IN THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF COLUMBIA

UNITED STATES OF AMERICA, et al.,

Plaintiffs,

v.

GOOGLE LLC,

Defendant.

STATE OF COLORADO, et al.,

Plaintiffs,

v.

GOOGLE LLC,

Defendant.

Case No. 1:20-cv-03010-APM HON. AMIT P. MEHTA

Case No. 1:20-cv-03715-APM HON. AMIT P. MEHTA

BRIEF OF AMICUS CURIAE MOZILLA CORPORATION IN SUPPORT OF NEITHER PARTY

CORPORATE DISCLOSURE STATEMENT

Pursuant to Local Rule 7(0)(5) and Federal Rule of Appellate Procedure 29(a)(4)(A), *amicus curiae* Mozilla Corporation ("Mozilla") certifies that Mozilla is a wholly owned subsidiary of the Mozilla Foundation. The Mozilla Foundation is not publicly traded and has no parent company. No publicly held corporation owns 10% or more of Mozilla's stock.

STATEMENT OF INTEREST

As the subsidiary of a non-profit organization, Mozilla is a mission driven corporation that seeks to promote an open and healthy interest ecosystem. As detailed in its motion seeking leave to file the instant *amicus* brief, Mozilla has a strong interest in this litigation because the remedies ordered by this Court could force Mozilla to exit the browser and browser engine markets, as well as significantly impair the ability of Mozilla and its parent company, the Mozilla Foundation, to achieve their public oriented mission.

STATEMENT OF AMICUS CURIAE INDEPENDENCE

Pursuant to Local Rule 7(0)(5) and Federal Rule of Appellate Procedure 29(a)((4)(E)), Mozilla certifies that no party's counsel authored this brief in whole or in part; no party or party's counsel contributed money intended to fund preparing or submitting the brief; and no person other than the *amicus*, its members, or its counsel—contributed money that was intended to fund preparing or submitting the brief.

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Pursuant to the Court's March 11, 2025 Order, Mozilla Corporation ("Mozilla") respectfully submits this amicus brief to assist the Court in crafting remedies that promote competition in the general search engine market while avoiding unintended harm to competition and innovation in the browser and browser engine markets.

PRELIMINARY STATEMENT

For two decades, Mozilla—a wholly owned subsidiary of the non-profit Mozilla Foundation—has fought for an open and healthy internet ecosystem that promotes the public good.¹ Among other things, Mozilla has developed open source products that foster innovation and prioritize user privacy and security over profits; advocated for web standards and legislation that promote competition and enable users to control their online experience; and spoken out against unfair and deceptive business practices.

As Mozilla's Chief Financial Officer, Eric Muhlheim, testified, the Proposed Distribution Remedies, if applied to Mozilla, would present an "existential threat" to Mozilla's business and public oriented mission. This testimony is fully corroborated by the uncontroverted evidence before this Court, which shows that the Proposed Distribution Remedies would eliminate approximately 85% of Mozilla's U.S. annual revenue by preventing Mozilla from being compensated for setting the highest quality and user preferred search engine, Google Search, as the default in its Firefox browser. Tr. at 3161:3-10, 3170:22-3171:5. This testimony is also fully consistent with this Court's prior observation that the "Firefox browser depends on Google's

¹ Exhibit citations are to the exhibits attached to the accompanying Declaration of Juan A. Arteaga, dated May 9, 2025. "Independent Browser Developers" means browser developers that do not provide a desktop and/or mobile device operating system or mobile devices. "Proposed Distribution Remedies" means Plaintiffs' proposal to prohibit Google from compensating distributors of Google's general search engine and/or generative artificial intelligence products and services for 10 years.

revenue share payments for its very survival." 1/27/25 Order at 18.

The Proposed Distribution Remedies would also force Mozilla to offer Firefox users an inferior out-of-the-box experience by setting other search engines as the default even though Mozilla's real world experience with Yahoo and user search behavior studies involving Bing have proven that "Google is the preferred search engine of [Firefox] users[.]" Tr. at 3129:3-6. As Mr. Muhlheim testified, Mozilla must offer Firefox users the best search experience right out-of-the-box because "one of the main use cases of [browsers] is to search for [information] on the Internet," and because Mozilla, as a non-Big Tech company, does not own an operating system and/or devices through which it can distribute Firefox. *Id.* at 3128:7-18, 3144:24-3145:1-9.

Importantly, the Proposed Distribution Remedies would also drastically impair Mozilla's ability to maintain and improve its open source Gecko browser engine, which is "the heart of Firefox," powers other independent browsers, and the only non-Big Tech browser engine. *Id.* at 3130:20-3131:4, 3162:22-25. If Mozilla exits the browser engine market, this will give Apple and Google, as the owners of the other two browser engines, greater control over web standards.

As detailed below, these competitive harms to the browser and browser engine markets can be avoided by exempting Independent Browser Developers like Mozilla from the remedies entered in this litigation, which would not sacrifice the efficacy of this Court's ultimate remedies in any way. As Plaintiffs' own market calculations show, Google's agreements with Independent Browser Developers had a *de minimis* foreclosure effect (if any) because these agreements collectively account for only 2.3% of Google's U.S. search traffic. And, as Dr. Tasneem Chipty (Plaintiffs' industrial organization expert) concluded, the application of the Proposed Distribution Remedies to Independent Browser Developers would result in only "0.6%" of Google's current market share shifting to another search engine provider. PXRD012 at 19. Such a tailored approach

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is fully consistent with the approach taken in other jurisdictions and has been supported by Google's search rivals.

Contrary to Plaintiffs' suggestion, Mozilla cannot fill the massive financial hole that the Proposed Distribution Remedies would create by entering default agreements with other search engine providers. As an initial matter, such an argument wrongly forces Mozilla to choose between its financial survival and Firefox users' clear search engine preferences.

Moreover, after this Court's liability decision, Mozilla conducted a 5-month analysis to project its search revenue should it have to set Bing as the Firefox search default. This analysis concluded that Mozilla's search revenue in the U.S. desktop market—which accounts for approximately 80% of Mozilla's U.S. revenue—would decline by

over 3 years) and that Mozilla's actual revenue loss would be much greater because this figure does not (i) take into account the non-U.S. and mobile device revenue that Mozilla would lose, and (ii) reflect the fact that Microsoft would likely decrease the revenue paid to Mozilla if it no longer had to compete with Google for default agreements. RDX340 at -769, -771. Tellingly, Plaintiffs have never challenged the results or methodology of Mozilla's analysis.

Contrary to Plaintiffs' suggestion, Mozilla cannot counter the "very frightening" and "precipitous[]," Tr. at 3133:5-6, 3152:23-25, revenue decline that it would suffer if this Court adopts the Proposed Distribution Remedies by growing its display advertising business. First, Mozilla would lack the revenue needed to sufficiently build such a business because it would no longer be receiving any Google search revenue. Second, Plaintiffs' argument fails to appreciate the fact that Mozilla's longstanding commitment to privacy-preserving digital advertising limits the types of advertising that it can pursue and the amount of advertising revenue that it can receive. This is why Mozilla cannot replicate the digital advertising business of the independent browser

company that Plaintiffs tried to hold up as a model for Mozilla to follow—a company that does not share Mozilla's reputation for privacy preserving practices.

Furthermore, Plaintiffs' reliance on Mozilla's *browser* choice screen studies to support their *search* choice screen remedies fails to consider critical distinctions. As Mr. Muhlheim explained, Mozilla's research has shown that properly designed browser choice screens can be an effective tool for overcoming Big Tech companies' use of their operating systems to self-preference their browsers. However, Mozilla's selection of Google Search as the Firefox default presents no such self-preferencing concerns because Mozilla does not own Google Search and has set Google Search as the Firefox default because it "is the preferred search engine of users." Tr. at 3129:3-6. In addition, Mozilla's design of Firefox provides users with far greater and more dynamic search choice than a one-time search choice screen. Ironically, if Plaintiffs' remedies force Mozilla to exit the browser market, users will be left with fewer browser choices.

In short, while Mozilla fully supports greater search competition, it strongly believes that it should not come at the expense of browser and browser engine competition, especially when, as this Court has suggested, the Proposed Distribution Remedies could result in a "world [where we] just have a different [search engine] giant, and that's Microsoft[.]" *Id.* at 820:7-13.

RELEVANT FACTUAL BACKGROUND

A. Mozilla's Procompetitive Mission To Build An Open And Healthy Internet Ecosystem

In 2003, a community of open source software designers led by former Netscape engineers created the Mozilla Foundation, "which is a 501(c) nonprofit [organization] dedicated to the health of the Internet." *Id.* at 3126:24-3127:1. The following year, the Mozilla Foundation launched the Firefox browser to provide users an alternative to Microsoft's Internet Explorer, which at the time

had a monopoly in the U.S. browser market.² Within a year, Firefox—which pioneered features such as tabbed browsing, pop-up blocking and fraud protection³—was downloaded over 100 million times and ultimately gained a 32% share of the U.S. desktop browser market.⁴ In 2005, Mozilla was established to oversee Firefox's commercial activities and develop other open source products and services that promote a healthy internet.⁵

Consistent with the Mozilla Foundation's mission, Mozilla has managed Firefox in a manner that places people and societal benefits above profits.⁶ For example, based on its belief that "privacy is fundamental to a healthy internet," Mozilla collects limited user data⁷ and has integrated market leading privacy and security features into Firefox, including:

- Enhanced Tracking Protection (blocks known trackers that gather information about users' online activity and are hidden in visited websites)
- Total Cookie Protection (isolates cookies placed by websites and prevents them from tracking users' online activity across other websites)
- DNS over HTTPS (prevents third parties from tracking users across websites by using an encrypted HTTPS connection to send the typed domain name)
- Fingerprinting Protection (warns users against websites that try to create digital fingerprints by collecting the settings from their browser and computer)
- Firefox Monitor (warns users if their accounts were involved in a known data breach or if a visited website was previously breached)
- Facebook Container (makes it harder for Facebook/Meta websites to track users)

² https://foundation.mozilla.org/en/who-we-are/; Ex. A at 320:7-324:9.

³ https://blog.mozilla.org/press/2004/11/mozilla-foundation-releases-the-highly-anticipated-mozilla-firefox-1-0-web-browser/.

⁴ https://www.mozilla.org/en-US/about/history/; Ex. A at 127:12-23.

⁵ https://www.mozilla.org/en-US/foundation/moco/.

⁶ Mozilla's work is guided by the Mozilla Foundation's Manifesto, which sets forth 10 principles for promoting an open, innovative, civil and competitive internet that benefits society. *See* https://www.mozilla.org/en-US/about/manifesto/.

⁷ https://www.mozilla.org/en-US/privacy/firefox/#notice.

• Site Isolation (enhances security by launching each website in a separate process).⁸

The steps taken by Mozilla to protect users' privacy and security have forced Big Tech and other browsers to adopt similar measures. For example, when Apple adopted tracking protection, it publicly acknowledged that it was following Mozilla's lead: "We'd like to thank Mozilla for their anti-tracking policy which served as inspiration for ours."⁹

Today, while Firefox's market share has decreased, it continues to serve 27 million monthly active users in the U.S. and over 200 million globally,¹⁰ many of whom have specifically chosen Firefox because it is a mission driven non-Big Tech browser that prioritizes user privacy.¹¹

In addition to Firefox, Mozilla has spearheaded initiatives and developed innovative products that have broadly benefited the internet and users. Tr. at 3129:7-3130:18. For example:

- Mozilla cofounded the Internet Security Research Group, which through its "Let's Encrypt" project has significantly increased the use of website encryption by issuing billions of free HTTPS certificates to hundreds of millions of websites.¹²
- Mozilla created Common Voice, which is a free speech recognition software that covers 180 languages (many of which are largely ignored by the tech industry) and makes machine learning and voice tools accessible to underserved communities.¹³
- Mozilla developed Rust, which is a widely used programming language that provides greater memory security for key online infrastructure and has been recognized by the U.S. government and large companies as providing leading security protections.¹⁴

¹¹ As Mr. Muhlheim testified, "Firefox is [] the most important product in [Mozilla's] portfolio" because "it represents about 90 percent of [Mozilla's] revenue, and it is [] the basis of [Mozilla's] business and the source of [its] strength[.]" Tr. at 3127:16-19.

¹² https://letsencrypt.org/about/.

¹³ https://www.fastcompany.com/91224595/mozilla-is-now-offering-free-ai-voice-training-data-in-180-languages.

¹⁴ https://blog.mozilla.org/en/mozilla/mozilla-welcomes-the-rust-foundation/; https://aws.amazon.com/blogs/opensource/why-aws-loves-rust-and-how-wed-like-to-help/.

⁸ https://support.mozilla.org/en-US/kb/firefox-privacy-and-security-features; https://blog.mozilla.org/security/2021/05/18/introducing-site-isolation-in-firefox/.

⁹ https://webkit.org/blog/9507/announcing-the-webkit-tracking-prevention-policy/.

¹⁰ https://data.firefox.com/dashboard/user-activity.

• Most recently, Mozilla and the Mozilla Foundation have been developing artificial intelligence ("AI") technology based on the principles of human agency, openness and privacy, and are investing in start-up companies focused on AI and other cutting-edge technologies that share these core values. This includes developing open source Llamafile software to run large language models locally and investing \$30 million in research and development on trustworthy AI via Mozilla.ai.¹⁵

B. Mozilla Has Consistently Designed And Operated Firefox In A Manner That Promotes Search Competition And User Choice

As the Co-Founder of the Mozilla Foundation and former Mozilla CEO, Mitchell Baker, testified during the liability phase, Mozilla has always provided Firefox users with a default search engine because "one of the fundamental use cases of the browser" is enabling users to immediately find and access information on the internet. Ex. A at 34:1-13, 47:3-48:24.¹⁶ As Ms. Baker also testified, Mozilla selected Google Search as Firefox's default search engine between 2004 and 2014 because "Google was way ahead" of the competition and Google demonstrated the greatest willingness to work within Mozilla's mission driven business model, particularly the non-negotiable principles that "we were not doing anything exclusive and we would honor user choice." *Id.* at 47:12-48:24, 52:8-54:16. Throughout this period, Mozilla preloaded several other search engines and made them readily available in Firefox's search bar. *Id.* at 48:3-49:11.¹⁷

While still viewing Google Search as the best search engine, Mozilla switched Firefox's U.S. search default to Yahoo in 2014 in an effort to promote greater search competition and

¹⁵ See https://itsfoss.com/llamafile/; https://blog.mozilla.org/en/mozilla/introducing-mozilla-ai-investing-in-trustworthy-ai/.

¹⁶ See also United States v. Google LLC, 747 F. Supp.3d 1, 253 (D.D.C. 2024) ("The court accepts that the user experience of a browser is enhanced when the [search] default is excellent").

¹⁷ See also New Search Strategy for Firefox Promoting Choice and Innovation (Nov. 19, 2014) ("When we instituted a default search option [in 2004], we broke from the industry standard by refusing commercial terms that demanded exclusivity. And throughout the last 10 years, we have always provided pre-installed alternatives, and easy ways for our users to change, add or remove search engines."), https://blog.mozilla.org/press/2014/11/new-search-strategy-for-firefox-promoting-choice-and-innovation/ ("Mozilla 2014 Blog").

innovation. RDX340 at -776.¹⁸ However, Mozilla learned "almost immediately [] that [Firefox] users did not like the Yahoo! Search experience" as evidenced by the fact that Mozilla received user "complaints" and saw its "[s]earch volume[s] decline[]" when "people shifted away from the default and went to another search engine," and "then finally people started shifting from [Firefox]" altogether. Tr. 3144:9-21.¹⁹

As a result, when Verizon acquired Yahoo in 2017, Mozilla terminated its Yahoo search agreement and switched Firefox's U.S. search default back to Google Search because "Google is the clear winner when it comes to product experience and what users want." DX0543 at -493.²⁰ This change resulted in Firefox's search traffic and revenue increasing again. Ex. A at 191:11-192:25.

Since 2017, Mozilla has consistently renewed its Google search default agreement because these "extension[s] [have] allow[ed] Mozilla to continue offering Firefox users the best search experience by incorporating the search product and services that [Mozilla's] experience shows are the highest quality,"²¹ and because "Mozilla cannot effectively compete with other browser developers without the continued integration of the industry leading search product and services." RDX0338 at -222.²² In addition, Mozilla's "experience and research has shown that Google

¹⁸ See also Mozilla 2014 Blog, supra note 17.

¹⁹ See also DX0543 at -491 ("Yahoo! was unable to retain sufficient usage due to the poor quality of their product experience which resulted in decreasing engagement and retention rates.").

²⁰ See also Ex. A at 80:19-24 (Mozilla switched back to Google "[b]ecause our users made it clear that they look for and want and expect Google").

²¹ Mozilla's conclusions are consisted with Dr. Chipty's testimony that Google Search has been "the best search engine" for "the last 20 years[.]" Tr. at 2309:19-22.

²² See also Ex. A at 87:20-24 (Mozilla entered 2020 extension because "users continue to tell us" they prefer Google Search over other search engines); Tr.at 3129:3-7 ("Because our experience and based upon research, Google is the preferred search engine of our users, and so that's the right search engine from a consumer experience perspective for us to make the default.").

Search provides Mozilla the best monetization rates," which enables Mozilla to "continue investing in [] R&D initiatives," "enhancing the current capabilities of [] Firefox," and "funding [] advocacy efforts that seek to promote a healthier internet ecosystem." *Id*.²³

In renewing its Google search agreement, Mozilla has ensured that the agreement "does not restrict in any way Mozilla's ability to continue promoting user choice" or "partner[ing] with other search providers." *Id.* Mozilla has also continued to (i) make it easy for users to change the search default, (ii) preload and promote competing search engines in Firefox's search bar, (iii) integrate features that present users with readily available search alternatives (*e.g.*, "This time, search with"), and (iv) actively offer users pre-search alternatives (*e.g.*, "Firefox Suggest"). Tr. at 3146:6-3149:4, 3177:13-25.²⁴ In addition, Mozilla has not allowed this partnership to prevent it from publicly criticizing Google practices that it believes fail to promote a healthy internet.²⁵

C. Mozilla's Gecko Browser Engine Promotes Open And Secure Web Standards And Provides Website And Browser Developers A Non-Big Tech Alternative

A browser engine is the "code in a browser" that enables the browser to "'render [web]' content," such as "display[ing] images, play[ing] videos, [and] show[ing] text." Tr. at 1475:7-21 (browser engine "is responsible for fetching [] web content and then showing it to the user in a way that is understandable to the user"). Because websites cannot be properly rendered in a browser without being compatible with the underlying browser engine, there is a strong incentive

²³ See also Tr. 3129:1-3130:18 (detailing Mozilla's procompetitive use of Google search revenue); *Google*, 747 F. Supp.3d at 174 (Mozilla agreement has "procompetitive benefits" because "Mozilla likely does use its payments from Google to upgrade Firefox").

²⁴ As Mr. Muhlheim testified, Mozilla's search agreement with Google has never prevented it from pursuing any deals with Google competitors. Tr. at 3154:1-3156:23.

²⁵ https://foundation.mozilla.org/en/youtube/findings/; https://www.techspot.com/news/97715-mozilla-harshly-criticizes-google-app-privacy-labels-new.html.

for website developers to ensure that their websites comply with the technical requirements of the most widely used browsers and browser engines.

Since its founding, Mozilla has developed and supported the Gecko browser engine, which is an open source engine that powers Firefox and several other independent browsers, including Tor, SeaMonkey, Waterfox, Midor, and K-Meleon. *Id.* at 3130:20-21, 3162:23-25. Over the years, Mozilla has invested approximately in Gecko and has used its ownership of Gecko to push for open web standards that prevent "big tech . . . [from] control[ling] all of the protocols by which people would be able to browse the Internet." *Id.* at 3131:9-13.²⁶

Over the years, there has been significant consolidation in the browser engine market, which includes Microsoft abandoning its Trident browser engine in 2022 and opting to build its Edge browser on Google's Chromium engine. In addition to Gecko, Apple's WebKit and Google's Chromium are the only remaining browser engines. Thus, Gecko is "the only browser engine that is held not by big tech but by a nonprofit." *Id.* at 3131:2-4.

ARGUMENT

A fundamental principle of antitrust law is that remedies should "do no harm."²⁷ Consequently, the Supreme Court has stressed that courts "must be sensitive to" entering remedial

²⁶ Mozilla has led the drafting of critically important web standards, including the Transport Layer Security 1.3 protocol (powers every secure transaction on the internet) and the WebPush standard (helped ensure that push messaging is end-to-end encrypted).

²⁷ Former Assistant Att'y Gen. Thomas O. Barnett, U.S. Dep't of Just., Antitrust Div., Section 2 Remedies: A Necessary Challenge 4 (Sept. 28, 2007) (citation omitted). https://www.justice.gov/archives/atr/file/519221/dl?inline=; see also id. ("In short, if the antitrust laws are intended to advance consumer welfare, then any remedy should, at the least, not harm such welfare."); Former Deputy Assistant Att'y Gen. Deborah Platt Majoras, U.S. Dep't of Just., Antitrust Div., Antitrust Remedies in the United States: Adhering to Sound Principles in a Multi-Faceted Scheme 7 (Oct. 4, 2002) (stating that enforcers "must be mindful that the remedy may have unintended consequences in the marketplace . . . given our ultimate goal of protecting competitive markets for benefit of consumers"), available the at https://www.justice.gov/archives/atr/file/519721/dl.

decrees that "could wind up impairing rather than enhancing competition" by, for example, "unintentionally suppress[ing] innovation[.]" *NCAA v. Alston*, 594 U.S. 69, 102 (2021); *see also id.* at 99 ("static judicial decrees in ever-evolving markets may themselves . . . frustrate entry and competition"). Likewise, the D.C. Circuit has relied on this well-settled principle to reject remedies that risk harming consumers and competition. *See, e.g., Massachusetts v. Microsoft Corp.*, 373 F.3d 1199, 1209-13 (D.C. Cir. 2004) (removing Microsoft's software code rejected because addressing entry barriers "in a manner likely to harm consumers is not self-evidently an appropriate way to remedy an antitrust violation"); *id.* at 1219 (broader disclosure of Microsoft's future APIs rejected because it was "likely to harm consumers" by reducing Microsoft's and rivals' incentives to innovate).²⁸

As detailed below, the Proposed Distribution Remedies violate the "do no harm" principle that guides antitrust remedies by making it extremely difficult, if not impossible, for Independent Browser Developers to (i) effectively compete with Big Tech browsers, which already enjoy significant distribution advantages, and (ii) continue innovating and offering users a more private and secure online experience. In addition, the Proposed Distribution Remedies create a significant risk that Mozilla will be forced to exit the browser engine market, thereby handing greater control to Apple and Google over the standards that website and browser developers must satisfy.

Again, the promotion of search competition should not come at the expense of browser and browser engine competition, especially when, as this Court has commented, the Proposed Distribution Remedies could result in a "world [where we] just have a different [search engine] giant, and that's Microsoft," Tr. 820:7-13, or where, as Plaintiffs' own experts acknowledge,

²⁸ See also Microsoft, 373 F.3d at 1226 (web services remedy rejected because a "court is not to risk harming consumers"); *id.* at 1226-27 (remedy barring discounts rejected because "we [] refuse to condemn a practice that 'offer[s] [the] the customer an attractive deal" (citation omitted)).

subjecting Independent Browser Developers—whose agreements account for only 2.3% of Google's U.S. search traffic—to the Proposed Distribution Remedies would result in a mere "0.6%" shift in Google's market share.

I. THE PROPOSED DISTRIBUTION REMEDIES WILL SIGNIFICANTLY HARM THE BROWSER AND BROWSER ENGINE MARKETS

This Court has rightly noted that the Proposed Distribution Remedies could force Mozilla to exit the browser market because "Firefox [] depends on Google's revenue share payments for its very survival." 1/27/25 Order at 18.²⁹ Such a result would give Big Tech browsers greater control over the browser market and leave privacy conscious users with fewer browser choices.

Plaintiffs have attempted to downplay the competitive harm that the Proposed Distribution Remedies will cause in the browser and browser engine markets by suggesting that Mozilla could easily replace its lost Google search revenue. The uncontroverted evidence proves otherwise.

Plaintiffs' contention that Mozilla could fill the financial abyss that their Distribution remedies would create by entering a default agreement with other search engine providers ignores Mozilla's disastrous experience with Yahoo as its search default and the numerous user search behavior studies that Mozilla has conducted over the past several years.

As Mr. Muhlheim's testimony and Mozilla's internal documents show, the quality of the user experience and competitiveness of Firefox declined dramatically during the 3-year period that Yahoo served as Firefox's search default:

[W]hat we found almost immediately is that our users did not like the Yahoo! Search experience and that a lot of things happened then.

You know, one thing is that people shifted away from the default and went to

²⁹ See also 3/7/25 Hearing Tr. at 63 ([THE COURT]: "So I mean, it seems to me Mozilla . . . would have a more compelling argument than [Apple to intervene] because it's not like Apple is going to go out of business if . . . [it] can no longer get revenue share. [Apple has] other sources of revenue; Mozilla hardly has any.").

another search engine, again, [] presumably Google or some other search engine. Search volumes declined . . . We got [user] complaints. And then finally people started shifting away from [Firefox].

Tr. at 3144:12-21.³⁰ Absent the minimum revenue guarantee that Mozilla required for the "massive risk" it took when it moved away from Google Search, these effects on Firefox's quality and business would have been ruinous. Ex. A at 241:14-242:17.

Prior to switching from Yahoo back to Google, Mozilla conducted multiple experiments to determine whether Firefox users would prefer Bing by switching the default for certain users from Google to Bing. These experiments showed that "switching the Firefox default to Bing would result in missing revenue targets" because users utilized Firefox's search access points much less. *Google*, 747 F. Supp.3d at 97. Between 2021 and 2022, Mozilla conducted a similar experiment which once again showed that Firefox users prefer Google Search over Bing by wide margins:

(1) "35.5% of clients who had their default search engine switched to Bing changed their default to another search engine (26% changed to Google, 9% changed to a search engine other than Bing or Google and the remaining kept Bing);" (2) the "64.5% of clients who did not switch away from Bing contributed a much lower percentage to total search volume and ad clicks than clients who switched back to Google;" and (3) "65% of users who did not retain Bing as their default engine made the change within the first day[.]"

Id. (citation omitted).

After this Court's liability decision, Mozilla conducted a 5-month analysis to project its search revenue if this Court's remedies in effect required Mozilla to set Bing as the Firefox search default. Consistent with the results from its earlier experiments, this analysis concluded that Mozilla's U.S. desktop search revenue—which represents 80% of Mozilla's U.S. revenue—would decline **Constant Constant Co**

³⁰ See also RDX340 at -776 ("Risk we took in 2014 harmed Firefox and left Mozilla in a weaker position[.]"); PXR0079 at -947 (Yahoo document discussing experience as Firefox search default and noting "Yahoo's past experiences in the browser space have not been positive").

[would] change search away from Bing" and the remaining Bing users would have far lower usage and monetization rates. RDX340 at -769, -771.

Importantly, this analysis also determined that the real financial harm to Mozilla was "likely to be far greater" because the projected search revenue decrease (i) did not reflect the decline that Mozilla would experience in its non-U.S. and mobile search revenue, and (ii) "assumed [the Bing] revenue share remains flat, which is a conservative assumption given that [the] Bing contract would need to be negotiated in a context where Microsoft would have all the leverage (with close to monopoly power)[.]" *Id.* at -769, -771, -772.³¹

In addition, this analysis concluded that setting Bing as Firefox's default search engine would severely "**challenge [Mozilla's] ability to maintain Gecko**," which, in turn, would further harm Firefox's competitiveness by resulting in "meaningful loss of user share & revenue" given that many users chose Firefox precisely because "[i]t isn't built on Chromium[.]" *Id.* at -769, -784. This analysis further concluded that Mozilla's exit from the browser engine market would (i) significantly lessen its ability to prevent web "standards that are bad for users, especially with privacy," and (ii) "[h]and[] control of implementation of web standards to only Google and Apple[.]" *Id.* at -784.

Notably, Mozilla's assessment of the harm that the Proposed Distribution Remedies would cause to the financial viability and competitiveness of Firefox is corroborated by the testimony and documents of Plaintiffs' own witnesses. As Yahoo's Senior Vice President and General Manager for Search, Brian Provost, testified, Yahoo recently abandoned consideration of a browser acquisition because it too concluded that the browser "would not [] monetize at the level

³¹ See also Tr. at 3135:3-6 ("I mean that there is a revenue share that we get from Microsoft, and if there is no alternative party to bid for [our] traffic, we assume that that revenue share would start to decrease over time.").

which Google monetizes" if Yahoo were to set its own search engine as the default. Tr. at 1262:24-1263:11. Putting aside Mozilla's past history with Yahoo, Mr. Provost's testimony, which was based on an October 2024 assessment of the quality of Yahoo's search engine, proves that Yahoo would not be a viable search alternative for Mozilla if it could no longer partner with Google Search because "Yahoo search's infrastructure [is] antiquated" and thus "not meeting [user] expectations." *Id.* at 1270:23-1271:19. If Yahoo—a company owned and backed by a private equity firm with \$785 billion in assets under management—concluded that it could not sustain a browser without Google Search as the default, there is absolutely no reason to believe that Mozilla, a much smaller company owned by a non-profit, would have more luck doing so.³²

Furthermore, Plaintiffs' suggestion that Mozilla could fill the financial gulf that the Proposed Distribution Remedies would cause by increasing its display advertising business fails to appreciate Mozilla's customer preferences, its mission driven business model, and its commitment to user privacy. As Mozilla has long made clear, it will only implement digital advertising that is privacy-preserving:

Today's digital advertising practices put personal data at risk, tracking people across websites without their knowledge or consent.

Mozilla is leading the charge, creating innovative solutions that deliver ad performance while safeguarding privacy. Our approach creates resilience for advertisers and publishers against continuous changes, and privacy protection to consumers.³³

³² There is no support for DuckDuckGo's speculation that Plaintiffs' proposed remedies would cause Mozilla to enter the general search engine market. As Mr. Muhlheim made clear, Mozilla has never considered developing its own search engine, Tr. at 3152:4-25, and Plaintiffs' proposed remedies would ensure that Mozilla lacks the financial resources to do so. If Apple—a company with billions in net profits and vast resources—has concluded that developing a general search engine is too difficult and presents too much risk, there is no reason to believe that Mozilla would be better positioned or more inclined to enter the general search engine market, especially at a time when well-funded AI companies are entering this space.

³³ https://www.mozilla.org/en-US/advertising/.

This is why Mozilla recently acquired Anonym, "a trailblazer in privacy-preserving digital advertising" that "enables brands to optimize and measure their advertising without sharing user-level data with ad platforms[.]"³⁴ Mozilla fully understands that this approach will limit the types of advertising that it can pursue and the amount of advertising revenue that it can generate, but strongly believes that such an approach is the right one for Mozilla's mission and Firefox's privacy and security conscious users. Plaintiffs' attempt to second guess Mozilla's business and values determinations should be rejected.

Furthermore, when showing Mr. Muhlheim an internal Mozilla strategy document discussing the revenue generated by another independent browser company's digital advertising business, Plaintiffs ignored the first part of the sentence they focused on, which noted that this browser company "does have some concerns about data privacy and this analysis does not suggest following everything [this browser] does[.]" PXR0254 at -628; *see also* Tr. at 3172:18-20 (Mr. Muhlheim noting that this browser company has "a lot of [] practices . . . that are not consistent with the way [Mozilla] do[es] business").³⁵

II. REQUIRING INDEPENDENT BROWSER DEVELOPERS TO INTEGRATE SEARCH CHOICE SCREENS WOULD HARM THE BROWSER AND BROWSER ENGINE MARKETS

While Plaintiffs' proposed remedies do not contemplate requiring Independent Browser Developers to integrate search choice screens if they set Google Search as the default, Tr. at 2177:3-2179:9, Mozilla wants to make clear that any such remedy should not be adopted because it would harm browser and browser engine competition while failing to reduce Google's market

³⁴ *Id*.; https://blog.mozilla.org/en/mozilla/mozilla-anonym-raising-the-bar-for-privacy-preserving-digital-advertising/.

³⁵ See, e.g., https://www.engadget.com/2020-01-19-opera-accused-of-predatory -loan-apps.html; https://blogs.opera.com/security/2023/07/debunking-spyware-misinformation/.

share.

As Dr. Chipty noted, search choice screen remedies face several challenges and have previously failed to result in meaningful market share shifts. *Id.* at 2175:6-19, 2188:2-2189:4 (detailing "problems [she] identified with a broad choice screen remedy" and noting that post-choice screen remedies in Europe "Google's [search market] share . . . still remains well over 90 percent"); *see also* PXRD012 at 47 (Dr. Chipty listing "[p]roblems with Broad Choice Screens"). Even Dr. Antonio Rangel—whose work Plaintiffs have cited to support their search choice screen remedies—agrees that choice screens in Europe have failed to result in meaningful market share shifts because they have resulted in Google's market shares only "decreas[ing], on average . . . between half and 1.5 percentage points." Tr. at 537:14-21.

While unlikely to reduce Google's market share, any remedy requiring the implementation of a search choice screen by Independent Browser Developers would be "disastrous" for browser and browser engine competition because Plaintiffs' proposed remedies would bar Google from paying any search revenue even if users selected Google Search. *Id.* at 3178:4-6. In turn, such a scenario could provide Google with an economic windfall because, as Europe's experience and studies have shown, Google would likely retain an overwhelming portion of the search traffic provided by Independent Browser Developers but would no longer need to pay any revenue share percentage for this traffic.

Moreover, Plaintiffs' reliance on Mozilla's *browser* choice screen studies to support their *search* choice screen remedies is misplaced. As Mr. Muhlheim explained, Mozilla—which highly values user choice—has advocated for well-designed browser choice screens because they have proven to be an effective tool to overcome the "very large self-preferencing problem" presented by Big Tech companies that use their ownership of operating systems to preload their browsers

and set them as the default while simultaneously making it extremely difficult for users to download and set another browser as their default. *Id.* at 3145:12-3150:5, 3173:5-16, 3176:19-3177:25. In stark contrast, Mozilla's search agreement with Google does not present any self-preferencing concerns because Mozilla does not own Google Search and Mozilla's decision to set Google Search as the Firefox default has been strictly based on the fact that Google Search "is the preferred search engine of users." *Id.* at 3129:3-6. In addition, Mozilla's design of Firefox provides users with far greater and more dynamic search choice than a one-time search choice screen. *Id.* at 3145:12-3150:5, 3173:5-16, 3176:19-3177:25; *see also* RDXD25 (depicting various ways in which Mozilla's design of Firefox provides users with many more opportunities to switch the search default than a search choice screen).

In short, while Plaintiffs' search choice screens are premised on the important principle of promoting user choice, they will in reality limit user choice in the browser and browser engine market by driving Independent Browser Developers such as Mozilla out of these markets.³⁶

III. THE COURT CAN ORDER EFFECTIVE REMEDIES WITHOUT PROHIBITING GOOGLE SEARCH PAYMENTS TO INDEPENDENT BROWSER DEVELOPERS

As this Court has concluded, Google's search agreements with Independent Browser Developers have had a "negligible" and "marginal" effect on U.S. search competition because these agreements collectively represent only 2.3% of Google's search traffic. *See Google*, 747 F. Supp.2d at 44-45, 153-54, 174. Thus, it is not surprising that Dr. Chipty concluded that applying the Proposed Distribution Remedies to Independent Browser Developers would result in only

³⁶ Over the course of the evidentiary hearing, this Court placed particular attention to Plaintiffs' proposed data sharing and syndication remedies. Mozilla's view is that such remedies do not necessarily raise the same risks for browser and browser engine competition as the Proposed Distribution Remedies. However, as a privacy focused company, Mozilla encourages this Court to ensure there are robust protections for user privacy if any such remedies are ordered.

"0.6%" of Google's market share shifting to other search companies. PXRD012 at 25; Tr. 2142:17-19 (Proposed Distribution Remedies would result in "less than 1 percent [share shift] from third-party browsers" excluding Apple).

Accordingly, to the extent that this Court is inclined to place any restrictions on Google's ability to compensate Google Search distributors or require the implementation of a search choice screen, it should exempt Google's agreements with Independent Browser Developers from these remedies. Such an exemption would not undermine the efficacy of this Court's remedies while simultaneously avoiding the grave competitive harm that the Proposed Distribution Remedies and search choice screen remedies would cause in the browser and browser engine markets.

Moreover, this tailored approach would be completely consistent with past antitrust decrees that have appropriately balanced the prohibition of anticompetitive conduct with the preservation of competition-enhancing conduct.³⁷ This tailored approach would also be fully consistent with the approaches taken in other jurisdictions that have sought to increase search competition. For example, in a 2020 market study regarding online platforms and digital advertising, the Competition and Markets Authority in the United Kingdom recommended exempting small browsers from measures intended to remedy Google's dominant search position because doing so would avoid unintended harm in the browser market:

[A]n effective way of addressing this concern [that widespread rollout of restrictions on Google default search arrangements could have unintended

³⁷ See, e.g., United States' Response to Public Comments in United States v. Comcast Corp. at 5-6 ("[T]he proposed Final Judgment sets forth broad prohibitions on restrictive contracting practices, including exclusives, with appropriately tailored exceptions. In doing so, the proposed Final Judgment strikes a balance between allowing reasonable and customary exclusivity provisions that enhance competition while prohibiting provisions that, without offsetting procompetitive development effective benefits, hinder the of competition[.]"), https://www.justice.gov/atr/case-document/file/492221/dl; United States' Response to Public Comments in United States v. The MathWorks Inc. at 10 (same), https://www.justice.gov/atr/casedocument/united-states-response-public-comments-2.

consequences] would be to limit the applicability of such a remedy to ensure that small web browsers fall outside of the scope of this intervention.³⁸

Notably, DuckDuckGo fully supported this exemption in order to protect competition in the browser market: "We recommend excluding the Firefox browser and other small browsers (e.g., Opera) from the contemplated ban because we support a diverse browser market."³⁹

Similarly, in a 2021 report regarding search defaults and choice screens, the ACCC, deferred making any recommendations regarding the desirability of restricting dominant search engines' ability to pay for the default position, but noted that "carve outs" from any such measure for small search distributors could help avoid unintended competitive harm.

CONCLUSION

For the foregoing reasons, Mozilla respectfully requests that this Court decline to apply the Proposed Distribution Remedies and any choice screen remedies to Independent Browser Developers like Mozilla, as well as decline to adopt any other remedies that would have the unintended consequence of harming browser and browser engine competition.

https://assets.publishing.service.gov.uk/media/5e8c813ad3bf7f1fb6491b13/200219_DuckDuckG

³⁸ Competition & Markets Authority, Online Platforms and Digital Advertising: Market Study Final Report at App'x V, para. 29 (July 1, 2020) ("CMA Report"), *available at* https://assets.publishing.service.gov.uk/media/5fe36a18d3bf7f08a02c87f6/Appendix_V_assessment of pro-competition interventions in general search 1.7.20.pdf.

³⁹ DuckDuckGo's Comments on the Market Study Interim Report Online Platforms and Digital Advertising at 9 (Feb. 19, 2020), *available at*

o_response_to_interim_report.pdf; *see also* CMA Report, *supra note* 38, at para. 19 ("DuckDuckGo suggested that [this exemption for browsers with small market shares] would also address concerns regarding the sustainability of smaller browsers that generate revenue from defaults arrangements to support their operations.").

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Respectfully submitted,

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