

**FEDERAL COURT
PROPOSED CLASS PROCEEDING**

BETWEEN:

(Court Seal)

PASS HERALD LTD.

and

GOOGLE LLC, GOOGLE IRELAND LIMITED, GOOGLE CANADA
CORPORATION, META PLATFORMS INC., FACEBOOK IRELAND
LIMITED, and FACEBOOK CANADA LTD.

Defendants

FRESH AS AMENDED STATEMENT OF CLAIM

TO THE DEFENDANT

A LEGAL PROCEEDING HAS BEEN COMMENCED AGAINST YOU by the Plaintiff. The claim made against you is set out in the following pages.

IF YOU WISH TO DEFEND THIS PROCEEDING, you or a solicitor acting for you must prepare a Statement of Defence in Form 171B prescribed by the Federal Court Rules, serve it on the plaintiff's solicitor or, if the plaintiff does not have a solicitor, serve it on the plaintiff, and file it, with proof of service, at a local office of this Court.

WITHIN 30 DAYS after the day on which this statement of claim is served on you, if you are served in Canada or the United States; or

WITHIN 60 DAYS after the day on which this statement of claim is served on you, if you are served outside Canada and the United States.

TEN ADDITIONAL DAYS are provided for the filing and service of the statement of defence if you or a solicitor acting for you serves and files a notice of intention to respond in Form 204.1 prescribed by the Federal Court Rules.

Copies of the Federal Court Rules, information concerning the local offices of the Court and other necessary information may be obtained on request to the Administrator of this Court at Ottawa (telephone 613-992-4238) or at any local office.

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Plaintiff

IF YOU FAIL TO DEFEND THIS PROCEEDING, judgment may be given against you in your absence and without further notice to you.

Date	Issued by	Local Registrar
	Address of local office:	Federal Court 180 Queen St. W. Toronto ON M5V 1Z4
TO:	Google LLC 1600 Amphitheatre Parkway Mountain View CA 94043 United States of America	
AND TO:	Google Ireland Limited Gordon House 4 Barrow Street Dublin, D04 ESW5 Ireland	
AND TO:	Google Canada Corporation 111 Richmond St. W Toronto ON M5H 2G4	
AND TO:	Meta Platforms Inc. 1 Hacker Way Menlo Park CA 94025 United States of America	
AND TO:	Facebook Ireland Limited 4 Grand Canal Quay Dublin D02 X525 Ireland	
AND TO:	Facebook Canada Ltd. 661 University Avenue Suite 1201, 12 th Floor Toronto, ON M5G 1M1	

CLAIM

I. DEFINED TERMS

1. In this Statement of Claim, the following terms have the following meanings:
 - (a) **“Advertiser”** means any natural or corporate person in Canada who submitted a bid on an Impression through an Advertiser Layer Tool, for the purpose of displaying their own advertisement.
 - (b) **“Advertiser Layer”** means the market for products, services, or other tools used by Advertisers to submit bids on Impressions to the Middle Layer, excluding Direct Deals. For greater certainty, it does not include products, services, or other tools that exclusively deal with search advertising. Correspondingly, an **“Advertiser Layer Tool”** is any product, service, or other tool that operates at least in part in the Advertiser Layer.
 - (c) **“Class”** means the Conspiracy Class and the Misrepresentation Class.
 - (d) **“Competitor Tools”** means:
 - (i) When referring to the period before September 27, 2018, all Advertiser Layer Tools, Middle Layer Tools, or Publisher Layer Tools, other than Google Tools; and
 - (ii) When referring to the period after September 26, 2018, all Advertiser Layer Tools, Middle Layer Tools, and Publisher Layer Tools, other than Google Tools or Facebook Tools.

Correspondingly, “**Competitor Publisher Layer Tools**”, “**Competitor Middle Layer Tools**”, and “**Competitor Advertiser Layer Tools**” mean Competitor Tools operating at least in part in the Publisher Layer, the Middle Layer, or the Advertiser Layer, respectively.

- (e) “**Competition Act**” means the *Competition Act*, RSC 1985, c C-34.
- (f) “**Conspiracy Class**” means Publishers who sold an Impression for display on a website or application between September 27, 2018 and the date of certification of this action as a class proceeding, except Google and Facebook.
- (g) “**Direct Deals**” transactions in which an Advertiser buys one or more Impressions from a Publisher directly, with no opportunity for other Advertisers to bid.
- (h) “**Display Ad**” means an advertisement that is:
 - (i) Shown to one user at one time;
 - (ii) On a website or application other than a search engine; and
 - (iii) Chosen dynamically. This means that different Display Ads may be shown to different users, or to the same user at different times.
- (i) “**Facebook**” means Meta Platforms Inc., Facebook Ireland Limited, Facebook Canada Limited, and all affiliated corporations.
- (j) “**Facebook Tools**” means any digital display advertising product or service offered by Facebook. This term includes, but is not limited to:

- (i) Facebook Ads Manager;
- (ii) Meta Audience Network, formerly Facebook Audience Network (both called “FAN”); and
- (iii) Monetization Manager.

Correspondingly, “**Facebook Publisher Layer Tools**”, “**Facebook Middle Layer Tools**”, and “**Facebook Advertiser Layer Tools**” mean Facebook Tools operating at least in part in the Publisher Layer, the Middle Layer, or the Advertiser Layer, respectively.

- (k) “**Google**” means Google LLC, Google Ireland Limited, Google Canada Corporation, and all of their affiliates.
- (l) “**Google Tools**” means any digital display advertising product or service offered by Google. This term includes, but is not limited to:
 - (i) Display & Video 360 (“**Google DV360**”);
 - (ii) DoubleClick for Publishers (“**Google DFP**”);
 - (iii) Google AdMob mediation;
 - (iv) Google AdMob network;
 - (v) Google Ads;
 - (vi) Google AdSense;

- (vii) Google Ad Exchange (“**Google AdX**”);
- (viii) Google Ad Manager; and
- (ix) Google Display Network.

Correspondingly, “**Google Publisher Layer Tools**”, “**Google Middle Layer Tools**”, and “**Google Advertiser Layer Tools**” mean Google Tools operating at least in part in the Publisher Layer, the Middle Layer, or the Advertiser Layer, respectively.

- (m) “**Impression**” means the right to show one Display Ad. This definition does not depend on how the purchaser’s payment is structured – for example, whether they pay directly for the right to show a Display Ad (paying a cost per mille, or “**CPM Basis**”) or whether they pay for each click on the Display Ad (paying a cost per click, or “**CPC Basis**”).
- (n) “**Middle Layer**” means the market for products, services, or other tools that run auctions or otherwise intermediate between the Publisher Layer on the one hand and the Advertiser Layer on the other hand, excluding Direct Deals. For greater certainty, it does not include products, services, or other tools that exclusively deal with search advertising. Correspondingly, a “**Middle Layer Tool**” is any product, service, or other tool that operates at least in part in the Middle Layer.

- (o) **“Misrepresentation Class”** means Publishers who used Google Tools between February 9, 2010 and the date of certification of this action as a class proceeding, except Google and Facebook.
- (p) **“Plaintiff”** means Pass Herald Ltd.
- (q) **“Publisher”** means any natural or corporate person in Canada who sold an Impression for display on a website or application. For greater certainty, this does not include intermediaries who only resold Impressions for others.
- (r) **“Publisher Layer”** means the market for products, services, or other tools used by Publishers to sell Impressions through the Middle Layer, excluding Direct Deals. For greater certainty, it does not include products, services, or other tools that exclusively deal with search advertising. Correspondingly, a **“Publisher Layer Tool”** is any product, service, or other tool that operates at least in part in the Publisher Layer.

II. RELIEF SOUGHT

2. The Plaintiff, on behalf of the Class, claims:

- (a) An order certifying this action as a class proceeding and appointing it as the representative plaintiff for the Class;
- (b) A declaration that Google and Facebook engaged in a conspiracy in breach of sections 45 and 46 of the *Competition Act*;

- (c) A declaration that Google and Facebook engaged in bid-rigging in breach of section 47 of the *Competition Act*;
- (d) Damages in the amount of \$4,000,000,000 against Google and Facebook, jointly and severally, for breach of sections 45-47 of the *Competition Act*, pursuant to section 36 of the *Competition Act*;
- (e) A declaration that Google made misrepresentations in breach of section 52 of the *Competition Act*;
- (f) Damages in the amount of \$4,000,000,000 against Google for breach of section 52 of the *Competition Act*, pursuant to section 36 of the *Competition Act*;
- (g) Investigative costs and the costs of this proceeding pursuant to section 36 of the *Competition Act*;
- (h) The costs of this proceeding on a substantial indemnity basis, plus applicable taxes;
- (i) Pre-judgment interest and post-judgment interest; and
- (j) Such further and other relief as this court may deem just.

III. FACTS

A. Overview

3. Digital display advertising is central to modern commerce. Millions of times every day, in the fraction of a second between when a user opens a website or application and when it finishes loading, Publishers request bids for the right to display an advertisement to that user on that website or application (an “**Impression**”). The requests are processed by Publisher Layer Tools, acting on

behalf of Publishers. In more than 90% of these transactions, the tools acting for Publishers are Google Publisher Layer Tools.

4. Google obtained this extraordinary market share in part by representing to Publishers that those tools maximized Publishers' revenues. In fact, Google Tools are programmed to reduce Publishers' revenues, allowing its Middle Layer Tools to purchase Impressions at depressed prices.

5. In 2009, the industry developed Publisher Layer technologies called "Header Bidding" that circumvented some of the techniques that Google used to reduce Publishers' revenues. When Publishers adopted Header Bidding, their revenues increased dramatically – up to 100%.

6. Google saw Header Bidding as a serious competitive threat to its Publisher Layer Tools and Middle Layer Tools. In a campaign it called "Jedi", it took a variety of steps to "kill" Header Bidding.

7. In March 2017, Facebook announced that it would embrace Header Bidding, which would give Publishers a potent alternative to using Google Publisher Layer Tools. The emergence of an imposing competitor that used Header Bidding would have prevented Google from suppressing prices, and forced Google to reduce the fees it charged to Publishers. Both effects would have increased competition and Publishers' revenues.

8. Google wanted to continue suppressing prices and charging high fees, so it chose to engage in an unlawful conspiracy and bid-rigging. In September 2018, it entered into a secret written agreement with Facebook, part of a larger secret arrangement pursuant to which Facebook would stop supporting Header Bidding, not develop a new Publisher Layer Tool, and stop bidding on website advertising opportunities, leaving that segment entirely. In exchange, Google would allow

Facebook Middle Layer Tools to also obtain Impressions at suppressed prices, and thereby also benefit at the expense of Publishers. Internally, Google codenamed the written agreement “Jedi Blue”. The word “Jedi” indicated that it was a continuation of Google’s Jedi campaign to “kill” Header Bidding. The word “Blue” referred to the colour of Facebook’s logo.

9. Altogether, the effects of Google’s misrepresentations and both defendants’ conspiracy and bid-rigging was to reduce Publishers’ revenues: Google Middle Layer Tools and Facebook Middle Layer Tools were able to purchase Impressions at depressed prices. This conduct foreclosed or forestalled entry by competitors, forcing Publishers to pay higher direct and indirect fees to Google and Facebook.

B. The Parties

(i) *The Representative Plaintiff & the Class*

10. The Plaintiff, Pass Herald Ltd., is a corporation incorporated under the laws of Alberta. The Plaintiff operates Crowsnest Pass Herald, founded in 1930 and the only locally-owned newspaper in Crowsnest Pass, Alberta. The newspaper is published online at www.passherald.ca.

11. The Plaintiff sells Impressions to be displayed on that website using a Google Publisher Layer Tool: Google AdSense. The screenshot below shows the landing page for that website, displaying an Impression sold to Walmart at the bottom. The preview bar at the very bottom in grey confirms that a Google Publisher Layer Tool was used to sell the Impression.



12. The Plaintiff seeks to bring this action on behalf of the Class.

(ii) The Google Defendants

13. Google LLC is a corporation incorporated under the laws of Delaware. Its headquarters is in Mountain View, California.

14. Google Ireland Limited is a corporation incorporated under the laws of Ireland. Its headquarters is in Dublin, Ireland. It is part of the same corporate group as Google LLC.

15. Google Canada Corporation is a corporation incorporated under the laws of Nova Scotia. It has multiple offices in Ontario, including one in downtown Toronto. It is a second-level subsidiary of Google LLC.

16. The business of each of Google LLC, Google Ireland Limited, and Google Canada Corporation is inextricably interwoven with the business of the others. Each is an agent for the

others with respect to the conduct described in this Statement of Claim. Collectively, these three companies directly or indirectly offered the services of Google Tools in Canada.

(iii) *The Facebook Defendants*

17. Meta Platforms Inc. is a corporation incorporated under the laws of Delaware. Its headquarters is in Menlo Park, California. It is the successor corporation of Facebook, Inc., which was also incorporated under the laws of Delaware and had the same headquarters. Meta Platforms Inc. has assumed all of the obligations and liabilities of Facebook, Inc.

18. Facebook Ireland Limited is a corporation incorporated under the laws of Ireland. Its headquarters is in Dublin, Ireland. It is part of the same corporate group as Meta Platforms Inc.

19. Facebook Canada Ltd. is a corporation incorporated under the laws of Canada. It has an office in downtown Toronto. It is part of the same corporate group as Facebook Inc. It is a second-level subsidiary of Meta Platforms Inc.

20. The business of each of Meta Platforms Inc., Facebook Ireland Limited, and Facebook Canada Ltd. is inextricably interwoven with the business of the other. Each is an agent for the other with respect to all of the conduct described in this Statement of Claim. Collectively, these three companies directly or indirectly competed in the Market in Canada.

C. The Marketplace

(i) *Marketplace Structure*

21. This claim centres on the marketplace for the exchange of Impressions.

22. Publishers sell Impressions. Their websites or applications contain spaces in which advertisements can be displayed. Every time a user opens the Publisher's website or application,

an Impression is created. For example, suppose a Publisher's website contains two spaces in which advertisements can be displayed, and 1,000 people open that website every day. In that case, the Publisher has 2,000 Impressions to sell.

23. Advertisers buy Impressions. They have advertisements to display and seek opportunities to show them to their target audiences.

24. There are three main layers between Publishers and Advertisers:

- (a) **Publisher Layer:** Publisher Layer Tools act on behalf of Publishers. Their purpose is to solicit bids for Impressions on behalf of Publishers, and sell those Impressions in a manner that maximizes Publishers' revenues. In the industry, they are commonly referred to as publisher ad servers or mediation tools.
- (b) **Middle Layer:** Middle Layer Tools do not act on behalf of Publishers or Advertisers directly. Their purpose is to take bids from Advertiser Layer Tools, choose the one they consider best, and submit that one to the Publisher Layer Tool. In the industry, they are commonly referred to as ad exchanges or ad networks.
- (c) **Advertiser Layer:** Advertiser Layer Tools act on behalf of Advertisers. Their purpose is to help Advertisers buy the highest value Impressions at the lowest price. In the industry, they are commonly referred to as demand side platforms or buying tools.

25. Every time a user opens a website or application, the following things happen in the fraction of a second before that website or application finishes loading.

- (a) First, the Publisher's website or application notifies the Publisher Layer Tool that there is an Impression for sale.
- (b) Second, acting on behalf of the Publisher, the Publisher Layer Tool sends a "**Bid Request**" to one or more Middle Layer Tools.
- (c) Third, each of those Middle Layer Tools calls for bids from one or more Advertiser Layer Tools.
- (d) Fourth, each of those Advertiser Layer Tools determines what its Advertiser clients are willing to pay for the Impression, and places bids to a Middle Layer Tool.
- (e) Fifth, Middle Layer Tools identify the best bid they received and send a "**Bid Response**" to the Publisher Layer Tool.
- (f) Sixth, the Publisher Layer Tool chooses a winning bid on behalf of the Publisher. The winning bidder then displays their advertisement on the website or application.
- (g) Seventh, the winning Advertiser pays, the winning Advertiser Layer Tool takes its fee, the winning Middle Layer Tool takes its fee, the Publisher Layer Tool takes its fee, and the Publisher takes the rest.

26. Most of this claim focuses on the second and fifth steps above. Focusing in on just those steps, there is a single auction. Publishers call for bids. Publisher Layer Tools, acting on behalf of Publishers, send Bid Requests to Middle Layer Tools. Middle Layer Tools are the bidders, and send Bid Responses. Below, references to the "**Auction**" are references to this auction between Publishers (calling for bids) and Middle Layer Tools (bidders).

(ii) Google and Facebook Compete in the Marketplace

27. Google Tools operate or have operated in every layer of the marketplace.

(a) **Publisher Layer:** Google AdMob mediation, Google AdSense, and Google DFP are Publisher Layer Tools. More than 90% of Impressions in the UK, EU, and Australia pass through these tools. A comparable percentage of Canadian Impressions passes through Google Publisher Layer Tools.

(b) **Middle Layer:** Google AdMob network, Google AdX,¹ and Google Display Network are Middle Layer Tools. More than half of Impressions in the UK, EU, and Australia pass through these tools. A comparable percentage of Canadian Impressions passes through Google Middle Layer Tools.

(c) **Advertiser Layer:** Google Ads and Google DV360 are Advertiser Layer Tools. More than half of Impressions in the UK, EU, and Australia pass through these tools. A comparable percentage of Canadian Impressions passes through Google Advertiser Layer Tools.

28. Facebook Tools also operate or have operated in every layer of the Market.

(a) **Publisher Layer:** Monetization Manager is a Publisher Layer Tool for Impressions displayed on applications. Additionally, to foreshadow the allegations below, Facebook would have built or bought a new Publisher Layer Tool to further

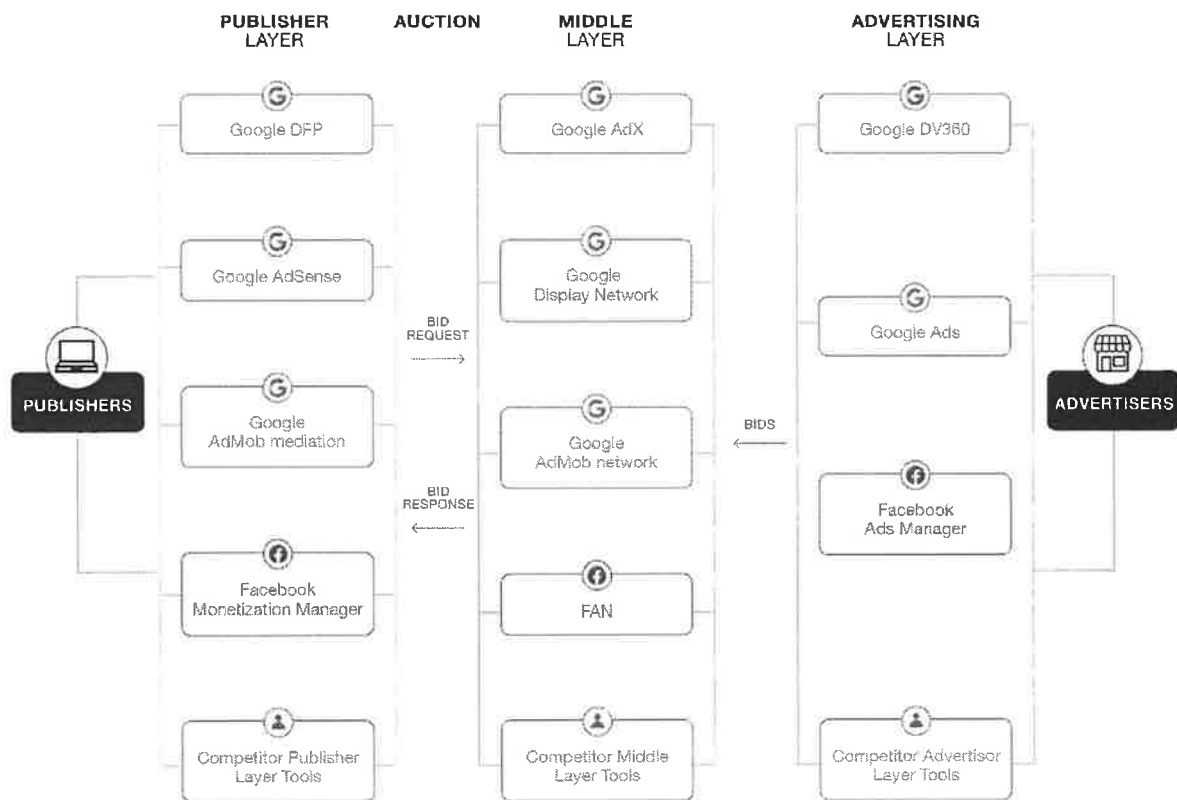
¹ After regulators began announcing investigations into Google AdX, Google rebranded Google AdX and Google DFP as a single product – Google Ad Manager, a.k.a. GAM – for marketing purposes. The “new” product acts as both a Publisher Layer Tool and a Middle Layer Tool. However, functionally, they continued to operate separately. For simplicity, this Statement of Claim only uses Google AdX and Google DFP – not Google Ad Manager or GAM.

compete with Google Publisher Layer Tools if it had not entered into a conspiracy with Google.

(b) **Middle Layer:** Facebook Exchange (discontinued in 2016) and FAN are Middle Layer Tools.

(c) **Advertiser Layer:** Facebook Ads Manager is an Advertiser Layer Tool.

29. The image below summarizes the structure of the marketplace and where each of the Google Tools and Facebook Tools fit into the marketplace:



30. Google has admitted that Facebook is one of its main competitors. On September 15, 2020, Donald Harrison, Google's President of Global Partnerships testified before the United States Senate that Facebook was a competitor in the market for "buying and selling ads online".

D. How Google Suppressed Publishers' Revenues

(i) *Waterfalling*

31. As described above, the purpose of a Publisher Layer Tool is to sell Impressions for the highest price. Logically, the simplest way to do so would be to send Bid Requests to all Middle Layer Tools at the same time, gather all Bid Responses, and then pick the highest one.

32. Prior to 2009, this was not possible. Due to technical limitations, Publisher Layer Tools could only solicit bids from one Middle Layer Tool at a time. Given that limitation, they used an algorithm called "**Waterfalling**", which worked as follows:

- (a) Prior to the Auctions, Publishers had the option to rank Middle Layer Tools – that is, decide the order in which they would be called upon – and set a reserve price for each Middle Layer Tool.
- (b) Each time an Impression was made available, the Publisher Layer Tool would send a Bid Request to the Middle Layer Tool ranked first.
- (c) Next, that Middle Layer Tool would send a Bid Response containing its bid. If that bid was higher than the reserve price for that tool, then that Middle Layer Tool would win the Auction and the Auction would end. If that bid was not higher than the reserve price for that tool, then the Publisher Layer Tool would send a Bid Request to the next-ranked Middle Layer Tool.

- (d) The steps in paragraph (c) would be repeated until a Middle Layer Tool won the Auction.

33. Waterfalling results in lower revenues for Publishers than an Auction where all Bid Responses are considered at the same time. The reason is that, under Waterfalling, there is only one bidder in the Auction. Sometimes, a Middle Layer Tool ranked lower would have bid higher, but it does not get the chance to submit that higher bid, so the Impression is sold at a lower price. By contrast, in an Auction where all Bid Responses are considered at the same time, the Impression would always be sold to the Middle Layer Tool willing to bid the highest.

(ii) *Header Bidding*

34. In 2009, a technology called “**Header Bidding**” was created. To use Header Bidding, a Publisher would add code to the header of their website or application. Since it was in the header, this code ran before the Auction. The code would solicit Bid Responses from multiple Middle Layer Tools, and identify the highest Bid Response. Then, the website or application would then call on its Publisher Layer Tool to run the Auction. The website or application would tell the Publisher Layer Tool not to sell the Impression for less than the highest bid that the website or application had received. This was better for Publishers than Waterfalling because multiple Bid Responses were received, and the Publisher was paid the value of the highest bid.

35. Header Bidding showed that it was technologically possible to consider Bid Responses from multiple Middle Layer Tools at the same time.

36. Nevertheless, Google continued using Waterfalling until 2017. In fact, Google doubled down on Waterfalling, adding algorithms that made it even worse for Publishers. Those additional algorithms are covered in next section.

(iii) Google Further Suppressed Auction Prices

37. Starting in 2009, Google Publisher Layer Tools used “**Dynamic Allocation**”. When this algorithm was turned on, Google Middle Layer Tools were effectively given a right of first refusal in Auctions. Google Middle Layer Tools were allowed to win any Auction by paying one penny more than the average historical bid of the highest ranked Competitor Middle Layer Tool. As a result, Google Middle Layer Tools were able to win more Auctions – especially those for high-value Impressions – but pay less.

38. As Google Middle Layer Tools won more and more high-value Impressions, the average value of Impressions won by Competitor Middle Layer Tools fell. Thus, Competitor Middle Layer Tools reduced their bids, eventually reducing their historical average bids. Since Google Middle Layer Tools could win the auction as long as they bid higher than historical average bids, this allowed Google Middle Layer Tools to win Auctions for even less money.

39. The analysis above is analogous to the following simplified example of auctions for tickets to Toronto Maple Leafs games. Suppose that the arena can only sell tickets to resellers. Those resellers would pay \$100 for seats far from the ice, \$500 for seats close to the ice, and \$1,000 for boxes. There are many more seats far from the ice, so the average price of a ticket is only \$200.

(a) If Header Bidding applied to this auction, all resellers would get to bid on all tickets.

Thus, the seats far from the ice would sell for almost \$100, the seats close to the ice

would sell for almost \$500, and the boxes would sell for almost \$1,000. The arena's revenues would be maximized.

- (b) If Dynamic Allocation applied to this auction, it would be like giving one reseller the right to purchase any tickets they wanted for one penny more than the average price paid by other resellers – originally \$200.01. The preferred reseller would then purchase all of the boxes and seats close to the ice and sell them at huge markups. Over time, other resellers would then realize that they are only winning the seats far from the ice, which are only worth \$100, so they would reduce their bids to \$100. The average historical price paid by other resellers would fall to \$100, so the preferred reseller could purchase any tickets they wanted at a price of \$100.01. In the end, the preferred reseller would be getting a discount of up to \$900 on each ticket. All of that is money that would have gone to the arena under Header Bidding.

40. This is one example of a “**Lemons Problem**”: any situation in which some bidders in an Auction have advantages in either identifying high-value Impressions, or winning the Auctions for those Impressions. A Lemons Problem results in lower revenues for the Publisher. The precise mechanism differs for different types of advantages, but the broad strokes are the same:

- (a) The preferred Middle Layer Tools win the vast majority of high-value Impressions in Auctions at depressed prices;
- (b) Competitor Middle Layer Tools realize that they cannot win those Impressions, so they withdraw or reduce their bids in Auctions; and

- (c) The preferred Middle Layer Tools use that fact to win Impressions in future Auctions at even lower prices.

41. To foreshadow the claims below, Google represented to the public that Google Publisher Layer Tools were “maximizing” Publishers’ revenues. But in fact, they created Lemons Problems, suppressing bids and allowing Google Middle Layer Tools to win more but pay less. Then, Facebook threatened to enter the market, which would have threatened the ecosystem that allowed Google to create these Lemons Problems. To prevent that, Google offered to secretly allow Facebook Middle Layer Tools to also benefit from these Lemons Problems, winning more but paying less. Facebook agreed not to compete in exchange for these secret benefits.

(iv) Google Launched the Jedi Campaign

42. By 2016, almost 70% of major publishers had adopted Header Bidding. According to an internal Google study, the average price of Impressions sold with Header Bidding was 80% higher than the average price of Impressions sold through Google AdX without Header Bidding. Google knew this. In his testimony before the United States Senate on September 15, 2020, Mr. Harrison conceded that Header Bidding “was better for publishers. Publishers were making more money.”

43. Google viewed Header Bidding as a serious threat.

- (a) At a meeting on October 13, 2016, Google employees discussed “options for mitigating growth of header bidding infrastructure”. One employee proposed predatory pricing – setting fees to zero – but another employee rejected the idea: “problem is that this doesn’t kill HB”.

- (b) A slide listing one Google executive's "top priorities" for 2017 stated, "Need to fight off the existential threat posed by Header Bidding and FAN. This is my personal #1 priority. If we do nothing else, this need[s] to [be] an all hand[s] on deck approach."
 - (c) On October 5, 2016, in a presentation to senior executives, a Google employee expressed concern about Facebook enabling the growth of Header Bidding, stating, "to stop these guys from doing HB we probably need to consider something more aggressive". That presentation stated that Google's "goal/mandate" was to "[f]ore stall major industry investment in HB & HB wrapper infrastructure."
44. Google took steps to attempt to stop Header Bidding, such as:
- (a) Having Google DV360 not bid on or reduce the frequency at which it bid on Impressions sold using Header Bidding;
 - (b) Creating Accelerated Mobile Pages ("AMP"), which prevent Header Bidding; and
 - (c) Prioritizing websites that use AMP in search results.
45. Google codenamed this campaign "**Jedi**". According to internal Google documents:
- (a) The purpose of Jedi was to "create a jedi mind trick plan that [gets] the ecosystem talking about why [Publisher Layer Tools and Advertiser Layer Tools] are willing to do things that are NOT in the publisher's best interests".

- (b) One Google executive advised colleagues, “Remember, Jedi negatively impacting header bidding is a Google desired outcome. Publishers are likely fine with header bidding, they make more money with it.”

(v) *Exchange Bidding is a Jedi Mind Trick*

46. As part of Jedi, Google changed the structure of its Auctions in a manner that eliminated Waterfalling, but not the Lemons Problem. Google represented to the public that it was making changes to maximize Publishers’ revenues, but failed to mention the continued Lemons Problem. The purpose of these changes and representations was to convince Publishers to continue using Google Publisher Layer Tools, rather than switching to Header Bidding.

47. In June 2017, Google officially rolled out “**Exchange Bidding**”. Under this algorithm, Google Publisher Layer Tools sent Bid Requests to all Middle Layer Tools at the same time. However, Google Middle Layer Tools still had the following advantages:

- (a) **Last Look:** After Competitor Middle Layer Tools submitted their bids, Google Middle Layer Tools were told the highest bid and given an opportunity to win the Impression for one cent more. This was referred to as a “**Last Look**” advantage. In effect, Google Middle Layer Tools still had a right of first refusal.²
- (b) **Unequal Fees:** Competitor Middle Layer Tools were charged an extra fee to bid, so they had to bid higher to match the bids of Google Middle Layer Tools.

² In 2019, when Google changed its Auctions from Exchange Bidding to Open Bidding, it got rid of this explicit Last Look advantage. Specifically, although Google Middle Layer Tools still received the Competitor Middle Layer Tools’ bids, they could no longer use that information to win *that* Auction. However, they could still aggregate that information to predict what Competitor Middle Layer Tools would bid in subsequent Auctions, and then bid one penny more in those subsequent Auctions. Thus, in practice, they still had a right of first refusal in most Auctions.

- (c) **No Networks:** Only exchanges (like Google AdX) could directly submit bids to Google DFP. Networks (like Facebook's FAN) could only bid through exchanges, such that they also pay the exchange's fee. This meant that they had to bid even higher to match the bids of Google Middle Layer Tools.

48. These advantages created another Lemons Problem, which allowed Google Middle Layer Tools to win more Auctions but pay less. Google's profits at the expense of Publishers were immense. According to internal Google documents, just giving up Last Look would have reduced Google Ads' revenues by at least 30% and reduced Google DV360's revenues by 10%. Giving up all of the advantages described above would have had an even larger impact.

E. Facebook Embraces Header Bidding

49. Even though Exchange Bidding allowed FAN to participate in Auctions run by Google Publisher Layer Tools, the advantages given to Google Middle Layer Tools still effectively prevented FAN from winning high-value Impressions. Facebook saw through Google's ruse. Thus, according to internal Facebook documents, Facebook embarked on an "18 month 'header bidding' strategy to minimize [the Exchange Bidding] tax". As part of that strategy, Facebook supported Header Bidding and planned to build or buy a new Publisher Layer Tool to compete head-on with Google Publisher Layer Tools. Facebook's goal was to allow FAN to win high-value Impressions. Facebook repeatedly and publicly announced those plans over the next two years.

- (a) In March 2017, Facebook partnered with six Header Bidding platforms to allow FAN to submit bids on Impressions displayed on websites using Header Bidding. Facebook's press release called out "third party middlemen who make the rules and obfuscate the truth". It hailed Header Bidding as the solution, and explained that,

according to its figures, Header Bidding increased Publishers' revenues by between 10% and 30%. David Jakubowski, who led Facebook's ad tech group, explained that Facebook would only work with providers willing to agree to four principles, including: "[a]ll demand sources get the same information at the same time", "ad space goes to the source willing to pay the most", and "[t]here is no arbitrage, no 'averaged' waterfall and no secret auction manipulations by a demand source". All of these were thinly veiled swipes at Google.

- (b) In August 2017, in an article in *AdExchanger*, a Facebook executive proposed developing Header Bidding technology for apps, adding that Publishers could "refuse to work with waterfalls".
- (c) In June 2018, Facebook expanded this program to allow FAN to submit bids on Impressions displayed on applications using Header Bidding.

50. According to internal Google documents, Google feared that these moves would allow Facebook to "disintermediate" Google and eliminate Google Publisher Layer Tools' "must-call status". Indeed, that was how industry insiders interpreted those statements. On March 22, 2017, the industry publication AdAge wrote that Facebook's foray into Header Bidding was a "digital advertising coup against rival Google and its DoubleClick empire". The reference to "DoubleClick", meaning Google DFP, indicates that the threat was in the Publisher Layer.

F. The Conspiracy

51. Shortly after Facebook announced its intention to actively embrace Header Bidding, Google made overtures to Facebook, hoping to strike a deal to prevent Facebook from working on

Header Bidding or building or buying a Publisher Layer Tool to compete head-on with Google.

Both parties understood that this was Google's primary motivation:

- (a) In a presentation on October 5, 2016, a Google senior executive said, "to stop these guys from doing HB we probably need to consider something more aggressive."
- (b) An internal Facebook document dated February 2, 2017 explained "What Google wants: To kill header bidding (us baptizing their product will help significantly)";
- (c) An email dated October 30, 2017 from a senior Facebook executive to another Facebook executive explained that Google "want[s] this deal to kill header bidding";
- (d) An internal Google document in 2017 stated that Google's goal was to "collaborate when necessary to maintain the status quo"; and
- (e) A presentation by a Google employee on August 9, 2018 explained that Google wanted to "avoid competing with FAN", but if it could not, then Google would instead collaborate with Facebook to "build a moat".

52. Meanwhile, Facebook was willing to go along because a conspiracy was cheaper than its next-best alternative: building or buying a competing Publisher Layer Tool. According to internal Facebook documents, Facebook saw the conspiracy as "relatively cheap compared to build/buy and compete in zero sum ad tech game". If it could not partner with Google, its next best option was to "build/buy ad tech", meaning a Publisher Layer Tool. But for the conspiracy, Facebook would have built or bought a competing Publisher Layer Tool.

53. At times known only to the defendants, the defendants negotiated and entered into a conspiracy, agreement, or arrangement, all aspects of which are collectively referred to herein as the “**Arrangement**”. The Arrangement included a written agreement – Jedi Blue – and unwritten terms, all of which are described in depth below. In brief, Facebook did not start competing with Google in the Publisher Layer, and later withdrew from the Middle Layer for Impressions displayed on websites. In exchange, Facebook secured secret bidding advantages that helped Facebook Middle Layer Tools win more Auctions but pay less.

(i) Jedi Blue

54. On September 27, 2018, Google LLC, Google Ireland Limited, Facebook, Inc. (now Meta Platforms Inc.), and Facebook Ireland Limited entered into an agreement, which Google internally codenamed “**Jedi Blue**”. The word “Jedi” indicated that it was a continuation of Google’s Jedi campaign to kill Header Bidding. The word “Blue” referred to the colour of Facebook’s logo.

Giving Up Header Bidding

55. Publisher Layer Tools are only viable if they receive a large number of Bid Responses. Prior to Jedi Blue, FAN submitted a large number of Bid Responses to Header Bidding, making Competitor Publisher Layer Tools viable. If Facebook were to build or buy a new Publisher Layer Tool, it could submit those Bid Responses to that new tool, making that new Facebook Publisher Layer Tool viable. Both of those were direct threats to Google Publisher Layer Tools.

56. Under Jedi Blue, FAN commits to submitting most if not all of its Bid Responses to Google Publisher Layer Tools. This makes it practically impossible for Facebook to build or buy a viable Publisher Layer Tool to compete head-on with Google Publisher Layer Tools. Jedi Blue locks up bids for Google Publisher Layer Tools in three ways.

- (a) **Minimum Spend:** First, Jedi Blue expressly locks up some Bid Responses for Google Publisher Layer Tools. Section 4(b) in Exhibit B to Jedi Blue requires FAN to spend US\$500 million per year. Facebook can only satisfy this contractual obligation if FAN submits Bid Responses to Google Publisher Layer Tools in a total amount that is significantly higher than US\$500 million per year.
- (b) **Lower Fee for More Spending:** Second, Jedi Blue offers Facebook a lower fee on purchases up to US\$500 million – equivalent to a \$50 million discount on fees – if FAN submits more Bid Responses to Google Publisher Layer Tools. Section 5, Third Phase in Exhibit B to Jedi Blue allows FAN to pay a fee of only 5% if it spends at least US\$375 million per quarter, meaning US\$1.5 billion per year. According to internal Facebook documents, Facebook treated Jedi Blue as offering a 5% fee, meaning that it interpreted this term as a commitment that FAN would submit Bid Responses to Google Publisher Layer Tools in a total amount that is significantly higher than US\$1.5 billion per year.
- (c) **Supra-Competitive Profits from More Spending:** Third, as described below, Jedi Blue and the Arrangement give FAN various secret bidding and information advantages, allowing FAN to win more but pay less in Auctions run by Google Publisher Layer Tools. However, Jedi Blue forbids Facebook from using those bidding and advantages in Auctions run by other Publisher Layer Tools. Specifically, sections 2.4(e), 6.6, and 6.8-6.9 of Jedi Blue prevent Facebook from using the information it receives “to build or enhance equivalent products to DoubleClick for Publishers, AdX, or AdMob”, or “to bid or inform bidding on any

platform or channel other than the Program”. In effect, Jedi Blue allows FAN to extract supra-competitive profits, but only if and to the extent that it submits Bid Responses to Google Publisher Layer Tools.

Secret Bidding Advantages

57. Jedi Blue allows FAN to bid directly into Google DFP and Google AdMob Mediation. More importantly, it gives FAN the following advantages over Competitor Middle Layer Tools.

- (a) **Unequal Information:** In assessing the value of an Impression, the most useful information is the identity of the viewer. Sections 1(a) and 3 of Jedi Blue require Google, with its trove of personal data, to help Facebook identify at least 80% of website Impressions viewers and 60% of app Impression viewers. This information allows FAN to steer clear of the low-value Impressions and focus on the high-value Impressions. This creates another Lemons Problem, allowing Facebook Middle Layer Tools to win more Auctions but pay less.
- (b) **Unequal Effects of Last Look:** Sections 2.1(b) and 6.5 of Jedi Blue prevent Google Tools from using their Last Look advantage – or any other information derived from FAN’s bids – against Facebook Tools. Meanwhile, Competitor Tools remain subject to the Last Look advantage. Thus, Jedi Blue gave Facebook Middle Layer Tools an advantage over Competitor Middle Layer Tools in Auctions. This creates

another Lemons Problem, allowing Facebook Middle Layer Tools to win more Auctions but pay less.

- (c) **Unequal Fees:** Section 5 in Exhibit B to Jedi Blue allows FAN to bid into Google DFP for a fee of only 5%, as long as it meets a minimum spending requirement which all parties expected it to meet. By contrast, Competitor Middle Layer Tools had to pay 10% to bid into Google DFP and Google AdMob Mediation. Thus, FAN could bid almost 5% less than Competitor Middle Layer Tools but still win the Auction. This creates another Lemons Problem, allowing Facebook Middle Layer Tools to win more Auctions but pay less.

Pact of Silence

58. Google and Facebook understood that the effectiveness of the Lemons Problem would be blunted if the public, and especially Publishers, were made aware of it. In that case, Publishers might start switching to Header Bidding or, as explained further below, offset the Lemons Problem by setting higher reserve prices for FAN. Thus, Jedi Blue also contained the following provisions that prohibited either party from sharing its existence with the public:

10. Publicity or PR. Neither Party may make any public statement or issue any marketing or other materials regarding the Program or this Agreement without the other Party's prior written approval. In addition, neither Party will issue presentations or other communications made generally available to Publishers regarding the Program without the other Party's prior written approval ...

59. Google and Facebook understood that the Arrangement, if discovered, would likely be challenged as breaching competition laws. In preparation for that, Jedi Blue requires Google and Facebook to alert each other and tailor their responses to regulators:

7. Regulatory Cooperation.

7.1 To the extent permitted by applicable law, and subject to Section 7.2 below, each of Google and Facebook agrees to use its reasonable best efforts to:

(a) cooperate and assist each other in responding to any Antitrust Action, Data Protection Action, or any inquiry or investigation relating to the Agreement by any Governmental Authority, and in defending the Agreement against any Antitrust Action, Data Protection Action, or any inquiry or investigation relating to the Agreement by any Governmental Authority;

(b) promptly and fully inform the other Party of any Governmental Communication relating to the Agreement (provided that, to the extent appropriate, any Party may designate such information as attorneys' or outside counsel only);

(c) allow the other Party a reasonable time to review and consider in good faith the views of the other with respect to any Governmental Communication (provided that, to the extent appropriate, any Party may designate such information as attorneys' or outside counsel only);

(d) not advance arguments in connection with any Antitrust Action, Data Protection Action, or any inquiry or investigation relating to the Agreement by any Governmental Authority (other than litigation between the Parties) over the objection of the other Party that would reasonably be likely to have a substantial adverse effect on that other Party; and

(e) consult with the other Party in advance, to the extent practicable, and give the other Party and its counsel reasonable notice and, to the extent not prohibited by law or the relevant Governmental Authority, an opportunity to attend and participate in any meeting or discussion with any Governmental Authority relating to any Antitrust Action, Data Protection Action, or any inquiry or investigation relating to the Agreement by any Governmental Authority.

60. The intent of this section was to thwart investigations and enforce another pact of silence on each other, in furtherance of the Arrangement. Their intention was to preserve an illusion that they were engaged in normal and *bona fide* competition with each other.

(ii) Other Terms of the Arrangement

Giving Up Header Bidding

61. When Jedi Blue was executed, Facebook abandoned its support for Header Bidding and its plans to build or buy a Publisher Layer Tool that would compete with Google Publisher Layer Tools. This was an integral part of the Arrangement, as indicated by the terms in Jedi Blue making

Facebook's support of a competitive Publisher Layer tool practically impossible, described above at paragraphs 55-56.

Secret Bidding Advantages

62. To implement Jedi Blue, Google and Facebook representatives met further to discuss the technical specifications. As a result FAN received even more advantages over Competitor Middle Layer Tools.

- (a) **Unequal Information:** As particularized above at paragraph 57(a), under Jedi Blue, Google undertook to use its trove of personal data to help Facebook identify viewers of Impressions. To satisfy this obligation, Google and Facebook integrated their software development kits for matching cookies to the user IDs of viewers. This not only allowed Facebook to identify users, but also circumvent their privacy restrictions, especially on Apple devices. Not only did this give Facebook more information, but also it meant that Google and Facebook had access to the same information. As a result, they were able to develop similar valuations for Impressions.
- (b) **Unequal Time to Bid:** Under the Arrangement, FAN had 300 ms to submit a Bid Response. That is enough time for it to identify who is viewing the Impression, and therefore to figure out whether it is a high-value or a low-value Impression. By contrast, Competitor Middle Layer Tools only have 160 ms, which is not enough time to do so. This creates another Lemons Problem, allowing Facebook Middle Layer Tools to win more Auctions but pay less.

Unified Pricing

63. Despite all of the conduct described above, and even though the Arrangement was secret, the most sophisticated Publishers with the most sophisticated data might have discovered that Google Middle Layer Tools and Facebook Middle Layer Tools were winning more of their higher quality Impressions but paying less. In response, those Publishers might have set higher reserve prices for Google Middle Layer Tools and Facebook Middle Layer Tools. This would have increased the prices that Google Middle Layer Tools and Facebook Middle Layer Tools paid in Auctions, which would have partially counteracted the Lemons Problem.

64. On May 2, 2019, representatives of Google and Facebook met and discussed this problem. They decided to prevent Publishers from setting any reserve prices. Google implemented this part of the Arrangement by rolling out “**Unified Pricing**” four days later. As a result of Unified Pricing, Google AdX won nearly twice as many Auctions but paid only half as much. FAN also won more but paid less.

Giving Up Website Segment

65. In February 2020, under the Arrangement, FAN stopped submitting Bid Responses on Impressions displayed on websites, effectively ceding that market segment to Google Middle Layer Tools. The effects on Publishers of removing FAN as a bidder were dramatic. The average price paid for Impressions displayed on websites in 2020 was 34% lower than the average price paid in 2019.

G. Google Made Misrepresentations

66. Google represented that Google Tools maximized Publishers' revenues.

- (a) On February 9, 2010, Google posted an article on its website titled "Maximizing advertising revenues for online publishers". It represented to the public that Google Tools maximize revenues for Publishers, and in particular that Dynamic Allocation increased revenues for Publishers. For example, it states:

Maximizing revenues for our AdSense partners ...

AdSense helps publishers get the most revenue possible for their ad space ...

When a publisher enables AdSense on their site, Google automatically maximizes the publisher's revenues every time a page loads ...

the Ad Exchange goes further than traditional "yield management." It provides a more complete revenue maximization solution. ...

As a result of this dynamic allocation, publishers essentially have a risk-free way to get the highest real-time revenues for all their non-guaranteed impressions. ...

our goal is to maximize all our partners' online advertising revenues

- (b) On May 18, 2013, Google represented to the public that Google AdSense, powered by Google Ad Manager, "helps you generate the most profit for every ad that appears on your site ... you can generate the most profit for every ad unit".
- (c) On April 13, 2016, Google represented to the public that it is "continuing to help publishers get the highest yield for every impression".
- (d) On November 14, 2016, Google represented to the public that DoubleClick has "consistently delivered server-side solutions that create the most revenue possible across all of a publisher's inventory without sacrificing speed."

- (e) On May 10, 2017, Google represented to the public: “At DoubleClick, we’re committed to helping our partners deliver great advertising experiences while earning the most from every impression.”
- (f) On June 8, 2017, Google represented to the public that it would “foster a sustainable advertising ecosystem. That means creating solutions that deliver the most revenue possible for publishers”.
- (g) Also on June 8, 2017, Google represented to the public: “At DoubleClick, we’ve always had a single mission—to help you grow revenue and build sustainable businesses with advertising. That means ensuring we’re helping you make the most revenue from every impression”.
- (h) On April 4, 2018, Google represented to the public that, since 1995, “DoubleClick mission has remained the same: to help publishers maximize revenue and create sustainable businesses.”

67. The representations described above at paragraph 66 were published on Google’s website and visible to the public, and were intended to be viewed directly or indirectly by Publishers.

68. Google also failed to provide Publishers with information that could have corrected those misrepresentations. The representations described above at paragraph 66 converted all of those omissions and redactions into misrepresentations by implication. The omissions included:

- (a) Failing to publicly disclose the existence of Jedi, Jedi Blue, the Arrangement, or Bernanke (defined below);

- (b) Failing to explain that Dynamic Revenue Sharing (defined below) could decrease Publishers' revenues, or that it often had that effect;
- (c) From 2018, redacting the fields KeyPart and TimeUsec2 in the information that Google Tools gave Publishers. Before this change, the most sophisticated Publishers had used these fields to compare the profitability of Google Publisher Layer Tools with that of Competitor Publisher Layer Tools using Header Bidding. Thus, redacting these fields prevented Publishers from uncovering that Header Bidding was better, or from quantifying the difference; and
- (d) From September 5, 2019, splitting up the data that Google Tools gave Publishers. Before this change, Google Tools provided Publishers with two databases: one with "bid-level data" (i.e. what Bid Responses were submitted in the Auction) and one with "impression-level data" (i.e. who won the Impression). The most sophisticated Publishers could link the two databases. As a result, they could determine where winning bids were coming from and optimize their reserve price strategy. After the change, Google made it impossible to link the two databases and anonymized the sources of some bids as "Unclassified Advertisers". As a result, Publishers were prevented from uncovering that Google Tools and Facebook Tools were winning a disproportionate and increasing share of their (high-value) Impressions.

69. Collectively, the representations described above at paragraph 66 and the omissions, redactions, and data splitting described above at paragraph 68 are the "**Misrepresentations**".

70. Google made the Misrepresentations to convince Publishers that Google Tools maximized Publishers' revenues. The purpose of the Misrepresentations was to promote the use of Google Tools by Publishers, both directly and indirectly. The indirect mechanisms included forestalling industry support for and investment in Header Bidding, and foreclosing or forestalling regulatory investigations into Google Tools.

71. The Misrepresentations were knowingly or recklessly false or misleading in a material respect. Google Tools did not maximize Publishers' revenues. In fact, they materially and intentionally reduced Publishers' revenues.

72. At all relevant times, Google Tools created, exacerbated, and failed to eliminate Lemons Problems; undermined Header Bidding; and entered the Arrangement, as described above. Google also introduced at least two other algorithms, described below, which also had the effect of decreasing Publishers' revenues. All of these rendered the Misrepresentations blatantly false.

73. From 2013 through 2019, Google Tools used a secret algorithm it called "**Bernanke**", after Ben Bernanke, who pioneered using quantitative easing to inflate the economy. Bernanke was designed to inflate the bids of Google Tools, ensuring that they won auctions even when they bid less than Competitor Tools. Google obtained the funds to inflate bids by taking them from Publishers, as explained below: According to an internal Google study, Bernanke decreased Publishers' revenues by upwards of 40%. Meanwhile, it increased Google's annual revenues by US\$230 million.

74. To understand how Bernanke worked, consider an auction with two bids: \$10.00 and \$8.00. The AdX Reserve Price is \$5.00. The AdX fee is 20%.

- (a) In a second-price auction without Bernanke, the winning bidder would pay \$8.00 (the second-highest bid), AdX would take \$1.60 as a fee (20% of \$8.00). The remaining \$6.40 goes to the Publisher.
- (b) With Bernanke, the winning bidder still pays \$8.00 (the second-highest bid). However, after the winning bidder has paid, AdX drops the \$8.00 bid, pretending that it never happened. In that case, the second-highest bid would only have been \$5.00 (the reserve price). AdX takes an additional \$1.00 as a fee (20% of \$5.00). The remaining \$4.00 goes to the Publisher.
- (c) Due to Bernanke, AdX just took \$2.40 that would have otherwise gone to the Publisher. The Publisher's revenues were not maximized. Google would then use that \$2.40 to inflate bids by Google Advertiser Layer Tools.

75. In 2014, Google Tools added "**Dynamic Revenue Sharing**". On June 7, 2021, France's Autorité de la concurrence found that this algorithm was being used "to the detriment of publishers". Meanwhile, it allowed Google AdX to transact an additional US\$250 million per year.

76. To understand how Dynamic Revenue Sharing worked, consider an auction between the Middle Layer and the Advertiser Layer with two Impressions for sale, and two bidders: a Google Advertiser Layer Tool that wants both Impressions, and a Competitor Advertiser Layer Tool that only wants one Impression. They are each willing to pay \$5.00 per Impression, but the Google Tool's fee is 20% while the Competitor Tool's fee is only 10%.

- (a) If AdX was trying to maximize the Publisher's revenues, it would run two separate auctions. In the first auction, the Competitor Advertiser Layer Tool would win

because its net bid is \$4.50 (\$5.00 minus 10% fee), which is higher than the Google Advertiser's net bid of \$4.00 (\$5.00 minus 20% fee). In the second auction, the Google Advertiser Layer Tool would win because its \$4.00 bid is the only bid. In the end, the Publisher would receive \$8.50.

- (b) Dynamic Revenue Sharing causes the Google Advertiser Layer Tool to win both auctions by manipulating the Google Advertiser Layer Tool's fee. It decreases that fee to one penny less than 10% for the first auction while increasing it to one penny more than 30% for the second auction. As a result, in the first auction, the Google Advertiser Layer Tool's net bid is \$4.51, which is higher than the Competitor Advertiser Layer Tool's net bid of \$4.50. In the second auction, the Google Advertiser would win because its \$3.49 bid is the only bid. In the end, the Publisher would only receive \$8.00.
- (c) Due to Dynamic Revenue Sharing, AdX just prioritized a Google Advertiser Layer Tool over a Competitor Advertiser Layer Tool, costing the Publisher \$0.50. The Publisher's revenues were not maximized.

CAUSES OF ACTION

A. Conspiracy

77. Google and Facebook are competitors in the marketplace.

- (a) They are direct competitors for the reasons described above at paragraphs 27 to 29.
- (b) They are competitors within the meaning of section 45(8) of the *Competition Act* because, had the defendants not entered into the Arrangement, Facebook would

have bought or built a Publisher Layer Tool that competed head-on with Google Tools in the Publisher Layer, as described above at paragraphs 49-50 and indicated by the terms in the Arrangement designed to prevent this outcome, described above at paragraphs 55-56.

78. The “price” for services in the relevant market is broader than the fees directly charged by Google or Facebook to Publishers. It includes any fee or spread charged in any layer of the marketplace because the incidence of those charges falls on Publishers. It also includes deadweight losses from avoidable Lemons Problems because, but for the Arrangement, Publishers’ revenues would have been higher by those amounts.

79. Through the Arrangement, the defendants conspired, agreed, or arranged to fix, maintain, increase, or control the price for services to transact Impressions contrary to section 45(1)(a) of the *Competition Act*, by the following means:

- (a) **No Publisher Layer Competitor:** As described above at paragraphs 55-56 and 61, under the Arrangement, Facebook abandoned its support for Header Bidding and its plans to build or buy a tool in the Publisher Layer that would compete head-on with Google DFP and Google AdMob Mediation. Instead, it directed FAN’s bids to Google Publisher Layer Tools, further undermining Competitor Publisher Layer Tools. Both of these allowed Google Publisher Layer Tools to maintain supra-competitive prices.
- (b) **Less Website Competition:** As described above at paragraph 65, under the Arrangement, FAN stopped sending Bid Responses for Impressions displayed on

websites. This ceded that part of the Middle Layer to Google, allowing Google Middle Layer Tools and Google Advertiser Layer Tools to maintain supra-competitive prices in the website segment.

- (c) **Less Middle Layer Competition:** As described above at paragraphs 57 and 62-63, the Arrangement gave Facebook Middle Layer Tools various advantages that created Lemons Problems, allowing it to win more Auctions but pay less. This allowed both Google Middle Layer Tools and Facebook Middle Layer Tools to maintain supra-competitive prices.
- (d) Publishers using Google DFP and Google AdMob Mediation were the most directly affected, but the fact that they paid higher prices resulted in umbrella effects to all other members of the Conspiracy Class.

80. Through the Arrangement, Google and Facebook conspired, agreed, or arranged to allocate sales or markets for the supply of Impressions, contrary to section 45(1)(b) of the *Competition Act*, by the following means:

- (a) **Allocating Publisher Layer:** As described above at paragraphs 55-56 and 61, due to the Arrangement, Facebook abandoned its plans to build or buy a tool in the Publisher Layer that would compete head-on with Google Tools. This effectively allocated the entire Publisher Layer to Google.
- (b) **Allocating Website Segment:** As described above at paragraph 65, due to the Arrangement, FAN stopped sending Bid Responses on Impressions displayed on

websites. This effectively allocated the entire segment of Middle Layer Tools and Advertiser Layer Tools transacting Impressions displayed on websites to Google.

- (c) **Allocating High-Value Impressions:** As described above at paragraphs 57 and 62-63, the Arrangement effectively limited access to high-value Impressions to only Google Middle Layer Tools or Facebook Middle Layer Tools. This effectively allocated the entire segment of Middle Layer Tools and Advertiser Layer Tools transacting high-value Impressions to Google and Facebook.

81. Through the Arrangement, Google and Facebook conspired, agreed, or arranged to fix, maintain, control, prevent, lessen, or eliminate the supply of services to exchange Impressions, contrary to section 45(1)(c) of the *Competition Act*, by the following means:

- (a) **No Publisher Layer Competitor:** As described above at paragraphs 55-56 and 61, due to the Arrangement, Facebook abandoned its plans to build or buy a Publisher Layer Tool that would compete head-on with Google Tools. This maintained the supply of tools in the Publisher Layer. Facebook further directed FAN to send Bid Responses to Google Publisher Layer Tools, undermining Competitor Publisher Layer Tools. This reduced the supply of Publisher Layer Tools.
- (b) **Less Website Competition:** As described above at paragraph 65, due to the Arrangement, FAN stopped sending Bid Responses on Impressions displayed on websites. This reduced the supply of tools in the website segment of the Middle Layer and the Advertiser Layer.

82. The Canadian defendants, Google Canada Corporation and Facebook Canada Ltd., implemented directives, instructions, intimations of policy, or other communications from the other four defendants, which communications were for the purpose of giving effect to a conspiracy, combination, agreement, or arrangement entered into outside of Canada that, if entered into in Canada, would have been in contravention of section 45 of the *Competition Act*. The defendants therefore breached section 46(1) of the *Competition Act*.

83. Accordingly, the plaintiffs and the Class are entitled to remedies against Google and Facebook pursuant to section 36 of the *Competition Act*.

B. Bid-Rigging

84. Publishers call for or request bids when they offer Impressions for sale. The Arrangement constitutes bid-rigging in breach of section 47 of the *Competition Act*.

85. As described above at paragraphs 25-26, the affected auctions are Auctions, which take place between the Publishers and Middle Layer Tools.

- (a) **Seller:** In Auctions, Publishers are persons calling for or requesting bids within the meaning of section 47(1) of the *Competition Act*. Bid Requests are sent on behalf of Publishers, and it is Publishers' inventory being sold.
- (b) **Bidders:** In Auctions, Middle Layer Tools are bidders within the meaning of section 47(1) of the *Competition Act*. Middle Layer Tools do not act for Advertisers, or as mere conduits for Advertisers' bids, for the following reasons:

- (i) **No Contract:** Middle Layer Tools do not enter into agency agreements, or any contracts, directly with Advertisers.
- (ii) **No Communication:** Middle Layer Tools generally do not communicate directly with Advertisers.
- (iii) **Reselling:** Some Middle Layer Tools (e.g. FAN) purchase Impressions on their own account, and then resell them to Advertiser Layer Tools at a higher price.
- (iv) **Repackaging:** Often, Middle Layer Tools purchase Impressions on a CPM Basis (paying a fixed cost per Impression), but then sell those Impressions on a CPC Basis (charging per click on the Display Ad) – i.e. repackaging the Impressions and reselling something different than what it purchased.
- (v) **Altering Bids:** Some Middle Layer Tools (e.g. Google Publisher Layer Tools) alter bids to ensure that they – the Middle Layer Tools – get to transact the Impression. Sometimes, they do not tell Advertisers about these alterations, as with Bernanke and Dynamic Revenue Sharing. In other words, they are prioritizing their own interests over those of Advertisers.

86. The Arrangement was an agreement or arrangement between Google and Facebook in which Facebook agreed or undertook not to submit bids, or agreed or undertook to withdraw bids on certain Impressions, contrary to section 47(1)(a) of the *Competition Act*, by the following means:

- (a) **Not Bidding on Website Impressions:** As described above at paragraph 65, due to the Arrangement, FAN stopped sending Bid Responses on Impressions displayed on websites. FAN withdrew or undertook not to submit those bids as part of the Arrangement.
- (b) **Not Bidding on Low-Value Impressions:** As described above at paragraphs 57 and 62-63, the Arrangement allowed FAN to identify and win high-value Impressions. One purpose of this was to secretly allow Facebook Middle Layer Tools not to submit bids on low-value Impressions.

87. The Arrangement was also an agreement or arrangement between Google and Facebook in which Google or Facebook agreed or undertook to submit bids on Impressions arrived at by agreement or arrangement, contrary to section 47(1)(b) of the *Competition Act*, by the following means:

- (a) **Common Pricing Algorithm:** As described above at paragraphs 57 and 62-63, the Arrangement allowed Google Middle Layer Tools and Facebook Middle Layer Tools to develop similar valuations for Impressions, and bid in accordance with those valuations.

88. Neither Google nor Facebook made Publishers aware of the Arrangement at or before the time when bids were submitted or withdrawn. In fact, they actively concealed the existence of the Arrangement from the public, as described above at paragraphs 58-60.

89. Accordingly, the plaintiffs and the Class are entitled to remedies against Google and Facebook pursuant to section 36 of the *Competition Act*.

C. Misrepresentations

90. As described above at paragraphs 66-76, Google made the Misrepresentations to the public for the purpose of promoting the use of Google Tools, even though it knew or was reckless to the possibility that these statements were false or misleading in a material respect. The Misrepresentations breached section 52 of the *Competition Act*.

91. Accordingly, the plaintiffs and the Class are entitled to remedies against Google pursuant to section 36 of the *Competition Act*.

D. Damages

92. As a result of the Arrangement and the Misrepresentations, the Class suffered losses and damages, in the form of:

- (a) **Lower Bids:** As pleaded above at paragraphs 40, 57, and 62-63, the Arrangement created and exacerbated various Lemons Problems, reducing the value of bids made by Middle Layer Tools. This reduced Publishers' revenues.
- (b) **Fewer Bids:** As pleaded above at paragraphs 55-56, 61, and 65, the Arrangement reduced the total number of Bid Responses, especially for Impressions displayed on websites. This reduced demand for Impressions and therefore reduced Publishers' revenues.
- (c) **Less Investment into Header Bidding:** As pleaded above at paragraphs 55-56 and 61, the Arrangement effectively prevented Facebook from creating a new Publisher Layer Tool, and undermined Competitor Publisher Layer Tools that used or supported Header Bidding. Additionally, the Misrepresentations reduced or

forestalled public scrutiny of Google Tools and limited interest in Header Bidding by the industry, developers, entrepreneurs, regulators, and governments. As a result, there was less investment of time and money into Header Bidding products. Thus, Publishers had to sell their Impressions through tools subject to the Lemons Problems described above. This reduced Publishers' revenues.

- (d) **Use of Google Tools:** The Misrepresentations convinced the Misrepresentation Class to start using or continue using Google Publisher Layer Tools. If they had known that Google Tools were not only not maximizing their revenues but also intentionally reducing their revenues, many would have switched to Competitor Tools, or started using Header Bidding. Had they done so, they would have received much higher revenues from selling their Impressions.
- (e) **Higher Fees:** As pleaded above at paragraphs 57 and 62-63, the Arrangement caused and exacerbated Lemons Problems that allowed Google and Facebook to charge supra-competitive prices for using Google Tools and Facebook Tools in all three layers, which was passed on to Publishers. This reduced Publishers' revenues.
- (f) **Umbrella Effects:** Some of the defendants' misconduct was limited to specific Middle Layer Tools and Publisher Layer Tools. However, by suppressing demand, the number and value of bids, and the amounts received for Impressions on those Middle Layer Tools or Publisher Layer Tools, the misconduct had similar umbrella effects on users of other Middle Layer Tools or Publisher Layer Tools. All members of the Conspiracy Class received less for their Impressions.

93. Internally, Google employees have acknowledged that the fees for using Google Tools are supra-competitive and not transparent.

(a) **Google AdX:** According to internal Google documents, one employee discussing the fees for Google AdX noted, “20% for just sell-side platform/exchange isn’t likely justified by value”. Another predicted that, with competition, “margins will stabilize at around 5 percent”.

(b) **Google Ads:** According to internal Google documents, one employee discussing the fees for Google Ads noted, “Buyers don’t know that [we] take a 15 percent fee? I didn’t realize that.” Another responded that the fee “is not transparent”.

94. Full particulars of the losses and damages will be provided before trial.

E. Discoverability & Fraudulent Concealment

95. The marketplace for digital display advertising is opaque and complex, and was made more so by Google’s omissions, redactions, and data-splitting described above at paragraph 68. Publishers generally do not know, and cannot with reasonable diligence discover:

- (a) How many bids were submitted by Advertiser Layer Tools to Middle Layer Tools, the amounts of those bids, or the fees or spreads charged by Advertiser Layer Tools;
- (b) Whether Google Tools or Facebook Tools were winning a disproportionate share of their (high-value) Impressions;

- (c) The difference between the price paid by the winning Advertiser and the price received by the Publisher, including all of the fees and spreads charged by tools across all three layers (the “**Take Rate**”);
- (d) Whether any bids were dropped by Bernanke, or whether their revenues were reduced by Dynamic Revenue Sharing; and
- (e) Whether using Google Publisher Layer Tools allows them to obtain more revenue than using Competitor Publisher Layer Tools, with or without Header Bidding.

96. Additionally, the defendants actively, intentionally, and fraudulently concealed the existence of the conspiracy, the bid-rigging, and the Arrangement from the public, including the Class. Google actively, unilaterally, and fraudulently concealed the falsity of the Misrepresentations from the public, including the Class. The affirmative acts of the defendants alleged herein, including acts in furtherance of the conspiracy, were fraudulently concealed and carried out in a manner that precluded detection. The defendants took active, deliberate, and wrongful steps to conceal their participation in the Arrangement, including:

- (a) Preventing the public from discovering the Arrangement and Bernanke. Both of those were only discovered by the Attorney General of Texas in an investigation into other anticompetitive practices by Google. On December 16, 2020, the Attorney General of Texas filed a complaint that mentioned the agreement. The Class could not have discovered the facts underlying the claim before that date;
- (b) Obfuscating the size of the Take Rate so that Publishers could not discover increases in its magnitude. Google does not tell Publishers what Advertisers paid

for Impressions or Google's Take Rate in any given transaction, even when it acts for both the Advertiser and the Publisher in that transaction; and

- (c) Redacting data from auction records provided to Publishers who use Google Tools to prevent them from quantifying the impact of Header Bidding.

97. In the circumstances, a reasonable Publisher would not have been alerted to investigate the conduct alleged herein before December 16, 2020, at the earliest.

V. OTHER

98. The plaintiff pleads and relies on sections 36, 45-47, and 52 of the *Competition Act*.

99. The plaintiff proposes that this action be tried in Toronto.

Original: March 15, 2022
Amended: December 9, 2022

SOTOS LLP
180 Dundas Street West, Suite 1200
Toronto ON M5G 1Z8

David Sterns (LSO # 36274J)
dsterns@sotos.ca
Louis Sokolov (LSO # 34483L)
lsokolov@sotos.ca
Jean-Marc Leclerc (LSO # 43974L)
jleclerc@sotos.ca
Adil Abdulla (LSO # 82095E)
aabdulla@sotos.ca

Tel: (416) 977-0007
Fax: (416) 977-0717

Lawyers for the plaintiff

PASS HERALD LTD.
Plaintiff

-and-

GOOGLE LLC et al.
Defendants

Court File No.

FEDERAL COURT

PROCEEDING COMMENCED AT TORONTO

AMENDED STATEMENT OF CLAIM

SOTOS LLP

180 Dundas Street West, Suite 1200
Toronto ON M5G 1Z8

David Sterns (LSO # 36274J)
dsterns@sotos.ca

Louis Sokolov (LSO # 34483L)
lsokolov@sotos.ca

Jean-Marc Leclerc (LSO # 43974L)
jleclerc@sotos.ca

Adil Abdulla (LSO # 82095E)
aabdulla@sotos.ca

Tel: (416) 977-0007

Lawyers for the plaintiff

I HEREBY CERTIFY that the above document is a true copy of
the original issued out of / filed in the Court on the _____

day of 16 MAR 2023 A.D. 20____

Dated this _____ day of JUN 08 2023 20____

REBECCA DUONG
REGISTRY OFFICER
AGENT DU GREFFE