EXHIBIT A

**IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA**

United States of America, *et al.*,	
Plaintiffs,	
v.	Case No. 1:20-cv-03010-APM
Google LLC,	
Defendant.	

**PLAINTIFFS' FIRST REQUESTS FOR PRODUCTION OF DOCUMENTS TO
<u>DEFENDANT GOOGLE LLC</u>**

Pursuant to Rules 26 and 34 of the Federal Rules of Civil Procedure, Plaintiffs United

States of America, and the States of Arkansas, California, Florida, Georgia, Indiana, Kentucky,

Louisiana, Michigan, Mississippi, Missouri, Montana, South Carolina, Texas, and Wisconsin

request that Defendant Google LLC produce the documents requested below, in accordance with

Local Rule 26.2(d) of the U.S. District Court of Columbia, no later than 30 days after service of

this request or at any other time or place counsel for the parties may agree or the Court may

direct in the Case Management Order or otherwise. Documents shall be produced at the office of

the U.S. Department of Justice, Antitrust Division, Technology and Financial Services Section,

450 Fifth Street NW, 7100, Washington, DC 20530, or at any other place counsel for the parties

may agree.

DEFINITIONS

1.   The terms defined below and used in each of the topics should be construed broadly to the fullest extent of their meaning in a good-faith effort to comply with the Federal Rules of Civil Procedure. These definitions are provided solely for the purpose of these Requests for Production.

2.   The terms "Google," "you," "your," and "the Company" mean Google LLC, its domestic and foreign parents, predecessors, divisions, subsidiaries, affiliates, partnerships and joint ventures, and all directors, officers, employees, agents, and representatives of the foregoing. The terms "parent," "subsidiary," "affiliate," and "joint venture" refer to any person in which there is partial (25 percent or more) or total ownership or control between the Company and any other person.

3.   The terms "and" and "or" have both conjunctive and disjunctive meanings.

4.   The term "any" means each and every.

5.   The term "documents" is defined to be synonymous in meaning and equal in scope to the usage of the phrase "documents or electronically stored information" in Rule 34(a)(1)(A) of the Federal Rules of Civil Procedure and includes electronically stored information ("ESI") of any kind in the possession, custody, or control of the company.

6.   The term "ESI Order" refers to the Stipulation and Order Regarding Discovery Procedures entered by the court on December 21, 2020.

7.   The term "including" means including, but not limited to.

8.   The term "person" includes the company and means any natural person, corporate entity, partnership, association, joint venture, government entity, or trust.

9.   The singular includes the plural and vice versa.

INSTRUCTIONS

1.   All documents already produced by Google in response to Civil Investigative

Demands 30092, 30178, 30120, 30121, 30357, and 30358, and not clawed back, need not be

reproduced in response to these document requests.

2.   In addition to the specific instructions set forth below, these document requests

incorporate the instructions set forth in Rules 26 and 34 of the Federal Rules of Civil Procedure,

the Local Rules of the U.S. District Court for the District of Columbia, and the operative ESI

Order in this case. Subject to a valid claim of privilege, the entire document must be produced if

any part of that document is responsive.

3.   Unless otherwise specified, these requests are for all documents in your

possession, custody, or control that were created, altered, or received at any time from January 1,

2010, to the present. Unless otherwise stated, these requests are for all otherwise responsive

documents relating to the United States or any part thereof, regardless of where those documents

are kept.

4.   These requests are continuing in nature, and you must supplement your responses

pursuant to Rule 26(e) of the Federal Rule of Civil Procedure. Plaintiffs specifically reserve the

right to seek supplementary responses and the additional supplementary production of

documents before trial.

5.   Where a claim of privilege or other protection from discovery is asserted in

objecting to any request or sub-part thereof, and any document is withheld (in whole or in part)

on the basis of such assertion, you shall provide a log ("Privilege Log") in accordance with the

operative Case Management Order and ESI Order entered by the court on December 21, 2020, or

the operative versions of those orders in place at the time you provide a log.

REQUESTS FOR PRODUCTION

1.   For the custodians listed in Appendix B, produce all documents, including all documents previously withheld or clawed back, responsive to the search terms listed in Appendix A.

2.   For the first page of the search results for each search query done in the United States on Google Search (not on a syndicated partner site), from (i) February 3, 2020, to February 9, 2020, and (ii) February 2, 2015, to February 8, 2015, produce the following data:

a.   search event ID;

b.   date of the search;

c.   time of the search in Pacific Time Zone;

d.   unhashed search query string;

e.   indicator (0 or 1) for whether the search was a navigational search;

f.   indicator (0 or 1) for whether the search was a commercial query;

g.   verticals4; (i.e. category of the search query with top levels and more granular subgroups such as "Science/Astronomy" or "Science/Chemistry");

h.   device type (computer, tablet, or mobile phone);

i.   browser;

j.   operating system;

k.   search access point;

l.   total number of top text ad spots available;

m.   number of text ads;

n.   number of text ads that appeared above the organic results;

o.   number of right-hand side text ads (only relevant to 2015);

p. number of product ads;

q. number of local ads;

r. indicator (0 or 1) for if a Google map showed up on the results page;

s. total number of all ads (including text, products, local, etc.);

t. number of clicks on text ads;

u. number of clicks on right-hand side text ads (only relevant to 2015);

v. number of clicks on product ads;

w. number of clicks on local ads;

x. total number of clicks on all ads;

y. revenue from all text ads;

z. revenue from all top text ads;

aa. revenue from right-hand side text ads (only relevant to 2015);

bb. revenue from product listing ads;

cc. revenue from local ads;

dd. total revenue from all ads;

ee. total number of conversions;

ff. unhashed advertiser bidded keywords for the highest positioned text ad;

gg. unhashed advertiser bidded keywords for the second highest positioned text ad;

hh. unhashed advertiser bidded keywords for the third highest positioned text ad;

ii. unhashed advertiser bidded keywords for the fourth highest positioned text ad;

jj. unhashed advertiser bidded keywords for the fifth highest positioned text ad;

kk. cost-per-click for the highest positioned text ad (even if the ad was not clicked, what would the advertiser have paid);

ll.   cost-per-click for the second highest positioned text ad (even if the ad was not clicked, what would the advertiser have paid);

mm.   cost-per-click for the third highest positioned text ad (even if the ad was not clicked, what would the advertiser have paid);

nn.   cost-per-click for the fourth highest positioned text ad (even if the ad was not clicked, what would the advertiser have paid);

oo.   cost-per-click for the fifth highest positioned text ad (even if the ad was not clicked, what would the advertiser have paid);

pp.   bid for the highest positioned text ad;

qq.   bid for the second highest positioned text ad, or if fewer than two text ads were shown, the bid for the second highest ranked eligible text ad;

rr.   bid for the third highest positioned text ad, or if fewer than three text ads were shown, the bid for the third highest ranked eligible text ad;

ss.   bid for the fourth highest positioned text ad, or if fewer than four text ads were shown, the bid for the fourth highest ranked eligible text ad;

tt.   bid for the fifth highest positioned text ad, or if fewer than four text ads were shown, the bid for the fifth highest ranked eligible text ad;

uu.   total value of the bids for all text ads;

vv.   quality-adjusted bid (ranking score) for the highest positioned text ad,

ww.   quality-adjusted bid (ranking score) for the second highest positioned text ad, or if fewer than two text ads were shown, the quality-adjusted bid for the second highest ranked eligible text ad;

xx.   quality-adjusted bid (ranking score) for the third highest positioned text ad, or if fewer than three text ads were shown, the quality-adjusted bid for the third highest ranked eligible text ad;

yy.   quality-adjusted bid (ranking score) for the fourth highest positioned text ad, or if fewer than four text ads were shown, the quality-adjusted bid for the fourth highest ranked eligible text ad;

zz.   quality-adjusted bid (ranking score) for the fifth highest positioned text ad, or if fewer than five text ads were shown, the quality-adjusted bid for the fifth highest ranked eligible text ad;

aaa.   predicted click-through-rate for the highest positioned text ad;

bbb.   predicted click-through-rate for the second highest positioned text ad;

ccc.   predicted click-through-rate for the third highest positioned text ad;

ddd.   predicted click-through-rate for the fourth highest positioned text ad;

eee.   predicted click-through-rate for the fifth highest positioned text ad;

fff.   unique advertiser ID for the highest positioned text ad;

ggg.   unique advertiser ID for the second highest positioned text ad;

hhh.   unique advertiser ID for the third highest positioned text ad;

iii.   unique advertiser ID for the fourth highest positioned text ad;

jjj.   unique advertiser ID for the fifth highest positioned text ad;

kkk.   ad extension format of the highest positioned text ad with indicators or variables for all relevant extensions;

lll.   ad extension format of the second highest positioned text ad with indicators or variables for all relevant extensions;

mmm. ad extension format of the third highest positioned text ad with indicators or variables for all relevant extensions;

nnn. ad extension format of the fourth highest positioned text ad with indicators or variables for all relevant extensions;

ooo. ad extension format of the fifth highest positioned text ad with indicators or variables for all relevant extensions;

ppp. indicator (0 or 1) for if the highest positioned text ad was clicked;

qqq. indicator (0 or 1) for if the second highest positioned text ad was clicked;

rrr. indicator (0 or 1) for if the third highest positioned text ad was clicked;

sss. indicator (0 or 1) for if the fourth highest positioned text ad was clicked;

ttt. indicator (0 or 1) for if the fifth highest positioned text ad was clicked; and

uuu. zip code for IP address of the search.

Note: For 2015, if the category of the search query is not available, please provide any other similar metric that is available such as query clusters. Also, please provide (1) definitions of how commercial and navigational queries are defined in the ordinary course, and (2) a description of how text ad positioning is defined in the presence of right-hand side text ads.

Dated: January 5, 2021

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CERTIFICATE OF SERVICE

I certify that on January 5, 2021, I served the foregoing on the below individuals via e-mail.

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Counsel for Plaintiff United States of America

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APPENDIX A

Custodians	Search Terms
All	("M&A" OR "M & A" OR MA OR merger* OR acquisition* OR acquir* OR transaction OR divest* OR JV OR "joint venture" OR "joint-venture" OR alliance) /20 (Android OR Droid OR bebop OR Orbitera OR Firebase OR Apigee OR ITA OR Skybox OR Songza OR "Relay Media" OR Kaggle OR BandPage OR Divide OR "mobile OS" OR "mobile operating system" OR "mobile operating systems" OR KitKat OR Lollipop OR Marshmallow OR Nougat OR Oreo OR Pie OR Chrome OR Chromium OR Blink OR browser* OR "browser engine" OR "browser engines" OR Search)
All	(complain* OR investig* OR inquir* OR alleg* OR claim* OR argue* OR CID* OR "civil investigative demand" OR "civil investigative demands" OR subpoena* OR litig* OR lawsuit OR sue* OR suing) /40 (anticompet* OR (anti pre/1 compet*) OR antitrust OR "anti-trust" OR monopol* OR oligopol* OR monopson* OR dominan* OR Sherman OR Clayton OR FTC OR "Federal Trade Commission" OR DOJ OR "Department of Justice" OR "Justice Department")
All	(plan* OR strateg* OR forecast* OR roadmap OR project* OR predict* OR budget* OR decision* OR decid* OR stud* OR (white pre/1 paper*) OR whitepaper* OR memo* OR report* OR deck* OR slide* OR slideshow* OR presentation* OR PowerPoint* OR "Power Point" OR "Power Points") /20 (entry OR "R&D" OR "R & D" OR research* OR (develop* /10 (plan* OR strateg* OR forecast* OR roadmap OR project* OR predict* OR budget* OR decision* OR decid*)) OR expan* OR grow* OR exit* OR shrink* OR enter* OR retrench* OR market* OR scal* OR compet* OR pric* OR objectiv* OR improv* OR cost*) /20 (Android OR Droid OR bebop OR Orbitera OR Firebase OR Apigee OR ITA OR Skybox OR Songza OR "Relay Media" OR Kaggle OR BandPage OR Divide OR "mobile OS" OR "mobile operating system" OR "mobile operating systems" OR KitKat OR Lollipop OR Marshmallow OR Nougat OR Oreo OR Pie OR Chrome OR Chromium OR Blink OR browser* OR "browser engine" OR "browser engines" OR Search)
All	((pric* OR rate OR rates OR discount* OR fee OR fees OR commission*) /10 (plan* OR list* OR polic* OR forecast* OR strateg* OR analy* OR program OR decision OR revshar* OR "rev shar*" OR "rev-shar*" OR "revenue-shar*" OR "revenue shar*" OR decid* OR card OR cards)) /20 (Android OR Droid OR bebop OR Orbitera OR Firebase OR Apigee OR ITA OR Skybox OR Songza OR "Relay Media" OR Kaggle OR BandPage OR Divide OR "mobile OS" OR "mobile operating system" OR "mobile operating systems" OR KitKat OR Lollipop OR Marshmallow OR Nougat OR Oreo OR Pie OR Chrome OR Chromium OR Blink OR browser* OR "browser engine" OR "browser engines" OR Search)
All	(moat OR wall OR "pricing power" OR "market power" OR "monopoly" OR "monopsony" OR "competitive edge" OR "efficient scale" OR "entry barriers" OR "entrench" OR "dominant" OR "market leader" OR "market position" OR "network effects") /20 (Android OR Droid OR bebop OR Orbitera OR Firebase OR Apigee OR ITA OR Skybox OR Songza OR "Relay Media" OR Kaggle OR BandPage OR Divide OR "mobile OS" OR "mobile operating system" OR "mobile operating systems" OR KitKat OR Lollipop OR Marshmallow OR Nougat OR Oreo OR Pie OR Chrome OR Chromium OR Blink OR browser* OR "browser engine" OR "browser engines" OR Search)
All	((market* /5 (share* or percent* or portion* or segmen* or vertical* OR presence OR domina* OR position)) /50 (protect* OR preserv* OR maint* OR keep* OR defend* OR guard* OR shield*)) /50 (Android OR Droid OR bebop OR Orbitera OR Firebase OR Apigee OR ITA OR Skybox OR Songza OR "Relay Media" OR Kaggle OR BandPage OR Divide OR "mobile OS" OR

Custodians	Search Terms
	"mobile operating system" OR "mobile operating systems" OR KitKat OR Lollipop OR Marshmallow OR Nougat OR Oreo OR Pie OR Chrome OR Chromium OR Blink OR browser* OR "browser engine" OR "browser engines" OR Search)
All	((plan* OR strateg* OR roadmap OR decision* OR decide* OR develop* OR creat* OR design* OR "R&D") /20 (ecosys* OR interop* OR rely* OR compat* OR combin*)) /30 (Android OR Droid OR bebop OR Orbitera OR Firebase OR Apigee OR ITA OR Skybox OR Songza OR "Relay Media" OR Kaggle OR BandPage OR Divide OR "mobile OS" OR "mobile operating system" OR "mobile operating systems" OR KitKat OR Lollipop OR Marshmallow OR Nougat OR Oreo OR Pie OR Chrome OR Chromium OR Blink OR browser* OR "browser engine" OR "browser engines" OR Search)
All	((analy* OR report* OR study OR studie* OR research* OR whitepaper OR "white paper" OR "white-paper") /5 (econom* OR market*)) /50 (Android OR Droid OR bebop OR Orbitera OR Firebase OR Apigee OR ITA OR Skybox OR Songza OR "Relay Media" OR Kaggle OR BandPage OR Divide OR "mobile OS" OR "mobile operating system" OR "mobile operating systems" OR KitKat OR Lollipop OR Marshmallow OR Nougat OR Oreo OR Pie OR Chrome OR Chromium OR Blink OR browser* OR "browser engine" OR "browser engines" OR Search
All	(compet* OR rival* OR (market* /5 (share* OR entry OR exit OR foreclose* OR dominan* OR leader OR position OR concentrate* OR HHI OR disrupt*))) /20 (Android OR Droid OR bebop OR Orbitera OR Firebase OR Apigee OR ITA OR Skybox OR Songza OR "Relay Media" OR Kaggle OR BandPage OR Divide OR "mobile OS" OR "mobile operating system" OR "mobile operating systems" OR KitKat OR Lollipop OR Marshmallow OR Nougat OR Oreo OR Pie OR Chrome OR Chromium OR Blink OR browser* OR "browser engine" OR "browser engines" OR Search OR "Fire OS" OR "Amazon OS" OR Sailfish OR Jolla OR Lune OR Tizen OR KaiOS OR LineageOS OR Cyanogen OR Nova OR Blink OR Firefox OR Mozilla OR FF OR Gecko OR Safari OR WebKit OR Opera OR Presto OR Puffin OR Dolphin OR Baidu OR "Samsung Internet" OR Yandex OR Cheetah OR Vivaldi OR "Internet Explorer" OR Explorer OR IE OR Edge OR Trident OR Lynklet OR Brave OR Ghostery OR "UC Web" OR Cliqz OR DuckDuckGo OR "Duck Duck Go" OR DDG OR "Duck-Duck-Go" OR Bink OR Yahoo)
Cross Product Execs, Search	(compet* OR rival* OR (market* /5 (share* OR entry OR exit OR foreclose* OR dominan* OR leader OR position OR concentrate* OR HHI OR disrupt*))) /20 ((Search /5 syndicat*) OR AFS OR "AdSense for Search" OR "custom search engine" OR CSE)
Cross Product Execs, Search, Chrome, Android	(search /10 default) /20 (browser* OR Chrome OR Chromium OR Blink OR Firefox OR FF OR Gecko OR Safari OR WebKit OR Opera OR Presto OR Puffin OR Dolphin OR Baidu OR "Samsung Internet" OR Yandex OR Cheetah OR Vivaldi OR "Internet Explorer" OR Explorer OR IE OR Edge OR MSFT OR Trident OR Lynklet OR Brave OR Ghostery OR "UC Web" OR Cliqz OR DuckDuckGo OR W3C OR "World Wide Web Consortium" OR iOS OR Apple OR Blackberry OR "Windows Mobile" OR Symbian OR "Amazon Fire" OR "Fire OS" OR "Fire phone" OR "Amazon phone" OR "Microsoft phone" OR "Microsoft mobile" OR Sailfish OR Jolla OR Lune OR Tizen OR KaiOS OR LineageOS OR Cyanogen)
Search	(compet* OR rival* OR (market* /5 (share* OR entry OR exit OR foreclose* OR dominan* OR leader OR position OR concentrate* OR HHI OR disrupt*))) /20 (index* OR crawl* OR "robots.txt" OR cach*)

Custodians	Search Terms
Search	(compet* OR rival* OR (market* /5 (share* OR entry OR exit OR foreclose* OR dominan* OR leader OR position OR concentrate* OR HHI OR disrupt*))) /20 (organic /5 (search* OR result* OR answer* OR link* or page*))
Cross Product Execs, Product Heads	(compet* OR rival*) /20 (market* /5 (share* OR entry OR exit OR foreclose* OR dominan* OR leader OR position OR concentrate* OR HHI OR disrupt*))
Cross Product Execs, Product Heads	(compet* OR rival*) /20 (strength OR weakness OR compar* OR analy*) /20 (Android OR Droid OR bebop OR Orbitera OR Firebase OR Apigee OR ITA OR Skybox OR Songza OR "Relay Media" OR Kaggle OR BandPage OR Divide OR "mobile OS" OR "mobile operating system" OR "mobile operating systems" OR KitKat OR Lollipop OR Marshmallow OR Nougat OR Oreo OR Pie OR Chrome OR Chromium OR Blink OR browser* OR "browser engine" OR "browser engines" OR Search)
Cross Product Execs, Product Heads	(compet* OR rival*) /10 (quality OR technolog* OR performance OR privacy OR security OR "user experience" OR UX OR customizability OR inventory OR availability OR publisher* OR develop* OR data OR (customer /5 service))
Cross Product Execs, Product Heads	(supply OR demand) /20 (Android OR Droid OR bebop OR Orbitera OR Firebase OR Apigee OR ITA OR Skybox OR Songza OR "Relay Media" OR Kaggle OR BandPage OR Divide OR "mobile OS" OR "mobile operating system" OR "mobile operating systems" OR KitKat OR Lollipop OR Marshmallow OR Nougat OR Oreo OR Pie OR Chrome OR Chromium OR Blink OR browser* OR "browser engine" OR "browser engines" OR Search)
Cross Product Execs, Search, Chrome, Android	(default /10 (propensity OR bias OR intertia OR preference OR behavior OR advantag*)) /20 (browser OR "search engine" or application* OR app OR apps)
Cross Product Execs, Search, Chrome, Android	((multi* pre/3 hom*) OR (multi* /5 provid*) OR switch*) /10 (browser OR "search engine" or application* OR app OR apps)
Cross Product Execs, Product Heads	(compet* OR rival* OR substitut*) /20 (supply OR demand OR cost OR scale OR inventory OR price) /20 (Android OR Droid OR bebop OR Orbitera OR Firebase OR Apigee OR ITA OR Skybox OR Songza OR "Relay Media" OR Kaggle OR BandPage OR Divide OR "mobile OS" OR "mobile operating system" OR "mobile operating systems" OR KitKat OR Lollipop OR Marshmallow OR Nougat OR Oreo OR Pie OR Chrome OR Chromium OR Blink OR browser* OR "browser engine" OR "browser engines" OR Search)
Cross-Product Execs, Search, Ads	(SERP OR SERPs OR "search engine results" OR (result* /3 pag*) OR (search* /3 result*)) /40 (universal OR onebox* OR answer* OR carousel* OR snippet* OR "commercial unit" OR "commercial units" OR ad OR ads OR advertis* OR "knowledge panel" OR "knowledge panels" OR organic OR website*) /40 (layout* OR design* OR place* OR location* OR priorit*)

Custodians	Search Terms
Cross-Product Execs, Product Heads, Global Partnerships	(data* OR datum OR histor*) /30 (sale* OR sell* OR commerc* OR monetiz*) /30 (Android OR Droid OR bebop OR Orbitera OR Firebase OR Apigee OR ITA OR Skybox OR Songza OR "Relay Media" OR Kaggle OR BandPage OR Divide OR "mobile OS" OR "mobile operating system" OR "mobile operating systems" OR KitKat OR Lollipop OR Marshmallow OR Nougat OR Oreo OR Pie OR Chrome OR Chromium OR Blink OR browser* OR "browser engine" OR "browser engines" OR Search)
Cross-Product Execs, Geo	("Google Map" OR "Google Maps" OR "Maps API" OR "Maps Platform") /50 ("third-party" OR "third party" OR 3P OR "non-Google" OR external OR compet* or rival*) /50 (restrict* OR limit* OR restrain* OR prevent* OR conflict* OR stop* OR block* OR prohibit* OR exclud* OR ban OR banned OR banning)
Cross-Product Execs, Android, Global Business and Partnerships	(MADA OR RSA OR AFA OR ACC OR contract OR agreement OR compatib* OR fragmentation OR "revenue share" OR "revenue-share" OR CTS) /30 (OEM OR ODM OR Samsung OR Huawei OR Xiaomi OR Oppo OR Motorola OR Vivo OR LG OR Sony OR Lenovo OR Verizon OR ASUS OR "AT&T" OR "T-Mobile" OR Sprint OR phone OR tablet OR "mobile device")
Cross-Product Execs, Android, Global Business and Partnerships	(Android OR AOSP OR "Play Store" OR "Google Play") /20 (revshare OR "revenue share" OR "revenue-share" OR commission OR fee OR (terms /2 sale) OR profit* OR margin* OR ((business OR "short term" OR "long term" OR budget* OR financial) /5 (plan* OR strateg* OR objective* OR projection* OR roadmap)) OR (default /5 updat*) OR (default /5 reset) OR (default /10 MADA) OR (expan* /5 (market OR product OR ecosystem*)) OR "R&D" OR research* OR ((reject* OR accept* OR appeal* OR remov*) /10 (compet* OR rival* OR advertis*)))
Cross-Product Execs, Android	("Open Handset Alliance" OR OHA) /50 (form* OR join* OR invit* OR announc* OR member*)
Cross-Product Execs, Product Heads, Android	(Android OR AOSP) /40 ((benefit* OR advantag* OR aid* OR improv* OR help* OR leverag* OR innovat* OR gain* OR enhanc*) /10 (bebop OR Orbitera OR Firebase OR Apigee OR ITA OR Skybox OR Songza OR "Relay Media" OR Kaggle OR BandPage OR Divide OR Chrome OR Chromium OR Blink OR browser* OR "browser engine" OR "browser engines" OR Search))
Cross-Product Execs, Android	("Play Store" OR "Google Play") /50 (developer* /20 ("Terms of Service" OR ToS OR distribution OR agreement OR pric* OR fee* OR review* OR appeal* OR "software development kit" OR SDK OR GMS OR "Google mobile services" OR API OR "in-app purchas*" OR IAP))

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Custodians	Search Terms
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Cross-Product Execs, Android	(Aptoide OR Yandex OR ((Facebook OR FB) /5 Oxygen) OR ((application* OR app OR apps) pre/1 distrib*) OR Epic OR Fortnite OR sideload) w/20 ((compet* or rival*) /10 ("Play Store" OR "Google Play"))
Cross-Product Execs, Chrome	(Chrome OR Chromium) /30 (updat* or upgrad* OR releas* OR version*) /30 (default OR process OR procedur* OR plan* OR schedul* OR strateg* OR beta OR explainer OR "origin trial" OR (intent /3 (prototype OR experiment OR ship)))
Cross-Product Execs, Chrome	(browser* OR Chrome OR Chromium OR Blink OR Firefox OR FF OR Gecko OR Safari OR WebKit OR Opera OR Presto OR Puffin OR Dolphin OR Baidu OR "Samsung Internet" OR Yandex OR Cheetah OR Vivaldi OR "Internet Explorer" OR Explorer OR IE OR Edge OR MSFT OR Trident OR Lynklet OR Brave OR Ghostery OR "UC Web" OR Cliqz OR DuckDuckGo OR W3C OR "World Wide Web Consortium" OR "Google Toolbar") /20 ((business OR "short term" OR "long term" OR expan* OR exit OR enter OR entry OR compet* OR marketing OR scale OR pric* OR budget OR cost*) /20 (plan* OR strateg* OR objectiv* OR roadmap OR goal OR tactic OR program OR idea OR propos* OR develop* OR projection* OR forecast* OR decision* OR improv* OR "R&D" OR research* OR study OR studies))
Cross-Product Execs, Chrome, Ads, Search, Global Business and Partnerships	(Chrome OR Chromium) /20 (benefit* OR advantag* OR aid* OR improv* OR help* OR leverag* OR innovat* OR gain* OR enhanc* OR develop* OR strength* OR emphas* OR reinforc* OR protect OR defen* OR "location data" OR behavior* OR target* OR personal* OR "ROI" OR "return on investment" OR "lifetime value" OR (data pre/1 shar*) OR "omnibox" OR captur*) /20 (advertis* OR ads OR Android OR Droid OR bebop OR Orbitera OR Firebase OR Apigee OR ITA OR Skybox OR Songza OR "Relay Media" OR Kaggle OR BandPage OR Divide OR "mobile OS" OR "mobile operating system" OR "mobile operating systems" OR KitKat OR Lollipop OR Marshmallow OR Nougat OR Oreo OR Pie OR Search)
Cross-Product Execs, Chrome, Product Heads	(Chrome OR Chromium) /20 ((data OR info* OR cookies OR "sign-on" OR bookmarks OR history OR payment OR autofill OR autocomplete OR token OR unique) /20 (sale OR sell OR commercial* OR monetiz* OR use* OR improv* OR leverag* OR enhanc* OR strength*))
Cross-Product Execs, Chrome, Android,	(Chrome OR Chromium OR Blink OR Firefox OR FF OR Gecko OR Safari OR WebKit OR Opera OR Presto OR Puffin OR Dolphin OR Baidu OR "Samsung Internet" OR Yandex OR Cheetah OR Vivaldi OR "Internet Explorer" OR Edge OR Explorer OR IE OR MSFT OR Cliqz OR Lynklet OR Brave OR Ghostery OR "UC Web") /20 (preload* OR distrib* OR bundl* OR place*)

Custodians	Search Terms
Global Partnerships	
Cross-Product Execs, Chrome, Global Business and Partnerships	cookie* /50 ((block* OR manag* OR track* OR prohibit* OR allow*) /20 (strateg* OR plan* OR polic* OR develop* OR chang* OR updat* OR upgrad* OR improv* OR "privacy sandbox"))
Cross-Product Execs, Search, Ads	(demot* OR rank* OR lower* OR rais* OR promot* OR position* OR change) /50 algorithm /50 (Search OR SERP OR universal OR onebox OR answer OR carousel OR snippet OR "commercial unit" OR "knowledge panel" OR organic OR website* OR "results page" OR "search results" OR results OR ad OR ads OR advertis*)
Cross-Product Execs, Search, Ads	("PageRank" OR (page /5 rank)) /50 ((discontin* OR modify OR stop OR own* OR vertical OR universal OR content OR website*) /5 Google)
Cross-Product Execs, Search, Ads	(ad OR advertisement OR paid OR promot* OR sponsor*) /20 (label OR disclos* OR reveal* OR prominen*)
Cross Product Execs, Search, Global Partnerships	(Firefox OR Safari OR Opera OR Puffin OR Dolphin OR Baidu OR "Samsung Internet" OR Yandex OR Cheetah OR Vivaldi OR "Internet Explorer" OR Edge OR Lynklet OR Brave OR Ghostery OR "UC Web") /50 (default OR placement OR agreement OR contract) /50 (Search)
Cross-Product Execs, Search, Ads	(Search OR SERP) /20 (business OR "short term" OR "long term" OR pric* OR budget* OR cost* OR financial OR revenue* OR compet* OR expand* OR expansion*) w/10 (plan* OR strateg* OR objective* OR goal* OR projection* OR forecast* OR decision* OR improv*)
Cross-Product Execs, Search	(Universal /5 search) /20 (strat* OR plan* OR compet* OR goal* OR objectiv* OR roadmap OR budget* OR project* OR update* OR cost* OR develop* OR expan* OR augment* OR support OR improv* OR compet* OR "R&D" OR research*)
Cross-Product Execs, Search	compet* /20 (search OR SERP OR universal OR onebox OR answer OR carousel OR snippet OR "commercial unit" OR "knowledge panel" OR organic OR website* OR "results page" OR "search results" OR results OR ad OR ads OR advertis*) /20 (vertical OR travel OR local OR shopping OR job OR jobs OR ranking* OR finance OR (real /5 estate) OR OTA)

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APPENDIX B

Custodians

Alegre, Daniel
Alferness, Jonathan
Ariely, Dan
Arora, Nikesh
Arundel, Patricia
Barra, Hugo
Barton, Chris
Berman, Kristen
Bita, Cristina
Braddi, Joan
Brady, Patrick
Brin, Sergey
Bronstein, Manuel
Brougher, Bill
Chatterjee, Surojit
Choski, Priti
Chu, Penny
Cohen, Adam
Cramer, Christian
D'Amico, Raphael "Raph"
Dischler, Jerry
Edwards, Cathy
Eustace, Alan
Fitzpatrick, Jen
Fox, Nick
Gennai, Paul
Giannandrea, John
Gklaros-Stavropoulos, Chris
Gold, Jon
Gomes, Ben
Govil-Pai, Shalini
Graham, Dave
Hamon Reid, Elizabeth
Harrison, Donald
Herring, Mike
Hillestad, Ted
Holden, Richard
Huber, Jeff
Huffman, Scott
Juda, Adam
Jung, Unsuk
Kapoor, Pooja
Kartasheva, Anna
Kawamura, Toru

Khan, Rehan
Kolotouros, Jim
Kordestani, Omid
Kunzweiler, Matt
Lagerling, John
Lehman, Eric
Levine, Zahavah
Li, Christopher
Lin, Carol
Lockheimer, Hiroshi
Mathis, Andy
McCallister, Adrienne
Miner, Rich
Mohan, Neal
Moon, Christine
Moxley, Emily
Nayak, Pandu
Page, Larry
Patel, Kesh
Pichai, Sundar
Pichette, Patrick
Pimplapure, Ashish
Porat, Ruth
Raghavan, Prabhakar
Ramaswamy, Sridhar
Ready, Bill
Reinke, Kristin
Richardson, Yuki
Rosenberg, Jamie
Roszak, Mike
Rubin, Andy
Samat, Sameer
Schindler, Phillip
Schmidt, Eric
Schwartz, Matt
Seefried, Darren
Shankar, Maya
Singhal, Amit
Spivak, Ariel
Turner, Richard
Upson, Linus
Varian, Hal
Veer, Christian
Walker, Kent
Warrier, Aparna
Wojcicki, Susan

Wu, Qing
Yoo, John