore not appropriate for

inclusion in Google's statement of undisputed material facts. Accordingly, no response is due

from Plaintiffs.

Plaintiffs do not dispute that the cited source-Pls. Ex. 22, Whinston (DOJ Pls.' Expert)

Initial Report, ¶ 832 Fig. 135—shows that approximately of all Google Search queries

entered in the United States in 2020 were covered by Google's search distribution contracts with

Opera.

182. Google and UC Web have never entered an agreement that restricts UC Web from integrating search engines other than Google Search into the UC Web browser. See, e.g.,

; Mobile UC Browser: Changing Your Search Engine to DuckDuckGo, available at https://help.duckduckgo.com/duckduckgohelp-pages/mobile/uc-browser/.

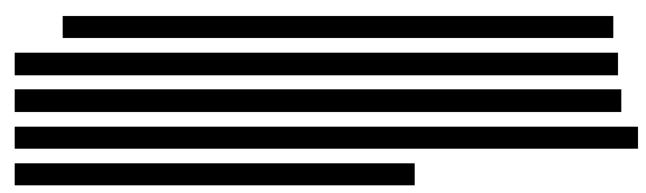
Disputed.

Plaintiffs object to the terms "restricts" and "integrating" as vague and undefined, to

Google's attempt to apply Statement 182 outside of the temporal terms of the contracts it cites,

and to Statement 182 as (1) vague; (2) misleading; and (3) not supported by the cited material as

required by Federal Rule of Civil Procedure 56(c)(1) and Local Rule 7(h).



Second, Prof. Whinston's Initial Report describes the restrictions on integration imposed by Google's contracts with UCWeb. Pls. Ex. 22, Whinston (DOJ Pls.' Expert) Initial Report, ¶

Case 1:20-cv-03010-APM Document 544-1 Filed 03/13/23 Page 113 of 271

| 821. As Prof. Whinston notes, | |
|-------------------------------|--|
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |

183. Google and UC Web have never entered an agreement that restricts UC Web from accepting payments from other search engines in exchange for directing traffic to those search engines in the UC Web browser. See, e.g.,

Disputed.

Plaintiffs object to the term "restricts" as vague and undefined and to Statement 183 as (1) incomplete; and (2) not supported by the cited material as required by Federal Rule of Civil

Procedure 56(c)(1) and Local Rule 7(h).

Undisputed that the UCWeb Agreement between Google and UC Web permits UC Web

to accept payments from search engines other than Google.

Otherwise disputed. The RSA between Google and UC Web creates financial incentives

for UC Web to increase the number of search queries UC Web sends to Google, and thereby

affects UC Web's decision-making including with respect to promotion and product design. See

Pls. Ex. 22, Whinston (DOJ Pls.' Expert) Initial Report, ¶ 821 (citing RSAs); cf. Pls. Ex. 173,

Schindler (Google) Dep., 330:23-331:20 (

Furthermore, the record contains evidence that carriers and browsers may make different

determinations with respect to distribution of search engines, and search defaults, absent

Google's search distribution contracts. See, e.g., Pls. Ex. 156, Ramaswamy (Neeva) Dep., 235:8-

17 ("

Plaintiffs object to the terms "restricts" and "search box" as vague and undefined and to

Statement 184 as (1) incomplete; and (2) misleading.

Undisputed that there is no direct, express, written agreement between Google and UC

Web to limit an end user from changing the search engine that receives queries entered in

Firefox.

Otherwise disputed. The RSA between Google and UC Web creates financial incentives

for UC Web to support Google, including with respect to increasing the number of search queries

UC Web sends to Google, and thereby affects UC Web's decision-making including with respect

to product design. See Pls. Ex. 173, Schindler (Google) Dep., 330:23-331:20 (

185. There is no evidence that UC Web would have refused to set a search engine other than Google as the default in place of Google in the U.S. if UC Web determined that the rival search engine would provide a superior user experience and UC Web was able to reach agreement with the rival.

Disputed.

).

Plaintiffs object to Statement 185 as improper for three reasons. First, it is a bare statement that the record contains "no evidence," and is, therefore, not proper for inclusion in a Statement of Material Facts. *Gipson v. LeBlanc*, No. 1:17-CV-01394, 2019 U.S. Dist. LEXIS 171137, at *14–15 (W.D. La. Sep. 6, 2019) (statements that nonmovant "has no evidence are not material facts that support Defendants' initial burden at the summary judgment stage. Rather, they are declarations that [nonmovant] will not carry his ultimate burden of proof at trial."). Second, Federal Rule of Civil Procedure 56(c)(1) and Local Rule 7(h) require citations to record evidence in a Statement of Material Facts and Google provides none. Third, Statement 185 is framed as a hypothetical, as such it is incomplete and not subject to answer.

Furthermore, the record contains evidence that both (1) "rival search engine[s] would provide a superior user experience" absent Google's search distribution contracts *see* Pls. Ex. 22, Whinston (DOJ Pls.' Expert) Initial Report, § VIII.A.2.c ("Google's anticompetitive search distribution contracts also reduce rivals' abilities and incentives to improve their general search services") & § VIII.A.2.d ("Google's anticompetitive search distribution contracts reduce potential entrants' incentives to develop improved or alternative approaches to general search"); and (2) carriers and browsers may make different determinations with respect to distribution of search engines, and search defaults, absent Google's search distribution contracts. *See, e.g.,* Pls. Ex. 156, Ramaswamy (Neeva) Dep., 235:8–17

According to StatCounter data cited by Plaintiffs' expert witness, 186. approximately 0.2% of page views in a web browser in the U.S. in 2021 occurred using the UC Web browser. Whinston (DOJ Pls.' Expert) Opening Rep. ¶ 821 n.1094 (Def. Ex. 40).

Undisputed.

| 187. | | | |
|------|--|--|--|
| | | | |
| | | | |

Disputed in part.

Statement 187 is not properly framed as a material fact, what Plaintiffs do or do not "contend" is not a material fact subject to proof at trial and is therefore not appropriate for inclusion in Google's statement of undisputed material facts. Accordingly, no response is due from Plaintiffs.

Disputed in part as improper. Plaintiffs do not dispute that the cited source-Pls. Ex. 22,

Whinston (DOJ Pls.' Expert) Initial Report, ¶ 832, Fig. 135 ---shows that approximately of

all Google Search queries entered in the United States in 2020 arose under its search distribution

contracts with UCBrowser.

2. The Agreements with Adobe and Avast

188. None of the agreements between Google and Adobe includes a provision requiring any manufacturer or distributor of a device (such as a computer or smartphone) to preinstall Google Search or set Google Search as the default search engine on any access point. See, e.g.,

; Adobe and Google team up for Toolbar, available at https://googleblog.blogspot.com/2006/06/adobe-and-google-team-up-for-toolbar.html (June 21, 2006).

Undisputed.

189. None of the agreements between Google and Adobe includes a provision requiring any browser developer to set Google Search as a default search engine in any browser. See, e.g., ; Adobe and Google team up for Toolbar, available at https://googleblog.blogspot.com/2006/06/adobe-and-google-team-up-for-toolbar.html (June 21, 2006).

Undisputed.

| 100 | | |
|------|---|--|
| 190. | , | |
| | | |
| | | |
| | | |
| | | |

Disputed.

Statement 190 is not properly framed as a material fact, what Plaintiffs do or do not

"contend" is not a material fact subject to proof at trial and is therefore not appropriate for

inclusion in Google's statement of undisputed material facts. Accordingly, no response is due

from Plaintiffs.

Plaintiffs object to Statement 190 as (1) not supported by the cited material as required by

Federal Rule of Civil Procedure 56(c)(1) and Local Rule 7(h) and (2) as improper.

The cited table does not mention Adobe.

191. None of the agreements between Google and Avast includes a provision requiring any manufacturer or distributor of a device (such as a computer or smartphone) to preinstall Google Search or set Google Search as the default search engine on any access point. *See, e.g.*,

; Avast and Google

Chrome, available at https://blog.avast.com/2009/12/03/avast-and-google-chrome/ (Dec. 3, 2009).

Undisputed.

192. None of the agreements between Google and Avast includes a provision requiring any browser developer to set Google Search as a default search engine in any browser. See, e.g., ; Avast and Google Chrome, available at https://blog.avast.com/2009/12/03/avast-and-google-chrome/ (Dec. 3, 2009).

Case 1:20-cv-03010-APM Document 544-1 Filed 03/13/23 Page 118 of 271

Undisputed.

193.

Disputed.

Statement 193 is not properly framed as a material fact, what Plaintiffs do or do not

"contend" is not a material fact subject to proof at trial and is therefore not appropriate for

inclusion in Google's statement of undisputed material facts. Accordingly, no response is due

from Plaintiffs.

Disputed as not supported by the cited material as required by Federal Rule of Civil

Procedure 56(c)(1) and Local Rule 7(h) and as improper. The cited table does not mention Avast.

II. The Agreements with Android Original Equipment Manufacturers and Wireless Carriers

A. The Android Operating System and Android Agreements Generally

194. Google released the first open-source version of Android source code on October 21, 2008. Android: The Open Source Cell Phone, available at https://opensource.googleblog.com/2008/10/android-open-source-cell-phone.html; Miner (Google) Tr. 245:14-20 (Def. Ex. 55).

Undisputed.

195. Google has continued to release major updates to Android since 2008, typically annually, in the form of new versions of Android (e.g., Android 10 (Q), Android 12 (S)) as well as intermediate updates. Def.'s 5th Supp. Resps. to Pl.'s Feb. 22, 2022 Notice of Dep. of Google LLC (Topic 6) at 20 (Def. Ex. 57).

Disputed in part.

Plaintiffs object to the terms "major," "updates" "typically," "intermediate," and

"Android" as vague and undefined and to Statement 195 as misleading to the extent that it is

meant to imply that the substance and/or frequency of Google's updates to the Android operating

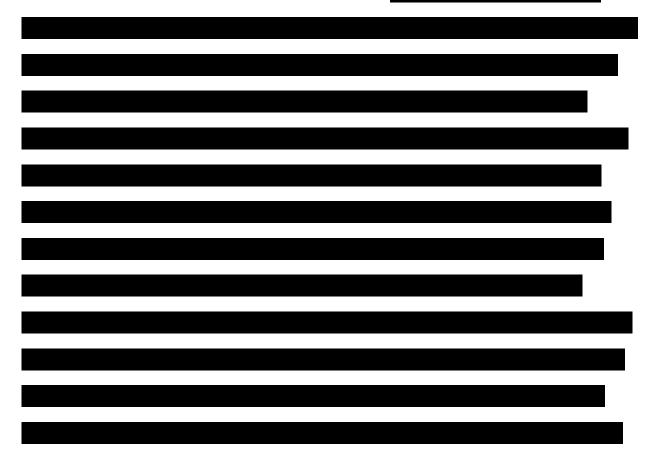
Case 1:20-cv-03010-APM Document 544-1 Filed 03/13/23 Page 119 of 271

system or devices have been sufficient or beneficial to consumers, OEMs or carriers. *See, e.g.,* Pls. Ex. 51, Google document: Carrier CLV: Internal Google Meeting Notes (Apr., May & Aug. 2017) (notes from multiple meetings), GOOG-DOJ-32661454, at -463 (

).

Undisputed that Google has continued to release updates to Android since 2008, including approximately annually, in the form of new versions of Android (e.g., Android 10 (Q), Android 12(S)), as well as other updates. Some of these "updates" remove functionality from the operating system. Pls. Ex. 56, Davies (DOJ Pls.' Expert) Initial Report, ¶¶ 49–52, § IV.B.2; Pls. Ex. 94, Davies (DOJ Pls.' Expert) Reply Report, ¶¶ 39–41.

Otherwise disputed, including to the extent Statement 195 suggests these updates are made available at the same time to all Android licensees.



196. Google has invested billions of dollars in developing and maintaining the Android platform. Murphy (Google's Expert) Opening Rep. ¶ 426 (Def. Ex. 9); Statement of Rich Miner (Nov. 8, 2016) (GOOG-DOJ-19567568 at -572) (Def. Ex. 56).

Disputed in part.

Plaintiffs object to the term "Android platform" as vague and to Statement 196 as misleading, including by suggesting comparable investment in AOSP and Google's proprietary Android.

Undisputed that Google has invested a large amount in developing and maintaining elements of its Android platform, including but not limited to AOSP.

Otherwise disputed. It is unclear from Statement 196 how much Google invests into open source AOSP, Google proprietary Android (including Google Play Services and GMS Core costs). Google has over the years shifted focus from AOSP to Google's proprietary Android. Pls. Ex. 56, Davies (DOJ Pls.' Expert) Initial Report, ¶¶ 49–52, § IV.B.2 ("Google has degraded AOSP over the years"). *See also* Pls. Ex. 57, Miner (Google) Dep., 136:14–22 ("So if you're asking does the AOSP, as it stands today, contain all the apps, probably not.").

197. Android was one of several competing licensable mobile operating systems when Google released the first commercially available version of Android, and there was no assurance that it would succeed. Christensen (Motorola) Tr. 20:22-24:9 (Def. Ex. 58); Statement of Rich Miner (Nov. 8, 2016) (GOOG-DOJ-19567568 at -571-74) (Def. Ex. 56).

Undisputed.

Case 1:20-cv-03010-APM Document 544-1 Filed 03/13/23 Page 121 of 271

198. Android was the second most widely used mobile phone operating system in the U.S. in 2021, behind Apple's iOS. Whinston (DOJ Pls.' Expert) Opening Rep. ¶ 54 Fig. 2 (Def. Ex. 40).

Undisputed.

199. Unlike iOS devices, which are manufactured only by Apple, numerous original equipment manufacturers (OEMs) such as Samsung, Motorola, LG, and OnePlus have chosen the Android operating system to run a range of differentiated smartphones and other devices.

Disputed in part.

Plaintiffs object to the terms "numerous," "Android operating system," "range," and "differentiated" as vague and undefined, object as vague as to time, and to Statement 199 as incomplete and misleading.

Undisputed that unlike iOS devices, which are manufactured only by Apple, multiple original equipment manufacturers (OEMs) such as Samsung, Motorola, LG, and OnePlus have at one time manufactured devices that run an Android operating system.

Otherwise disputed. Android is the only viable, licensable modern operating system for mobile phones in the United States. Pls. Ex. 56, Davies (DOJ Pls.' Expert) Initial Report, ¶¶ 25– 31, § III.D ("Android emerged as the only viable, licensable modern smartphone OS"). Accordingly, it is wrong to say OEMs have chosen to license Android—it is the only option. Also disputed with respect to "differentiation"—the vast majority of OEMs in the United States (including all the OEMs listed in Statement 199) have signed distribution agreements that commit them to distributing Android devices that are only differentiated as far as the CDD

allows.

Also, LG no longer

Case 1:20-cv-03010-APM Document 544-1 Filed 03/13/23 Page 122 of 271

manufactures mobile devices. Pls. Ex. 279, LG Electronics, Inc., Press Release, "LG to Close Mobile Phone Business Worldwide" (Apr. 5, 2021).

200. In 2021 there were an estimated 9,000 unique yet compatible Android devices from an estimated 550 manufacturers in active use in the U.S. Murphy (Google's Expert) Opening Rep. ¶ 354 (Def. Ex. 9).

Disputed.

Plaintiffs object to the term "compatible Android devices" as vague and undefined and to Statement 200 as (1) vague; (2) incomplete; and (3) misleading.

First, the data is kept by model, meaning slight varitions in models appear as different

entries in the data.

Second, "compatible Android devices" does not distinguish between devices running AOSP and devices with GMS preinstalled (Google proprietary Android devices)—for an Android mobile device to be successful in the United States, it must have proprietary Google Software preinstalled—e.g., the Play Store and Google Play Services (GPS) (a critical proprietary set of APIs). *See* Pls. Ex. 61, Christensen (Motorola) Dep., 157:11–158:2 (); Pls. Ex. 63,) Dep., 29:18–30:9 (); Pls. Ex. 64, Google presentation: Android Review (*Nov. 5, 2019), GOOG-DOJ-06465054, at -066–067 (Android apps look for the application

programming interfaces (APIs) known as Google Play Services (GPS) and they need them to function).

Finally, the number provides no insight as to the number of each device in circulation, putting equal weigh on devices with dozens of active users verses millions. Looking at the same data Prof. Murphy relies on, Though it is vague whether "compatible Android devices" includes only Google

proprietary Android devices or also AOSP devices, of the Android mobile devices in the United

States, the vast majority are Google proprietary devices. E.g., Pls. Ex. 158, Email from Braddi

(Google), Re: assistant (Aug. 7, 2018), GOOG-DOJ-06446636, at -636

; Pls. Ex. 22, Whinston (DOJ Pls.' Expert) Initial Report, ¶ 754. The most popular

Google proprietary Android devices are Samsung, Motorola, or LG (until their exit in 2021). Pls.

Ex. 22, Whinston (DOJ Pls.' Expert) Initial Report, ¶ 79, Fig. 8; Pls. Ex. 159, Google

presentation: Android Staples (Aug. 2021), GOOG-DOJ-30356083, at -093.

201. Android smartphones are typically available at lower price points than Apple's iPhone, with an estimated average price in the U.S. between 2016 and 2021 of approximately \$462 for an Android smartphone compared to approximately \$935 for an iPhone. Murphy (Google's Expert) Opening Rep. ¶ 354 & Fig. 24 (Def. Ex. 9);

| <u>Undisput</u> | ted. | | |
|-----------------|------|--|--|
| 202. | | | |
| | | | |
| | | | |

Undisputed.

203. In 2021, an estimated of search queries in the U.S. were submitted from devices running on the Android operating system. Murphy (Google's Expert) Opening Rep. ¶ 34 & Fig. 1 (Def. Ex. 9).

Undisputed.

| 204. | | | |
|------|--|--|--|
| | | | |
| | | | |
| | | | |

Disputed.

Plaintiffs object to Statement 204 as (1) vague; (2) incomplete; and (3) misleading.

Based on the same data Google relies on for Statement 204, in 2020 Android devices

submitted

. Pls. Ex.

67, Murphy (Def.'s Expert) Initial Report, ¶ 86, Fig. 5. Statement 204 is misleading because it obscures the differences between desktop and mobile searches—Windows has search share on mobile and tablet devices in the United States. Pls. Ex. 22, Whinston (DOJ Pls.' Expert) Initial Report, ¶¶ 53–54, Figs. 2, 3. In 2021, Microsoft's Bing search engine had share on phones and share on tablets, compared to Google's share on phones and share on phones and share on tablets. Pls. Ex. 22, Whinston (DOJ Pls.' Expert) Initial Report, ¶¶ 849–852, Fig. 142.

205. Bing has been the preinstalled default search engine on more than 80% of Windows PCs since approximately 2013. Murphy (Google's Expert) Opening Rep. ¶¶ 91-94, Fig. 7, & Fig. 9 (Def. Ex. 9).

Disputed in part.

Plaintiffs object to Statement 205 as (1) incomplete; and (2) misleading insofar as it understates Google's possession of defaults on Windows PCs.

Plaintiffs do not dispute that Bing is the default search engine within a preinstalled

browser on most Windows PCs and has been since 2013.

Otherwise disputed. Statement 205 (1) ignores that Google's distribution agreements with nearly every alternative browser used on Windows and its ownership of Chrome—distributed exclusively with Google search defaults—ensures Google benefits from the popularity of Chrome and, to a lesser degree, from users of alternative browsers; from 2019–2021 at most

of Google's queries on Windows PCs were not attributable to distribution agreement or Chrome. Pls. Ex. 24, Whinston (DOJ Pls.' Expert) Rebuttal Report, ¶ 459; and (2) ignores, with

Case 1:20-cv-03010-APM Document 544-1 Filed 03/13/23 Page 125 of 271

respect to preinstallation relative to a user, that Windows' relative popularity in enterprise settings allows a small set of technical administrators to switch defaults for large numbers of searchers. Pls. Ex. 24, Whinston (DOJ Pls.' Expert) Rebuttal Report, ¶¶ 467–468.

206. Google has not had any agreements to preinstall Google Search or the Chrome browser on Windows PCs since 2015. Murphy (Google's Expert) Opening Rep. ¶¶ 83, 92, 96, & Fig. 10 (Def. Ex. 9).

Disputed in part.

Plaintiffs object to Statement 206 as (1) incomplete; and (2) misleading.

Undisputed that Google exited many, if not all, of its agreements to preinstall Google Search or the Chrome browser on Windows PCs by approximately 2015—after it had achieved a persistent market share of nearly 80% in general search services for more than five years. Pls. Ex. 22, Whinston (DOJ Pls.' Expert) Initial Report, ¶¶ 437–444, Figs. 66–71.

Plaintiffs note: Statement 206 does not support the proposition in Google's Memorandum of Law for which Statement 206 is cited as support. See Def. Br. at 40 ("Google knows this well, having successfully won consumers' business on Microsoft Windows PCs, even though it has historically had little or no pre-load distribution or default status while Microsoft search engines and browsers have been preloaded exclusively on almost all such devices.") (citing SMF ¶¶ 205-206.). In fact, historically Google has had many agreements for pre-load distribution or default status on Windows PCs. *See, e.g.*, Pls. Ex. 66, Google presentation: Top Account Reviews: Distribution – Chrome, Toolbar, and Desktop Browser Default Search (Jan. 2012), GOOG-DOJ-00130034, at -035–040 (providing overview of pre-load distribution or default status deals on Windows PCs, for Chrome, Toolbar, Default Search, and Homepage products, among others). *See also* Pls. Ex. 67, Murphy (Def.'s Expert) Initial Report, ¶ 97 (in 2010, 9 percent of Google's search query volume on Windows PCs were covered by preinstallation deals).

B. Android Compatibility Commitment (ACC) and Anti-Fragmentation Agreement (AFA)

207. Google has entered Android Compatibility Commitments (ACC) and Anti-Fragmentation Agreements (AFA) with OEMs, such as Samsung and Motorola. *E.g.*, Anti-Fragmentation Agreement

; Android Compatibility Commitment between

Undisputed.

208. Entering into an ACC or AFA is not a condition of licensing the Android operating system. *Licenses*, available at https://source.android.com/docs/setup/about/licenses (Sept. 13, 2022).

Disputed in part.

Plaintiffs object to the term "Android operating system" as vague and undefined and to Statement 208 as (1) incomplete; and (2) misleading. It is unclear whether Statement 208 refers to AOSP, Google proprietary Android, or other elements of the undefined "Android operating system."

Undisputed there are versions of the Android Open Source Project (AOSP) available via open-source license without signing an AFA or ACC.

Otherwise disputed, including to the extent Statement 208 suggests that an Android mobile device could be successful in the United States today without proprietary Google Software. For an Android mobile device to be successful in the United States, it must have proprietary Google Software preinstalled—e.g., the Play Store and Google Play Services (GPS) (a critical proprietary set of APIs). Pls. Ex. 61, Christensen (Motorola) Dep., 157:11–158:2 (

Pls. Ex. 64, Google presentation: Android

Review (*Nov. 5, 2019), GOOG-DOJ-06465054, at -066–067 (Android apps look for the application programming interfaces (APIs) known as Google Play Services (GPS) and they need

Case 1:20-cv-03010-APM Document 544-1 Filed 03/13/23 Page 127 of 271

them to function). Further, an AOSP licensee cannot use the Android name, logo, or trademarks or provide users access to the Google Play Store, which are all necessary to compete. To get these things necessary to compete, OEMs must make devices compatible with Google's CDD and sign an ACC or AFA as a prerequisite to signing a MADA (necessary to get the Play Store). Pls. Ex. 68, Android Source, AOSP – Docs – Getting Started – Brand Guidelines; Pls. Ex. 56, Davies (DOJ Pls.' Expert) Initial Report, ¶ 48; *accord*

209. ACCs and AFAs require signatories to comply with the public Android Compatibility Definition Document ("CDD") for the Android devices that they market. Second Statement of Jamie Rosenberg (Feb. 20, 2021) (GOOG-DOJ-29517860, at -872) (Def. Ex. 60);

Disputed in part.

Plaintiffs object to the terms "Android" and "public" as vague and undefined and to Statement 209 as (1) vague; (2) misleading; and (3) not supported by cited material, as required by Federal Rule of Civil Procedure 56(c)(1) and Local Rule 7(h). It is unclear whether Statement 209 refers to AOSP or Google proprietary Android.

Undisputed that the AFA and ACC require compliance with the CDD for all Android

devices (AOSP and Google proprietary Android) and that the CDD is publicly available for

review.

Otherwise disputed. The prohibitions of the ACCs and AFAs require broader compliance than only for "Android devices that [OEMs] market." The AFAs prohibit manufacturers from "distributing or developing" Android devices that do not comply with the CDD.

, and from

distributing a software development kit (SDK) based on Android.

Even more broadly, the AFAs

prevent signatories from taking "any actions that may cause or result in the fragmentation of

Android."

Google does not define fragmentation in the AFAs and declined to define fragmentation

when asked by OEMs. E.g., Pls. Ex. 69, Email from Tsao (Google),

(Nov. 25, 2010), GOOG-DOJ-00626785, at -786. The ACCs are similar, with

exemptions for contract and component manufacturing.

. Pls. Ex. 56, Davies (DOJ Pls.' Expert)

Initial Report, ¶ 107–114, § VIII ("Google's Arrangements with Smartphone Vendors Preclude

The Development Of Viable Alternatives To Google's Proprietary Android").

Google-not the "public"-controls the contents of the CDD and reserves the right to

unilaterally alter the CDD at its sole discretion; Statement 209 is disputed to the extent it

suggests otherwise.

210. Neither the ACC nor the AFA requires a signatory to install the Google Search app, the Chrome browser, or any proprietary Google Software on any Android device. *See, e.g.*,

Android Compatibility Definition Document, available at https://source.android.com/docs/compatibility/cdd (Aug. 11, 2022).

Disputed in part.

Plaintiffs object to the term "Android" as vague and undefined and to Statement 210 as

(1) incomplete; and (2) misleading. It is unclear whether Statement 210 refers to AOSP or

Google proprietary Android.

Undisputed that there are no explicit provisions in the AFA or ACC that require a

signatory to install the Google Search app, the Chrome browser, or any proprietary Google

Software on any AOSP or Google proprietary Android device.

Case 1:20-cv-03010-APM Document 544-1 Filed 03/13/23 Page 129 of 271

Otherwise disputed, including to the extent Statement 210 suggests that an Android mobile device could be successful in the United States today without proprietary Google Software. For an Android mobile device to be successful in the United States, it must have proprietary Google Software preinstalled—e.g., the Play Store and Google Play Services (GPS) (a critical proprietary set of APIs). *See* Pls. Ex. 61, Christensen (Motorola) Dep., 157:11–158:2

| Pls. Ex. 63,) Dep., 29:18–30:9 (); Pls. Ex. 64, Google |
|--|
| presentation: Android Review (*Nov. 5, 2019), GOOG-DOJ-06465054, at -066-067 (Android |
| apps look for the application programming interfaces (APIs) known as Google Play Services |
| (GPS) and they need them to function). Nearly all mobile devices made under the AFAs and |
| ACCs are also made under MADA agreements, indicating signatories view the agreements |
| together. Pls Ex. 280, Email from Jung (Google), Treble Compliance Requirements, (Jan. 21, |
| 2017), GOOG-DOJ-23765101, at -101 (|
| |

); Pls. Ex. 158, Email

from Braddi (Google), Re: assistant (Aug. 7, 2018), GOOG-DOJ-06446636, at -636 (

); Pls. Ex. 121, Google presentation: Android

Agreements Explainer - ACC, MADA, RSA, DCB (Feb. 2, 2018), GOOG-DOJ-28380959, at -

968

211. Neither the ACC nor the AFA restricts a signatory from exclusively preinstalling or setting as the default a search application, search widget, or browser provided by a search engine other than Google on any Android device. *See, e.g.*,

Android Compatibility Definition Document, available at https://source.android.com/docs/compatibility/cdd (Aug. 11, 2022); Jung (Google) Tr. 234:24-235:6 (Def. Ex. 63).

Disputed in part.

Case 1:20-cv-03010-APM Document 544-1 Filed 03/13/23 Page 130 of 271

Plaintiffs object to the terms "restricts," "default," and "Android" as vague and undefined and to Statement 211 as (1) incomplete; (2) vague as to type of default referenced, e.g. meaning of "the" default versus "a" default; and (3) misleading. It is unclear whether Statement 211 refers to AOSP or Google proprietary Android.

Undisputed there are no explicit provisions in the AFA or ACC that restrict a signatory from exclusively preinstalling or setting as the default a search application, search widget, or browser provided by a search engine other than Google on any device running any Android operating system.

Otherwise disputed, including to the extent Statement 211 suggests that an Android device could be sucessful in the United States today without the Play Store or Google Play Services (GPS). For an Android mobile device to be successful in the United States, it must have proprietary Google Software preinstalled—e.g., the Play Store and Google Play Services (GPS) (a critical proprietary set of APIs). *See* Pls. Ex. 61, Christensen (Motorola) Dep., 157:11–158:2

Pls. Ex. 63,

Dep., 29:18–30:9 (); Pls. Ex. 64, Google presentation: Android Review (*Nov. 5, 2019), GOOG-DOJ-06465054, at -066–067 (Android apps look for the application programming interfaces (APIs) known as Google Play Services (GPS) and they need them to function). The Play Store and GPS are only available under the MADA, and the MADA requires that if the Play Store and GPS preinstalled, so must be the rest of a core set of applications that include Google's Search Widget and Google's Chrome Browser. Pls. Ex. 160, Def.'s Resp. to Pls.' Second Set of Contention Interrogatories (Apr. 27, 2022), at 20–21 (response to Contention Interrogatory No. 19). Nearly all mobile devices made under the AFAs and ACCs are also made under MADA agreements, indicating signatories view the agreements together. Pls. Ex. 280, Email from Jung (Google), Treble Compliance Requirements, (Jan. 21,

2017), GOOG-DOJ-23765101, at -101 (

); Pls. Ex. 158,

Email from Braddi (Google), Re: assistant (Aug. 7, 2018), GOOG-DOJ-06446636, at -636

); Pls. Ex. 121, Google

presentation: Android Agreements Explainer - ACC, MADA, RSA, DCB (Feb. 2, 2018),

GOOG-DOJ-28380959, at -968

C. Mobile Application Distribution Agreement (MADA)

212. Google provides OEMs a royalty-free license to a suite of proprietary applications, services, and application programming interfaces through the Mobile Application Distribution Agreement (MADA). *E.g.*, Mobile Application Distribution Agreement between

; Mobile Application Distribution Agreement between

Disputed in part.

Plaintiffs object to the term "royalty-free license" as vague and to Statement 212 as incomplete and misleading.

Undisputed that Google provides OEMs a license to a suite of proprietary applications, services, and application programming interfaces through the Mobile Application Distribution Agreement (MADA). The MADA does not require a monetary royalty payment from the OEM to Google.

Otherwise disputed. Plaintiffs dispute Google's characterization of the MADAs as

"royalty-free." Google describes its MADAs as "Non monetary barter" providing "[a]ccess to

Google apps in exchange for placement and security update." Pls. Ex. 91, Google presentation,

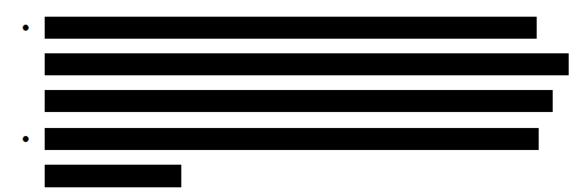
2019 Partner Plan (*July 2019), GOOG-DOJ-09073083, at -097. Prof. Whinston's reports

Case 1:20-cv-03010-APM Document 544-1 Filed 03/13/23 Page 132 of 271

are in accord: as he notes, under the MADAs, "[i]nstead of charging a fee for GMS licenses, Google imposes a set of requirements on the Android OEM and any Android device on which the Android OEM chooses to preinstall Google apps." Pls. Ex. 22, Whinston (DOJ Pls.' Expert) Initial Report, ¶ 751. Prof. Whinston identified these requirements as they existed in the most recent MADAs:

- The Android OEM must have a valid ACC or AFA;
- If the Android OEM preinstalls any single Google app, it must preinstall a suite of 11 Google apps (the Core and Flexible Apps);
- Google's Core Apps—GSA, Chrome, Play Store, Maps, YouTube, and Gmail must be preinstalled in the system partition, making them undeletable by the user;
- Google Search widget must be placed on the default home screen;
- Google Play Store must be placed on the default home screen;
- A folder or icon labeled "Google" that provides direct access to the Core and Flexible Apps must be placed on the default home screen;

| • | |
|---|--|
| | |
| | |
| • | |
| | |
| • | |
| | |
| | |
| | |



Pls. Ex. 22, Whinston (DOJ Pls.' Expert) Initial Report, ¶ 751 (citing contracts).

213. The Google applications licensed pursuant to the MADA include the Google Search app, the Chrome browser, Gmail, Google Maps, YouTube, and Google Play. https://www.android.com/gms;

Disputed in part.

Plaintiffs object to Statement 213 as (1) incomplete; and (2) misleading.

Undisputed that Google applications licensed pursuant to the MADA include the Google Search app, the Chrome browser, Gmail, Google Maps, YouTube, and Google Play. But in order to install any one of the Google applications listed in Statement 213, the MADA also requires preinstallation of additional applications that vary by geography.

Disputed that OEMs could use the Google Search app, the Chrome browser, Gmail, Google Maps, YouTube, and Google Play, without taking Google's other apps. In the United States, the MADA requires preinstallation of 11 applications: Google Search, Google Play Store, Google Chrome, YouTube, Google Maps, Gmail, Google Photos, YouTube Music, Google Duo, Google Drive, and Google Play Movies and TV. Pls. Ex. 160, Def.'s Resp. to Pls.' Second Set of Contention Interrogatories (Apr. 27, 2022), at 20–21 (response to Contention Interrogatory No. 19).

214. Google has offered versions of the MADA to OEMs since the commercial release of Android. *E.g.*, Mobile Application Distribution Agreement between

Undisputed.

215. An OEM is not required to sign a MADA in order to manufacture or sell Android devices. Def.'s Supp. Resp. to Pls.' Interrog. No. 3 at 2-3 (Def. Ex. 67).

Disputed in part.

Plaintiffs object to the terms "required" and "Android" as vague and undefined and to Statement 215 as (1) incomplete; (2) vague; and (3) misleading. It is unclear whether Statement 215 refers to AOSP or Google proprietary Android.

Undisputed that an OEM may manufacture or sell an AOSP device without signing the MADA.

Otherwise disputed. Market realities require OEMs to sign MADAs. For an Android mobile device to be successful in the United States, it must have proprietary Google Software preinstalled—e.g., the Play Store and Google Play Services (GPS) (a critical proprietary set of APIs). *See* Pls. Ex. 61, Christensen (Motorola) Dep., 157:11–158:2

| 9:18–30:9 (); Pls. Ex. 64, Google presentation: Android Review (*Nov. 5, 2019), |
|---|
| GOOG-DOJ-06465054, at -066–67 (Android apps look for the application programming |
| nterfaces (APIs) known as Google Play Services (GPS) and they need them to function). In |
| rder to distribute an Android device with any Google application preinstalled, including Google |
| Play, a device must also be preloaded with Google Search under the terms of the MADA. |

); Pls. Ex. 63, Dep.,

| | . See Pls. Ex. 61, Christensen (Motorola) Dep., 157:11–158:2 (|
|----|--|
|); | Pls. Ex. 63, |
| | Dep., 29:18–30:9 (); Pls. Ex. 64, Google presentation: Android Review |

(*Nov. 5, 2019), GOOG-DOJ-06465054, at -066–067 (Android apps look for the application programming interfaces (APIs) known as Google Play Services (GPS) and they need them to function). The only way that manufacturers can get access to the Play Store or any other part of GMS is by signing a MADA.

216. An OEM that signs a MADA is not required to install any Google applications on any of its devices, and it may sell Android devices without any preloaded Google applications. *E.g.*,

Disputed in part.

Plaintiffs object to the terms "required" and "Android" as vague and undefined and to Statement 216 as (1) incomplete; (2) vague; and (3) misleading. It is unclear whether Statement 216 refers to AOSP or Google proprietary Android.

Undisputed that an OEM that signs a MADA is not contractually obligated to install any Google applications on any of its non-GMS devices, and the OEM is not contractually obligated to preload Google applications on AOSP devices.

Otherwise disputed, including as incomplete and misleading to the extent Statement 216 suggests an OEM that signs a MADA would not be required to install the full bundle of MADA applications if it wanted to install any single application. e.g.,

Further disputed to the

extent Statement 216 suggests an AOSP mobile device would be viable in the United States without proprietary Google Software preinstalled—e.g., the Play Store and Google Play Services (GPS) (a critical proprietary set of APIs). *See* Pls. Ex. 61, Christensen (Motorola) Dep., 157:11– 158:2 (________); Pls. Ex. 63, ______) Dep., 29:18–30:9 (_______); Pls. Ex. 64, Google presentation: Android Review (*Nov. 5, 2019), GOOG-DOJ-06465054, at -067–68 (Android apps look for the application programming interfaces (APIs) known as Google Play Services (GPS) and they need them to function). The only way that manufacturers can get access to the Play Store or any other part of GMS is by signing a MADA.

217. If an OEM decides to install on a given device sold in the U.S. any of the proprietary Google applications licensed pursuant to the MADA, then the MADA provides that, absent an exemption, the OEM will (i) preload on that device all of the applications licensed pursuant to the MADA and (ii) place on the device's default home screen the Google Search widget, the Google Play application, and a folder containing the other MADA applications. *E.g.*,

Undisputed.

218. The MADA does not restrict an OEM from preloading its own applications or any third-party applications on any of its devices, including devices on which it chooses to install the MADA applications. *E.g.*,

Disputed in part.

Plaintiffs object to the term "restrict" as vague and undefined and to Statement 218 as (1)

incomplete; and (2) misleading.

Undisputed that the MADAs do not contain terms that explicitly prohibit preinstallation

of other applications-but the MADA's placement and bundled preinstallation requirements, e.g.

do restrict—effectively limiting—preinstallation of alternative applications, as partners generally

prefer fewer applications be preinstalled because of consumer preferences. Pls. Ex. 77,

7,

Pls. Ex. 61, Christensen (Motorola) Dep., 147:24–148:10,

Case 1:20-cv-03010-APM Document 544-1 Filed 03/13/23 Page 137 of 271

| Otherwise disputed. |
|--|
| |
| |
| |
| |
| |
| |
| |
| |
| |
| |
| |
| |
| |
| |
| |
| . Further, Google RSAs do contain terms that explicitly prohibit preinstallation of |
| other applications. Many OEMs may view signing MADAs and RSAs as one, combined |
| agreement. Pls. Ex. 280, Email from Jung (Google), Treble Compliance Requirements, (Jan. 21, |
| 2017), GOOG-DOJ-23765101, at -101 |
| ; Pls. Ex. 158, |
| Email from Braddi (Google), Re: assistant (Aug. 7, 2018), GOOG-DOJ-06446636, at -636 (|

Case 1:20-cv-03010-APM Document 544-1 Filed 03/13/23 Page 138 of 271

); Pls. Ex. 121, Google presentation: Android

Agreements Explainer - ACC, MADA, RSA, DCB (Feb. 2, 2018), GOOG-DOJ-28380959, at -

968

; Pls. Ex. 87, Murphy (Def.'s Expert) Dep.,

220:10-22 ("as an economic matter, since you can't sign an RSA unless you've also signed the

MADA, thinking about the advantages of the RSA would be relevant for deciding whether to

sign a MADA agreement.")

219. The MADA does not restrict an OEM from preloading a search application, widget, or browser provided by a search engine other than Google on any of its devices, including devices on which it chooses to install the MADA applications. *E.g.*,

Disputed in part.

Plaintiffs object to the term "restrict" as vague and undefined and to Statement 219 as (1) incomplete; and (2) misleading.

Undisputed that the MADA does not contain terms that explicitly limit an OEM's ability

to preload a search application, widget, or browsers provided by a search engine other than

Google on any of its devices, including devices on which it chooses to install the MADA

applications-but the MADA's placement and bundled preinstallation requirements, e.g.,

deter—effectively limiting—preinstallation of alternative search applications, widgets, or browsers.

Otherwise dispute. For example, an OEM could preinstall an alternative search widget but would still be required to preinstall Google's search widget and place it prominently on the home screen, if the OEM wanted to preinstall any Google applications (e.g., the Play Store).

Case 1:20-cv-03010-APM Document 544-1 Filed 03/13/23 Page 139 of 271

Further, Google RSAs do contain terms that explicitly limit an OEM's ability to preload a search application, widget, or browsers provided by a search engine other than Google on the OEM's devices, including devices on which the OEM chooses to install the MADA applications. *E.g.*, Many OEMs may view signing MADAs and RSAs as one, combined agreement. Pls. Ex. 87, Murphy (Def.'s Expert) Dep., 220:10–22 ("[S]ince you can't sign an RSA unless you've also signed the MADA, thinking about the advantages of the RSA would be relevant for deciding whether to sign a MADA agreement.").

220. The MADA does not restrict an OEM from setting a browser in which Google is not the default search engine as the default browser on any of its devices, including devices on which it chooses to install the MADA applications. *E.g.*,

Disputed in part.

Plaintiffs object to the term "restrict" as vague and undefined and to Statement 220 as (1)

incomplete; and (2) misleading.

Undisputed that the MADA does not contain terms that explicitly restrict an OEM from

setting a browser in which Google is not the default search engine as the default browser on any

of the OEM's devices, including devices on which it chooses to install the MADA

applications-but the MADA's placement and bundled preinstallation requirements, e.g.,

deter—effectively limiting—preinstallation of a browser in which Google is not the default search engine as the default browser.

Otherwise disputed, including to the extent Statement 220 suggest that browsers in which Google is not the default would have equal access to default on MADA devices, because (1) the MADA requires that, if any Google applications are preinstalled, Google's Chrome browser must also be preinstalled,

. Distributors generally prefer to avoid duplication of applications Pls. Ex. 77, Pls. Ex. 61, Christensen (Motorola) Dep., 147:24-148:10; and (2) Google RSA agreements—which cover nearly all MADA devices in the United States do require that Google be the exclusive default search engine on the device. *E.g.*,

Many OEMs may view signing MADAs and RSAs as one, combined agreement. Pls. Ex. 87, Murphy (Def.'s Expert) Dep., 220:10–22 ("[S]ince you can't sign an RSA unless you've also signed the MADA, thinking about the advantages of the RSA would be relevant for deciding whether to sign a MADA agreement.").

221. The MADA does not restrict an OEM from setting a search engine other than Google as the default search engine on any of the OEM's devices, including devices on which it chooses to install the MADA applications. *E.g.*,

Disputed in part.

Case 1:20-cv-03010-APM Document 544-1 Filed 03/13/23 Page 141 of 271

Plaintiffs object to the terms "restrict" and "default search engine" as vague and undefined and to Statement 221 as (1) incomplete; and (2) misleading.

Undisputed that the MADA does not contain terms that explicitly restrict an OEM from setting a search engine other than Google as a default search engine on any of the OEM's devices, including devices on which it chooses to install the MADA applications —but the MADA's placement and bundled preinstallation requirements, *e.g.*,

, deter—effectively

limiting—OEMs from setting a search engine other than Google as the default search engine

Otherwise disputed, including to the extent Statement 221 suggest that search engines other that Google would have equal access to default on MADA devices, because (1) the MADA requires that, if any Google applications are preinstalled, Google's Chrome browser must also be preinstalled, e.g.,

. Chrome always defaults to Google. Pls. Ex. 70, Kolotouros (Google) Dep., 89:1–5. Distributors generally prefer to avoid duplication of applications. Pls. Ex. 77, ______, Pls. Ex. 61, Christensen (Motorola) Dep., 147:24–148:10, _______ and (2) Google RSA agreements—which cover nearly all MADA devices in the United States—do require that Google be the exclusive default search engine on the device. *E.g.*, . Many OEMs

may view signing MADAs and RSAs as one, combined agreement. Pls. Ex. 87, Murphy (Def.'s Expert) Dep., 220:10–22 ("[S]ince you can't sign an RSA unless you've also signed the MADA,

Case 1:20-cv-03010-APM Document 544-1 Filed 03/13/23 Page 142 of 271

thinking about the advantages of the RSA would be relevant for deciding whether to sign a

MADA agreement.").

D. Revenue Share Agreements (RSA)

| 222. Google offers OEMs and wireless carriers |
|---|
| that sell Android devices an opportunity to earn revenue from Google by |
| promoting Google services to end users of Android devices and delivering security and |
| operating system updates to those end users. E.g., Google Mobile Revenue Share |
| Agreement between |
| ; Mobile Revenue Share Agreement between |
| ; Android Activations Agreement between |
| ; Search |

Revenue Share Agreement between

Disputed in part.

Plaintiffs object to the terms "offers," "promoting," and "Android" as vague and undefined and to Statement 222 as (1) incomplete; and (2) misleading. It is unclear whether Statement 222 refers to AOSP or Google proprietary Android.

Undisputed that Google offers revenue share agreements (RSAs) to OEMs and wireless carriers, that RSAs provide Google's counterparties an opportunity to earn revenue from Google, and that RSAs include certain requirements to deliver security and operating system updates to end users.

Otherwise disputed. Google's broad cites to four RSAs fail to support Statement 222's claim that the purpose of its RSAs is to provide "an opportunity to earn revenue from Google by promoting Google services to end users of Android devices and delivering security and operating system updates to those end users." Google enters into RSAs primarily to distribute and acquire exclusive or preferential placement for its products.

Case 1:20-cv-03010-APM Document 544-1 Filed 03/13/23 Page 143 of 271

Case 1:20-cv-03010-APM Document 544-1 Filed 03/13/23 Page 144 of 271

Any promotional purposes to RSAs are secondary.

Android RSAs with manufacturers and carriers contain explicit exclusivity provisions

that prevent the counterparty from implementing a rival search service. See, e.g.,

223. In the U.S., consumers purchase Android devices directly from OEMsas well as from carriersChristensen(Motorola) Tr. 24:10-25:10 (Def. Ex. 58).

Undisputed.

224. Carriers and OEMs in the U.S. may engage in negotiations regarding the out-of- the-box configuration of an Android device sold by a carrier, which may include negotiations regarding which apps are preloaded on the device.

Disputed in part.

Plaintiffs object to the term "Android device" as vague and undefined, and to Statement

224 as incomplete as to the ability of carriers and OEMs to negotiate which apps are preloaded

on devices.

Undisputed that carriers and OEMS in the United States may engage in negotiations regarding the out-of-the-box configuration of *some* Android devices sold by carriers, which may include negotiations regarding some apps that may be preloaded on the devices.

Otherwise disputed. Negotiations between carriers and OEMs regarding Google proprietary Android devices cannot result in preloading only some Google proprietary applications but not others—this is prohibited by the MADA.

Google proprietary applications cannot be preloaded at all on AOSP devices that do not comply with Google's CDD.

225. The RSAs between Google and Android OEMs and carriers do not restrict end users from installing and using alternatives to any Google application, including the Google Search app, the Google Search widget, and the Google Chrome browser.

Disputed in part.

Plaintiffs object to the term "restrict" as vague and undefined, and to Statement 225 as (1) not support by the cited materials, as required by Federal Rule of Civil Procedure 56(c)(1) and Local Rule 7(h); and (2) incomplete as to the degree to which the RSAs "restrict" end users from installing and using alternatives, by ignoring importance of defaults to the end user behavior.

Undisputed that the RSAs between Google and Android OEMs and carriers do not contractually bar OEMs and carriers from including functionality that allows end users to install and use alternatives to most Google applications, including the Google Search app, the Google Search widget, and the Google Chrome browser.

Case 1:20-cv-03010-APM Document 544-1 Filed 03/13/23 Page 146 of 271

Otherwise disputed. Google's RSAs can have the effect of deterring end users from installing and using alternatives to Google applications and its search engine. *E.g.*, Pls. Ex. 79, Google presentation: Mobile Growth Meeting (Sept. 8, 2016), GOOG-DOJ-05642687, at 720. More generally, users are highly unlikely to avail themselves of options that are not available by default. Pls. Ex. 23, Rangel (DOJ Pls.' Expert) Initial Report, ¶ 27–47, ¶ 59–97.



226. Google has entered RSAs pursuant to which an OEM or carrier agrees on a device-by-device basis to set Google as the default search engine for search access points specified in the agreement and to refrain from preloading alternative search services (as defined in the agreement) to the extent specified in the agreement. *E.g.*,

Case 1:20-cv-03010-APM Document 544-1 Filed 03/13/23 Page 147 of 271

Disputed in part.

Plaintiffs object to the term "device" as vague, and to Statement 226 as vague as to the time.

Undisputed that Google today has in effect some—but not all—RSAs pursuant to which an OEM or carrier agrees on a device-by-device basis to set Google as the default search engine for search access points specified in the agreement on Google propriety Android devices, and to refrain from preloading alternative search services (as defined in the agreement) to the extent specified in the agreement.

Otherwise disputed. Statement 226 is vague as to "device" and Plaintiffs understand Google to mean Google proprietary Android devices. Statement 226 is further vague as to time—Google has in the recent past entered into RSAs under which all Google proprietary Android devices must comply with certain RSA requirements to receive payments on any device (so-called "platform" requirements). Pls. Ex. 24, Whinston (DOJ Pls.' Expert) Rebuttal Report, ¶ 405, Fig. 33 (bolded font indicates requirements is platform based); *e.g.*,

227. Google has entered RSAs pursuant to which an OEM or carrier may choose among multiple tiers that provide varying levels of promotion of Google Search. *E.g.*,

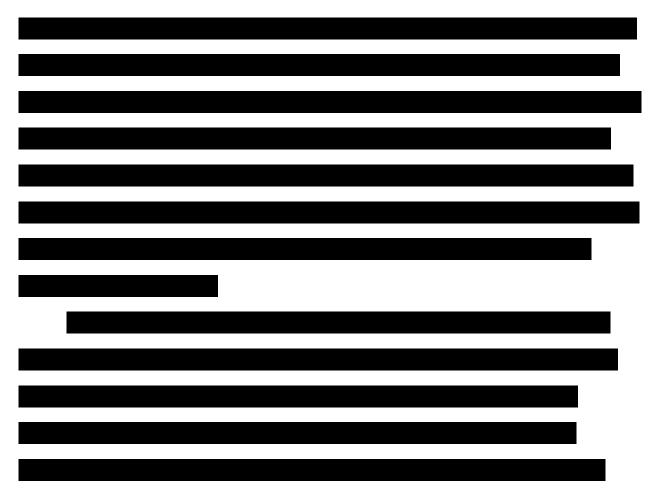
Disputed in part.

Case 1:20-cv-03010-APM Document 544-1 Filed 03/13/23 Page 148 of 271

Plaintiffs object to the term "promotion" as vague and undefined, and to Statement 227 as (1) not supported by the cited material as required by Federal Rule of Civil Procedure 56(c)(1) and Local Rule 7(h); (2) as vague as to time; and (3) as incomplete.

Undisputed that Google has entered into some RSAs pursuant to which an OEM or carrier may choose among multiple tiers that provide varying levels of exclusivity for Google Search and that such agreements are in effect today. The highest paying levels provide Google with the greatest exclusivity.

Otherwise disputed. Google's broad cite to a single RSA fails to support Statement 227's claim that the purpose of its RSAs is to provide "promotion of Google search." Google enters into RSAs primarily to distribute and acquire exclusive or preferential placement for its products.



| Any promotional purposes to RSAs are secondary. |
|--|
| Further disputed because the statement is vague as to time and Google has previously |
| entered into RSA agreements without tiers-under which no options for different levels of |
| search exclusivity in exchange for lower payments were offered— |
| Pls. Ex. 24, Whinston (DOJ Pls.' Expert) Rebuttal Report, ¶ 405, |
| Fig. 33 (bolded font indicates requirement is platform based). <i>E.g.</i> , |
| rig. 55 (bolded font indicates requirement is platform based). 2.g., |
| |
| 228. |
| |
| |
| Undisputed. |

Case 1:20-cv-03010-APM Document 544-1 Filed 03/13/23 Page 150 of 271

229. No OEM or carrier is required to sign an RSA in order to manufacture or sell Android devices, or to license Google Play or any other Google application, application programming interface, or service. *E.g.*, Def.'s Resp. to Pls.' 4th Set of Interrogs. (No. 23) at 7 (Def. Ex. 73);

Disputed in part.

Plaintiffs object to the terms "required" and "Android" as vague and undefined and to Statement 229 as (1) not support by the cited materials, as required by Federal Rule of Civil Procedure 56(c)(1) and Local Rule 7(h); and (2) incomplete as to what OEMs or carriers may be "required" to do.

Undisputed that no OEM or carrier is explicitly required to sign an RSA to manufacture or sell Android devices, or to license Google Play or any other Google application, application programming interface, or service.

Otherwise disputed. Many OEMs may view signing MADAs and RSAs as one, combined agreement; Pls. Ex. 87, Murphy (Def.'s Expert) Dep., 220:10–22 ("[S]ince you can't sign an RSA unless you've also signed the MADA, thinking about the advantages of the RSA would be relevant for deciding whether to sign a MADA agreement."). Market realities require OEMs to sign MADAs to sell mobile phones into the United States. For an Android mobile device to be successful in the United States, it must have proprietary Google Software preinstalled—e.g., the Play Store and Google Play Services (GPS) (a critical proprietary set of APIs). *See* Pls. Ex. 61, Christensen (Motorola) Dep., 157:11–158:2

Pls. Ex. 63,) Dep., 29:18–30:9);

Pls. Ex. 64, Google presentation: Android Review (*Nov. 5, 2019), GOOG-DOJ-06465054, at -066–67 (Android apps look for the application programming interfaces (APIs) known as Google Play Services (GPS) and they need them to function). In order to distribute an Android device with any Google application preinstalled, including Google Play, a device must also be

| preloaded with Google Search under the terms of the MADA. |
|--|
| |
| |
| Because Google Search will be on any Android device that preinstalls Google proprietary |
| applications—i.e., any Android device that has the Google Play store—a carrier may be |
| practically "required" to sign an RSA or lose out on the monetary benefit from user searches on |
| that device. <i>E.g.</i> , ; Pls. Ex. 56, Davies (DOJ Pls.' |
| Expert) Initial Report, ¶ 81. |
| 230. |
| |
| |
| Disputed. |
| Plaintiffs object as vague as to " |
| ," and further object to Statement 230 as (1) not supported by cited |
| material, as required by Federal Rule of Civil Procedure 56(c)(1) and Local Rule 7(h); and (2) |
| misleading as to carrier's consideration of and interest in preloading alternative search engines or |
| other innovative search offerings. |
| There is ample evidence that carriers have considered pre-loading rival search engines on |
| Android devices. Pls. Ex. 63, Dep., 169:24–171:21; Pls. Ex. 210, |
| Pls. Ex. 61, |
| Christensen (Motorola) Dep., 46:8–25 (|
|); Pls. Ex. 77, |
| An Android device pre-loaded with a rival search engine exclusively, |

Case 1:20-cv-03010-APM Document 544-1 Filed 03/13/23 Page 152 of 271

however, would be ineligible to pre-install the Google Play Store, due to the bundling provisions in the MADA

. Given the importance of the Play Store and

); Pls. Ex.

Google Play Services to the commercial viability of Android devices in the United States, it is perhaps inevitable carriers would not prefer to distribute Android devices exclusively pre-loaded with a rival search engine but lacking Google Play and GPS. *See* Pls. Ex. 61, Christensen (Motorola) Dep., 157:11–158:2

64, Google presentation: Android Review (*Nov. 5, 2019), GOOG-DOJ-06465054, at -066–67 (Android apps look for the application programming interfaces (APIs) known as Google Play Services (GPS) and they need them to function).

); Pls. Ex. 63, Dep., 29:18–30:9 (

What Google considers **and the limits** is unclear—negotiations with carriers have included discussions about the limits the RSAs place on the carriers. There is evidence carriers have wanted to preinstall innovative alternatives to general search services but were deterred by Google's contracts.

Pls. Ex. 84, Email from Trowbridge (AT&T), Follow up requests/qq's (Apr. 28, 2020), BM-0001448, at -448.



Disputed.

Plaintiffs object as vague as to

" and further object to Statement 231 as (1) not supported by cited material, as required by Federal Rule of Civil Procedure 56(c)(1) and Local Rule 7(h); and (2) misleading as to OEM's consideration of and interest in preloading alternative search engines or other innovative search offerings. There is ample evidence that OEMs considered pre-loading rival alternative search

engines on Android devices, *e.g.*, Pls. Ex. 85, and that OEMs at least once distributed Android devices with an alternative search exclusively preinstalled. Pls. Ex. 61, Christensen (Motorola) Dep., 46:8–25. In the United States most mobile devices are distributed through carriers, and carriers have asked OEMs to preinstall non-Google search engines. Pls. Ex. 61, Christensen (Motorola) Dep., 46:8–25; Pls. Ex. 77, An Android device pre-loaded with a rival search engine *exclusively*, however, would be ineligible to pre-install the Google Play Store, due to the bundling provisions in the MADA.

Store and Google Play Services to the commercial viability of Android devices in the United States, it is perhaps inevitable carriers would not prefer to distribute Android devices exclusively pre-loaded with a rival search engine but lacking Google Play and GPS. *See* Pls. Ex. 61,

. Given the importance of the Play

Christensen (Motorola) Dep., 157:11-158:2 (

| ; Pls. Ex. 63, |) Dep., 29:18–30:9 (|); |
|----------------|----------------------|----|
| , , |) = -F., = | |

Pls. Ex. 64, Google presentation: Android Review (*Nov. 5, 2019), GOOG-DOJ-06465054, at -

066-67 (Android apps look for the application programming interfaces (APIs) known as Google

Play Services (GPS) and they need them to function).

What Google considers is unclear—negotiations with OEMs have included discussions about the limits the RSAs place on OEMs. There is evidence OEMs wanted to preinstall innovative alternatives to general search services but were deterred by Google's contracts. Pls. Ex. 86,

232. Search applications, widgets, and browsers developed by search engines other than Google can be downloaded on Android devices, including from the Google Play Store. *E.g., Microsoft Edge Now Available for iOS and Android (Updated)*, https://blogs.windows.com/windowsexperience/2017/11/30/microsoft-edge-now-availablefor-ios-and-android/ (Mar. 26, 2018); *Neeva on Mobile Devices: Get the Android App*, available at https://help.neeva.com/hc/en-us/articles/8093854852627-Get-the-Android-App.

Undisputed.

233. In the Google Chrome browser, a user can change the default search engine that receives queries entered in the browser's integrated search box. Def.'s Resp. to Pls.' 4th Set of Interrogs. (No. 26) at 10-13 (Def. Ex. 73).

Disputed in part.

Plaintiffs object to the terms "default search engine" and "search box" as vague and to

Statement 233 as (1) incomplete; and (2) misleading.

Undisputed that in the Google Chrome browser, a user can change the settings so that the

browser's integrated search feature defaults to a search engine other than Google.

Disputed that user can select the default search engine, out of the box, without going to

the browser's setting controls. Pls. Ex. 160, Def.'s Resp. to Pls.' Second Set of Contention

Interrogatories (Apr. 27, 2022), at 20-21 (response to Contention Interrogatory No. 19) ("In the

United States, Google Search is the default out-of-the-box search service for the Google Search App and the Google Chrome App on Android mobile devices"). Defendant Google LLC's Answer And Affirmative Defenses To Plaintiffs' Amended Complaint (ECF #103), Jan. 29, 2021, at ¶ 137 ("Google admits that Google Search is the default out-of-the-box search service for certain Google apps, including the Chrome app."). Users are highly unlikely to take the steps required to change the default. Pls. Ex. 23, Rangel (DOJ Pls.' Expert) Initial Report, ¶¶ 14–122, §§ II-VII; Pls. Ex. 22, Whinston (DOJ Pls.' Expert) Initial Report, ¶¶ 846–965, § VII.A

234. Bing, Yahoo, DuckDuckGo, and Ecosia are currently available as prepopulated options that a user of the Chrome browser in the U.S. may set as the default search engine that receives queries entered in Chrome's integrated search box. Def.'s Resp. to Pls.' 4th Set of Interrogs. (No. 26) at 11-12 (Def. Ex. 73).

Disputed in part.

Plaintiffs object to the terms "default search engine" and "search box" as vague and to Statement 234 as (1) incomplete and (2) misleading.

Undisputed that in the Google Chrome browser, a user can change the settings so that the browser's integrated search functionality defaults to Bing, Yahoo, DuckDuckGo, and Ecosia, which are currently available as prepopulated options.

Disputed that user can select the default search engine, out of the box, without going to the browser's setting controls. Pls. Ex. 160, Def.'s Resp. to Pls.' Second Set of Contention Interrogatories (Apr. 27, 2022), at 20–21 (response to Contention Interrogatory No. 19) ("In the United States, Google Search is the default out-of-the-box search service for the Google Search App and the Google Chrome App on Android mobile devices"). Defendant Google LLC's Answer And Affirmative Defenses To Plaintiffs' Amended Complaint (ECF #103), Jan. 29, 2021, at ¶ 137 ("Google admits that Google Search is the default out-of-the-box search service for the service for the service for the service for certain Google apps, including the Chrome app."). Users are highly unlikely to take the steps

required to change the default. Pls. Ex. 23, Rangel (DOJ Pls.' Expert) Initial Report, ¶¶ 14–122, §§ II-VII; Pls. Ex. 22, Whinston (DOJ Pls.' Expert) Initial Report, ¶¶ 846–965, § VII.A.

III. Plaintiffs' Experts' Opinions Regarding the Agreements

235. In order to assess how much foreclosure might occur as a result of a particular agreement or set of agreements, an economist ideally would compare the world under the contracts at issue to a but-for world. Whinston (DOJ Pls.' Expert) Rebuttal Rep. ¶ 326 (Def. Ex. 77); Whinston (DOJ Pls.' Expert) Tr. 382:22-384:2 (Def. Ex. 4); Murphy (Google's Expert) Reply Rep. ¶¶ 134-143 (Def. Ex. 78).

Disputed.

Plaintiffs object to Statement 235 as (1) incomplete and (2) misleading.

Statement 235 conflates the process of measuring competitive effects with the process of measuring foreclosure. "[T]he likely *competitive effects* of Google's behavior . . . [are] ideally examined relative to a 'but-for' world." Pls. Ex. 24, Whinston (DOJ Pls.' Expert) Rebuttal Report, ¶ 326 (emphasis added). But identifying foreclosure (even as an economist) does not require an assessment of but-for worlds. Pls. Ex. 24, Whinston (DOJ Pls.' Expert) Rebuttal Report, ¶ 318 (citing Areeda & Hovencamp ¶ 768b4 n.38 (defining foreclosure and its example calcuation)) & ¶ 320 n. 429 (citing Areeda & Hovencamp ¶ 1821d4 (calculating a foreclosure percentage in an example lacking any information about a but-for world)); *see also* Pls. Ex. 87, Murphy (Def.'s Expert) Dep., 393:5–394:6 (admitting that the Murphy reports do not—and that Prof. Murphy could not in his deposition—provide a citation for measuring foreclosure relative to a but-for world).¹⁷

¹⁷ Google cites a deposition exchange where Prof. Whinston was asked whether calculating "foreclosure" requires "some but-for world" and responded, "I think what I say [in my report] is, ideally, you would like to do that. And there are difficulties with doing that." Pls. Ex. 88, Whinston (DOJ Pls.' Expert) Dep., 383:6–384:2. Context reveals Prof. Whinston was discussing the ideal method of calculating competitive effects, not foreclosure. Indeed, that is what Prof. Whinston's reports explain, and Google's suggestion that Prof. Whinston changed that opinion in his deposition is wishful thinking. First, the exchanges both before and after the "foreclosure"

236. Neither Plaintiffs' Complaints nor their interrogatory responses purport to describe a but-for world without Google's MADAs or RSAs. *See, e.g.*, DOJ Pls.' 2d Supp. Resps. to Google's 2d Set of Interrogs. (Nos. 8-10) at 12-16 (Def. Ex. 79); Colo. Pls.' 2d Supp. Resps. to Google's 2d Set of Interrogs. (Nos. 8-10) at 6-7 (Def. Ex. 80); DOJ Pls.' 6th Supp. Resps. to Google's 1st Set of Interrogs. (No. 14) at 38-39 (Def. Ex. 81); Colo. Pls.' 4th Supp. Resps. to Google's 1st Set of Interrogs. (No. 14) at 11 (Def. Ex. 82).

Disputed.

Statement 236 is not properly framed as a material fact, and Plaintiffs object to it in full.

What Plaintiffs do or do not "purport to describe" is not a material fact subject to proof at trial

and is therefore not appropriate for inclusion in Google's statement of undisputed material facts.

Accordingly, no response is due from Plaintiffs. Plaintiffs further object to the term "but-for

world" as vague and undefined and to Statement 236 as incomplete.

Plaintiffs are not required to generally opine on whether some specific hypothetical

conduct may have been lawful. As noted in response to Statements 237, 238, 242, 254, and 255,

Plaintiffs' experts have laid out numerous scenarios of what could have occurred "but-for"

Google's conduct.

237. Plaintiffs' experts have not offered an opinion regarding what a but-for world without Google's agreements with browser developers, such as Apple and Mozilla, might look like. *See, e.g.*, Whinston (DOJ Pls.' Expert) Tr. 391:15-395:20 (Def. Ex. 4); Baker (Colo. Pls.' Expert) Tr. 296:10-297:11 (Def. Ex. 84).

Disputed.

question refer to competitive effects. Pls. Ex. 88, Whinston (DOJ Pls.' Expert) Dep., 383:6–13 (asking about the best method "to assess the competitive impact of an exclusive dealing contract"), 384:3–385:7 ("[I]n my report, I do consider . . . some less restrictive alternatives that I am thinking about the effects of."). Second, Prof. Whinston's response to the "foreclosure" question exhibits that, despite the question, he was still discussing competitive effects. Most tellingly, Prof. Whinston's response referred to and used key terms—"ideally" and "difficulties"—from his rebuttal report's discussion of competitive effects. The relevant portions of the report explain (1) that the "the likely competitive effects of Google's behavior . . . [are] *ideally* examined relative to a 'but-for' world" and (2) that "it is *difficult* to say exactly what Google would have done if it had not employed its exclusionary search distribution contracts." Pls. Ex. 24, Whinston (DOJ Pls.' Expert) Rebuttal Report, ¶ 326–329 (emphases added).

Case 1:20-cv-03010-APM Document 544-1 Filed 03/13/23 Page 158 of 271

Statement 237 is not properly framed as a material fact, and Plaintiffs object to it in full. What Plaintiffs' experts have "offered an opinion regarding" is not a material fact subject to proof at trial and is therefore not appropriate for inclusion in Google's statement of undisputed material facts. Accordingly, no response is due from Plaintiffs. Plaintiffs further object to the term "but-for world" as vague and undefined, and to Statement 237 as (1) not supported by cited material, as required by Federal Rule of Civil Procedure 56(c)(1) and Local Rule 7(h); and (2) misleading as to the opinions offered by Plaintiffs' experts about a world without Google's exclusionary search distribution contracts.

In his reports and testimony, Prof. Whinston lays out numerous scenarios of what could have occurred absent Google's conduct in both the short and long-run. In his Initial Report, Prof. Whinston discusses how search engine parity or rivals winning defaults would be possible outcomes but for Google's contracts. Pls. Ex. 22, Whinston (DOJ Pls.' Expert) Initial Report, ¶¶ 874–876 (discussing Mozilla switch to Yahoo!); ¶¶ 882–914, § VII.A.2.a (estimates assuming that rivals gain exclusive default positions instead of Google); ¶¶ 915–965, § VII.A.2.b (estimates assuming that rivals have search access point parity with Google). Prof. Whinston also offers "various possible 'but-for' alternatives that could have emerged and would not have had the same extent of harmful effects to competition in the relevant markets as did Google's exclusionary search distribution contracts." Pls. Ex. 24, Whinston (DOJ Pls.' Expert) Rebuttal Report, ¶ 329; *accord* Pls. Ex. 89, Whinston (DOJ Pls.' Expert) Reply Report, ¶ 427. Prof. Whinston further discusses how

Pls. Ex. 89, Whinston (DOJ Pls.' Expert) Reply Report, ¶ 412; Pls. Ex. 88, Whinston (DOJ Pls.' Expert) Dep., 425:14–426:17.

Prof. Baker also discusses

Pls. Ex. 267, Baker (Colo. Pls.' Expert) Reply Report, ¶ 111; Pls. Ex. 265, Baker (Colo. Pls.' Expert) Dep., 294:7–294:12. In the testimony cited by Defendants to support Statement 237, Prof. Baker states Apple "could still decide to enter" or "it could decide to enter an agreement with some other ... general search firm." Pls. Ex. 265, Baker (Colo. Pls.' Expert) Dep., 296:21–297:11. Prof. Baker considers both the possibility that "one of Google's rivals reached an exclusive default agreement instead of Google," or that "no search firm reached an exclusive pre-installation default agreement" with any of the firms that control search access points (as listed in Pls. Ex. 266, Baker (Colo. Pls.' Expert) Initial Report, Table 21), including Apple. Pls. Ex. 266, Baker (Colo. Pls.' Expert) Initial Report, ¶¶ 262–263; Pls. Ex. 267, Baker (Colo. Pls.' Expert) Reply Report, ¶ 146. Prof. Baker is also clear that the "pre-installation search default agreements exclude [Google's] actual and potential rivals . . . because they raise the cost of entry and expansion for all general search firms." Pls. Ex. 266, Baker (Colo. Pls.' Expert) Initial Report, ¶ 316. In other words, without the "pre-installation search default agreements," Prof. Baker's opinion is that the "cost of entry and expansion" would have been lower for all general search firms. Pls. Ex. 266, Baker (Colo. Pls.' Expert) Initial Report, ¶ 316.

238. Plaintiffs' experts have not evaluated whether any particular but-for world would result in procompetitive benefits for consumers or browser developers, such as Apple or Mozilla. *See, e.g.*, Whinston (DOJ Pls.' Expert) Tr. 137:9-139:16 (Def. Ex. 4); Baker (Colo. Pls.' Expert) Tr. 296:10-297:11, 326:20-327:25 (Ex. 84).

Disputed.

Statement 238 is not properly framed as a material fact, and Plaintiffs object to it in full. What Plaintiffs' experts have "evaluated" is not a material fact subject to proof at trial and is therefore not appropriate for inclusion in Google's statement of undisputed material facts.

Case 1:20-cv-03010-APM Document 544-1 Filed 03/13/23 Page 160 of 271

Accordingly, no response is due from Plaintiffs. Plaintiffs further object to the term "but-for world" as vague and undefined, and to Statement 238 as (1) not supported by cited material, as required by Federal Rule of Civil Procedure 56(c)(1) and Local Rule 7(h); and (2) misleading as to the opinions offered by Plaintiffs' experts about a world without Google's exclusionary search distribution contracts.

Prof. Whinston's Initial Report provides extensive evidence of benefits to consumers if Google faces more competition. Pls. Ex. 22, Whinston (DOJ Pls.' Expert) Initial Report, ¶ 1173 (explaining that Section VIII.A discusses how Google's "distribution contracts directly reduce the quality of the alternatives that consumers have" and how "these contracts reduce[] the incentives of firms in the general search services market, including Google, to make improvements in search quality"). Prof. Whinston further provides evidence that absent the distribution deals, Google's rivals would be more competitive. *E.g.*, Pls. Ex. 24, Whinston (DOJ Pls.' Expert) Rebuttal Report, ¶ 41 (explaining that Section VI demontrates how "Prof. Murphy mistakenly declares that [Google's] contracts have no exclusionary effects"); Pls. Ex. 22, Whinston (DOJ Pls.' Expert) Initial Report, ¶ 38 ("In Section VII.B, I discuss the degree to which these contracts reduce the competitiveness of Google's actual and potential general search engine rivals.").

Prof. Baker's Initial Report Section VI.B.5 also provides a description of the benefits to consumers if Google faced more competition. Pls. Ex. 266, Baker (Colo. Pls.' Expert) Initial Report, ¶ 341 states, "[g]reater competition among the participants in the market for general search services in the U.S. would be expected to benefit search users." Further, Pls. Ex. 266, Baker (Colo. Pls' Expert) Initial Report, ¶ 342 states, "[w]ith more competition Google would be pushed to improve quality and innovate in the general search services, general search

158

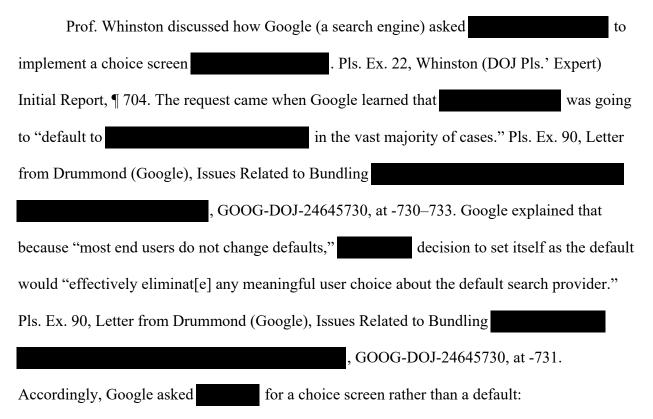
Case 1:20-cv-03010-APM Document 544-1 Filed 03/13/23 Page 161 of 271

advertising, and general search text advertising markets." Prof. Baker's Reply Report also describes benefits to consumers from increased competition in Section IV.B. which is titled "Greater competition would benefit search users, advertisers, and innovation."

239. Plaintiffs' experts have not identified any instance where a browser developer entered an agreement to implement a choice screen or a search engine asked a browser to implement a choice screen. *See, e.g.*, Whinston (DOJ Pls.' Expert) Tr. 146:4-147:18 (Def. Ex. 4); Baker (Colo. Pls.' Expert) Tr. 300:6-301:4 (Def. Ex. 84).

Disputed.

Statement 239 is not properly framed as a material fact, and Plaintiffs object to it in full. What Plaintiffs' experts have "identified" is not a material fact subject to proof at trial and is therefore not appropriate for inclusion in Google's statement of undisputed material facts. Accordingly, no response is due from Plaintiffs. Plaintiffs further object to Statement 238 as (1) not supported by cited material, as required by Federal Rule of Civil Procedure 56(c)(1); and Local Rule 7(h), and (2) misleading as to the opinions offered by Plaintiffs' experts.



We propose[] instead that users be prompted to select the default search provider the first time they use the inline search feature. This approach eliminates any company's own self interests and places control in the hands of the end user, where it belongs. It also helps to ensure that users understand they have a choice of search providers when using the new search box

Pls. Ex. 90, Letter from Drummond (Google), Issues Related to Bundling

(July 22, 2005), GOOG-DOJ-24645730, at -731.

Prof. Whinston also discussed two instances where Google (in its role as maker of Chrome) agreed to implement a choice screen in both the European Union and Russia, albeit in

negotiations with regulatory authorities. Pls. Ex. 22, Whinston (DOJ Pls.' Expert) Initial Report,

¶¶ 950–965.

Prof. Baker cites to evidence describing Google's plans "to improve Search experience"

in response to the "choice screen" in Europe. Pls. Ex. 267, Baker (Colo. Pls.' Expert) Reply

Report, ¶ 194 n.550 (citing Pls. Ex. 297, Google presentation: Go big in Europe (July 2019),

GOOG-DOJ-12085275, at -276). Prof. Baker also indicates in his testimony that he is aware of

choice screens being present outside of the United States. Pls. Ex. 265, Baker (Colo. Pls.'

Expert) Dep., 300:15–300:24.

240. Plaintiffs' experts have not evaluated whether browser developers would benefit from or be harmed by setting a search engine that they do not prefer as the default or altering the design of their browsers such that they cannot set their preferred search engine as the default. *See, e.g.*, Whinston (DOJ Pls.' Expert) Tr. 241:1-10, 249:17-250:15 (Def. Ex. 4); Baker (Colo. Pls.' Expert) Tr. 296:10-297:11 (Def. Ex. 84).

Undisputed.

Statement 240 is not properly framed as a material fact, and Plaintiffs object to it in full. What Plaintiffs' experts have "evaluated" is not a material fact subject to proof at trial and is therefore not appropriate for inclusion in Google's statement of undisputed material facts. Accordingly, no response is due from Plaintiffs.

Case 1:20-cv-03010-APM Document 544-1 Filed 03/13/23 Page 163 of 271

241. Plaintiffs' experts have not analyzed the competitive effects of Apple setting a different search engine, such as Bing, as the default in Safari. *See, e.g.*, Whinston (DOJ Pls.' Expert) Tr. 134:11-135:8 (Def. Ex. 4); Baker (Colo. Pls.' Expert) Tr. 282:16-284:21, 286:15-22 (Def. Ex. 84).

Disputed.

Statement 241 is not properly framed as a material fact, and Plaintiffs object to it in full. What Plaintiffs' experts have "analyzed" is not a material fact subject to proof at trial and is therefore not appropriate for inclusion in Google's statement of undisputed material facts. Accordingly, no response is due from Plaintiffs. Plaintiffs further object to Statement 241 as (1) not supported by cited material, as required by Federal Rule of Civil Procedure 56(c)(1) and Local Rule 7(h); and (2) misleading as to the opinions offered by Plaintiffs' experts.

Prof. Whinston analyzes the competition effects of Apple setting a different search engine from many angles. Prof. Whinston presents extensive evidence that if Apple set an alternate search engine as the default, that engine would gain a large amount of traffic (scale). *See* Pls. Ex. 22, Whinston (DOJ Pls.' Expert) Initial Report, ¶¶ 878, 888–893. Prof. Whinston further presents evidence that "a general search engine's competitiveness is affected by its scale," and that scale is an important factor in search engine quality. Pls. Ex. 22, Whinston (DOJ Pls.' Expert) Initial Report, ¶¶ 966, 975–1126. Prof. Whinston discusses how

illustrate the importance of search

distribution for obtaining scale, particularly on mobile devices. Pls. Ex. 22, Whinston (DOJ Pls.' Expert) Initial Report, ¶¶ 1157–1166. Prof. Whinston then provides evidence that higher-quality rivals would benefit consumers by increasing both Google's and other market participants' incentives to invest in search quality. Pls. Ex. 22, Whinston (DOJ Pls.' Expert) Initial Report, ¶¶ 1173–1352.

Case 1:20-cv-03010-APM Document 544-1 Filed 03/13/23 Page 164 of 271

Prof. Baker provides an illustrative calculation that describes the decrease in Google's share of general search queries that would result from other search firms reaching pre-installation default agreements (including with Apple). Pls. Ex. 266, Baker (Colo. Pls.' Expert) Initial Report, ¶¶ 262–263. Prof. Baker explains that search result quality is linked to search firm scale in Section III.A.2 of his Reply Report, and he explains in ¶ 128 that "by raising switching costs appreciably for general search services users accounting for half of all search queries, likely placed Google's actual and potential rivals at a marked search quality disadvantage, making it more difficult for them to expand output or enter, respectively." Pls. Ex. 267, Baker (Colo. Pls.' Expert) Reply Report, ¶ 128, § III.A.2. Further, Prof. Baker provides evidence that increased competition would benefit search users, advertisers, and innovation in Section Section IV.B of his Reply Report. Pls. Ex. 267, Baker (Colo. Pls.' Expert) Reply Report. Pls. Ex. 267, Baker (Colo. Pls.' Expert) Reply Report. Pls. Ex. 267, Baker (Colo. Pls.' Expert) Reply Report. Pls. Ex. 267, Baker (Colo. Pls.' Expert) Reply Report. Pls. Ex. 267, Baker (Colo. Pls.' Expert) Reply Report. Pls. Ex. 267, Baker (Colo. Pls.' Expert) Reply Report. Pls. Ex. 267, Baker (Colo. Pls.' Expert) Reply Report. Pls. Ex. 267, Baker (Colo. Pls.' Expert) Reply Report. Pls. Ex. 267, Baker (Colo. Pls.' Expert) Reply Report. Pls. Ex. 267, Baker (Colo. Pls.' Expert) Reply Report. Pls. Ex. 267, Baker (Colo. Pls.' Expert) Reply Report. Pls. Ex. 267, Baker (Colo. Pls.' Expert) Reply Report. Pls. Ex. 267, Baker (Colo. Pls.' Expert) Reply Report. Pls. Ex. 267, Baker (Colo. Pls.' Expert) Reply Report. Pls. Ex. 267, Baker (Colo. Pls.' Expert) Reply Report. S IV.B.

242. Plaintiffs' experts have not offered an opinion regarding what a but-for world without Google's MADAs or RSAs might look like. *See, e.g.*, Whinston (DOJ Pls.' Expert) Tr. 290:20-294:22, 368:19-372:4, 384:3-385:7, 393:6-395:14 (Def. Ex. 4); Baker (Colo. Pls.' Expert) Tr. 318:14-322:5 (Def. Ex. 84).

Disputed.

Statement 238 is not properly framed as a material fact, and Plaintiffs object to it in full. What Plaintiffs' experts have "offered an opinion regarding" is not a material fact subject to proof at trial and is therefore not appropriate for inclusion in Google's statement of undisputed material facts. Accordingly, no response is due from Plaintiffs. Plaintiffs further object to the term "but-for world" as vague and undefined, and to Statement 242 as (1) not supported by cited material, as required by Federal Rule of Civil Procedure 56(c)(1) and Local Rule 7(h); and (2) misleading as to the opinions offered by Plaintiffs' experts about a world without Google's exclusionary search distribution contracts.

Case 1:20-cv-03010-APM Document 544-1 Filed 03/13/23 Page 165 of 271

Prof. Whinston does not lay out a single but-for world but discusses a number of possible worlds where Google's exclusive deals are absent. Prof. Whinston lays out numerous scenarios of what could have occurred and discusses the implications of those occurences (*e.g.*, unconditional revenue share, Google contracting for a choice screen, rivals winning an exclusive default). *E.g.*, Pls. Ex. 22, Whinston (DOJ Pls.' Expert) Initial Report, ¶ 879 (overviewing "two possible scenarios" that could have occurred "absent Google's search distribution contracts" and are discussed at length in the report); Pls. Ex. 89, Whinston (DOJ Pls.' Expert) Reply Report, ¶¶ 364 n.644, 412, 427; Pls. Ex. 88, Whinston (DOJ Pls.' Expert) Dep., 289:19–294:22.

Prof. Baker states in the part of his testimony cited by Google in support of Statement 242, "[n]o, I do have an opinion that the but-for world would be more competitive than the current world, because . . . Google would not have engaged in the exclusionary conduct, and it would have allowed competition to proceed. Pls. Ex. 265, Baker (Colo. Pls.' Expert) Dep., 320:4-320:14. Prof. Baker also allows for several possible situations to arise in the but-for world when he states, "I didn't take a position on . . . whether there would be exclusive default agreeements in the but-for world, and if so, between which general search firms and which firms that control search access points." Pls. Ex. 265, Baker (Colo. Pls.' Expert) Dep., 320:15-320:24. Further, in his InitialReport, Prof. Baker describes in his illustrative calculation of the "exclusionary effect of Google's exclusive pre-installed default agreements" a situation where other search firms reach agreements with all of the firms that control search access points (specifically referring to those listed in Pls. Ex. 266, Baker (Colo. Pls.' Expert) Initial Report, tbl. 21), and explains how the calculation would change if no general search firm reached an agreement with any of the firms that control search access points. Pls. Ex. 266, Baker (Colo. Pls.' Expert) Initial Report, ¶¶ 262–263.

243. According to Professor Whinston, an estimated **Constant** of Google Search queries in the United States in 2020 were "covered by" a revenue share agreement between Google and an Android OEM or Carrier. Whinston (DOJ Pls.' Expert) Opening Rep. **(M)** 832 Fig. 135, 833- 34 (Def. Ex. 40).

Undisputed.

Statement 243 is not properly framed as a material fact, and Plaintiffs object to it in full.

What Plaintiffs' experts have "estimated" is not a material fact subject to proof at trial and is

therefore not appropriate for inclusion in Google's statement of undisputed material facts.

Accordingly, no response is due from Plaintiffs.

Plaintiffs note, Google's use of Statement 243 to support footnote 12 in Google's Brief is

not correct. Statement 243 (and the evidence it relies on) concern the portion Google search

queries on Android covered by a revenue share agreement. The Statement and the underlying

evidence do not quantify uncovered queries on Android devices.

244. Following a July 2018 decision by the European Commission, Google implemented a search engine "choice screen" on certain Android devices sold in certain European countries. *About the Choice Screen*, available at https://www.android.com/choicescreen/ (Aug. 29, 2022).

Undisputed.

245. Professor Whinston estimated in his opening report that if the European choice screen design had been implemented on Android devices in the U.S., then Google's share of consumer search engine default choices would have been Whinston (DOJ Pls.' Expert) Opening Rep. ¶ 964 (Def. Ex. 40).

Disputed in part.

Statement 245 is not properly framed as a material fact, and Plaintiffs object to it in full.

What Plaintiffs' experts have "estimated" is not a material fact subject to proof at trial and is

therefore not appropriate for inclusion in Google's statement of undisputed material facts.

Accordingly, no response is due from Plaintiffs. Plaintiffs further object to the term "European

choice screen design" as vague and undefined given the multiple design iterations, and to

Case 1:20-cv-03010-APM Document 544-1 Filed 03/13/23 Page 167 of 271

Statement 245 as incomplete and misleading. Google had a significant role in designing the European choice screen.

Otherwise disputed. Statement 245 is incomplete because, as Prof. Whinston explained, this is a "*short-run* estimate[]." Pls. Ex. 22, Whinston (DOJ Pls.' Expert) Initial Report, ¶ 880. Statement 245 is incomplete, and misleading, to the extent that it ignores the fact that, as Prof. Whinston explained, his "estimates do not take account of the fact that Google's rivals' qualities and brand perceptions today would undoubtedly be better absent the long history of Google's search distribution contracts with their exclusionary terms." Pls. Ex. 22, Whinston (DOJ Pls.' Expert) Initial Report, ¶ 881. Without Google's long history of anticompetitive distribution contracts, "even the short-run share shifts that [Prof. Whinston] calculate[s] almost certainly would be greater." Pls. Ex. 22, Whinston (DOJ Pls.' Expert) Initial Report, ¶ 881.

246. Professor Whinston estimated in his opening report that if choice screen shares translate into search shares, then general search engines other than Google would have received for the general search traffic from Android devices in the U.S. under a circumstance in which the European choice screen design had been implemented on Android devices in the U.S. Whinston (DOJ Pls.' Expert) Opening Rep. ¶ 964 (Def. Ex. 40).

Disputed in part.

Statement 246 is not properly framed as a material fact, and Plaintiffs object to it in full. What Plaintiffs' experts have "estimated" is not a material fact subject to proof at trial and is therefore not appropriate for inclusion in Google's statement of undisputed material facts.

Case 1:20-cv-03010-APM Document 544-1 Filed 03/13/23 Page 168 of 271

Accordingly, no response is due from Plaintiffs. Plaintiffs further object to the term "European choice screen design" as vague and undefined, given the multiple design iterations, and to Statement 246 as incomplete and misleading. Google had a significant role in designing the European choice screen.

Undisputed that Prof. Whinston estimated in his initial report, Pls. Ex. 22, Whinston (DOJ Pls.' Expert) Initial Report, ¶ 964, that "[i]f choice screen shares translate into search shares, rivals would therefore achieve a share of Android search traffic in the US" in the short-run and that the "choice screen" here refers to the "revised choice screen" as discussed in Pls. Ex. 22, Whinston (DOJ Pls.' Expert) Initial Report, ¶ 956–958.

Otherwise disputed. Statement 246 is incomplete because, as Prof. Whinston explained, this is a "*short-run* estimate[]." Pls. Ex. 22, Whinston (DOJ Pls.' Expert) Initial Report, ¶ 880. Statement 246 is vague and misleading to the extent it suggests that this estimate would apply if a choice screen "had been implemented" at any time as opposed to "had been implemented" recently. As Prof. Whinston explained, his "estimates do not take account of the fact that Google's rivals' qualities and brand perceptions today would undoubtedly be better absent the long history of Google's search distribution contracts with their exclusionary terms." Pls. Ex. 22, Whinston (DOJ Pls.' Expert) Initial Report, ¶ 881. Without Google's long history of anticompetitive distribution contracts, "even the short-run share shifts that [Prof. Whinston] calculate[s] almost certainly would be greater." Pls. Ex. 22, Whinston (DOJ Pls.' Expert) Initial Report, ¶ 881.

247. Professor Whinston estimated in his opening report that if the European choice screen design had been implemented on all Android devices in the U.S., then approximately **1000** of all Google search queries from all device types may have shifted from Google to search engines other than Google. Whinston (DOJ Pls.' Expert) Opening Rep. ¶¶ 832 Fig. 135, 959, 964 (Def. Ex. 40).

Disputed in part.

Case 1:20-cv-03010-APM Document 544-1 Filed 03/13/23 Page 169 of 271

Statement 247 is not properly framed as a material fact, and Plaintiffs object to it in full. What Plaintiffs' experts have "estimated" is not a material fact subject to proof at trial and is therefore not appropriate for inclusion in Google's statement of undisputed material facts. Accordingly, no response is due from Plaintiffs. Plaintiffs further object to the term "European choice screen design" as vague and undefined, given the multiple design iterations, and to Statement 247 as incomplete and misleading. Google had a significant role in designing the European choice screen.

Undisputed that Prof. Whinston estimates that if the choice screen deployed in Europe had been implemented today on all Android devices in the United States, "in the short-run Google's rivals would be expected to achieve a modest, but significant gain in Android phone share . . . a gain that might double or triple (or more) their collective share on Android phones." Pls. Ex. 22, Whinston (DOJ Pls.' Expert) Initial Report, ¶ 965.

Otherwise disputed. Statement 247 is incomplete because, as Prof. Whinston explained, this is a "*short-run* estimate[]." Pls. Ex. 22, Whinston (DOJ Pls.' Expert) Initial Report, ¶ 880. Statement 247 is incomplete and misleading to the extent it suggests this estimate would apply if a choice screen "had been implemented" at any time as opposed to "had been implemented" recently. As Prof. Whinston explained, his "estimates do not take account of the fact that Google's rivals' qualities and brand perceptions today would undoubtedly be better absent the long history of Google's search distribution contracts with their exclusionary terms." Pls. Ex. 22, Whinston (DOJ Pls.' Expert) Initial Report, ¶ 881. Without Google's long history of anticompetitive distribution contracts, "even the short-run share shifts that [Prof. Whinston] calculate[s] almost certainly would be greater." Pls. Ex. 22, Whinston (DOJ Pls.' Expert) Initial Report, ¶ 881.

167

248. Professor Whinston estimated at his deposition that if the European choice screen design had been implemented on all Android devices in the U.S., then less than of all search queries entered in the U.S. from all device types may have shifted from Google to search engines other than Google. Whinston (DOJ Pls.' Expert) Tr. 415:4-416:21 (Def. Ex. 4).

Disputed in part.

Statement 248 is not properly framed as a material fact, and Plaintiffs object to it in full. What Plaintiffs' experts have "estimated" is not a material fact subject to proof at trial and is therefore not appropriate for inclusion in Google's statement of undisputed material facts. Accordingly, no response is due from Plaintiffs. Plaintiffs further object to the term "European choice screen design" as vague and undefined, given the multiple design iterations, and to Statement 248 as incomplete and misleading. Google had a significant role in designing the European choice screen.

Undisputed that Prof. Whinston offered a "conservative estimate" at his deposition that if the choice screen adopted in Europe were implemented only on Android devices in the United States, then **States** of U.S. Android search traffic (which translates to less than **States** of all U.S. search traffic) would shift from Google to rivals, under current conditions. Pls. Ex. 88, Whinston (DOJ Pls.' Expert) Dep., 415:4–418:20.

Otherwise disputed. Disputed to the extent Statement 248 suggests this was Prof. Whinston's best or only estimate. To the contrary, Prof. Whinston used another analysis to estimate that rivals' U.S. Android search traffic would grow nearly six fold (from to

) if the choice screen adopted in Europe were implemented on U.S. Android devices today. Pls. Ex. 22, Whinston (DOJ Pls.' Expert) Initial Report, ¶ 964. Statement 248 is further disputed to the extent it suggests this estimate would hold true in perpetuity. As Prof. Whinston explained, these are "*short-run* estimates." Pls. Ex. 22, Whinston (DOJ Pls.' Expert) Initial Report, ¶ 880; *accord* Pls. Ex. 88, Whinston (DOJ Pls.' Expert) Dep., 415:4–416:10. Further disputed to the extent Statement 248 suggests the that these estimates apply if a choice screen "had been implemented" at any time as opposed to "had been" implemented recently. As Prof. Whinston explained, his "estimates do not take account of the fact that Google's rivals' qualities and brand perceptions today would undoubtedly be better absent the long history of Google's search distribution contracts with their exclusionary terms." Pls. Ex. 22, Whinston (DOJ Pls.' Expert) Initial Report, ¶ 881. Without Google's long history of anticompetitive distirbution contracts, "even the short-run share shifts that [Prof. Whinston] calculate[s] almost certainly would be greater." Pls. Ex. 22, Whinston (DOJ Pls.' Expert) Initial Report, ¶ 881.

249. Plaintiffs' experts are not opining that in a but-for world any particular Android OEM or Carrier would have set a search engine choice screen on any particular device. *E.g.*, Whinston (DOJ Pls.' Expert) Tr. 289:10-18, 380:9-382:4 (Ex. 4); Baker (Colo. Pls.' Expert) Tr. 318:14-322:5 (Def. Ex. 84).

Disputed in part.

Statement 249 is not properly framed as a material fact, and Plaintiffs object to it in full. What Plaintiffs' experts are "opining" on is not a material fact subject to proof at trial and is therefore not appropriate for inclusion in Google's statement of undisputed material facts. Accordingly, no response is due from Plaintiffs. Plaintiffs further object to the term "but-for world" as vague and undefined, and to Statement 249 as (1) not supported by cited material, as required by Federal Rule of Civil Procedure 56(c)(1) and Local Rule 7(h), and (2) incomplete and misleading as to the opinions offered by Plaintiffs' experts about a world without Google's exclusionary search distribution contracts.

Undisputed that Plaintiffs' experts have not opined that, absent Google's distribution agreements, a particular Android OEM or a particular carrier would have set a search engine choice screen on a particular device.

Case 1:20-cv-03010-APM Document 544-1 Filed 03/13/23 Page 172 of 271

Otherwise disputed. Statement 249 suggests that Prof. Whinston or any Plaintiff expert opined that, absent Google's distribution agreements, no Android OEM or carrier would have implemented a search engine choice screen. To the contrary, Prof. Whinston explained that although "it is difficult to know exactly what Google (and rivals) would have done if Google had not used its exclusionary search distribution contracts, ... there are reasonable scenarios in which current or future rivals would achieve parity," such as a choice screen. Pls. Ex. 89, Whinston (DOJ Pls.' Expert) Reply Report, ¶ 427; accord Pls. Ex. 24, Whinston (DOJ Pls.' Expert) Rebuttal Report, ¶ 329; Pls. Ex. 88, Whinston (DOJ Pls.' Expert) Dep., 287:16–288:13. Further, Prof. Whinston noted that in other scenarios, where Google's distribution agreements are inapplicable, Google and others have implemented choice screens willingly. E.g., Pls. Ex. 24, Whinston (DOJ Pls.' Expert) Rebuttal Report, ¶ 678 n.887 (discussing three choice screens Google gives users); Pls. Ex. 24, Whinston (DOJ Pls.' Expert) Rebuttal Report, ¶ 680 n.892 (discussing five choice screens that appear at startup on Apple devices); Pls. Ex. 89, Whinston (DOJ Pls.' Expert) Reply Report, ¶ 430 ("In March 2021, Apple switched the Siri virtual assistant from having a female voice by default to presenting the user with a voice choice screen at startup." (citing Pls. Ex. 264, Email from Franklin (Apple), New Siri voices coverage (Mar. 31, 2021), APLGOOGDOJ-01145304, at -304)).

Also disputed to the extent Statement 249 suggests that Prof. Baker has opined that no Android OEM or carrier would have implemented a search engine choice screen in the but-for world, rather he states he is "not taking a view one way or the other about that." Pls. Ex. 265, Baker (Colo. Pls.' Expert) Dep., 300:25–301:4.

250. Plaintiffs' experts have not evaluated the financial impacts on any OEM or carrier of setting a search engine choice screen on its devices. *E.g.*, Whinston Tr. (DOJ Pls.' Expert) 380:9-382:4 (Def. Ex. 4).

Undisputed.

Statement 250 is not properly framed as a material fact, and Plaintiffs object to it in full.

What Plaintiffs' experts have "evaluated" is not a material fact subject to proof at trial and is

therefore not appropriate for inclusion in Google's statement of undisputed material facts.

Accordingly, no response is due from Plaintiffs.

251. Professor Whinston estimated in his opening report that if a search engine other than Google had been the exclusive preinstalled default search engine on all search access points on Android devices in the U.S., then approximately **General search** of total U.S. search queries may have shifted from Google to other general search engines. Whinston (DOJ Pls.' Expert) Opening Rep. ¶¶ 904-05 (Def. Ex. 40).

Disputed in part.

Statement 251 is not properly framed as a material fact, and Plaintiffs object to it in full. What Plaintiffs' experts have "estimated" is not a material fact subject to proof at trial and is therefore not appropriate for inclusion in Google's statement of undisputed material facts. Accordingly, no response is due from Plaintiffs. Plaintiffs further object to the term "default search engine" as vague and undefined, given the multiple design iterations, and to Statement

251 as incomplete and misleading.

Undisputed that Prof. Whinston estimated in his initial report, Pls. Ex. 22, Whinston (DOJ Pls.' Expert) Initial Report, at ¶¶ 904–905, that "[i]f I make the same adjustments for the US vs. worldwide geography and for revenue vs. queriers as I did above [Pls. Ex. 22, Whinston (DOJ Pls.' Expert) Initial Report, at ¶¶ 888–892]

" and that "the

shift in search traffic to rivals were rivals to gain these Android defaults would be between

Case 1:20-cv-03010-APM Document 544-1 Filed 03/13/23 Page 174 of 271

of total US searches and between

of US mobile phone

searches." Pls. Ex. 22, Whinston (DOJ Pls.' Expert) Initial Report, ¶ 905.

Otherwise disputed. Statement 251 is incomplete in part because it leaves off the last clause of the quoted text – that the shift in search traffic to rivals would be

Pls. Ex. 22, Whinston (DOJ Pls.' Expert) Initial Report, ¶

905. Statement 251 is further incomplete and misleading because as Prof. Whinston explained, these are "*short-run* estimates." Pls. Ex. 22, Whinston (DOJ Pls.' Expert) Initial Report, ¶ 880. Further disputed to the extent Statement 251 suggests that these estimates apply if a rival "had [always] been" as opposed to "had [recently] been" changed to the exclusive preinstalled default search engine. As Prof. Whinston explained, his "estimates do not take account of the fact that Google's rivals' qualities and brand perceptions today would undoubtedly be better absent the long history of Google's search distribution contracts with their exclusionary terms." Pls. Ex. 22, Whinston (DOJ Pls.' Expert) Initial Report, ¶ 881. Without Google's long history of anticompetitive distribution contracts, "even the short-run share shifts that [Prof. Whinston] calculate[s] almost certainly would be greater." Pls. Ex. 22, Whinston (DOJ Pls.' Expert) Initial Report, ¶ 881.

252. Professor Whinston has not opined that consumers who prefer a search engine other than Google are frustrated in attempting to use that search engine or that consumers who prefer a search engine that is not the default fail to seek it out and use it. *See, e.g.*, Whinston (DOJ Pls.' Expert) Tr. 199:8-201:5 (Def. Ex. 4).

Disputed.

Statement 252 is not properly framed as a material fact, and Plaintiffs object to it in full. What Plaintiffs' experts have "opined" is not a material fact subject to proof at trial and is therefore not appropriate for inclusion in Google's statement of undisputed material facts. Accordingly, no response is due from Plaintiffs. Plaintiffs further object to Statement 252 as (1) not supported by cited material, as required by Federal Rule of Civil Procedure 56(c)(1) and Local Rule 7(h); and (2) misleading as to the opinions offered by Prof. Whinston.

Disputed. Prof. Whinston has not opined on the preferences or frustrations of any particular individual. Pls. Ex. 88, Whinston (DOJ Pls.' Expert) Dep., 200:19–201:5. But Prof. Whinston nonetheless provided extensive evidence on the stickiness of defaults. *E.g.*, Pls. Ex. 22, Whinston (DOJ Pls.' Expert) Initial Report, § VII.A. Most notably, Prof. Whinston's analysis of defaults showed (among other things) that a choice screen "would, [even] in the short run, lead to a modest but still significant shift in shares toward Google's rivals." Pls. Ex. 22, Whinston (DOJ Pls.' Expert) Initial Report, ¶ 926. The fall in share would be caused, at least in part, by users who prefer a non-Google search engine but are using Google because it is the default. *See* Pls. Ex. 22, Whinston (DOJ Pls.' Expert) Initial Report, ¶ 926.

253. Plaintiffs' experts are not opining that in a but-for world all Android devices sold in the U.S. would ship with a search engine other than Google as the exclusive preloaded search engine. *E.g.*, Whinston (DOJ Pls.' Expert) Tr. 389:14-393:16 (Def. Ex. 4); Baker (Colo. Pls.' Expert) Tr. 318:14-322:5 (Def. Ex. 84).

Undisputed.

Statement 253 is not properly framed as a material fact, and Plaintiffs object to it in full. What Plaintiffs' experts are "opining" is not a material fact subject to proof at trial and is therefore not appropriate for inclusion in Google's statement of undisputed material facts. Accordingly, no response is due from Plaintiffs.

254. Plaintiffs' experts are not opining that in a but-for world any particular Android OEM or carrier would have selected a search engine other than Google to be the exclusive preloaded search engine on any particular Android device. *E.g.*, Whinston (DOJ Pls.' Expert) Tr. 389:14-393:16 (Def. Ex. 4); Baker (Colo. Pls.' Expert) Tr. 318:14-322:5 (Def. Ex. 84).

Disputed in part.

Case 1:20-cv-03010-APM Document 544-1 Filed 03/13/23 Page 176 of 271

Statement 254 is not properly framed as a material fact, and Plaintiffs object to it in full. What Plaintiffs' experts are "opining" is not a material fact subject to proof at trial and is therefore not appropriate for inclusion in Google's statement of undisputed material facts. Accordingly, no response is due from Plaintiffs. Plaintiffs further object to the term "but-for world" as vague and undefined, and to Statement 254 as (1) not supported by cited material, as required by Federal Rule of Civil Procedure 56(c)(1) and Local Rule 7(h), and (2) incomplete and misleading as to the opinions offered by Plaintiffs' experts about a world without Google's exclusionary search distribution contracts.

Undisputed that Plaintiffs' experts have not opined that, absent Google's distribution agreements, a particular Android OEM or a particular carrier would have selected a search engine other than Google to be the exclusive preloaded search engine on a particular Android device.

Otherwise disputed. Prof. Whinston explained that although "it is difficult to know exactly what Google (and rivals) would have done if Google had not used its exclusionary search distribution contracts, . . . there are reasonable scenarios in which current or future rivals would achieve . . . exclusive default positions on a device or browser." Pls. Ex. 89, Whinston (DOJ Pls.' Expert) Reply Report, ¶ 427; *accord* Pls. Ex. 24, Whinston (DOJ Pls.' Expert) Rebuttal Report, ¶ 329; *see also* Pls. Ex. 88, Whinston (DOJ Pls.' Expert) Dep., 389:14–390:9 (noting that a rival may win an exclusive in the short run "on some device[s]" and even more devices "in the longer run"). Further, Prof. Whinston noted that, even despite Google's anticompetitive conduct, a rival search engine managed to secure the default search position on Firefox from 2014 to 2017. Pls. Ex. 22, Whinston (DOJ Pls.' Expert) Initial Report, ¶ 817–818.

Case 1:20-cv-03010-APM Document 544-1 Filed 03/13/23 Page 177 of 271

Also disputed to the extent Statement 254 suggests that Prof. Baker has opined that no Android OEM or carrier would have selected a search engine other than Google to be the exclusive preloaded search engine on its devices in the but-for world. Prof. Baker allows for several possible situations to arise in the but-for world when he states, "I didn't take a position on . . . whether there would be exclusive default agreeements in the but-for world, and if so, between which general search firms and which firms that control search access points." Pls. Ex. 265, Baker (Colo. Pls.' Expert) Dep., 320:15–320:24. Further, in his Initial Report, Prof. Baker describes in his illustrative calculation of the "exclusionary effect of Google's exclusive preinstalled default agreements" a situation where other search firms reach agreements with all of the firms that control search access points (specifically refering to those listed in Baker Initial Report, tbl. 21), and explains how the calculation would change if no general search firm reached an agreement with any of the firms that control search access points. Pls. Ex. 266, Baker (Colo. Pls.' Expert) Initial Report, ¶ 262–263.

255. Plaintiffs' experts are not opining that any Android OEM or Carrier has determined that a rival search engine is superior to Google or that an OEM or Carrier would have exclusively preloaded a rival search engine instead of Google if not for Google's RSAs with OEMs and carriers. *E.g.*, Whinston (DOJ Pls.' Expert) Tr. 361:5-364:16 (Def. Ex. 4); Baker (Colo. Pls.' Expert) Tr. 318:14-322:5 (Def. Ex. 84).

Disputed in part.

Statement 255 is not properly framed as a material fact, and Plaintiffs object to it in full. What Plaintiffs' experts are "opining" is not a material fact subject to proof at trial and is therefore not appropriate for inclusion in Google's statement of undisputed material facts. Accordingly, no response is due from Plaintiffs. Plaintiffs further object to Statement 255 as (1) not supported by cited material, as required by Federal Rule of Civil Procedure 56(c)(1) and Local Rule 7(h), and (2) incomplete and misleading as to the opinions offered by Plaintiffs' experts about a world without Google's exclusionary search distribution contracts.

Case 1:20-cv-03010-APM Document 544-1 Filed 03/13/23 Page 178 of 271

Undisputed that Plaintiffs' experts are not opining that an Android OEM or carrier has determined that a rival search engine is superior to Google. Also undisputed that Plaintiffs' experts are not opining that a particular Android OEM or a particular carrier would have exclusively preloaded a rival search engine instead of Google if not for Google's RSAs with OEMs and carriers.

Otherwise disputed. Prof. Whinston explained that although "it is difficult to know exactly what Google (and rivals) would have done if Google had not used its exclusionary search distribution contracts, . . . there are reasonable scenarios in which current or future rivals would achieve . . . exclusive default positions on a device or browser." Pls. Ex. 89, Whinston (DOJ Pls.' Expert) Reply Report, ¶ 427; *accord* Pls. Ex. 24, Whinston (DOJ Pls.' Expert) Rebuttal Report, ¶ 329. Further, Prof. Whinston noted that, even despite Google's anticompetitive conduct, a rival search engine managed to secure the default search position on Firefox from 2014 to 2017. Pls. Ex. 22, Whinston (DOJ Pls.' Expert) Initial Report, ¶¶ 817–818.

Also disputed to the extent Statement 255 suggests that Prof. Baker has opined that no that no OEM or carrier would have exclusively preloaded a rival search engine instead of Google if not for Google's RSAs with OEMs and carriers. Prof. Baker allows for several possible situations to arise in the but-for world when he states, "I didn't take a position on . . . whether there would be exclusive default agreements in the but-for world, and if so, between which general search firms and which firms that control search access points." Pls. Ex. 265, Baker (Colo. Pls.' Expert) Dep., 320:15–320:24. Further, in his Initial Report, Prof. Baker describes in his illustrative calculation of the "exclusionary effect of Google's exclusive pre-installed default agreements" a situation where other search firms reach agreements with all of the firms that control search access points with all of the firms that control search access points with all of the firms that control search access points with all of the firms that control search access points with all of the firms that control search access points with all of the firms that control search access points with all of the firms that control search access points with all of the firms that control search access points with all of the firms that control search access points (specifically referring to those listed in Baker Initial Report, tbl. 21),

176

and explains how the calculation would change if no general search firm reached an agreement with any of the firms that control search access points. Pls. Ex. 266, Baker (Colo. Pls.' Expert) Initial Report, ¶¶ 262–263.

IV. Plaintiffs' Additional Contentions Regarding the ACC and AFA

A. The Role of Compatibility in the Development of Android

256. Before Android, OEMs installed customizable mobile operating systems including, among others, JavaME (or J2ME), Symbian, and Mobile Linux. Second Statement of Jamie Rosenberg (Oct. 5, 2018) (GOOG-DOJ-01661440 at -447) (Def. Ex. 85); Jung (Google) Tr. 231:13–25 (Def. Ex. 63); Miner (Google) Tr. 173:19–174:7 (Def. Ex. 55).

Disputed in part.

Plaintiffs object to the term "Android" as vague as to whether it refers to Google

proprietary Android or to AOSP, and to Statement 256 as (1) not supported by cited material, as required by Federal Rule of Civil Procedure 56(c)(1) and Local Rule 7(h) and (2) incomplete and misleading.

Undisputed that before Android (a period that covers from the dawn of the cellular phone

until 2008), some OEMs installed customizable mobile operating systems including, among

others, JavaME (or J2ME), Symbian, and Mobile Linux.

Otherwise disputed. It is not the case that *all* OEMs, before Android (which Plaintiffs understand to mean AOSP in this context), installed customizable mobile OSs. Some OEMs developed their own proprietary mobile OSs. Pls. Ex. 56, Davies (DOJ Pls.' Expert) Initial

Report, ¶ 14–16.

257. OEMs implemented those customizable mobile platforms in mutually incompatible ways, such that an application written for one mobile phone model might not work on another model running a variation of the same mobile operating system. Android Partner Engineering Evolution of Android Compatibility (GOOG-DOJ-03509514 at -518–20) (Def. Ex. 86); Miner (Google) Tr. 173:19–174:7 (Def. Ex. 55).

Undisputed.

258. To have their applications run properly on different implementations of those predecessor platforms, app developers wrote different versions of their apps, increasing development costs. Jung (Google) Tr. 231:7-20) (Def. Ex. 63); Android Partner Engineering Evolution of Android Compatibility (GOOG-DOJ-03509514 at -518-21) (Def. Ex. 86).

Disputed in part.

Plaintiffs object to Statement 258 as (1) not supported by cited material, as required by

Federal Rule of Civil Procedure 56(c)(1) and Local Rule 7(h); and (2) incomplete and misleading

Undisputed that to have their applications run properly on different implementations of

some predecessor platforms, some app developers wrote different versions of their apps,

increasing development costs.

Otherwise disputed. Statement 258 is only true in some cases. Having different

implementations sometimes increased app devloper costs, but not always. For example,

developers might build an app to meet standards common to all implementations, which would

not necessarily lead to increased costs. Pls. Ex. 161, Davies (DOJ Pls.' Expert) Dep., 110:13-

114:2.

259. Google, a developer of mobile applications during this period, experienced these higher app development costs. Lockheimer (Google) Tr. 82:8-83:10 (Def. Ex. 87).

Undisputed.

Plaintiffs object as vague "this period." This response assumes it to mean 2006–2007.

260. In 2012, Google's Larry Page stated in a letter to investors: "developing apps for mobile devices was incredibly painful. We had a closet full of over 100 phones, and we were building our software pretty much one device at a time." Alphabet Investor Relations, 2012 Founders' Letter, *available at* https://abc.xyz/investor/founders-letters/2012/.

Undisputed.

261. Google recognized that licensing the Android operating system open-source created the potential for incompatibilities that had hindered other customizable mobile platforms. Statement of Rich Miner (Nov. 8, 2016) (GOOG-DOJ-19567568 at -573) (Def. Ex. 56); Miner (Google) Tr. 173:8-18 (Def. Ex. 55).

Undisputed.

262. Google made promoting compatibility a key Android goal before Android's launch. 2008 Android Defragmentation Proposal (GOOG-DOJ-01662514 at -514) (Def. Ex. 88); Miner (Google) Tr. 101:24–102:7 (Def. Ex. 55).

Undisputed.

263. Google entered into compatibility commitments with partners as early as 2007, prior to Android's open-source release. *E.g.*, Open Handset Alliance Cooperative Marketing Agreement between Open Handset Alliance Cooperative Marketing Agreement between

Undisputed.

264. Google, from Android's release, sought compatibility commitments from Android device makers that licensed Google proprietary apps. *E.g.*, Android License Agreement and accompanying Anti-Fragmentation Agreement between

| ; An | droid License A | Agreement an | d accompan | ying Anti- |
|---------------------------------|-----------------|--------------|------------|------------|
| Fragmentation Agreement between | | | | |

Undisputed.

265. Licensing Google's proprietary Android apps only to OEMs that agree to Android compatibility commitments remains Google's policy. Jung (Google) Tr. 88:5-18 (Def. Ex. 63).

Undisputed.

266. OEMs, contemporaneous with Android's launch, supported Google's efforts to promote compatibility on Android devices to attract users and developers. Statement of Rich Miner (Nov. 8, 2016) (GOOG-DOJ-19567568 at -576) (Def. Ex. 56); Miner (Google) Tr. 188:1-7 (Def. Ex. 55).

Disputed in part.

Plaintiffs object to the term "Android" as vague in this context as to whether it refers to

Google proprietary Android or to AOSP, and to Statement 266 as (1) not supported by cited

material, as required by Federal Rule of Civil Procedure 56(c)(1) and Local Rule 7(h) and (2)

incomplete and misleading as to OEMs' support for Google's efforts to promote compatibility.

Undisputed that some OEMs, contemporaneous with Android's launch as the open source AOSP, supported Google's efforts to promote compatibility on Android devices to attract users and developers.

Otherwise disputed. Statement 266 is misleading in that it suggests OEMs have universally accepted the methods by which Google has chosen to promote compatibility. OEMs have objected to aspects of Google's compatibility commitments as overly restrictive and preventing device customization. See, e.g., Pls. Ex. 91, Google presentation, 2019 Partner Plan (*July 2019), GOOG-DOJ-09073083, at -092

; Pls. Ex. 92, Email from Lockheimer (Google), Summary of meeting (Oct. 15, 2019), GOOG-DOJ-28674737, at -738 (

Ex. 93, Email from Kawamura (Google), Search Widget customization exploration (Feb. 23, 2017), MOTO-CID-00066236, at -236; Pls. Ex. 61, Christensen (Motorola) Dep., 39:9–40:24; Pls. Ex. 56, Davies (DOJ Pls.' Expert) Initial Report, ¶¶ 95–105.

267. Baseline compatibility helps attract application developers to Android because compatibility reduces application development costs. Lockheimer (Google) Tr. 36:23-37:16 (Def. Ex. 87); Lagerling (Google) Tr. 49:7-50:2 (Def. Ex. 93).

Disputed in part.

Plaintiffs object to the term "Android" as vague in this context as to whether it refers to

Google proprietary Android or to AOSP, and to Statement 267 as (1) not supported by cited

material, as required by Federal Rule of Civil Procedure 56(c)(1) and Local Rule 7(h) and (2)

incomplete and misleading.

Undisputed that baseline compatibility helps attract application developers.

Case 1:20-cv-03010-APM Document 544-1 Filed 03/13/23 Page 183 of 271

Otherwise disputed. Developers are not equally attracted to developing for AOSP devices as Google proprietary Android devices. *E.g.*, Pls. Ex. 56, Davies (DOJ Pls.' Expert) Initial Report, ¶¶ 39–41. Neither Mr. Lockheimer nor Mr. Lagerling are third-party Android application developers—to the extent both have knowledge, it comes mainly from their experience at Google. Pls. Ex. 96, Lockheimer (Google) Dep., 234:10–236:25; Pls. Ex. 97, Lagerling (Google) Dep., 121:20–126:10. To the extent Mr. Lockheimer and Mr. Lagerling rely on what they have been told by app developers, that is inadmissible hearsay and cannot be used to support Statement 267.

268. Professor Whinston recognizes that "preventing fragmentation can be an important factor" in "encourag[ing] application developers to write applications for Android." Whinston (DOJ Pls.' Expert) Rebuttal Rep. ¶ 345 (Def. Ex. 77).

Undisputed.

Statement 268 is not properly framed as a material fact, and Plaintiffs object to it in full.

What Plaintiffs experts have "recognized" is not a material fact subject to proof at trial and is

therefore not appropriate for inclusion in Google's statement of undisputed material facts.

Accordingly, no response is due from Plaintiffs.

B. AFAs, ACCs, and the Android Compatibility Definition Document

269. In 2017, Google transitioned from using the AFA to using the ACC. Rosenberg (Google) Tr. 278:8-10 (Def. Ex. 94); Statement of Rich Miner (Feb. 16, 2021) (GOOG-DOJ-29517791 at -797) (Def. Ex. 95).

Disputed in part.

Plaintiffs object to Statement 269 as incomplete.

Undisputed that in 2017, Google began transitioning from using the AFA to using the

ACC for some OEMs.

Case 1:20-cv-03010-APM Document 544-1 Filed 03/13/23 Page 184 of 271

Otherwise disputed. 270. ACCs specify that "[a]ll devices based on Android that [the] Company manufactures, distributes or markets will be Android Compatible Devices," which are

defined as devices that comply with the CDD. E.g.,

Undisputed.

271. The CDD seeks to ensure that applications written to the Android software development kits ("SDK") work on all devices that comply with the CDD. Statement of Rich Miner (Feb. 16, 2021) (GOOG-DOJ-29517791, at -797) (Def. Ex. 95); *Android Compatibility Definition Document*, available at https://source.android.com/docs/compatibility/cdd (Aug. 11, 2022).

Disputed in part.

Plaintiffs object to Statement 271 as (1) incomplete; and (2) misleading.

Undisputed that the CDD ensures that applications written to the Android software

development kits ("SDK") work on all devices that comply with the CDD.

Otherwise disputed, including to the extent Statement 271 suggests that seeking to ensure

applications written to Android SDKs work on all devices that comply with the CDD is Google's

only goal. From early on, Google viewed the CDD as a way to "define the standard and shape

the ecosystem" and that the "CDD allows us to define the platform roadmap." Pls. Ex. 116,

Google presentation: Android: QC Quarterly Review - Q4 2010 (Oct. 10, 2010), GOOG-DOJ-

04100017, at -026.

272. The CDD sets baseline technical requirements for application programming interfaces, hardware, and security. *Android Compatibility Definition Document*, available at https://source.android.com/docs/compatibility/cdd (Aug. 11, 2022); *Compatibility Definition: Android 13*, available at

https://source.android.com/docs/compatibility/13/android-13-cdd (Nov. 29, 2022); Jung (Google) Tr. 93:25-94:6 (Def. Ex. 63).

Undisputed.

273. Many features in the CDD are optional or can be implemented in different ways. *Android Compatibility Definition Document*, available at https://source.android.com/docs/compatibility/cdd (Aug. 11, 2022); Second Statement of Jamie Rosenberg (Feb. 20, 2021) (GOOG-DOJ-29517860 at -862-64) (Def. Ex. 60).

Undisputed.

274. The CDD contains "core" requirements applicable to all Android devices, as well as form-factor specific requirements. *Android Compatibility Definition Document*, available at https://source.android.com/docs/compatibility/cdd (Aug. 11, 2022).

Disputed in part.

Plaintiffs object to the term "Android" as vague in this context as to whether it refers to

Google proprietary Android, to AOSP, or to non-CDD compliant versions of AOSP and to

Statement 274 as (1) not supported by cited material, as required by Federal Rule of Civil

Procedure 56(c)(1) and Local Rule 7(h); and (2) misleading as to time.

Undisputed that, today, the CDD contains "core" requirements applicable to all Android

devices that comply with Google's technical standards, as well as form-factor specific

requirements.

Otherwise disputed. The CDD lays out "core" requirements for all Android devices

manufactured or sold by AFA or ACC signatories, including AOSP and Google proprietary

Android devices. Google SMF, 209;

An OEM could manufacturer non-CDD

compatible AOSP devices, though doing so would violate the AFA or ACC if they were

Case 1:20-cv-03010-APM Document 544-1 Filed 03/13/23 Page 186 of 271

signtories—this was the situation for OEM's Amazon approached about the Fire Phone. Pls. Ex. 98, Amazon Letter to Competition Comm'n of India (Sept. 13, 2019), AMZNDOJ0000414, at -428–27. Statement 274 is vague as to when or under what circumstances the CDD began including form-factor specific requirements. Google only added form-factor specific requirements to the CDD starting with Android 8.0 in 2017. Def. Ex. 60, Second Rosenberg (Google) Statement submitted to Korea Fair Trade Commission (Annex G-2) (Feb. 20, 2021), GOOG-DOJ-29517860, at -864. Previously, Google had developed one set of requirements for all form factors and manfacturers had to request to "carve out" lesser-known form factors. Def. Ex. 60, Second Rosenberg (Google) Statement submitted to Korea Fair Trade Commission (Annex G-2) (Feb. 20, 2021), GOOG-DOJ-29517860, at -864.

275. The CDD does not prohibit partners from adding additional features whether APIs, hardware, or services—consistent with its baseline requirements. Rosenberg (Google) Tr. 286:13-19 (Ex. 94); Jung (Google) Tr. 58:6-7, 142:19-143:14 (Def. Ex. 63).

Undisputed

276. AFA and ACC signatories can seek exemptions from Google. Jung (Google) Tr. 37:23-38:2, 60:2-61:24 (Def. Ex. 63).

Disputed in part.

Plaintiffs object to Statement 276 as (1) inaccurate; and (2) misleading.

Undisputed that AFA and ACC signatories can seek exemption from Google for certain

device types.

Otherwise disputed.

277. AFAs and ACCs do not address the search service or browser a signatory installs or promotes on its CDD-compatible devices. Jung (Google) Tr. 234:21-235:6 (Def. Ex. 63); see, e.g.,

Undisputed.

278. The CDD does not dictate the search engine that is installed or set as the default on any Android device, and it does not place any restrictions on the search engines that may later be installed by a user. Android Compatibility Definition Document, *available at* https://source.android.com/docs/compatibility/cdd (Aug. 11, 2022).

Undisputed.

279. The CDD does not specify the browser that is installed or set as the default on any Android device. *Android Compatibility Definition Document*, available at https://source.android.com/docs/compatibility/cdd (Aug. 11, 2022).

Undisputed

280. The CDD does not require the installation of any Google proprietary software. *Android Compatibility Definition Document*, available at https://source.android.com/docs/compatibility/cdd (Aug. 11, 2022); Second Statement of Jamie Rosenberg (Feb. 20, 2021) (GOOG-DOJ-29517860 at -865) (Def. Ex. 60).

Disputed in part.

Plaintiffs object to the term "installation" as vague and undefined and to Statement 280 as

(1) incomplete; and (2) misleading.

Undisputed that the CDD does not explicitly require the installation of any Google

proprietary software.

Otherwise disputed. For an Android mobile device to be successful in the United States,

it must have proprietary Google Software preinstalled-e.g., the Play Store and Google Play

Services (GPS) (a critical proprietary set of application programming interfaces (APIs)). See Pls.

Ex. 61, Christensen (Motorola) Dep., 157:11–158:2 (the Play Store);

Pls. Ex. 63,) Dep., 29:18–30:9

); Pls. Ex. 64, Google presentation: Android Review (*Nov. 5, 2019), GOOG-

DOJ-06465054, at -066 (Android apps look for the APIs known as Google Play Services (GPS) and the Android apps need the APIs to function). This is proprietary Google Software.

281. Professor Whinston acknowledges that "compatible [Android] devices are better opportunities" for rival general search engines to distribute their products than incompatible devices. Whinston (DOJ Pls.' Expert) Reply Rep. ¶ 385 (Def. Ex. 20).

Disputed.

Statement 281 is not properly framed as a material fact, and Plaintiffs object to it in full. What Plaintiffs' experts have "acknowledged" is not a material fact subject to proof at trial and is therefore not appropriate for inclusion in Google's statement of undisputed material facts. Accordingly, no response is due from Plaintiffs. Plaintiffs further object to Statement 281 as (1) not supported by cited material, as required by Federal Rule of Civil Procedure 56(c)(1) and Local Rule 7(h); and (2) inaccurate, incomplete, and misleading as to the opinions offered by Prof. Whinston.

Prof. Whinston's statement is taken out of context. The full quote reads "compatible devices are better opportunities precisely because the AFA/ACC has led to a situation in which app developers focus on Google's proprietary Android platform and in which Google Play Store is the deominant source for those apps." Pls. Ex. 89, Whinston (DOJ Pls.' Expert) Reply Report, ¶ 385.

282. Professor Whinston offers no opinion that the AFA or ACC have resulted in the shift of any search queries to Google from Google's rivals.

Disputed.

Statement 282 is not properly framed as a material fact, and Plaintiffs object to it in full. What Plaintiffs' expert "offers no opinion" on is not a material fact subject to proof at trial and is therefore not appropriate for inclusion in Google's statement of undisputed material facts. Accordingly, no response is due from Plaintiffs. Plaintiffs further object to Statement 282 as (1) not supported by cited material, as required by Federal Rule of Civil Procedure 56(c)(1) and Local Rule 7(h); and (2) misleading and incomplete as to the opinions offered by Prof. Whinston.

Prof. Whinston offers the opinion that "[T]he AFAs/ACCs . . . [provide] Google with a considerable ability to disrupt the profitability of any OEM or MNO that implements a rival general search engine on its devices." Pls. Ex. 24, Whinston (DOJ Pls.' Expert) Rebuttal Report, ¶ 346.

283. CDD-compatible Android devices attract more application developers, and the availability of more applications in turn attracts more users. Jung (Google) Tr. 91:10-92:6 (Def. Ex. 63); Second Statement of Jamie Rosenberg (Feb. 20, 2021) (GOOG-DOJ-29517860 at -871) (Def. Ex. 60).

Disputed in part.

Plaintiffs object to Statement 283 as (1) not supported by cited material, as required by Federal Rule of Civil Procedure 56(c)(1) and Local Rule 7(h); and (2) incomplete; and (3) misleading.

Undisputed that the availability of more applications attracts more users.

Otherwise disputed. CDD-compliant devices attract developers not merely because they

are compliant with the CDD, but because developers are attracted to Google's proprietary

applications and APIs—under the MADA's terms, OEMs that preinstall Google proprietary

applications and APIs must meet the CDD. See Def. SMF ¶ 296; see also, e.g.,

; Pls. Ex. 56, Davies (DOJ Pls.' Expert) Initial Report, ¶¶ 49–52 (providing examples in which Google deprecated certain AOSP apps after releasing a proprietary version of a comparable app); Pls. Ex. 94, Davies (DOJ Pls.' Expert) Reply Report, ¶¶ 39–41 (explaining that deprecating AOSP's core apps and APIs functionally eliminates potential alternatives to Google's proprietary Android). A device could be nearly CDD compatible and still attract few app developers, due to a lack of Google's proprietary apps and APIs—an example of this is Amazon's Fire Phone. Pls. Ex. 56, Davies (DOJ Pls.' Expert) Initial Report, ¶ 52 & n.90; Pls. Ex. 161, Davies (DOJ Pls.' Expert) Dep., 237:20–242:20.

C. Amazon's Fire Phone

284. Amazon introduced the Fire Phone in 2014. *Fire, First Smartphone Designed By Amazon, Now Available At AT&T And Amazon*, available at https://press.aboutamazon.com/2014/7/fire-first-smartphone-designed-by-amazon-now-available-at-at-t-and-amazon (July 25, 2014).

Undisputed.

285. The Fire Phone ran a variant of the Android operating system that did not comply with the CDD. Second Statement of Jamie Rosenberg (Feb. 20, 2021) (GOOG-DOJ-29517860, at -869) (Def. Ex. 60); Lee (Amazon) Tr. 31:8-12, 227:2-8 (Def. Ex. 97).

Undisputed.

286. Amazon made Bing the Fire Phone's default search engine. E.g.,

Undisputed.

287. Amazon could have likewise made Bing the default search engine on its Fire Phone if Amazon had made the Fire Phone CDD compatible. Statement of Rich Miner (Feb. 16, 2021) (GOOG-DOJ-29517791 at -801) (Def. Ex. 95).

Disputed in part.

Case 1:20-cv-03010-APM Document 544-1 Filed 03/13/23 Page 191 of 271

Plaintiffs object to Statement 287 as (1) incomplete; (2) hypothetical; (3) vague; and (4) inherently speculative.

Undisputed that Amazon would have had no contractual barrier to making Bing the default search engine on its Fire Phone in a hypothetical world where the Fire Phone was CDD compatible.

Otherwise disputed, including to the extent Statement 287 suggests making the Fire Phone CDD compatible would have been sufficient for app developers to port their Android apps from Google proprietary Android devices to Fire Phones. Without Google's proprietary APIs, key applications would not function on Fire Phones without additional work and expense. Pls. Ex. 64, Google presentation: Android Review (*Nov. 5, 2019), GOOG-DOJ-06465054, at -066; Pls. Ex. 98, Amazon Letter to Competition Comm'n of India (Sept. 13, 2019),

AMZNDOJ00000414, at -429, ¶ 20.



Disputed

Plaintiffs object to Statement 288 as (1) vague; (2) not supported by the cited material as required by Federal Rule of Civil Procedure 56(c)(1) and Local Rule 7(h); and (3) incomplete.

First, Google's citations do not support its claim. Although those sources identify some issues contributing to the Fire Phone's lack of commercial success, none purport to be a complete list and—as pointed out by Plaintiffs' device expert, Mr. Davies—"products can and do fail for multiple reasons." Pls. Ex. 94, Davies (DOJ Pls.' Expert) Reply Report, ¶ 30.

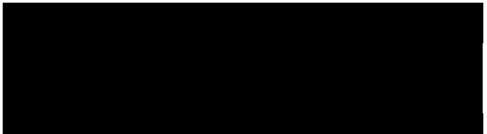
Case 1:20-cv-03010-APM Document 544-1 Filed 03/13/23 Page 192 of 271

That deficiency aside, the cited sources fail to support Statement 288 for other reasons.

| The first, Def. Ex. 99, is an internal Amazon analysis of |
|---|
| Def. Ex. 99, Amazon document: Smartphone Working Back Document (*Jan. 2015), AMZN-SEARCH-000357486, at -486. |
| Pls. Ex. 100, Lee (Amazon) Dep., at |
| 262:11-263:3. |
| . Def. Ex. 99, Amazon document: Smartphone |
| Working Back Document (*Jan. 2015), AMZN-SEARCH-000357486, at -486.Second, Google relies on two portions of the deposition of Young Lee of Amazon. Thefirst portion involves a discussion of the internal Amazon analysis discussed above (Def. Ex. 99, |
| Amazon document: Smartphone Working Back Document (*Jan. 2015), AMZN-SEARCH-000357486), and shows that, |
| Pls. Ex. 100, Lee (Amazon) |
| Dep., at 262:11–263:3. |
| |

Finally, Google's third document consists of Mr. Young's suggested edits to a section of a draft paper by an unrelated MBA student recounting a conversation with Mr. Young; it similarly does not purport to be a complete recitation of the reasons behind the Fire Phone's failure. Pls. Ex. 101, Email from Lee (Amazon), Failure at Amazon: The Fire Phone (Aug. 18, 2017), AMZN-SEARCH-000049162, at -163–164 (cover email to Def. Ex. 100).

Furthermore, evidence shows that many OEMs and others were unable to partner with Amazon because of the AFA. Plaintiffs' experts opined on this evidence, *see* Pls. Ex. 56, Davies (DOJ Pls.' Expert) Initial Report, ¶ 109; Pls. Ex. 94, Davies (DOJ Pls.' Expert) Reply Report, ¶ 29–32, and Amazon described the obstacles posed by Amazon's AFA in a submission to the Competition Commission of India:

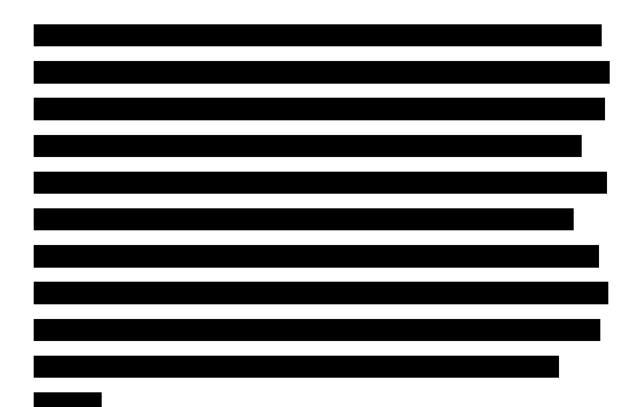


Moreover, the restrictions imposed by Google in relation to the access to GMS (which was contingent upon signing the MADA) and other limitations precluding the interoperability of Android apps would continue to serve as a significant impediment to the adoption of smartphone devices running on the Fire OS, irrespective of the availability of a broad range of such devices. Consequently, Amazon had to focus on distributing the Fire OS on the Amazon- branded smart mobile devices only, rather than by partnering with OEMs.

Pls. Ex. 98, Amazon Letter to Competition Comm'n of India (Sept. 13, 2019),

AMZNDOJ0000414, at -428, ¶ 19; see also Pls. Ex. 102, Amazon Letter to Competition

Comm'n of India (Dec. 13, 2019), AMZNDOJ0000526, at -528



Finally, the European Union considered and rejected this same argument from Google. Pls. Ex. 103, EC Google Android Decision (July 18, 2018), GOOG-DOJ-26429163, at -408–13, § 12.6.3.3; *see also Google LLC v. European Comm'n*, Judgement of the General Court of the Court of Justice of the European Union, Case No. T-604/18, at ¶¶ 850–851 (Sept. 14, 2022) (affirming EU decision in relevant part).



Disputed.

Statement 289 is not properly framed as a material fact, and Plaintiffs object to it in full. What Plaintiffs' experts have "agreed" to is not a material fact subject to proof at trial and is therefore not appropriate for inclusion in Google's statement of undisputed material facts. Accordingly, no response is due from Plaintiffs. Plaintiffs further object to Statement 289 as (1) vague; (2) not supported by the cited material as required by Federal Rule of Civil Procedure 56(c)(1) and Local Rule 7(h); and (3) incomplete.

Statement 289 ignores that the reply reports of the experts it purports to address rebut it. See Pls. Ex. 94, Davies (DOJ Pls.' Expert) Reply Report, ¶¶ 29–32 & nn.54–56; Pls. Ex. 89, Whinston (DOJ Pls.' Expert) Reply Report, ¶¶ 383–385. Statement 289 mirrors an (uncited) portion of Prof. Murphy, Google's expert, rebuttal report, which claims "Plaintiffs' experts concede that Fire Phone did not fail because of AFA." Pls. Ex. 139, Murphy (Def.'s Expert) Rebuttal Report, ¶ 322. Mr. Davies and Prof. Whinston both stated in their replies that Prof. Murphy's claim was false and explained why that was so. Pls. Ex. 94, Davies (DOJ Pls.' Expert) Reply Report, ¶ 29–32; Pls. Ex. 89, Whinston (DOJ Pls.' Expert) Reply Report, ¶¶ 383–385.

| 290. | |
|--|---|
| Disputed. | |
| Plaintiffs object to the term | as vague and undefined and to Statement 290 as |
| (1) vague; (2) misleading; and (3) not supported | l by the cited material as required by Federal Rule |
| of Civil Procedure 56(c)(1) and Local Rule 7(h) |). |

The cited testimony shows that Young Lee of Amazon replied "Pls. Pls. Ex. 100, Lee (Amazon) Dep., 187:9–11.

Pls. Ex. 98, Amazon

Letter to Competition Comm'n of India (Sept. 13, 2019), AMZNDOJ0000414, at -428, ¶ 19.

Disputed.

Plaintiffs object to Statement 291 as (1) not supported by the cited material as required by Federal Rule of Civil Procedure 56(c)(1) and Local Rule 7(h); (2) partially reliant on inadmissible hearsay; and (3) incomplete.

Statement 291 cites three sources. The first source is deposition testimony in which Google employee Unsuk Jung relates inadmissible hearsay provided by

The second source is

a link to a web page on foreign electronic manufacturer Xiaomi Corporation's website describing a "Xiaomi TV F2 55" Fire TV," which is also inadmissible hearsay, and which does not discuss any 2021 Amazon decision.¹⁸ Pls. Ex. 104, Xiaomi, Xiaomi TV F2 55" Fire TV.

The third source is a

which says nothing about Amazon and does not show that the named entity was the particular Xiaomi subsidary manufacturing the TV at issue, or that the TV at issue was sold in the United States.

Statement 291 is also contradicted by other evidence, including the testimony of Amazon witness Young Lee, Pls. Ex. 100, Lee (Amazon) Dep., 247:2–21

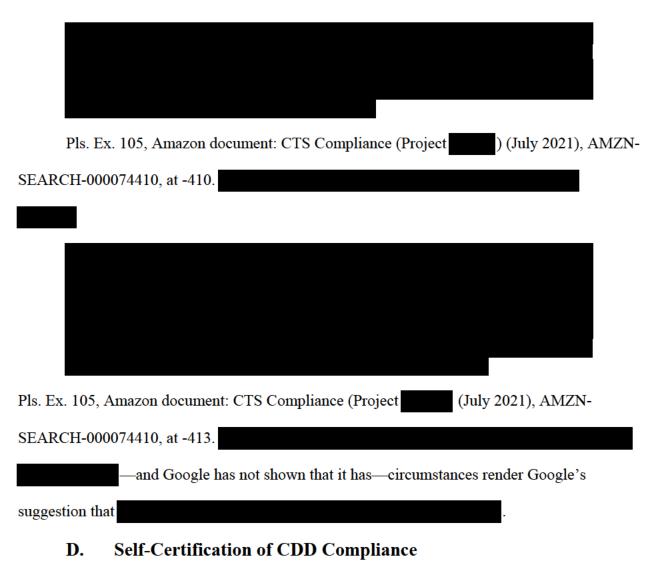
¹⁸ Plaintiffs viewed the site Pls. Ex. 104, Xiaomi, Xiaomi TV F2 55" Fire TV.



| Pls. Ex. 105, Amazon document: CTS Compliance | |
|---|--|
| (Project (July 2021), AMZN-SEARCH-000074410 (Lee Ex. 18), at -414, ¶ 11 | |
| | |
| | |
| ; Pls. Ex. 106, Kartasheva (Google) Dep., 458:22–25 | |
| | |
| | |
| Finally, Statement 291 is incomplete because it references a | |
| | |
| | |
| | |
| | |
| | |
| | |

Pls. Ex. 107, Amazon document: Q2 Top Partner Review - Amazon Devices & Services (*May

2021), AMZN-SEARCH-000400490, at -490. Similarly, an internal Amazon document



292. Neither the AFA nor the ACC requires signatories to preview any devices with Google prior to their launch. *See, e.g.*, Anti-Fragmentation Agreement between

Undisputed.

293. Neither the AFA nor the ACC requires signatories to attest that a device complies with the CDD before marketing the device. *See, e.g.*,

Undisputed.

294. Android OEMs can determine whether their devices comply with the CDD by using the Compatibility Test Suite ("CTS"), a free self-assessment tool available online. *Google Compatibility Test Suite*, available at

https://source.android.com/docs/compatibility/cts (Sept. 13, 2022); Statement of Rich Miner (Oct. 8, 2018) (GOOG-DOJ-01660584 at -591) (Def. Ex. 104).

Undisputed.

295. Android OEMs self-certify that their devices meet CDD requirements by running the CTS. Jung (Google) Tr. 152:23-153:2 (Def. Ex. 63).

Disputed in part.

Plaintiffs object to Statement 295 as incomplete.

Undisputed that Android OEMs can self-certify that their devices meet CDD

requirements by running the CTS.

Otherwise disputed.

296. Under the MADA's terms, OEMs that preinstall Google proprietary software applications must meet the CDD, as well as other requirements. *E.g.*,

Undisputed.

297. The MADA requires manufacturers to submit a CTS report and device samples to Google for approval only for devices that are preloaded with Google applications, and not for any other Android devices that the manufacturer markets. Jung (Google) Tr. 153:19-20 (Def. Ex. 63); e.g.,

Case 1:20-cv-03010-APM Document 544-1 Filed 03/13/23 Page 200 of 271

Disputed in part.

Plaintiffs object to the term "requires" and "Android as vague and Statement 297 as (1) incomplete; and (2) misleading.

Undisputed that the MADA requires manufacturers to submit a CTS report and device samples to Google for approval for devices that are preloaded with Google applications.

Otherwise disputed, including to the extent Statement 297 suggests Google only requires CDD compliance for devices preloaded with Google applications. The MADA generally requires compliance with an AFA or ACC—see Statement 298—and the AFA and ACC require that an OEM only distribute Android devices that are CDD-compliant, including for Android devices that are not preloaded with Google applications.

| | | ; see als | o Pls. 1 | Ex. 11 | 0, Go | oogle | docume | nt: We | elcom | e Pa | ack fo | or New | Andro | oid |
|----------------|-----|-----------|----------|--------|-------|-------|----------|--------|-------|------|--------|--------|-------|-----|
| | | | | | | | | | | | _ | | | |
| Partners (Oct. | 11. | 2019). 0 | GOOG | -DOJ- | 1724 | 2522. | at -523. | -528: | Pls. | Ex. | 111. | | | |

| | | | I |
|--|--|--|---|
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

Case 1:20-cv-03010-APM Document 544-1 Filed 03/13/23 Page 201 of 271

| 298. MADA signatories are required to sign an AFA/ACC or agree to its equivalent terms in the MADA. <i>E.g.</i> , |
|---|
| |
| <u>Undisputed</u> . |
| 299. |
| |

Undisputed.

Plaintiffs object to Statement 299 as incomplete.

Case 1:20-cv-03010-APM Document 544-1 Filed 03/13/23 Page 202 of 271

| | | |
|------|------------------------------------|-----------------------|
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| 300. | Microsoft markets its Surface Duo. | with Microsoft's Edge |

300. Microsoft markets its Surface Duo, with Microsoft's Edge browser as the default browser on its home screen and Bing as the default search engine. (Def. Ex. 105); (Microsoft) Tr. 229:10-14 (Def. Ex. 106).

Disputed.

Plaintiffs object to Statement 300 as (1) not supported by the cited material as required by Federal Rule of Civil Procedure 56(c)(1) and Local Rule 7(h); and (2) as incomplete and misleading.

inisicading.

First, Google's claim that Microsoft marketed its Surface Duo with "Bing as the default search engine" for the device is misleading and incomplete in light of the testimony it relies on.

Case 1:20-cv-03010-APM Document 544-1 Filed 03/13/23 Page 203 of 271

|); see also Def. Ex. 105, |
|--|
| GOOG-DOJ-02699263, at -288-89; Pls. Ex. 117, Email from Panay |
| (Microsoft), A couple thoughts (Sept. 16, 2019), MSFT-0001331638, at -639 (Sept. 16, 2019 |
| email from Hiroshi Lockheimer (Google) to Panos Panay (Microsoft), stating "search widget on |
| [Surface Duo] default home screen is important to us"). |
| |
| Def. Ex. 105, |
| GOOG-DOJ-02699263, at -288–289, (Exhibit B, ¶¶ 4 |
| |
|) & 5 |
| |
|)); |
| |
| |
| |
| |
| |

Case 1:20-cv-03010-APM Document 544-1 Filed 03/13/23 Page 204 of 271

| also Pls. Ex. 24, Whinston (DOJ Pls.' Expert) Rebuttal Report, ¶ 382, | |
|---|---|
| n.504 (| |
| | |
| | |
| | |
| | J |
| | |
| | |
| | |
| | |
| | - |
| 201 | |
| 301. | |
| | |

Disputed.

Statement 301 is not properly framed as a material fact, and Plaintiffs object to it to this extent. What Plaintiffs' experts "cited" is not a material fact subject to proof at trial and is therefore not appropriate for inclusion in Google's statement of undisputed material facts.

Accordingly, no response is due from Plaintiffs. Plaintiffs further object to the term "relates to" as vague and undefined and to Statement 301 as (1) not supported by the cited material as required by Federal Rule of Civil Procedure 56(c)(1) and Local Rule 7(h); and (2) incomplete.

| Although it is accurate that Prof. Whinston relied on the email, he relies on a |
|--|
| separate portion stating |
| "AFAs/ACCs |
| give Google a great deal of discretion in approving devices, providing Google with a |
| considerable ability to disrupt the profitability of any OEM or MNO that implements a rival |
| general search engine on its devices." Pls. Ex. 24, Whinston (DOJ Pls.' Expert) Rebuttal Report, |
| ¶ 346 & n.357 (|
| Other companies' documents accord with |
| Prof. Whinston's opinion. See, e.g. Pls. Ex. 119, Amazon document: Core US Tenets & |
| Guidelines (*Aug. 2015), AMZN-SEARCH-000400505, at -507, § 10 (" |
| |
| |
| |

¹⁹ Google's description of this document as a "2015" email appears to be a typo.

302.

Disputed.

Plaintiffs object to Statement 302 as (1) not supported by the cited material as required by

Federal Rule of Civil Procedure 56(c)(1) and Local Rule 7(h); and (2) incomplete.

As described in Plaintiffs' response to Statement 301, Def. Ex. 107,

| Statement 302 is also misleading and | l incomplete as it does not disclose th |
|--------------------------------------|---|
|--------------------------------------|---|

| | ; see also | | |
|-----------|------------|--|--|
| | | | |
| | | | |
| | | | |
| | | | |
| 303. | | | |
| | | | |
| Disputed. | | | |

Plaintiffs object to the term as vague and to Statement 303 as (1) incomplete; and (2) misleading.

The MADA effectively restricts Samsung from preinstalling other browsers with a non-Google default search engine. *See* Pls. Ex. 22, Whinston (DOJ Pls.' Expert) Initial Report, § VI.A.1.f. ("Mobile Application Distribution Agreements with Android OEMs"), Pls. Ex. 24,

Case 1:20-cv-03010-APM Document 544-1 Filed 03/13/23 Page 207 of 271

Whinston (DOJ Pls.' Expert) Rebuttal Report, § VI.A.2.a. ("The MADA's search placement requirements are exclusionary").

| Prof. Whinston relies on this part of |
|--|
| email in partial support of his opinion that the MADA excludes Google rivals from getting |
| distribution through the addition of a browser with a non-Google search default on Android |
| devices, and Google's Statements 301-304 do not mention, let alone challenge, that conclusion. |
| Pls. Ex. 24, Whinston (DOJ Pls.' Expert) Rebuttal Report, ¶ 360. Prof. Whinston further supports |
| his opinion with a citation to |
| |
| |
| |
|). Other evidence is in accord. See, e.g. |
| |
| |
| |
| Pls. Ex. 61, |
| Christensen (Motorola) Dep., 147:24–148:10 (" |

| Statement 303 is also misleading and incomplete as it does not disclose that |
|--|
| ; see also |
| |
| 304. |

Disputed in part

Plaintiffs object to the term "relate to" as vague and undefined and to Statement 304 as (1) incomplete; and (2) not supported by the cited material as required by Federal Rule of Civil Procedure 56(c)(1) and Local Rule 7(h).

Plaintiffs do not dispute that Def. Ex. 107,

does not include the words

"compatibility," "AFA," or "ACC".

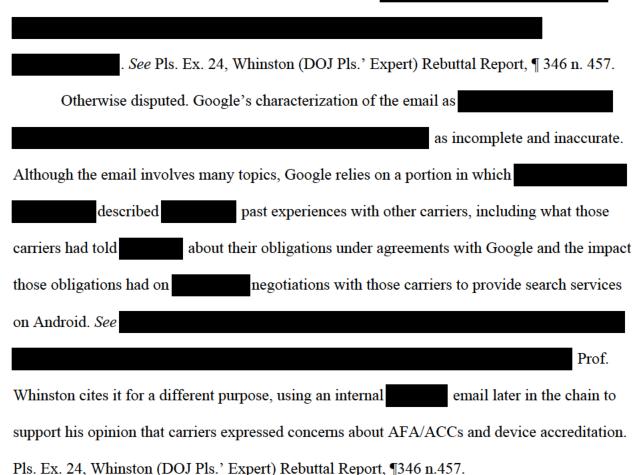
Otherwise disputed. Elsewhere in this document, Google concedes that any discussion of the MADA, as occurs in the email, would necessarily relate to the AFA/ACC. *See* Google's Statement 298 ("MADA signatories are required to sign an AFA/ACC or agree to its equivalent terms in the MADA or agree to its equivalent terms in the MADA.").

305.

Disputed in part

Statement 238 is not properly framed as a material fact, and Plaintiffs object to it in full. What Plaintiffs' experts "cite" is not a material fact subject to proof at trial and is therefore not appropriate for inclusion in Google's statement of undisputed material facts. Accordingly, no response is due from Plaintiffs. Plaintiffs further object to the term "relating to" as vague and undefined, including whether it means in whole, in part, directly, indirectly, or something else, and to Statement 305 as (1) not supported by the cited material as required by Federal Rule of Civil Procedure 56(c)(1) and Local Rule 7(h); and (2) incomplete.

Plaintiffs do not dispute that Prof. Whinston cites



Case 1:20-cv-03010-APM Document 544-1 Filed 03/13/23 Page 210 of 271



Disputed.

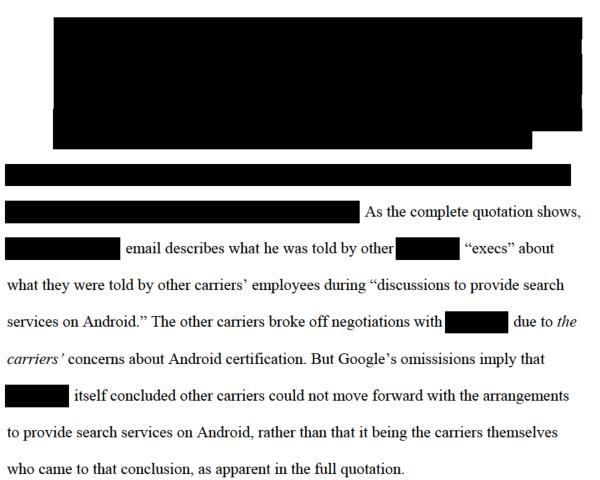
Plaintiffs object to Statement 306 as (1) not supported by the cited material as required by

Federal Rule of Civil Procedure 56(c)(1) and Local Rule 7(h); and (2) as misleading because of omissions.

Google's omission of the beginning of its quotation from the August 15, 2015 email from

in the cited email string changes its meaning. Here is a complete

quotation of the passage with Google's omissions in italics:



307. Disputed. Plaintiffs object to Statement 307 as (1) not supported by the cited material as required by Federal Rule of Civil Procedure 56(c)(1) and Local Rule 7(h); and (2) as incomplete. As explained in Plaintiffs' response to Google's Statement 306, did not describe interpretation of a MADA, but instead described at some point in 2015 or before. statements made by carriers other than The 2020 release of the cannot support a finding that carrier statements to described in a 2015 email are inaccurate, Def. Ex. 108, and as noted in Plaintiffs' response to Statement 306, Statement 307's argument to the contrary edits the email to remove necessary, relevant context contradicting Statement 307. 308. Carriers such as do not certify devices. Disputed in part. Plaintiffs object to the phrase " as vague and to Statement 308 as (1) vauge as to time; (2) incomplete; and (2) misleading. Undisputed that carriers such as do not generally run CTS certification on devices themselves. Otherwise disputed. Carriers must ensure compliance on GMS devices as a condition of distributing devices loaded with Google proprietary applications. See Pls. Ex. 314, T-Mobile

document: GMS Requirements (*Sept. 6, 2019), Google_Lit-TMO_00124591, at -591 (under

"Carrier Help," listing "GMS Requirements" including, as a "Fundamental Requirement[]" that

"Android devices that ship with GMS MUST comply with the Android Compatibility Definition Document (CDD) and pass the Testing Suites like CTS, CTS Verifier, and GTS"). Testing by carriers themselves is part of the devices launch process. Pls. Ex. 315, Google presentation: Android: Partner Device Launch Process (*June 2013), GOOG-DOJ-20847347, at -351 (listing the "Carrier Lab Cycle(s)" as a "Stage" for device launch, during which "[t]he carrier's QA lab cycles while CTS failures are resolved.")

309. Carriers such as do not sign AFAs or ACCs with Google. Rosenberg (Google) Tr. 30:2-8 (Def. Ex. 94).

Undisputed.

V. Agreements Relating to Google Assistant and Internet-of-Things Devices

A. Virtual Assistant Offerings

310. A virtual assistant (also referred to as an "assistant" or "voice assistant") is an interactive service that uses voice as the primary input and output to allow users to access and accomplish tasks on various devices. Lee (Amazon) Tr. 32:6-9 (Def. Ex. 97); Spivak (Google) Tr. 16:14-19 (Def. Ex. 110).

Undisputed.

311. A virtual assistant is different from voice-activated search, which allows a consumer to enter a query in a general search engine orally. Whinston (DOJ Pls.' Expert) Opening Rep. ¶ 217 n.267 (Def. Ex. 40).

Undisputed.

312. Depending on how a device implements the assistant, a user can activate it through different methods, including (i) a spoken "hotword" or "wake word" like "Hey Siri," (ii) a physical affordance (such as a dedicated button on a phone or TV remote, or long pressing a non-dedicated button on a device), or (iii) a gesture on a device. Whinston (DOJ Pls.' Expert) Opening Rep. ¶ 744 (Def. Ex. 40); Spivak (Google) Tr. 89:7-10 (Def. Ex. 110); Brady (Google) Tr. 111:10–20 (Def. Ex. 111); Giannandrea (Apple) Tr. 82:3–13 (Def. Ex. 5).

Undisputed.

313. There are many assistants that work on a variety of devices; examples include:

a. Apple launched the first assistant, Siri, on the iPhone 4S in October 2011, later integrating it on subsequent iPhones, CarPlay (Apple's phone-to-car projection technology), Apple Watches, AirPods, Apple TV, and HomePod smart speakers. Giannandrea (Apple) Tr. 81:19-82:13 (Def. Ex. 5); *Devices that support "Hey Siri,"* available at <u>https://support.apple.com/en-us/HT209014/</u> (Mar. 21, 2022); *10 years of Siri: the history of Apple's voice assistant*, available at https://www.techradar.com/news/siri-10-year-anniversary (Oct. 4, 2021).

b. Amazon distributes Alexa, launched in 2014, on its Echo line of speakers and displays, Amazon Fire TV devices, third-party TV devices, mobile phones, first- and third-party tablets, third-party speakers, first- and third-party headphones and earbuds, and numerous other smart-home devices. *Amazon Echo Now Available to All Customers*, https://press.aboutamazon.com/2015/6/amazon-echo-now-available-to-all-customers (June 23, 2015); Lee (Amazon) Tr. 40:5-41:6, 41:19-42:4; 162:15-23 (Def. Ex. 97).

c. Google launched Google Assistant in October 2016 on its Google Home speaker and Pixel phone, and Google Assistant is also available on other Android mobile devices, and speakers, cars connected to the internet, smart TVs, and wearable devices such as smart watches. Spivak (Google) Tr. 17:12–19:3 (Def. Ex. 110); Brady (Google) Tr. 32:19-23, 98:11-20 (Def. Ex. 111); *A personal Google, just for you*, available at https://blog.google/products/assistant/personal-google-just-you/ (Oct. 4, 2016).

d. Samsung launched its virtual assistant, Bixby, on the Samsung Galaxy S8 smartphone in March 2017 and preinstalled it on subsequent Samsung Android devices and Samsung smart TVs. Denison (Samsung) Tr. 218:20- 219:3 (Def. Ex. 75); Baxter (Samsung) Tr. 89:16-20 (Def. Ex. 76); *Discover New Possibilities with the Samsung Galaxy S8 and Galaxy S8+: A Smartphone Without Limits*, available at https://news.samsung.com/us/discover-new-possibilities-samsung-galaxy-s8-galaxy-s8-plusunpacked-2017/ (Mar. 29, 2017).

e. Sonos, Spotify, Roku, Vizio, LG, Auto OEMs, and white-label services also offer assistants integrated into various devices and services. *E.g.*, Siegel (Sonos) Tr. 42:12-43:3 (Def. Ex. 112);

Undisputed.

B. Uses of Virtual Assistants

314. The primary use of assistants is to perform actions. Raghavan (Google) Tr. 613:13-614:10 (Def. Ex. 114); Lee (Amazon) Tr. 42:24-44:9 (Def. Ex. 97).

Undisputed.

315. Across all devices from February 10, 2022, through April 6, 2022, of Google Assistant interactions were action related, including media, communications, home automation, productivity, routines, device actions, and others; the remaining of

interactions involved seeking information. Murphy (Google's Expert) Opening Rep. ¶ 575 Fig. 28 (Def. Ex. 9).

Undisputed.

316. The majority of Google Assistant interactions on smart speakers, in connected cars, and with smart TVs is to perform actions:

a. On smart speakers, **Determined** of Google Assistant interactions are action related, and **Determined** are information related. Murphy (Google's Expert) Opening Rep. ¶¶ 574–75, 577 (Def. Ex. 9).

b. In autos, **of** Google Assistant interactions are action related, and are information related. Murphy (Google's Expert) Opening Rep. ¶¶ 575, 577 (Def. Ex. 9).

c. With smart TVs, **b** of Google Assistant interactions are action related, and **b** are information related. Murphy (Google's Expert) Opening Rep. ¶¶ 575, 577 (Def. Ex. 9).

Undisputed.

317. The majority of Google Assistant interactions on mobile devices are "to fulfill an intent ... as opposed to only gather information," including tasks such as setting a timer, setting an alarm, or playing music. Raghavan (Google) Tr. 613:13-614:10 (Def. Ex. 114).

Undisputed.

318. Google Assistant interactions that result in a web search comprise of Google Search requests, with smartphones accounting for and IoT devices (speakers, displays, TVs, wearable devices, and connected cars) accounting for Murphy (Google's Expert) Opening Rep. ¶ 593 Table 4 (Def. Ex. 9).

a. Assistant usage on speakers and displays, half of all Google Assistant usage, accounts for for the of overall Google Search usage. Murphy (Google's Expert) Opening Rep. ¶¶ 571 Table 3, 593 Table 4 (Def. Ex. 9).

b. Virtual assistant usage in cars accounts for second of overall Google Assistant usage and an even more insignificant amount of overall Google Search requests
Murphy (Google's Expert) Opening Rep. ¶¶ 571 Table 3, 593 Table 4 (Def. Ex. 9).

c. Smart TVs account for just of Google Assistant usage and of original of original control of Google Search usage. Murphy (Google's Expert) Opening Rep. ¶¶ 571 Table 3, 593 Table 4 (Def. Ex. 9).

d. Assistant usage on mobile devices accounts for the of overall Google Assistant usage and the of total Google Search requests. Murphy (Google's Expert) Opening Rep. ¶¶ 571 Table 3, 593 Table 4 (Def. Ex. 9). Undisputed.

319.

hinston (DOJ Pls.'

Expert) Opening Rep. ¶¶ 224-25 (Def. Ex. 40).

Undisputed.

320. The most common information-related assistant interactions seek specific information—such as "what is the weather" or "what is the score of the Boston Celtics game"— for which the virtual assistant will return only a single result and, on devices without displays, that result is only spoken. Whinston (DOJ Pls.' Expert) Opening Rep. ¶ 230 (Def. Ex. 40); Spivak (Google) Tr. 23:9-13, 24:23-25 (Def. Ex. 110).

Undisputed.

Plaintiffs note that Google's citation to Prof. Whinston's Initial Report should include

both Pls. Ex. 22, Whinston (DOJ Pls.' Expert) Initial Report, ¶¶ 220 and 230, not only ¶ 230.

321. Across all devices from February 10, 2022, through April 6, 2022, at most of Google Assistant usage is "information-related," with only a small subset involving a web search. Murphy (Google's Expert) Opening Rep. ¶¶ 575, 582, Fig. 28, & n.910 (Def. Ex. 9).

Undisputed.

322. Professor Whinston agrees that the most frequent uses of virtual assistants are for actions, not web searches. Whinston (DOJ Pls.' Expert) Opening Rep. ¶¶ 220-25 (Def. Ex. 40).

Undisputed.

Statement 322 is not properly framed as a material fact, and Plaintiffs object to it in full.

What Plaintiffs' experts "agree" to is not a material fact subject to proof at trial and is therefore

not appropriate for inclusion in Google's statement of undisputed material facts. Accordingly, no

response is due from Plaintiffs.

323. Professor Whinston states that virtual assistants do not belong in his proposed "general search services" market because assistants "are significantly differentiated from general search engines, fulfilling different and varied consumer needs." Whinston (DOJ Pls.' Expert) Opening Rep. ¶¶ 218–19, 134, 219-234 (Def. Ex. 40).

Undisputed.

Statement 323 is not properly framed as a material fact, and Plaintiffs object to it in full.

What Plaintiffs' expert "states" not a material fact subject to proof at trial and is therefore not

appropriate for inclusion in Google's statement of undisputed material facts. Accordingly, no

response is due from Plaintiffs.

324. Professor Whinston recognizes that "Google Assistant is not ... [t]he future of Google Search" and opines that "virtual assistants currently have, and in the near future will have, only a limited ability to provide results that would substitute for the SERP of a hypothetical general search services monopolist, leading consumers to use them largely for other purposes." Whinston (DOJ Pls.' Expert) Opening Rep. ¶¶ 221, 233 (Def. Ex. 40).

Undisputed.

Statement 324 is not properly framed as a material fact, and Plaintiffs object to it in full.

What Plaintiffs' expert "recognizes" not a material fact subject to proof at trial and is therefore

not appropriate for inclusion in Google's statement of undisputed material facts. Accordingly, no

response is due from Plaintiffs.

C. Google's Third-Party Assistant Agreements

325. Amazon, Google, and Apple integrate on smart speakers, with Alexa as the sole built-in assistant on 46.6% of speakers shipped in 2021, compared to 32.4% where Google Assistant was the sole built-in assistant, and 9.8% where Siri was the sole built-in assistant. Murphy (Google's Expert) Opening Rep. ¶ 625 Fig. 31 (Def. Ex. 9).

Undisputed.

326. Third-party OEMs accounted for 17.2% of total speaker shipments in 2021. Murphy (Google's Expert) Opening Rep. ¶ 622 Fig. 30 (Def. Ex. 9).

Undisputed.

327. Google has entered into non-exclusive agreements with third-party smart speaker OEMs to license Google Assistant. *E.g.*, Google Cast-Enabled and Assistant-Enabled Compliant Device Distribution Agreement

Undisputed.

328. Amazon works with many different companies to integrate Alexa into speakers. Lee (Amazon) Tr. 63:5-63:9 (Def. Ex. 97).

Undisputed.

329. Most third-party speaker shipments (64.9% of third-party shipments, or 11.2% of overall shipments) include both Google Assistant and Alexa, while third-party speakers shipped with either Google Assistant or Alexa as the sole built-in assistant account for 3.2% and 2.8% of total speaker shipments, respectively. Murphy (Google's Expert) Opening Rep. ¶ 623-24 (Def. Ex. 9).

| <u>Undisp</u> | uted. | | | | |
|---------------|-------|--|--|--|--|
| 330. | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

Undisputed.

331. Connected cars feature numerous assistants, including Google Assistant, Siri, Alexa, and first-party assistants developed by auto OEMs using technology offered by Amazon, Cerence, and SoundHound.

Undisputed.

332. Google has entered into paid licensing agreements, known as Google Automotive Services (GAS) agreements, which provide automotive OEMs with a license to preinstall a suite of services (including Google Assistant) on a non-exclusive, device-bydevice basis . *E.g.*, Google Automotive Services License Agreement ; Spivak (Google) Tr. 159:6-22; 164:14-165:25 (Def. Ex. 110).

Undisputed.

| 333. | | | |
|------|--|--|--|
| | | | |
| | | | |
| | | | |

Undisputed.

334. Google Assistant is distributed on third-party TVs that run non-Android operating systems and also through Android TV. Spivak (Google) Tr. 17:20-19:3 (Def. Ex. 110).

Undisputed.

335. Android TV is Google's smart TV service and integrates the Google Assistant, which helps users access content through the service. Spivak (Google) Tr. 22:7-21 (Def. Ex. 110); *e.g.*, Android TV Application Distribution Agreement between

Undisputed.

336. Android TV constituted an estimated 13.3% of TV shipments, compared with Roku (35.3%), Samsung (25.9%), LG's webOS (9.6%), Vizio's Smartcast OS (7.9%), and Amazon's Fire TV (7.1%). Spivak (Google) Tr. 18:9-11 (Def. Ex. 110); Murphy (Google's Expert) Opening Rep. ¶¶ 682 Fig. 36, 683 (Def. Ex. 9).

Undisputed.

337. Samsung and LG offer multiple assistants on smart TVs covered by Google Assistant Distribution Agreements, with Samsung smart TVs (25.9% of shipments) offering Bixby, Alexa, and Google Assistant, and LG smart TVs (9.6%) offering LG Assistant, Alexa, and Google Assistant.

Murphy (Google's Expert) Opening Rep. ¶ 679 (Def. Ex. 9).

Undisputed.

338. Siri, which accounted for 41.3% of smartphone assistant usage in 2020, is the sole preinstalled assistant on all Apple iPhones, which accounted for about 47.6% of smartphone shipments in 2021. Murphy (Google's Expert) Opening Rep. ¶¶ 707 Fig. 38, 709 (Def. Ex. 9).

Undisputed.

339. Google Assistant accounted for approximately 28.3% of smartphone virtual assistant usage in 2020, while Alexa accounted for approximately 24.4%. Murphy (Google's Expert) Opening Rep. ¶ 707 Fig. 38 (Def. Ex. 9).

Undisputed.

340. Bixby accounted for approximately 6% of smartphone usage in 2020; for the small number of Bixby interactions that invoke a web search, Google Search is currently the default provider. Murphy (Google's Expert) Opening Rep. ¶ 707 Fig. 38 (Def. Ex. 9);

Undisputed.

341. Google enters MADAs with smartphone OEMs to offer a royalty-free license to preinstall and distribute Google's proprietary apps and services, including Google Assistant. *E.g.*,

Disputed in part.

Plaintiffs object to Statement 341 as (1) incomplete; and (2) duplicative of Statement 212. Plaintiffs do not dispute that Google's MADA agreements with smartphone OEMs contain licenses to preinstall and distribute Google's proprietary apps and services, including Assistant.

Otherwise disputed. As described in the report of Plaintiffs' expert Prof. Whinston, "Google uses MADAs to substantially foreclose its search rivals from distribution on Android devices sold in the US." Pls. Ex. 22, Whinston (DOJ Pls.' Expert) Initial Report, § VI.A.1.f., ¶¶ 750–59; *see also* Pls. Ex. 121, Google presentation: Android Agreements Explainer - ACC, MADA, RSA, DCB (Feb. 2, 2018), GOOG-DOJ-28380959, at -967

Other documents elaborate on the reasons Google enters MADAs, beyond those identified in Statement 341, including how they work with Google's AFA, ACC, and RSAs to exclude competition. *See* Pls. Ex. 122, Google presentation: Android Commercial Agreements (Oct. 2020), GOOG-DOJ-17461385, at -418 ("

"); Pls. Ex. 123, Google

presentation: Top OEMs: Search and Assistant Overview (Aug. 2018), GOOG-DOJ-05536106,

at -115 ("

) (emphasis omitted); Pls. Ex.

121, Google presentation: Android Agreements Explainer - ACC, MADA, RSA, DCB (Feb. 2,

Case 1:20-cv-03010-APM Document 544-1 Filed 03/13/23 Page 220 of 271

2018), GOOG-DOJ-28380959, at -968

Pls. Ex. 124, Google presentation: Google

Distribution on Android Framework (*Sept. 2019), GOOG-DOJ-21790045, at -051

Plaintiffs also dispute Google's characterization of the MADAs as "royalty-free." Google describes its MADAs as "**Non monetary barter**" providing "[a]ccess to Google apps in exchange for placement and security update." Pls. Ex. 91, Google presentation, 2019 Partner Plan (*July 2019), GOOG-DOJ-09073083, at -097 (emphasis in original). Prof. Whinston's reports are in accord: as he notes, under the MADAs, "[i]nstead of charging a fee for GMS licenses, Google imposes a set of requirements on the Android OEM and any Android device on which the Android OEM chooses to preinstall Google apps." Pls. Ex. 22, Whinston (DOJ Pls.' Expert) Initial Report, ¶ 751. Prof. Whinston identified these requirements as they existed in the most recent MADAs for the three companies cited in Google's support for Statement 341, namely Samsung, Motorola, and LG:

- The Android OEM must have a valid ACC or AFA
- If the Android OEM preinstalls any single Google app, it must preinstall a suite of 11 Google apps (the Core and Flexible Apps)
- Google's Core Apps—GSA, Chrome, Play Store, Maps, YouTube, and Gmail must be preinstalled in the system partition, making them undeletable by the user
- Google Search widget must be placed on the default home screen
- Google Play Store must be placed on the default home screen

• A folder or icon labeled "Google" that provides direct access to the Core and Flexible Apps must be placed on the default home screen

| • | |
|---|--|
| | |
| | |
| | |
| • | |
| | |
| • | |
| | |
| | |
| | |
| | |
| • | |
| | |
| | |
| • | |
| | |
| | |

Pls. Ex. 22, Whinston (DOJ Pls.' Expert) Initial Report, ¶ 751 (citing contracts).

| 342. | | | |
|------------|-----------|--|--|
| | | | |
| Undisputed | <u>d.</u> | | |
| 343. | | | |
| | | | |
| | | | |

| Undisputed. | |
|-------------|--|
| 344. | |
| | |
| | |

Disputed in part.

Plaintiffs object to Statement 344 as (1) incomplete; and (2) misleading.

Undisputed that the MADAs cited in Statement 344 contain the quoted language.

Otherwise disputed. The MADA's placement and bundled preinstallation requirements

do restrict preinstallation of alternative applications, as partners generally prefer fewer

applications be preinstalled because that follows consumer preferences. Pls. Ex. 61, Christensen

(Motorola) Dep., 147:24-148:10

| see also Def. Ex. 107, |
|------------------------|
| |
| |

Case 1:20-cv-03010-APM Document 544-1 Filed 03/13/23 Page 223 of 271

| ; Pls. Ex. 120, |
|---|
| , 115. LA. 120, |
| |
| |
| |
| ; Pls. Ex. 22, Whinston (DOJ Pls.' Expert) Initial |
| Report, ¶¶ 750–59 ("Mobile Application Distribution Agreements with Android OEMs"); Pls. |
| Ex. 24, Whinston (DOJ Pls.' Expert) Rebuttal Report, ¶¶ 351–64 ("The MADA's search |
| placement requirements are exclusionary."); Pls. Ex. 56, Davies (DOJ Pls.' Expert) Initial |
| Report, ¶ 85, n. 157 (citation to examples of carrier testimony regarding a preference to not |
| install repetitive applications). |

| - |
|---|

Undisputed.

346. Samsung has preinstalled its own Bixby virtual assistant alongside Google Assistant on all Samsung mobile devices (including Google Mobile Services devices) since Bixby was launched. Denison (Samsung) Tr. 218:20-219:3 (Def. Ex. 75); Brady (Google) Tr. 193:17-19 (Def. Ex. 111).

Undisputed.

347. The MADAs do not restrict end users from downloading non-Google assistants on a device or from changing the default assistant to a non-Google assistant.

Undisputed.

348. Google has entered RSAs with OEMs and carriers to provide incremental promotion of Google Search and other Google products, including Google Assistant, in exchange for a share of revenue generated by Google Search on the device. E.g.,

Disputed in part.

Plaintiffs object to the term "promotion" and the phrase "incremental promotion" as vague, and duplicative of other Statements. Plaintiffs' further object to Statement 348 as (1) not supported by the cited material as required by Federal Rule of Civil Procedure 56(c)(1) and Local Rule 7(h); and (2) incomplete.

Undisputed that Google has entered RSAs with OEMs and carriers to provide a share of revenue generated by Google Search and other Google products on devices.

Otherwise disputed. Google's broad cites to four RSAs fail to support Statement 348's claim that the purpose of its RSAs are to provide "incremental promotion." Google enters into RSAs primarily to distribute and acquire exclusive or preferential placement for its products.

222

Case 1:20-cv-03010-APM Document 544-1 Filed 03/13/23 Page 225 of 271

| Any |
|-----|

promotional purposes to RSAs are secondary.

| 349. | | | |
|------|--|--|--|
| | | | |
| | | | |
| | | | |

Disputed in part.

Plaintiffs object to the term "require" as vague and to Statement 349 as incomplete.

Undisputed that the listed RSAs contain the stated requirements.

Otherwise disputed. The listed RSAs have many other requirements

—to make an Android device eligible for the

revenue share, the carrier must make Google the out-of-the-box default on all search access

points, and meet preinstallation and placement requirements for the most important search access

point on the Android device. prohibits the carrier from implementing

alternative search services and, with limited exceptions, promoting or suggesting the use of

alternative search services to the end users of the devices. Pls. Ex. 22, Whinston (DOJ Pls.'

Expert) Initial Report, ¶ 779;

350. The RSAs do not restrict end users from downloading a non-Google assistant or from changing the default assistant to a non-Google assistant. E.g.,

Undisputed.

VI. The Development of Open-Source Applications

351. Google included basic open-source apps when it first released the Android open-source operating system in 2008. Def.'s Supp. Resp. to Pl.'s Feb. 22, 2022 Notice of Dep. Of Google LLC (Topic 6) at 35, 41-58 (Def. Ex. 125).

Undisputed.

352. These apps are referred to as "AOSP" apps—taking their name from the Android Open Source Project ("AOSP"), which includes the Android operating system ("Android OS"), separate open-source API packages (such as Jetpack), and basic open-source applications ("AOSP apps"). Def.'s Supp. Resp. to Pl.'s Feb. 22, 2022 Notice of Dep. of Google LLC (Topic 6) at 35 (Def. Ex. 125).

Undisputed.

353. Google included, for example, basic AOSP apps for calendar, camera, email, messaging, phone contacts, phone dialer, photo gallery, music, search, and web browsing functionality in the first open-source Android release. Def.'s Supp. Resp. to Pl.'s Feb. 22, 2022 Notice of Dep. of Google LLC (Topic 6) at 35, 41-59 (Def. Ex. 125).

Undisputed.

354. When Android launched, virtually no third-party Android applications existed. Def.'s Supp. Resp. to Pl.'s Feb. 22, 2022 Notice of Dep. of Google LLC (Topic 6) at 35 (Def. Ex. 125); Miner (Google) Tr. 136:23-137:1 (Def. Ex. 55).

Undisputed.

A. The Role of Early AOSP Apps and Third-Party Alternatives

355. AOSP apps served as "reference applications" for Android developers to build their own applications. Def.'s Supp. Resp. to Pl.'s Feb. 22, 2022 Notice of Dep. of Google LLC (Topic 6) at 35, 44, 52, 54-55 (Def. Ex. 125).

Disputed.

Plaintiffs object to Statement 355 as (1) incomplete; and (2) misleading.

AOSP apps were not merely "reference applications," but were intended to provide a

complete out-of-the-box experience. Pls. Ex. 57, Miner (Google) Dep., 130:17-131:14 ("[I]n

addition to all those other pieces that we were building into Android, we also planned to have a

core set of applications available so if somebody was building a handset based on the AOSP, our

open source version of Android, they would have a complete out-of-the-box -- you know, they'd

have the ability to ship a complete out-of-the-box experience day one with kind of all the apps

that a user might expect to be available on a phone available day one.").

356. AOSP apps have simple functionality that is limited to the device on which it is installed, absent code modifications. Def.'s Supp. Resp. to Pl.'s Feb. 22, 2022 Notice of

Dep. Of Google LLC (Topic 6) at 35-36; 42-59 (Def. Ex. 125). Def.'s Supp. Resp. to Pl.'s Feb. 22, 2022 Notice of Dep. of Google LLC (Topic 6) at 36 (Def. Ex. 125); Def.'s Fifth Supp. Resp. to Pl.'s Feb. 22, 2022 Notice of Dep. of Google LLC (Topic 6) at 18 (May 5, 2022) (Def. Ex. 57).

Disputed.

Plaintiffs object to Statement 356 as (1) incomplete; and (2) misleading.

The relative use of the AOSP applications has changed over time. At the outset, the portion of the Android OS that was open source (AOSP) included the core of the OS, the application framework, and many of the core apps required for a complete and compelling modern smartphone. *See* Pls. Ex. 128, Google presentation: Welcome to Android Noogler Onboarding! (2019), GOOG-DOJ-15887557, at -585 (Jung Ex. 2) ("

."). Today, however, the fact that "code modifications" could be

needed for AOSP apps to have increased functionality is a result of Google's decisions to invest (or not invest) in ongoing development of AOSP apps. Pls. Ex. 56, Davies (DOJ Pls.' Expert) Initial Report, ¶¶ 49–52 (discussing apps and functionalities that Google has deprecated or removed from the AOSP manifest file since 2010); *see also* Pls. Ex. 162, Google document:

357. AOSP apps cannot interact with proprietary services absent code modifications. Def.'s Supp. Resp. to Pl.'s Feb. 22, 2022 Notice of Dep. of Google LLC (Topic 6) at 36 (Def. Ex. 125); Def.'s Fifth Supp. Resp. to Pl.'s Feb. 22, 2022 Notice of Dep. of Google LLC (Topic 6) at 18 (May 5, 2022) (Def. Ex. 57).

Disputed in part.

Plaintiffs object to Statement 357 as incomplete.

Case 1:20-cv-03010-APM Document 544-1 Filed 03/13/23 Page 229 of 271

Undisputed that AOSP apps cannot interact with proprietary services absent code modifications today.

Otherwise disputed. As described by Plaintiffs' industry expert Michael A.M. Davies, Google has degraded ASOP over the years, including by deprecating or removing core apps. Pls. Ex. 56, Davies (DOJ Pls.' Expert) Initial Report, ¶¶ 49–52; *see also* Pls. Ex. 163, Def.'s Supp. Resp. to Pls.' Feb. 22, 2022 Notice of Dep. of Google (Apr. 7, 2022), at 40–42. As Mr. Davies notes, "[f]or some of these core apps, Google deprecated the open-source version of the app after releasing its proprietary version." Pls. Ex. 56, Davies (DOJ Pls.' Expert) Initial Report, ¶ 51 & nn. 78–85 (citing examples).

358. Today, thousands of Android developers offer millions of Android apps. Slide Deck: AOSP And APIs (GOOG-DOJ-01660503 at -509) (Def. Ex. 126); First Statement of Jamie Rosenberg (Feb. 20, 2021) (GOOG-DOJ-29517846 at -854) (Def. Ex. 127).

Disputed in part.

Plaintiffs object to the term "Android apps" as vague, including whether it refers to apps built on Google's proprietary Android or apps built on AOSP. Plaintiffs also object to Statement 358 as (1) not supported by the cited material as required by Federal Rule of Civil Procedure 56(c)(1) and Local Rule 7(h); and (2) incomplete.

Undisputed that today, thousands of Android developers offer millions of Android apps that operate on Google's proprietary Android but not necessarily AOSP.

Otherwise disputed. Google's Exhibit 126, cited for this proposition, does not support that access to AOSP is sufficient to develop all of these "Android apps," instead making a distinction between AOSP and Google's proprietary Android—it notes "AOSP apps were *originally* produced to enable OEMs to build fully functional devices, with a view to meeting users expecations," [emphasis added], and suggests today Android apps (apparently as

Case 1:20-cv-03010-APM Document 544-1 Filed 03/13/23 Page 230 of 271

distinguished from AOSP apps) now "cover[] all the funcionalities offered by AOSP apps." Def. Ex. 126, Google presentation: AOSP and APIs (UNDATED), GOOG-DOJ-01660503, at -509. Many of the most widely used applications have relied on Google's proprietary apps and APIs.



126 is therefore consistent with Plaintiffs' industry expert Michael A.M. Davies's description of AOSP as insufficient to market a modern Android mobile device. *See* Pls. Ex. 56, Davies (DOJ Pls.' Expert) Initial Report, ¶¶ 49–52; *see also* Pls. Ex. 57, Miner (Google) Dep., 136:19–22 ("So

if you're asking does the AOSP, as it stands today, contain all the apps, probably not.").

359. There are numerous third-party alternatives to the evolved AOSP apps, covering all of the functionalities offered by AOSP apps. Slide Deck: AOSP And APIs (GOOG-DOJ- 01660503, at -509) (Def. Ex. 126); Def.'s Supp. Resp. to Pl.'s Feb. 22, 2022 Notice of Dep. of Google LLC (Topic 6) at 38-39 (Apr. 7, 2022) (Def. Ex. 125).

Disputed in part.

Plaintiffs object to the term "evolved AOSP apps" as vague and to Statement 359 as

vague as to time.

Undisputed that there are some third-party alternatives to AOSP applications today.

Otherwise disputed. When Android was first released, there were virtually no third-party

Android applications. Def.'s SMF, ¶ 354.

See, e.g., Pls. Ex. 100, Lee (Amazon) Dep., 191:22-193:4 (

360. Each general search engine has its own Android app. E.g., Microsoft Bing, available at

https://play.google.com/store/apps/details?id=com.microsoft.bing&hl=en_US&gl=US; Neeva Browser and Search Engine, available at

https://play.google.com/store/apps/details?id=com.neeva.app&hl=en_US&gl=US; DuckDuckGo Privacy Browser, available at

https://play.google.com/store/apps/details?id=com.duckduckgo.mobile.android&hl=en_US &gl=US.

Undisputed.

361. Google introduced the open-source Chromium browser in 2008, years before the deprecation of the AOSP browser. Welcome to Chromium, available at https://blog.chromium.org/2008/09/welcome-to-chromium_02.html (Sept. 2, 2008); Def.'s Supp. Resp.s to Pl.'s Feb. 22, 2022 Notice of Dep. of Google LLC (Topic 6) at 42, 57 (Def. Ex. 125).

Undisputed.

362. Numerous third-party browsers, including Microsoft Edge, Opera, and Brave, are based on open-source Chromium. E.g., Edge Browser, available at https://support.microsoft.com/en-us/microsoft-edge/download-the-new-microsoft-edgebased-on-chromium-0f4a3dd7-55df-60f5-739f-00010dba52cf; Brave Browser, available at https://brave.com/; Opera 91 Stable, available at https://blogs.opera.com/desktop/2022/09/opera-91-stable/.

Undisputed.

363. Compared to AOSP apps, proprietary apps can enable more secure connections, more robust functionality, faster updating, and foster innovation by offering a return on investment. Def.'s Supp. Resp. to Pl.'s Feb. 22, 2022 Notice of Dep. of Google LLC (Topic 6) at 36, 62-63 (Def. Ex. 125).

Undisputed.

B. The Evolution of AOSP Apps

364. With the rise of apps developed by third-party Android developers, use of AOSP apps declined. Def.'s Supp. Resp. to Pl.'s Feb. 22, 2022 Notice of Dep. of Google LLC (Topic 6) at 39 (Def. Ex. 125).

Disputed in part.

Case 1:20-cv-03010-APM Document 544-1 Filed 03/13/23 Page 232 of 271

Plaintiffs object to Statement 364 as (1) incomplete; and (2) misleading.

Undisputed that use of consumer-facing AOSP apps declined at the same time third-party Android apps increased.

Otherwise disputed. As described by Plaintiffs' industry expert Michael A.M. Davies, Google has degraded AOSP over the years, including by deprecating or removing core apps. Pls. Ex. 56, Davies (DOJ Pls.' Expert) Initial Report, ¶¶ 49–52; Pls. Ex. 94, Davies (DOJ Pls.' Expert) Reply Report, ¶¶ 39–41; *see also* Pls. Ex. 163, Def.'s Supp. Resp. to Pls.' Feb. 22, 2022 Notice of Dep. of Google (Apr. 7, 2022), at 40–42 (identifying AOSP apps that Google has deprecated or removed from the manifest source file, including messaging, contacts, calendar, camera, photo gallery, music player, and browser apps); Pls. Ex. 162, Google document:

As Mr. Davies notes, for "some of

these core apps, Google deprecated the open-source version of the app after releasing its proprietary version." Pls. Ex. 56, Davies (DOJ Pls.' Expert) Initial Report, ¶ 51 & nn.78–86 (citing examples). The reduced use of the AOSP apps, therefore, arose in part because of their deprecation, their removal from the AOSP manifest source file.

365. As a result, Google has at times streamlined the purpose of certain AOSP apps, decided not to add new functionality to certain apps, and/or removed certain apps from the Android operating system source manifest. Def.'s Supp. Resp. to Pl.'s Feb. 22, 2022 Notice of Dep. of Google LLC (Topic 6) at 39-41 (Def. Ex. 125).

Disputed in part.

Case 1:20-cv-03010-APM Document 544-1 Filed 03/13/23 Page 233 of 271

Plaintiffs object to the term "streamlined" as vague and undefined and to Statement 365 as (1) incomplete; (2) misleading; and (3) not supported by the cited material, as required by Federal Rule of Civil Procedure 56(c)(1) and Local Rule 7(h).

Undisputed that Google has "at times" decided not to add new functionality to certain AOSP apps, and/or removed certain apps from the Android operating system source manifest.

Otherwise disputed. Google has decided not to add new functionality to certain AOSP apps and/or remove certain apps from the Android operating system source manifest for reasons unrelated to the availability of third-party AOSP app. Pls. Ex. 56, Davies (DOJ Pls.' Expert) Initial Report, ¶¶ 49–52 (describing how "Google has degraded AOSP over the years" and for some apps "Google deprecated the open-source version of the app after releasing its proprietary version."); Pls. Ex. 94, Davies (DOJ Pls.' Expert) Reply Report, ¶¶ 39–41;



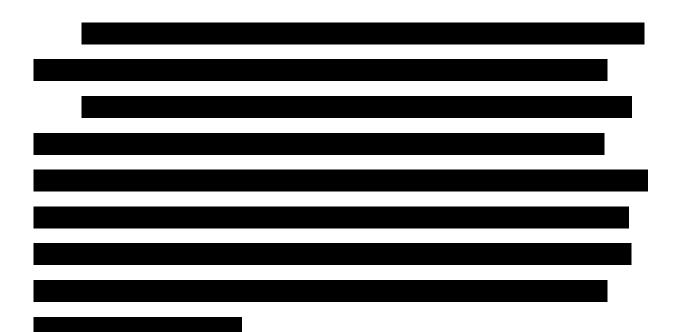
366. Deprecation refers to when Google decides not to add new functionality to an AOSP app. Def.'s Supp. Resp. to Pl.'s Feb. 22, 2022 Notice of Dep. of Google LLC (Topic 6) at 40 (Def. Ex. 125).

Undisputed.

367.

Disputed in part.

Plaintiffs object to Statement 367 as (1) incomplete; and (2) misleading.



368. Google continues to provide security and translation updates for deprecated apps, correct for any bugs, and ensure that deprecated apps function properly. Def.'s Supp. Resp. to Pl.'s Feb. 22, 2022 Notice of Dep. of Google LLC (Topic 6) at 40 (Def. Ex. 125).

Disputed.

Plaintiffs object to Statement 368 as (1) incomplete; and (2) misleading.

"Google does not update AOSP Applications that have been removed from the source

manifest," Pls. Ex. 163, Def.'s Supp. Resp. to Pls.' Feb. 22, 2022 Notice of Dep. of Google (Apr.

7, 2022), at 19-20, including the AOSP email app that was removed from the manifest source

file in 2020. Pls. Ex. 163, Def.'s Supp. Resp. to Pls.' Feb. 22, 2022 Notice of Dep. of Google

(Apr. 7, 2022), at 45-46.

369. All deprecated apps remain available in AOSP. Def.'s Supp. Resp. to Pl.'s Feb. 22, 2022 Notice of Dep. of Google LLC (Topic 6) at 40 (Def. Ex. 125).

Disputed.

Plaintiffs object to Statement 369 as (1) not supported by the cited material, as required by Federal Rule of Civil Procedure 56(c)(1) and Local Rule 7(h); and (2) as misleading.

Statement 369 is contradicted by Googles Statement 370, which is undisputed and avers

that Google has removed some AOSP apps from the source manifest file in later Android

releases. Pls. Ex. 56, Davies (DOJ Pls.' Expert) Initial Report, ¶¶ 49–52; Pls. Ex. 94, Davies

(DOJ Pls.' Expert) Reply Report, ¶¶ 39–41.

370. Google has removed some AOSP apps from the source manifest file in later Android releases. Def.'s Supp. Resp. to Pl.'s Feb. 22, 2022 Notice of Dep. of Google LLC (Topic 6) at 40-41 (Def. Ex. 125).

Undisputed.

371. All AOSP apps removed from the source manifest are still publicly available. Def.'s Supp. Resp. to Pl.'s Feb. 22, 2022 Notice of Dep. of Google LLC (Topic 6) at 41 (Def. Ex. 125).

Disputed.

Plaintiffs object to Statement 371 as (1) incomplete; and (2) misleading.

Google does not provide updates to AOSP apps removed from the source file, including

updates that would provide security and translation, correct for any bugs, and ensure that the

apps function properly. Pls. Ex. 163, Def.'s Supp. Resp. to Pls.' Feb. 22, 2022 Notice of Dep. of

Google (Apr. 7, 2022), at 45-46.

372. Google had valid reasons for evolving each of the AOSP apps to which Plaintiffs point. Def.'s Supp. Resp. to Pl.'s Feb. 22, 2022 Notice of Dep. of Google LLC (Topic 6) at 41- 59 (Def. Ex. 125).

Disputed.

Plaintiffs object to the phrases and terms "valid reasons," "evolving," and "each of the

AOSP apps to which Plaintiffs point" as vague, and to Statement 372 as (1) improper; (2)

incomplete; and (3) misleading.

Google's averment that it had "valid reasons" for its conduct is a "legal conclusion[] cast as [a] factual allegation[]," and is therefore not proper for a Statement of Facts. *Steele v. Carter*, 192 F. Supp. 3d 151, 158 (D.D.C. 2016) (Mehta, J.) (disregarding statements which "are not

Case 1:20-cv-03010-APM Document 544-1 Filed 03/13/23 Page 236 of 271

assertions of fact, but rather are legal conclusions"). That aside, whether Google had "valid reasons" for its actions is in dispute.

; see also Pls. Ex. 56, Davies (DOJ Pls.' Expert)

Initial Report, \P 51 (for some apps "Google deprecated the open-source version of the app after releasing its proprietary version.").

Google has degraded AOSP over the years, as AOSP has lost many of its important

elements and failed to keep up with the requirements of a moden smartphone OS platform. Pls.

Ex. 56, Davies (DOJ Pls.' Expert) Initial Report, ¶¶ 49–52; Pls. Ex. 94, Davies (DOJ Pls.'

Expert) Reply Report, ¶¶ 39–41.

373. The AOSP apps, mentioned by Plaintiffs, that Google has deprecated, removed from the source manifest, or streamlined ("cleaned up") include:

| AOSP App(s) | Status | Date |
|--------------|-------------------------------|---------------------|
| Calendar | Deprecated | 2013 |
| Calendar | Cleaned up | Prior to March 2019 |
| | Camera: Removed from manifest | 2018 |
| Camera | LegacyCamera: Deprecated | 2011 |
| | DevCamera: Deprecated | 2016 |
| Email | Removed from manifest | 2020 |
| Messaging | IM: Removed from manifest | 2012 |
| INICSSAEIIIB | MMS: Removed from manifest | 2018 |

| | BasicSmsReceiver: Deprecated | 2011 |
|----------|--|---------------------|
| | Messaging: Deprecated | 2016 |
| | Gallery 3D: Removed from manifest | 2013 |
| Gallery | Gallery: Deprecated | 2012 |
| | Gallery2: Deprecated | 2016 |
| Music | Deprecated | 2012 |
| IVIUSIC | Cleaned up | Prior to March 2019 |
| Contacts | Deprecated | 2017 |
| | Phone: Removed from manifest | 2016 |
| Dialer | VoiceDialer: Removed from manifest | 2017 |
| | Dialer (replaced Phone): Deprecated | 2018 |
| | GlobalSearch: Removed from manifest | 2010 |
| Search | GoogleSearch: Removed from manifest | 2010 |
| | QuickSearchBox: Deprecated | 2011 |
| Browser | Browser: Removed from manifest | 2018 |
| | Browser2: Deprecated | 2019 |
| | | |

Undisputed.

374. Android launched with one AOSP search app, GoogleSearch, and Google added a second AOSP search app, GlobalSearch, in 2009. Def.'s Supp. Resp. to Pl.'s Feb. 22, 2022 Notice of Dep. of Google LLC (Topic 6) at 53 (Def. Ex. 125).

Undisputed.

375. In 2009, Google introduced a new AOSP search app, Quick Search Box, which replaced GoogleSearch and GlobalSearch. Def.'s Supp. Resp. to Pl.'s Feb. 22, 2022 Notice of Dep. of Google LLC (Topic 6) at 54-55 (Def. Ex. 125).

Undisputed.

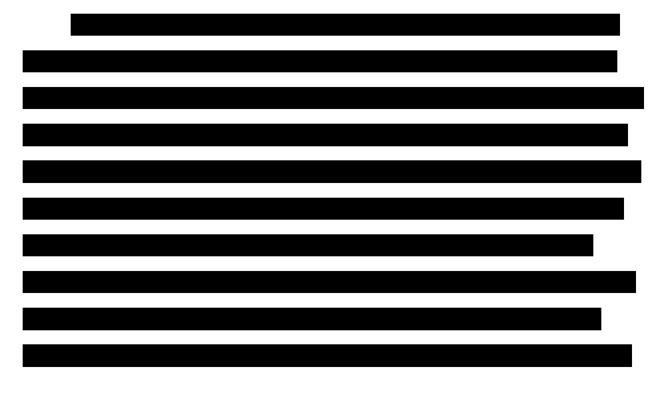
376. In 2010, GlobalSearch and GoogleSearch, which required modifications to work with proprietary search services, were removed from the source manifest. Def.'s Supp. Resp. to Pl.'s Feb. 22, 2022 Notice of Dep. of Google LLC (Topic 6) at 42, 54 (Def. Ex. 125).

Undisputed.

Disputed.

377.

Plaintiffs object to Statement 377 as incomplete.



Case 1:20-cv-03010-APM Document 544-1 Filed 03/13/23 Page 239 of 271

378. Third parties created alternative, proprietary search apps for Android. Def.'s Supp. Resp. to Pl.'s Feb. 22, 2022 Notice of Dep. of Google LLC (Topic 6) at 55 (Ex. 125); e.g., Microsoft builds Bing Search App for Android, available at https://fortune.com/2010/08/30/microsoft-builds-bing-search-app-for-android/ (Aug. 30, 2010); Yahoo Offers Android Search Widget, available at https://searchengineland.com/yahoo-offers-android-search-app-html5-upgrades-for-ios-45542 (July 1, 2010).

Disputed in part.

Plaintiffs object to Statement 378 as (1) incomplete; (2) misleading; and (3) not supported by the cited material, as required by Federal Rule of Civil Procedure 56(c)(1) and Local Rule 7(h).

Undisputed that third parties created alternative search apps for Android.

Otherwise disputed. Alternative search apps are not generally available on AOSP devices without Google proprietary applications preinstalled. For example, for a general user to access the Yahoo applications cited in Google Exhibits, they would have needed to download the application from the Google Play store (or its predecessor, Android Market). *See* Pls. Ex. 311, Greg Sterling, Yahoo Offers Android Search Widget, Search Engine Land (July 10, 2010) ("Not being an Android power user I was confused about how to install Yahoo Search. It appeared to be an app that wouldn't launch . . . after speaking to Yahoo, I found out it's a "widget" that you install on your homescreen. You download the "app" from the Android Market and then touch and hold the homescreen."). The Play Store has never been available in AOSP. The Microsoft

Case 1:20-cv-03010-APM Document 544-1 Filed 03/13/23 Page 240 of 271

application cited was a Verizon exclusive. Pls. Ex. 312, Seth Weintraub, "Microsoft builds Bing Search App for Android," Fortune (Aug. 30, 2010).



Disputed in part.

Plaintiffs object to Statement 379 as (1) incomplete; (2) misleading; and (3) not supported by the cited material, as required by Federal Rule of Civil Procedure 56(c)(1) and Local Rule 7(h).

380. Google developed a new AOSP app for on-device searches called AppSearch, which it first released in 2021. Def.'s Supp. Resp. to Pl.'s Feb. 22, 2022 Notice of Dep. of Google LLC (Topic 6) at 55-56 (Def. Ex. 125).

Undisputed.

381. OEMs and app developers can utilize AppSearch to build custom in-app search capabilities, which allows users to search for content even while offline. Def.'s Supp. Resp. to Pl.'s Feb. 22, 2022 Notice of Dep. of Google LLC (Topic 6) at 55-56 (Def. Ex. 125).

Undisputed.

382. The AOSP Browser shipped with Android in 2008. Def.'s Supp. Resp. to Pl.'s Feb. 22, 2022 Notice of Dep. of Google LLC (Topic 6) at 57 (Def. Ex. 125).

Undisputed.

383. The same year, Google released Chrome's underlying source code, which was made available as part of the Chromium open-source project. Def.'s Supp. Resp.to Pl.'s Feb. 22, 2022 Notice of Dep. of Google LLC (Topic 6) at 57 (Ex. 125); Welcome to Chromium, available at https://blog.chromium.org/2008/09/welcome-to-chromium_02.html (Sept. 2, 2008).

 Undisputed.

 384.

 Disputed in part.

Plaintiffs object to Statement 384 as (1) incomplete; and (2) misleading.

Pls. Ex. 130,

385. As a result, Google deprecated the AOSP Browser in 2012 and removed it from the source manifest in 2018. Def.'s Supp. Resp. to Pl.'s Feb. 22, 2022 Notice of Dep. of Google LLC (Topic 6) at 57 (Def. Ex. 125).

Disputed in part.

Plaintiffs object to Statement 385 as (1) incomplete; and (2) misleading.

Undisputed that Google deprecated the AOSP Browser in 2012 and removed it from the

source manifest in 2018.

Otherwise disputed to the extent that Statement 385 implies that Google's decision to

remove the AOSP Browser app from the manitfest file was taken completely "as a result" of a

decision that doing so would benefit users.

Generally, deprecating AOSP functionality

gives Google more control of its propriatry Android, as OEMs have fewer options. Pls. Ex. 56,

Davies (DOJ Pls.' Expert) Initial Report, ¶¶ 49–52; Pls. Ex. 94, Davies (DOJ Pls.' Expert) Reply

Report, ¶¶ 39–41.

386. Google similarly deprecated the AOSP Browser2 in 2019. Def.'s Supp. Resp. to Pl.'s Feb. 22, 2022 Notice of Dep. of Google LLC (Topic 6) at 42 (Def. Ex. 125).

Disputed in part.

Plaintiffs object to the term "similarly" as vague and object to Statement 386 as (1) incomplete; (2) misleading; and (3) not supported by the cited material, as required by Federal Rule of Civil Procedure 56(c)(1) and Local Rule 7(h).

Undisputed that Google deprecated the AOSP Browser2 in 2019.

Otherwise disputed. Google's cited source describes no reason for the deprecation of

AOSP Browser2.

. Generally, deprecating AOSP functionality gives Google

more control of its propriatry Android, as OEMs have fewer options. Pls. Ex. 56, Davies (DOJ

Pls.' Expert) Initial Report, ¶¶ 49-52; Pls. Ex. 94, Davies (DOJ Pls.' Expert) Reply Report, ¶¶

39-41.

387. Every prior version of AOSP is publicly available on the AOSP website. Def.'s Supp. Resp. to Pl.'s Feb. 22, 2022 Notice of Dep. of Google LLC (Topic 6) at 41 (Def. Ex. 125).

Undisputed.

388. All versions of AOSP apps and APIs, including installable versions, remain publicly available and a part of AOSP. Def.'s Supp. Resp. to Pl.'s Feb. 22, 2022 Notice of Dep. of Google LLC (Topic 6) at 40-41 (Def. Ex. 125).

Disputed.

Plaintiffs object to Statement 388 as (1) incomplete; and (2) misleading.

Google does not provide updates to AOSP apps removed from the source file, including

updates that would provide security and translation, correct for any bugs, and ensure that the

apps function properly. Pls. Ex. 163, Def.'s Supp. Resp. to Pls.' Feb. 22, 2022 Notice of Dep. of

Google (Apr. 7, 2022), at 45-46

389. Google has invested enormous resources into Android and AOSP since inception. Def.'s Supp. Resp. to Pl.'s Feb. 22, 2022 Notice of Dep. of Google LLC (Topic 6) at 57 (Def. Ex. 125); Murphy (Google's Expert) Opening Rep. ¶ 426 nn.659-60 (Def. Ex. 9) (citing data showing tens of billions invested in AOSP alone).

Undisputed.

390. Google continues to devote resources to developing and introducing new AOSP apps. Def.'s Supp. Resp. to Pl.'s Feb. 22, 2022 Notice of Dep. of Google LLC (Topic 6) at 39 (Def. Ex. 125).

Disputed in part.

Plaintiffs object to Statement 390 as (1) incomplete; and (2) misleading.

Undisputed that Google has continued to devote some resources to AOSP apps.

Otherwise disputed. Google has not devoted comparable resources to AOSP apps verses

Google proprietary applications over time. Pls. Ex. 56, Davies (DOJ Pls.' Expert) Initial Report,

¶¶ 49–52 (discussing apps and functionalities that Google has deprecated or removed from the

AOSP manifest file since 2010); Pls. Ex. 94, Davies (DOJ Pls.' Expert) Reply Report, ¶¶ 39-41;

Pls. Ex. 128, Google presentation: Welcome to Android Noogler Onboarding! (2019), GOOG-

| DOJ-15887557, | , at -585 |
|---------------|-----------|
|---------------|-----------|

| | Pls. Ex. 162, |
|------------------|---------------|
| Google document: | |
| | |
| | |

391. Many AOSP apps are upgraded or actively maintained, meaning that Google still modifies the code for the apps. Slide Deck: AOSP And APIs (GOOG-DOJ-01660503 at -509) (Def. Ex. 126); Def.'s Supp. Resp. to Pl.'s Feb. 22, 2022 Notice of Dep. of Google LLC (Topic 6) at 39 (Def. Ex. 125).

Undisputed.

392. Google adds and improves open-source application programming interfaces with each new release of the Android operating system. Def.'s Supp. Resp. to Pl.'s Feb. 22, 2022 Notice of Dep. of Google LLC (Topic 6) at 60 (Def. Ex. 125); First Statement of Jamie Rosenberg (Feb. 20, 2021) (GOOG-DOJ-29517846 at -848) (Def. Ex. 127).

Disputed in part.

Case 1:20-cv-03010-APM Document 544-1 Filed 03/13/23 Page 245 of 271

Plaintiffs object to the term "improves" as vague, and to Statement 392 as (1) incomplete;

and (2) misleading.

Undisputed that Googles adds and improves some open-source APIs with some new

release of the Android operating system.

Otherwise disputed. Google has released other improvements as part of its Google Play

Services, rather than AOSP APIs.

393. In each successive release of AOSP, Google improves functionality and features, such as privacy, battery life, and user experience. First Statement of Jamie Rosenberg (Oct. 5, 2018) (GOOG-DOJ-01658973 at -976-77) (Def. Ex. 129).

Disputed.

Plaintiffs object to the terms "improves" and "functionality" as vague. Further object to

to Statement 393 as (1) incomplete; and (2) misleading.

The functionality gap between AOSP and Google's proprietary Android has increased

over time. Pls. Ex. 56, Davies (DOJ Pls.' Expert) Initial Report, ¶¶ 49–52; Pls. Ex. 94, Davies

(DOJ Pls.' Expert) Reply Report, ¶ 39-41; see also Pls. Ex. 57, Miner (Google) Dep., 136:14-

15 ("So if you're asking does the AOSP, as it stands today, contain all the apps, probably not.").

394. Before Android launched, Google planned to license proprietary Android apps and services, including Google Mobile Services that run on the Android operating system. Def.'s Supp. Resp. to Pl.'s Feb. 22, 2022 Notice of Dep. of Google LLC (Topic 6) at 36 (Def. Ex. 125).

Undisputed.

395. Google Play Store, Google Play Services APIs (also called GMS Core), Google Maps, Maps APIs, YouTube, Google Account Manager, Cloud Messaging services, push notifications, and cloud syncing have always been licensed proprietarily and have never been part of AOSP. Def.'s Supp. Resp. to Pl.'s Feb. 22, 2022 Notice of Dep. of Google LLC (Topic 6) at 59, 62, 66, 71, 78-79, 81 (Def. Ex. 125).

Undisputed.

Contrary to Google's statement in their brief, Plaintiffs never claimed these applications

were at one point part of AOSP. Def. Br. at 49.

396. Google offers an AOSP location provider that Google has improved since Android's launch. Def.'s Supp. Resp. to Pl.'s Feb. 22, 2022 Notice of Dep. of Google LLC (Topic 6) at 70-71 (Def. Ex. 125).

Undisputed.

397. Google continues to improve the AOSP APIs that Google and third-party mapping services use, including by improving the AOSP location provider APIs. Def.'s Supp. Resp. to Pl.'s Feb. 22, 2022 Notice of Dep. of Google LLC (Topic 6) at 74 (Def. Ex. 125).

Undisputed.

398. Google also offers its own proprietary network location technology that never has been part of AOSP. Def.'s Supp. Resp. to Pl.'s Feb. 22, 2022 Notice of Dep. of Google LLC (Topic 6) at 71-72 (Def. Ex. 125).

Undisputed

Dated: January 26, 2023

Respectfully submitted,

By: /s/ Kenneth M. Dintzer

Kenneth M. Dintzer Adam Severt Matthew C. Hammond Michael G. McLellan (D.C. Bar #489217) Elizabeth S. Jensen Diana A. Aguilar Aldape Sarah M. Bartels (D.C. Bar No. 1029505) R. Cameron Gower Thomas Greene Karl E. Herrmann (D.C. Bar # 1022464) Matthew Jones (D.C. Bar No. 1006602) Claire Maddox (D.C. Bar # 498356) Veronica N. Onyema (D.C. Bar No. 979040) Lara E.V. Trager Catharine S. Wright U.S. Department of Justice, Antitrust Division Technology & Digital Platforms Section 450 Fifth Street NW, Suite 7100 Washington, DC 20530 Telephone: (202) 227-1967 Kenneth.Dintzer2@usdoj.gov

Counsel for Plaintiff United States of America

By: /s/ Margaret Sharp

Ken Paxton, Attorney General James Lloyd, Chief, Antitrust Division Margaret Sharp, Assistant Attorney General Office of the Attorney General, State of Texas 300 West 15th Street Austin, Texas 78701 Margaret.Sharp@oag.texas.gov

Counsel for Plaintiff State of Texas

By: /s/ Matthew Michaloski

Theodore Edward Rokita, Attorney General Scott L. Barnhart, Chief Counsel and Director, Consumer Protection Division Matthew Michaloski, Deputy Attorney General Christi Foust, Deputy Attorney General Office of the Attorney General, State of Indiana Indiana Government Center South, Fifth Floor 302 West Washington Street Indianapolis, Indiana 46204 Matthew.Michaloski@atg.in.gov

Counsel for Plaintiff State of Indiana

By: <u>/s/ Keaton Barnes</u> Keaton Barnes Arkansas Bar No. 2022161 Assistant Attorney General Office of Tim Griffin, Attorney General 323 Center Street, Suite 200 Little Rock, AR 72201 Keaton.Barnes@ArkansasAG.gov

Counsel for Plaintiff State of Arkansas

By: /s/ Brian Wang

Rob Bonta, Attorney General Ryan J. McCauley, Deputy Attorney General Brian Wang, Deputy Attorney General Henry Cornillie, Deputy Attorney General Paula Blizzard, Supervising Deputy Attorney General Office of the Attorney General, California Department of Justice 455 Golden Gate Avenue, Suite 11000 San Francisco, California 94102 Brian.Wang@doj.ca.gov

Counsel for Plaintiff State of California

By: <u>/s/Lee Istrail</u> Ashley Moody, Attorney General R. Scott Palmer, Special Counsel, Complex Enforcement Chief, Antitrust Division Nicholas D. Niemiec, Assistant Attorney General Lee Istrail, Assistant Attorney General Office of the Attorney General, State of Florida PL-01 The Capitol Tallahassee, Florida 32399 Lee.Istrail@myfloridalegal.com Scott.Palmer@myfloridalegal.com

Counsel for Plaintiff State of Florida

By: <u>/s/ Daniel Walsh</u> Christopher Carr, Attorney General Margaret Eckrote, Deputy Attorney General Daniel Walsh, Senior Assistant Attorney General Charles Thimmesch, Assistant Attorney General Office of the Attorney General, State of Georgia 40 Capitol Square, SW Atlanta, Georgia 30334-1300 cthimmesch@law.georgia.gov

Counsel for Plaintiff State of Georgia

By: /s/ Philip R. Heleringer

Daniel Cameron, Attorney General J. Christian Lewis, Commissioner of the Office of Consumer Protection Philip R. Heleringer, Executive Director of the Office of Consumer Protection Jonathan E. Farmer, Deputy Executive Director of the Office of Consumer Protection Office of the Attorney General, Commonwealth of Kentucky 1024 Capital Center Drive, Suite 200 Frankfort, Kentucky 40601 Philip.Heleringer@ky.gov

Counsel for Plaintiff Commonwealth of Kentucky

By: <u>/s/ Christopher J. Alderman</u> Jeff Landry, Attorney General Christopher J. Alderman, Assistant Attorney General Office of the Attorney General, State of Louisiana Public Protection Division 1885 North Third St. Baton Rouge, Louisiana 70802 AldermanC@ag.louisiana.gov

Counsel for Plaintiff State of Louisiana

By: <u>/s/ Scott Mertens</u> Dana Nessel, Attorney General Scott Mertens, Assistant Attorney General Michigan Department of Attorney General P.O. Box 30736 Lansing, Michigan 48909 MertensS@michigan.gov

Counsel for Plaintiff State of Michigan

By: /s/ Stephen M. Hoeplinger

Stephen M. Hoeplinger Assistant Attorney General Missouri Attorney General's Office 815 Olive St., Suite 200 St. Louis, Missouri 63101 Stephen.Hoeplinger@ago.mo.gov

Counsel for Plaintiff State of Missouri

By: /s/ Hart Martin

Lynn Fitch, Attorney General Hart Martin, Special Assistant Attorney General Crystal Utley Secoy, Assistant Attorney General Office of the Attorney General, State of Mississippi P.O. Box 220 Jackson, Mississippi 39205 Hart.Martin@ago.ms.gov

Counsel for Plaintiff State of Mississippi

By: <u>/s/ Anna Schneider</u> Anna Schneider Bureau Chief Montana Office of Consumer Protection P.O. Box 200151 Helena, MT. 59602-0150 Phone: (406) 444-4500 Fax: 406-442-1894 Anna.schneider@mt.gov

Counsel for Plaintiff State of Montana

By: /s/ Mary Frances Jowers

Alan Wilson, Attorney General W. Jeffrey Young, Chief Deputy Attorney General C. Havird Jones, Jr., Senior Assistant Deputy Attorney General Mary Frances Jowers, Assistant Deputy Attorney General Rebecca M. Hartner, Assistant Attorney General Office of the Attorney General, State of South Carolina 1000 Assembly Street Rembert C. Dennis Building P.O. Box 11549 Columbia, South Carolina 29211-1549 mfjowers@scag.gov

Counsel for Plaintiff State of South Carolina

By: /s/ Gwendolyn J. Lindsay Cooley

Joshua L. Kaul, Attorney General Gwendolyn J. Lindsay Cooley, Assistant Attorney General Wisconsin Department of Justice 17 W. Main St. Madison, Wisconsin 53701 Gwendolyn.Cooley@Wisconsin.gov

Counsel for Plaintiff State of Wisconsin

FOR PLAINTIFF STATE OF COLORADO:

PHILIP WEISER Attorney General

Jonathan B. Sallet Special Assistant Attorney General

<u>/s/ Jonathan B. Sallet</u> Jonathan B. Sallet, DC Bar No. 336198 Jon.Sallet@coag.gov Steven M. Kaufmann, DC Bar No. 1022365 *(inactive)* <u>Steve.Kaufmann@coag.gov</u> Carla Baumel <u>Carla.Baumel@coag.gov</u> Elizabeth W. Hereford <u>Elizabeth.Hereford@coag.gov</u> Colorado Office of the Attorney General 1300 Broadway, 7th Floor Denver, CO 80203 Tel: 720-508-6000

William F. Cavanaugh , Jr. PATTERSON BELKNAP WEBB & TYLER LLP 1133 Avenue of the Americas Suite 2200 New York, NY 10036-6710 212-335-2793 Email: wfcavanaugh@pbwt.com

Counsel for Plaintiff Colorado

FOR PLAINTIFF STATE OF NEBRASKA:

MIKE HILGERS Attorney General

Joseph M. Conrad, Assistant Attorney General Colin P. Snider, Assistant Attorney General Matthew K. McKinley, Special Assistant Attorney General Nebraska Department of Justice Office of the Attorney General 2115 State Capitol Lincoln, NE 68509 Telephone: (402) 471-3840 Joseph.Conrad@nebraska.gov Colin.snider@nebraska.gov Matt.Mckinley@nebraska.gov

William F. Cavanaugh , Jr. PATTERSON BELKNAP WEBB & TYLER LLP 1133 Avenue of the Americas Suite 2200 New York, NY 10036-6710 212-335-2793 Email: wfcavanaugh@pbwt.com

Counsel for Plaintiff Nebraska

FOR PLAINTIFF STATE OF ARIZONA:

KRISTIN K. MAYES Attorney General

Robert A. Bernheim, Unit Chief Counsel Arizona Office of the Attorney General 400 West Congress, Ste. S-315 Tucson, Arizona 85701 Tel: (520) 628-6507 Robert.bernheim@azag.gov

Counsel for Plaintiff Arizona

FOR PLAINTIFF STATE OF IOWA:

BRENNA BIRD Attorney General

Noah Goerlitz, Assistant Attorney General Office of the Attorney General of Iowa 1305 E. Walnut St., 2nd Floor Des Moines, IA 50319 Tel: (515) 725-1018 Noah.goerlitz@ag.iowa.gov

Counsel for Plaintiff Iowa

FOR PLAINTIFF STATE OF NEW YORK:

LETITIA JAMES Attorney General

Elinor R. Hoffmann Morgan J. Feder Michael Schwartz Office of the Attorney General of New York 28 Liberty Street, 21st Floor New York, NY 10005 212-416-8513 Elinor.hoffmann@ag.ny.gov Morgan.feder@ag.ny.gov Michael.schwartz@ag.ny.gov

Counsel for Plaintiff New York

FOR PLAINTIFF STATE OF NORTH CAROLINA:

JOSH STEIN Attorney General

Kunal Janak Choksi Joshua Daniel Abram Jonathan R. Marx Jessica Vance Sutton North Carolina Department of Justice 114 W. Edenton St. Raleigh, NC 27603 919-716-6000 kchoksi@ncdoj.gov jabram@ncdoj.gov jmarx@ncdoj.gov jsutton2@ncdoj.gov

Counsel for Plaintiff North Carolina

FOR PLAINTIFF STATE OF TENNESSEE:

JONATHAN SKRMETTI Attorney General

J. David McDowell Chris Dunbar Office of the Attorney General and Reporter P.O. Box 20207 Nashville.TN 37202 (615) 741-8722 David.McDowell@ag.tn.gov Chris.Dunbar@ag.tn.gov

Counsel for Plaintiff Tennessee

FOR PLAINTIFF STATE OF UTAH:

SEAN D. REYES Attorney General

Scott R. Ryther Tara Pincock Utah Office of Attorney General 160 E 300 S, 5th Floor P.O. Box 142320 Salt Lake City, Utah 84114 385-881-3742 sryther@agutah.gov tpincock@agutah.gov

Counsel for Plaintiff Utah

FOR PLAINTIFF STATE OF ALASKA:

TREG TAYLOR Attorney General

Jeff Pickett State of Alaska, Department of Law Office of the Attorney General 1031 W. Fourth Avenue, Suite 200 Anchorage, Alaska 99501 Tel: (907) 269-5100 Jeff.pickett@alaska.gov

Counsel for Plaintiff Alaska

FOR PLAINTIFF STATE OF CONNECTICUT: WILLIAM TONG Attorney General

Nicole Demers Office of the Attorney General of Connecticut 165 Capitol Avenue, Suite 5000 Hartford, CT 06106 860-808-5202 Nicole.demers@ct.gov

Counsel for Plaintiff Connecticut

FOR PLAINTIFF STATE OF DELAWARE:

KATHY JENNINGS Attorney General

Michael Andrew Undorf Delaware Department of Justice Fraud and Consumer Protection Division 820 N. French St., 5th Floor Wilmington, DE 19801 302-577-8924 Michael.undorf@delaware.gov

Counsel for Plaintiff Delaware

FOR PLAINTIFF DISTRICT OF COLUMBIA:

BRIAN SCHWALB Attorney General

Elizabeth Gentry Arthur Office of the Attorney General for the District of Columbia 400 6th Street NW Washington, DC 20001 202-724-6514 Elizabeth.arthur@dc.gov

Counsel for Plaintiff District of Columbia

FOR PLAINTIFF TERRITORY OF GUAM:

DOUGLAS MOYLAN Attorney General

Fred Nishihira, Chief, Consumer Protection Division Office of the Attorney General of Guam 590 S. Marine Corps Drive, Suite 901 Tamuning, Guam 96913 Tel: (671) 475-3324

Counsel for Plaintiff Guam

FOR PLAINTIFF STATE OF HAWAI'I:

ANNE E. LOPEZ Attorney General

Rodney I. Kimura Department of the Attorney General, State of Hawai'i Commerce & Economic Development 425 Queen Street Honolulu, HI 96813 808-586-1180 Rodney.i.kimura@hawaii.gov

Counsel for Plaintiff Hawai'i

FOR PLAINTIFF STATE OF IDAHO:

RAÚL LABRADOR Attorney General

John K. Olson Office of the Idaho Attorney General Consumer Protection Division 954 W. State St., 2nd Floor P.O. Box 83720 Boise, ID 83720 208-334-4114 Brett.delange@ag.idaho.gov John.olson@ag.idaho.gov

Counsel for Plaintiff Idaho

FOR PLAINTIFF STATE OF ILLINOIS:

KWAME RAOUL Attorney General

Elizabeth Maxeiner Brian Yost Office of the Attorney General of Illinois 100 W. Randolph St. Chicago, IL 60601 773-590-7935 Elizabeth.maxeiner@ilag.gov Brian.yost@ilag.gov

Counsel for Plaintiff Illinois

FOR PLAINTIFF STATE OF KANSAS:

KRIS W. KOBACH Attorney General

Lynette R. Bakker Kansas Office of the Attorney General 120 S.W. 10th Avenue., 2nd Floor Topeka, KS 66612 Tel: (785) 296-3751 Lynette.bakker@ag.ks.gov

Counsel for Plaintiff Kansas

FOR PLAINTIFF STATE OF MAINE:

AARON M. FREY Attorney General

Christina M. Moylan Office of the Attorney General of Maine 6 State House Station August, ME 04333 207-626-8800 Christina.moylan@maine.gov

Counsel for Plaintiff Maine

FOR PLAINTIFF STATE OF MARYLAND:

ANTHONY G. BROWN Attorney General

Schonette J. Walker Gary Honick Office of the Attorney General of Maryland 200 St. Paul Place, 19th Floor Baltimore, MD 21202 410-576-6480 swalker@oag.state.md.us ghonick@oag.state.md.us

Counsel for Plaintiff Maryland

FOR PLAINTIFF COMMONWEALTH MASSACHUSETTS:

ANDREA CAMPBELL Attorney General

William T. Matlack Michael B. MacKenzie Office of the Attorney General of Massachusetts One Ashburton Place, 18th Fl. Boston, MA 02108 Tel: (617) 727-2200 William.matlack@mass.gov Michael.Mackenzie@mass.gov

Counsel for Plaintiff Massachusetts

FOR PLAINTIFF STATE MINNESOTA:

KEITH ELLISON Attorney General

Zachary William Biesanz Office of the Minnesota Attorney General Consumer, Wage, and Antitrust Division 445 Minnesota Street, Suite 1400 St. Paul, MN 55101 651-757-1257 Zach.biesanz@ag.state.mn.us

Counsel for Plaintiff Minnesota

FOR PLAINTIFF STATE OF NEVADA:

AARON D. FORD Attorney General

Michelle Christine Newman Lucas J. Tucker Nevada Office of the Attorney General 100 N. Carson Street Carson City, NV 89701 775-684-1164 mnewman@ag.nv.gov ltucker@ag.nv.gov

Counsel for Plaintiff Nevada

FOR PLAINTIFF STATE OF NEW HAMPSHIRE:

JOHN FORMELLA Attorney General

Brandon Garod Office of Attorney General of New Hampshire 33 Capitol Street Concord, NH 03301 603-271-1217 Brandon.h.garod@doj.nh.gov

Counsel for Plaintiff New Hampshire

FOR PLAINTIFF STATE OF NEW JERSEY:

MATT PLATKIN Attorney General

Isabella R. Pitt Deputy Attorney General New Jersey Attorney General's Office 124 Halsey Street, 5th Floor Newark, NJ 07102 973-648-7819 Isabella.Pitt@law.njoag.gov

Counsel for Plaintiff New Jersey

FOR PLAINTIFF STATE OF NEW MEXICO:

RAUL TORREZ Attorney General

Judith E. Paquin Cholla Khoury Assistant Attorney General New Mexico Office of the Attorney General 408 Galisteo St. Santa Fe, NM 87504 Tel: 505-490-4885 jpaquin@nmag.gov ckhoury@nmag.gov

Counsel for Plaintiff New Mexico

FOR PLAINTIFF STATE NORTH DAKOTA:

DREW WRIGLEY Attorney General

Elin S. Alm Assistant Attorney General Consumer Protection and Antitrust Division Office of the Attorney General of North Dakota 1720 Burlington Drive, Suite C Bismarck, ND 58504 701-328-5570 ealm@nd.gov

Counsel for Plaintiff North Dakota

FOR PLAINTIFF STATE OHIO:

DAVE YOST Attorney General

Jennifer Pratt Beth Ann Finnerty Mark Kittel Office of the Attorney General of Ohio 30 E Broad Street, 26th Floor Columbus, OH 43215 614-466-4328 Jennifer.pratt@ohioattorneygeneral.gov Beth.finnerty@ohioattorneygeneral.gov Mark.kittel@ohioattorneygeneral.gov

Counsel for Plaintiff Ohio

FOR THE PLAINTIFF STATE OKLAHOMA:

GENTNER DRUMMOND Attorney General

Caleb J. Smith Office of the Oklahoma Attorney General 313 NE 21st St Oklahoma City, OK 73105 Tel: (405) 522-1014 Caleb.Smith@oag.ok.gov

Counsel for Plaintiff Oklahoma

FOR PLAINTIFF STATE OREGON:

ELLEN ROSENBLUM Attorney General

Cheryl Hiemstra Oregon Department of Justice 1162 Court St. NE Salem, OR 97301 503-934-4400 Cheryl.hiemstra@doj.state.or.us

Counsel for Plaintiff Oregon

FOR PLAINTIFF COMMONWEALTH PENNSYLVANIA:

MICHELLE HENRY Attorney General

Tracy W. Wertz Joseph S. Betsko Pennsylvania Office of Attorney General Strawberry Square Harrisburg, PA 17120 Tel: (717) 787-4530 jbetsko@attorneygeneral.gov twertz@attorneygeneral.gov

Counsel for Plaintiff Pennsylvania

FOR PLAINTIFF TERRITORY PUERTO RICO:

DOMINGO HERNANDEZ Attorney General

Guarionex Diaz Martinez Assistant Attorney General Antitrust Division Puerto Rico Department of Justice P.O. Box 9020192 San Juan, Puerto Rico 00902 Tel: (787) 721-2900, ext. 1201 gdiaz@justicia.pr.gov

Counsel for Plaintiff Puerto Rico

FOR PLAINTIFF STATE RHODE ISLAND:

PETER NERONHA Attorney General

Stephen Provazza Rhode Island Office of the Attorney General 150 South Main Street Providence, RI 02903 Tel: (401) 274-4400 SProvazza@riag.ri.gov

Counsel for Plaintiff Rhode Island

FOR PLAINTIFF STATE SOUTH DAKOTA:

MARTY J. JACKLEY Attorney General

Yvette K. Lafrentz Office of the Attorney General of South Dakota 1302 E. Hwy 14, Suite 1 Pierre, SD 57501 605-773-3215 Yvette.lafrentz@state.sd.us

Counsel for Plaintiff South Dakota

FOR PLAINTIFF STATE VERMONT:

CHARITY R. CLARK Attorney General

Christopher J. Curtis Assistant Attorney General Office of the Attorney General of Vermont 109 State St. Montpelier, VT 05609 802-828-3170 Ryan.kriger@vermont.gov

Counsel for Plaintiff Vermont

FOR PLAINTIFF COMMONWEALTH VIRGINIA:

JASON S. MIYARES Attorney General

Tyler T. Henry thenry@oag.state.va.us Office of the Attorney General of Virginia 202 N. 9th Street Richmond, VA 23219 Tel: (804) 692-0485

Counsel for Plaintiff Virginia

FOR PLAINTIFF STATE WASHINGTON:

BOB FERGUSON Attorney General

Amy Hanson Washington State Attorney General 800 Fifth Avenue, Suite 2000 Seattle, WA 98104 206-464-5419 Amy.hanson@atg.wa.gov

Counsel for Plaintiff Washington

FOR PLAINTIFF STATE WEST VIRGINIA:

PATRICK MORRISEY Attorney General

Douglas Lee Davis Office of the Attorney General, State of West Virginia 1900 Kanawha Boulevard, East Building 6, Suite 402 P.O. Box 1789 Charleston, WV 25305 304-558-8986 Douglas.l.davis@wvago.gov

Counsel for Plaintiff West Virginia

FOR PLAINTIFF STATE WYOMING:

BRIDGET HILL Attorney General

Benjamin Peterson Wyoming Attorney General's Office 2320 Capitol Avenue Kendrick Building Cheyenne, WY 82002 (307) 777-6397 Benjamin.peterson2@wyo.gov

Counsel for Plaintiff Wyoming