IN THE UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF PENNSYLVANIA

AMERANTH, INC. Plaintiff, v. DOORDASH, INC. Defendant.	) Civil Action No. 2:22-cv-1776-WSH) **FIRST AMENDED COMPLAINT FOR PATENT INFRINGEMENT**) **JURY TRIAL DEMANDED**

For its First Amended Complaint, Ameranth, Inc. ("Ameranth"), by and through the undersigned counsel, alleges as follows:

THE PARTIES

1. Ameranth is a Delaware corporation having a principal place of business at 5820 Oberlin Drive, Suite 202, San Diego, California 92121.

2. Defendant DoorDash, Inc. ("Defendant") is a Delaware company, with, upon information and belief, a brick-and-mortar store, called DashMart, located at 3232 Penn Avenue, Pittsburgh, Pennsylvania 15201, which has been open since 2021.

JURISDICTION AND VENUE

3. This action arises under the Patent Act, 35 U.S.C. § 1 *et seq.*

4. Subject matter jurisdiction is proper in this Court under 28 U.S.C. §§ 1331 and 1338.

5. Upon information and belief, Defendant conducts substantial business in this forum, directly and/or through intermediaries, including: (i) at least a portion of the infringements alleged herein; and (ii) regularly doing or soliciting business, engaging in other persistent courses of conduct and/or deriving substantial revenue from goods and services provided to individuals in this district and otherwise directs infringing activities to this District in connection with its

products and services . Defendant's staff operating at and from their DashMart store in Pittsburgh use products and services that are accused of infringement herein. The same is true of the hundreds of Defendant's Delivery Driver Dashers operating within this district .

6. The same accused products and services are also integrated with, upon information and belief, more than seven hundred other restaurants/stores operating within this district, *see* Food Delivery in Pittsburgh (available at https://www.doordash.com/food-delivery/pittsburgh-pa-restaurants/ (last accessed May 1, 2023), and with tens of thousands of Pittsburgh area consumers within this district, using Defendant's mobile application and supported by a Pittsburgh, Pennsylvania-based engineering team, that is focused on activities directly related and contributing to the infringement allegations herein: Defendant is "focused on core platform technologies that drive our delivery logistics platform and solve some of our team's largest distributed systems challenges." Brian Bailey, "Pioneering DoorDash's Platform Evolution in Pittsburgh," Oct. 21, 2021 (available at https://doordash.engineering/2021/10/21/pioneering-doordashs-platform-evolution-in-pittsburgh/ (last accessed Apr. 2, 2023)); *see also* "DoorDash to make regional debut with DashMart convenience concept on Penn Avenue in Lawrenceville," Sept. 22, 2021 (available at https://www.wpxi.com/news/business/doordash-make-regional-debut-with-dashmart-convenience-concept-penn-avenue-lawrenceville/RGRKTXADZVAKZB6GYOV44WO6NA/ (last accessed Apr. 3, 2023)).

7. Defendant's July 2022 job posting for a DashMart Site Manager in Pittsburgh, Pennsylvania confirmed the use and operation in this district of the products and services accused of infringement herein:

Site Manager

POSTED ON 6/28/2022 CLOSED ON 7/18/2022

DoorDash, Inc. Pittsburgh, PA Full Time

Job Posting for **Site Manager** at **DoorDash, Inc.**

About the Team

We're looking for a people-focused leader and experienced warehouse specialist to lead one of our DashMart facilities. DashMart is a new convenience and grocery store from DoorDash, focused on delivering household essentials, favorite snacks, and light groceries right to our customers' doorsteps on-demand.

About the Role

In this role, you'll manage a 5-10k sq ft distribution center, the local warehouse operating team, and be responsible for ensuring we maintain high quality for our customers.

You're excited about this opportunity because you will...

Lead: Recruit, lead, coach & retain a high-performing team of Shift Leads (3) and Operations Associates (6). Set your team up for success to work safely and productively. As a leader, you will be responsible for building a strong, positive culture and will be accountable for driving strong employee satisfaction scores. You'll partner with your Shift Leads to effectively delegate daily tasks and ensure high performance from your team.
Own: You will own the day-to-day operations of one of our DashMart warehouses, ensuring the site processes run smoothly, efficiently and safely. You'll own scheduling and be responsible for managing a labor budget. You will be responsible for ensuring your warehouse meets site-level metric goals.
Delight customers: Lead your team in providing our customers with the best possible experience on each and every order. You will be responsible for maintaining key quality metrics including order accuracy and fulfillment speed. Work cross-functionally with central teams including our inventory and training teams to provide your team with the tools and resources to achieve this goal.
Strategize: Use data to identify pain-points or areas of inefficiency within our warehouse and current processes. Design, build and execute process improvement projects to improve our warehouse operations, quality metrics, and the employee experience.

https://www.salary.com/job/doordash-inc/site-manager/a9606a76-32ac-4adc-9e25-311d72e1198e (last accessed Apr. 3, 2023).

8. While Defendant announced on January 20, 2023, approximately one-month after the filing of the initial Complaint, the cancellation of its planned physical engineering office within this district, the announcement itself admits to infringing activity within this district, including its engineering talent hub in the Pittsburgh area, and admits to its continuing to hire engineers within this district, which it has continued to do and still is doing today:

> "We have chosen not to open an office in Pittsburgh at this time," she said. "That said, we do have engineers in Pittsburgh, and are enthusiastic about talent there."
>
> She further emphasized how "DoorDash's flexible work model allows employees to work from wherever is most convenient to them and has enabled us to grow our engineering talent across the U.S., including in Pittsburgh."
>
> The company expects to continue to grow its staff in western Pennsylvania, she added: "DoorDash remains enthusiastic about our plans to grow our talent hub in the Pittsburgh area."
>
> DoorDash's "hub" will likely be figurative now, of course, as the company continues to seek to recruit Pittsburgh engineering talent.

Tim Schooley, "DoorDash opts against establishing Pittsburgh office, instead staying remote with local engineering team," Jan. 20, 2023 (available at https://www.bizjournals.com/pittsburgh/news/2023/01/20/doordash-engineering-office-pittsburgh.html?utm_campaign=manual&utm_medium=trueAnthem&utm_source=linkedin (last accessed Apr. 3, 2023)).

9. Defendant also has an "Engineering Leader" in Pittsburgh, Pennsylvania. https://www.linkedin.com/in/mranney (last accessed Apr. 3, 2023), and the Pittsburgh engineering team includes numerous data scientists, software programmers, operations research scientists, partner integrators, computer scientists and more working on all or almost all aspects of the products and services accused herein of infringing the '130 patent. He and, upon information and belief, other Defendant employees located in this district are working on the products and services accused of infringement herein. Further, their technical work within this district clearly provides them access to all of the relevant Defendant engineering evidence/information.

10. Further, the Pittsburgh engineering team is a centralized platform team that is

contributing to "all aspects of DoorDash's products and internal services":

Pittsburgh Engineering Teams

Platform Evolution is a newly formed engineering team and will be the first (of many) teams to be located in Pittsburgh. As previous blog posts have discussed, the DoorDash engineering team has been focused on transitioning away from a monolithic codebase to a microservices architecture. This new team represents the next phase in this transformation. In addition to having our product teams focus on the migration, we'll also be staffing a fully dedicated team. Platform Evolution will be responsible for building the core platform components to enable a seamless migration, while also ensuring we are able to increase capacity and expand to new global markets. As a centralized platform team, our software engineers will have the opportunity to contribute to all aspects of DoorDash's products and internal services.

Brian Bailey, "Pioneering DoorDash's Platform Evolution in Pittsburgh," Oct. 21, 2021 (available at https://doordash.engineering/2021/10/21/pioneering-doordashs-platform-evolution-in-pittsburgh/ (last accessed Apr. 3, 2023)).

11. As is stated above, in addition to the engineering team in Pittsburgh, which is focused on the platform/framework technology of the '130 patent claims as explained and admitted below, Defendant also employs hundreds of delivery Dashers, throughout the district, all of which use technology that is accused of infringement herein and which is implemented within DashMart in Pittsburgh, as well as, upon information and belief, more than seven hundred stores and restaurants operating within this district and all of which are integrated with tens of thousands of consumers, each equipped with Defendant's mobile application, and all of which are operating together and within this district.

12. Venue is thus proper in this district pursuant to the second clause of 28 U.S.C. § 1400(b) which states venue is appropriate "where the defendant has committed acts of infringement and has a regular place of business."

THE PATENT-IN-SUIT

13. On March 15, 2022, U.S. Patent No. 11,276,130 (the "'130 patent"), entitled "Information Management and Synchronous Communications System," was duly and lawfully issued by the U.S. Patent and Trademark Office. A true and correct copy of the '130 patent is attached hereto as Exhibit A.

14. Ameranth is the assignee and owner of the right, title and interest in and to the '130 patent, including the right to assert all causes of action arising under said patent and the right to any remedies for infringement of it.

15. The claims of the '130 patent are as follows:

> 1.[preamble] An intelligent web server computer with multi-modes of contact, multi-communications protocols, multi-user and parallel operational capabilities for use in completing remotely initiated hospitality food/drink delivery or pick up ordering tasks comprising;
>
> [a] at least one said web server computer with web server software;
>
> [b] at least one hospitality food/drink ordering software application for delivery or pick up orders integrated with the at least one said web server computer;
>
> [c] an advanced master database comprising data and parameters of the at least one hospitality food/drink ordering software application integrated with the at least one said web server computer and with a usable menu file structure dictated prior to task execution and is accessible via its own database API and with one or more predefined formats stored within it and which intelligently learns, updates and stores multiple communication modes of contact and related operational parameters for hospitality entities and for remote hospitality users along with their prior attributes or preferences, if any and then intelligently applies them;
>
> [d] Middleware/Framework Communications Control Software (MFCCS) which enables via its centralized system layer architecture the at least one said web server computer to communicate with two or more remote wireless handheld computers and for multiple modes of contact, multiple communications protocol functionality, integrated with the master database and with the at least one hospitality food/drink ordering software application;
>
> [e] at least one external software API, which enables the full integration of the at least one hospitality food/drink ordering software application and the MFCCS with one or more non hospitality applications via the internet;

> [f] the external software API integrating with and leveraging the advanced master database to enable the importing of food/drink menus including required and non-required modifiers which are then automatically reflected throughout the master menu tree file structure, improving efficiency while eliminating the necessity of continually querying or checking every tree branch in the master menu tree file structure when responding to remote user requested tasks and/or other inputs;
>
> [g] wherein the at least one said web server computer is integrated with the MFCCS, the hospitality food/drink ordering software and is programmed with instructions enabled to intelligently choose and apply multiple and different modes of contact and/or different communications protocols, if applicable with the said hospitality entities and/or said remote users associated with the user requested hospitality food/drink delivery or pick up ordering application tasks and is enabled to support the completion of those tasks.
>
> 2. The intelligent web server of claim 1 further enabled to assign and apply sub-modifiers to the required or non required modifiers.
>
> 3. The intelligent web server of claim 1, further enabled to include meal preparation times in the food/drink ordering.

Exhibit A at 21:38-22:48.

16. A person of ordinary skill in the art ("POSITA") at the time of the invention of the '130 patent would be:

> someone with a bachelor's degree in computer science, industrial engineering, operations research, or related field, and either (1) two or more years of relevant industry experience for hospitality applications and/or (2) an advanced degree in computer science, industrial engineering, operations research, or related field. This description is approximate, and more work experience could compensate for less education or more education could compensate for less work experience.

Exhibit F at ¶ 18.

17. "The purpose of claim construction is to give claim terms the meaning understood by a person of ordinary skill in the art at the time of the invention." *Mass. Inst. of Tech. v. Shire Pharms., Inc.*, 839 F.3d 1111, 1118 (Fed. Cir. 2016).

18. Ameranth hereby proposes and officially adopts the below claim constructions, all of which are viewed through the eyes of a POSITA, defined above:

Claim Terms/Phrase	*Claim Nos.*	*Proposed Construction with Supporting Evidence*
"web server computer"	1[preamble]	any machine capable of running or executing server software that uses HTTP to serve up HTML documents and any associated files and scripts when requested by a client, such as a Web browser Evidence: Microsoft Computer Dictionary (5th ed. 2002) at p. 260); Exhibit F at ¶ 66; https://www.pcmag.com/encyclopedia/term/web-server (last accessed May 1, 2023); '130 patent at 17:37-39; Exhibit E at pp. 9-12.
"said web server computer"	1[a]-[d],[g]	an intelligent web server computer with multi-modes of contact, multi-communications protocols, multi-user and parallel operational capabilities Evidence: Preamble of claim 1; Exhibit E at pp. 9-12. This is an ordered combination defined and limited by the anteceding, first element of the claim preamble and with all terms non-conventionally arranged and integrated to improve the web server computer.
"multi"	1 [preamble, c, d, g]	two or more
"modes of contact"	1[preamble], [c], [d], [g]	communication options including telephone calls, web pages, emails, pages, facsimiles, instant messages, and text messages Evidence: '130 patent at Figure 10, 14:41-52,15:2-9, 15:49-52, 16:25-33, 17:35-48, 17:56-59; Exhibit E at pp. 9-12.
"parallel operational capabilities"	1[preamble]	parallel processing of related operational parameters to improve the performance of the web server Evidence: Microsoft Computer Dictionary (5th ed. 2002) at p. 391; '130 patent at 16:5-18, 17:35-48, 17:57-18:3, 18:29-32; Exhibit E at p. 9.

"a usable menu file structure dictated prior to task execution"	1[c]	a menu file structure that improves the efficiency of the advanced master database Evidence: Claim 1 itself; '130 patent at Fig. 10, 21:22-27; Exhibit E at p. 10.
"related operational parameters"	1[c]	a set of operational criteria or rules related to the modes of contact and associated with the hospitality entities and for remote hospitality users, such as times of day, alternate modes, multi-thread communications, restaurant inventory/menu options that are set aside for one or more particular purposes, location, type and/or price range Evidence: '130 patent at 13:59-62, 13:65-14:5, 15:49-52, 17:35-48, 15:62-66, 16:51-17-12, 18:11-18, 29-32; Exhibit E at p. 2, 10.
"along with their prior attributes or preferences"	1[c]	a set of corresponding operational criteria such as their order history, one or more orders of restaurants as to user ranking, and/or most desirable, in accordance with previously established (e.g. stored) user unique lists, via database lookups, with matches to search criteria, with only one, multiple or all of selected entities/preferences Evidence: '130 patent 14:8-25, 15:62-66, 16:51-17-12, 18:11-18; Exhibit E at p. 10.

AMERANTH BACKGROUND

19. Inventor and current President Keith McNally founded Ameranth in 1996 to develop and provide innovative wireless, real-time communications technology and associated computer software and hardware systems that would enhance the efficiency of hospitality-focused enterprises such as hotels, restaurants, entertainment and event ticketing venues and similar establishments. Ameranth successfully developed and deployed its products/systems to many thousands of locations, including several of the world's largest restaurant and hotel chains, won more than ten important technology awards for its technology and has licensed its patents to more

than 47 different companies.

20. Ameranth's inventions and development of these systems has already resulted in the issuance by the USPTO of eight patents: 6,384,850 (the "'850 patent) (issued 2002), 6,871,325 (the "'325 patent") (issued 2005), 6,982,733 (the "'733 patent") (issued 2006), 8,146,077 (the "'077 patent") (issued 2012), 9,009,060 (the "'060 patent) (issued 2015), 9,747,651 (the "'651 patent") (issued 2017), 10,970, 797 (the "'797 patent) (issued 2021) and the '130 patent (issued 2022). Further, three additional patents are pending in this patent family, with these additional patents expected to issue later in 2023 and/or in 2024.

21. The 2022-issued '130 patent is directed to different technology and solutions than the earlier patents and it is the lead patent of Ameranth's new parallel-operational-capable, web server network and distributed computing-based patent family, based upon the new and expanded teachings disclosed in the July 26, 2005 patent application, which is a continuation-in-part of the '077 patent. The claims of the '130 patent are not directed to formatting and synchronizing a graphical user interface (GUI) with wireless handheld computers, as is further explained below.

22. After the issuance of *Alice Corp. Pty. Ltd. v. CLS Bank Int'l*, 134 S. Ct. 2347 (2014), regarding patent-eligibility (35 U.S.C. § 101), many claims of the '850, '325, '733, '077 and '651 patents were found ineligible by the Patent Trial and Appeal Board or district courts, and then affirmed to be so by the Federal Circuit in three different rulings, *Apple, Inc. v. Ameranth, Inc.*, 842 F.3d 1229 (2016), *Ameranth, Inc. v. Domino's Pizza, LLC*, 792 Fed. Appx. 780, 788 (2019); and *Ameranth, Inc. v. Olo Inc.*, No. 2021-1211, 2021 WL 4699180 (Fed. Cir. Oct. 8, 2021).

23. *Alice Corp. Pty. Ltd. v. CLS Bank Int'l*, 134 S. Ct. 2347 (2014), has been widely acknowledged to be confusing and difficult to apply, including by twelve judges of the Federal Circuit and the U.S. Solicitor General.

24. On April 5, 2023, in response to U.S. Supreme Court orders inviting the Solicitor General to express the views of the United States in two cases involving 35 U.S.C. § 101, the U.S. Solicitor General in conjunction with the Solicitor at the U.S. Patent and Trademark Office confirmed the confusion surrounding patent-eligibility and the need for the law to be clarified. Brief for the United States as Amicus Curiae, *Interactive Wearables, LLC v. Polar Electro Oy*, No. 21-1281 (filed Apr. 5, 2023); Brief for the United States as Amicus Curiae, *Tropp v. Travel Sentry, Inc.*, No. 22-22 (filed Apr. 5, 2023).

25. All claims of the '130 patent are materially different from those prior invalidated claims. While the invalidated claims were directed to graphical user interfaces and/or synchronizing systems, the claims of the '130 patent are clearly directed to the improved web server computer. The '130 patent's claims are explicitly directed to improving the claimed, backend web server computer, with multiple new and non-conventional inventive concepts, and with the technical improvements and the "how" specifically included within the claims – and supported by and resulting from the extensive new inventive teachings and new material disclosed in the July 26, 2005 continuation-in-art application and Figure 10. The issuance of the '130 patent claims is the first of Ameranth's new parallel-operational-capable, web server computer-based network and master distributed database/computing-based patent family.

TECHNOLOGY BACKGROUND

a. Technological Problems in 2005

26. Ameranth incorporates in its entirety the Declaration of Keith R. McNally Regarding: U.S. Patent: 11,276,130, attached hereto as Exhibit B, into the pleadings here.

27. As explained by Mr. McNally, the inventor and a person of ordinary skill in the art, in early 2005, Ameranth was presented with two new, strategic opportunities, one from Holiday

Inn Hotels of Intercontinental Hotels Group (IHG) (the world's largest hotel company) and the other from Zagat Survey LLC (the world's largest restaurant rating/ranking company). These enterprise level opportunities presented new and unprecedented technological challenges to Ameranth in 2005. Ameranth recognized they needed that which was non-conventional and which did not exist at the time—a full, intelligent, enterprise level, web server computer-based back end solution/service with parallel operational capabilities and multi modes of contact. That these technology improvements were new, nonconventional, and did not exist prior to 2005 is evidenced and confirmed by the sworn statement of Mr. McNally and the fact that IHG and Zagat management sought Ameranth to develop what clearly did not then exist in 2005; had the technology existed, these industry giants would have simply used it, yet they retained Ameranth to develop it. .

28. Ameranth's eHost platform deployed for Holiday Inn incorporated key aspects of the inventions claimed in the '130 patent. McNally Decl. at ¶¶ 14-17.

29. Several of the features claimed in the '130 patent were also incorporated into Ameranth's Magellan Restaurant Reservations System in November 2005. McNally Decl. at ¶¶ 18-19.

30. Mr. McNally invented a new, unique and ordered combination of technologies that improved web server computers, including an internet-based web server/cloud-based datacenter/hosted system with distributed computing, and the new and non-conventional multi-modes of contact and parallel operational capabilities' functionality, and its layered architecture and with distributed but linked databases, yet operating together as a master database and which learns, was intelligent and chooses/acts/decides intelligently. This ordered-combination-based invention improving web server computers is what is claimed in the '130 patent. As is confirmed

in his declaration, the '130 patent's new multi-modes of contact to/with either or both wireless handheld equipped consumers/customers and with the restaurants/hotels, solves technological problems by providing resiliency, flexibility and reliability, and its internal and external API's accommodate and integrate with current and future hospitality and non-hospitality external systems.

31. With national scale, hosted, web server computer-based deployments and the requirements for extreme reliability, the 24x7x365 availability of the system across thousands of locations, and enabled for multiple and linked web server data centers to prevent the system from going down due to a power outage or other such failure mode, consequently, the distributed computing and claimed master database while acting intelligently approaches with the layered Middleware/Framework Communications Control Software (MFCCS) architecture and framework as is shown in Figure 10 of the '130 patent and with seamless interconnectivity was essential.

32. Because speed/time to market was also a high priority, Ameranth was also challenged to develop interim solutions if required—while deferring, when/if appropriate to later versions—any integrations or special features not essential for the initial, primary operational features/objectives. This required planning and integrating the layered architecture shown in Figure 10 of the '130 patent and external API into the MFCCS system framework/design to provide for continual growth and considerations into the overall system framework/architecture. At the time of the inventions claimed in the '130 patent, no such integrated system or system of systems existed.

33. The claimed inventions of the '130 patent and their new technical and intelligent solutions preceded what later and more currently have become known as e.g. machine learning

and/or a microservices-based architectural approach. McNally Decl. at ¶¶ 25, 27.

34. After conceiving the advances, innovations and new, web served based architecture that powered and enabled these new systemic solutions in late 2004 into early 2005, Mr. McNally filed a continuation-in-part patent application on July 26, 2005, providing extensive new teachings/guidance to persons of skill in the art to expand upon the earlier teachings/disclosures of his original patent specification, filed on September 21, 1999. The teachings were and are targeted to teach new advancements on the back end and architectural side of the systems. This continuation-in-part application is the parent to the '130 patent.

35. Mr. McNally added text about some additional functionality at the end of the prior Abstract, emphasizing the importance of new enhancements supporting the multiple modes of contact enhancements, he modified the primary prior systemic architecture Figure 9 into Figure 10, and he added a short addition to the prior specification (*see* '130 patent at 13:2-5), but then focused on the extensive new 2005 systemic and architectural innovations disclosed in the '130 patent at col. 13, l. 31 to col, 18, l. 57.

36. The advantages of and extensive new teaching/explaining in columns 13-18 of the '130 patent specification via non-software language specific examples evidence the multiple modes of contact advancement/concept, because a person of ordinary skill in the art can follow the example based specification teachings and then at the appropriate time and in the appropriate programming language as of that date or any date program/code this functionality in the software language then preferred and used. This enhancement of the multi-modes of contact improved the web server functionality as part of the overall framework design and was/is essential to achieving the system reliability and autonomous enterprise level functionality, as was required for both the eHost and Magellan systems. Without such functionality combined with the learning/intelligence

of the system, the first instance of a communication failing and/or being unanswered would immediately end that communication flow and prevent that hospitality task from being timely completed, thus degrading the system and its reliability and reducing merchant/customer satisfaction. Further, once the system learns that e.g. a particular contact mode is ineffective, it can then avoid even trying that and thus eliminate that wasted computer resource and increase the system's efficiency. This new learning and intelligence functionality and its application as in the '130 patent's claims—e.g. the "intelligently learns, updates and stores" and "intelligently choose and apply" terms of the '130 patent claims— was new, non-conventional and improved the efficiency of prior web servers and the overall connected network by eliminating computer resources previously wasted on actions (that were not required toward the claimed requirement of completing the hospitality tasks as in the '130 claims) and by eliminating these wasted actions, less computing resources were required; thus improving CPU processing and efficiency. Of special importance to the multiple modes of contact was the '130 patent's claimed invention, in late 2004, that integrating text and chat into actual deployed/operational systems would offer technical and operational benefits. This was a new and important innovation since at this time, texting (while loved by teenagers) was scorned by most adults, but its limited use was a stand-alone function, not actually integrated directly into an operational system and the execution and completion of hospitality tasks. Mr. McNally was the first to recognize this and actually teach the ability to integrate texting/chatting functionality into deployed and operational hospitality task based systems and make them, optionally a part of the completion of those tasks when/where appropriate, as evidenced by the disclosure and claims of the '130 patent. McNally Decl. at ¶¶ 25, 27.

37. As Mr. McNally further and first recognized, and which is specifically taught in the continuation-in-part additions of and claimed in the '130 patent to achieve and teach the overall

systemic enhancements to prior web server computer-based systems while providing a totally integrated, hosted, ordered combination systemic solution and one capable of interfacing with wireless handheld computers and via multiple modes of contact, along with the framework and layered approach of Figure 10 of the '130 patent, the claims and teachings of the '130 patent guide/teach a person of skill in the art to pursue/architect a distributed computing, distributed-but linked database system, which mirrors and teaches the new systemic framework approach, as a new and ordered combination which now, many years later is often now deemed as a microservices-based approach. '130 patent at 14:55-60, 16:61-66, 18:18-24, 18:29-32, Fig. 10.

38. As explained in Mr. McNally's declaration:

> 23) In order to best teach/explain these new innovations and enhancements to prior web server based systems to persons of skill in the art, such as myself, I decided to adopt and apply a 'pseudo code', and '**by way of example'** teaching approach – relying on a 'three way' example baseline/approach, of the interactivity between the 'computer', i.e. the improved back office/web servers and with the 'the users', 'the entities' and their bi-directionally 'back and forth' actions/communications, describing and teaching the new enhancements via **45 examples** and which was/is clearly explained to a POSA below.
>
> I chose a reservations embodiment, to illustrate the new innovations, however the new inventive concepts apply to all hospitality embodiments.
>
> 'Such functionality may be implemented in a number of ways. So as to illustrate by way of example, employing such functionality in the making of appointments and/or reservations will be discussed.' Col 13, lns 41-43)
>
> This 'examples' teaching approach, (including the pseudo code instructions where appropriate) was the best teaching approach of the how, since with ever changing software languages, and the likelihood that multiple/different languages would be used, on/with different elements of the overall integrated framework/system and even with varying databases types and interfaces, this was the optimal approach. Providing source code in a single/particular programming language that would likely soon be obsoleted, would not have stood the test of time, nor offered a viable technical teaching, whereas providing pseudo code guidance and 'examples' which are independent of a special/unique software language optimized the teachings for a person of skill in the art, and ensured broad teaching applicability.

McNally Decl. at ¶ 23.

39. The advantages of the pseudo code approach are further and independently confirmed in Exhibit 7 to the McNally Decl.:

> Developing computer programs, especially ones as large and complex as operating systems or corporate data systems, is a difficult job. There are many opportunities for developers to make mistakes, create unintentional complexity, or simply lose their way. Pseudocode is an incredibly useful tool in the developer's toolbox, helping her avoid many of the pitfalls that plague such a complex undertaking.
>
> Pseudocode is plain text and therefore easy to understand. Because it does not require the rigid structures and syntax of a programming language, it does not require a special editing environment. Pseudocode can also be understood by nonprogrammers, allowing developers to bring experts with no computer knowledge into the creative loop, benefiting from their input and allowing the developer to create software that is even more useful for their clients.
>
> Because pseudocode is not itself an actual programming language, it can be used with almost any available programming language. This is a great boon to developers, who often have the ability to use a variety of languages.

40. A distributed database is a database that is distributed across multiple computers and devices in a network. Such an architecture can provide tremendous benefits for users. As would be well-known to a POSITA prior to 2005 and prior to the new and non-conventional '130 patent claimed inventions, however, there were significant challenges for system designers to be able to successfully implement such a distributed database. For example, a major challenge is that of achieving the design goals of consistency, availability, and partition-tolerance:

- **Consistency**. Consistency means that all devices on the network see the same data at the same time. For this to happen, whenever data is written to one node, it must be immediately forwarded and replicated to all the other nodes in the system before the write is deemed successful.
- **Availability**. Availability means that that any device making a request for data gets a response, even if one or more other nodes are down. Another way to state this is that all working nodes in the distributed system return a valid response for any request.

- **Partition-tolerance**. A partition is a communications break within a distributed system, such as a delayed or disconnected link between nodes, that disconnects one or more nodes from other nodes in the network. Partition-tolerance means that a cluster of nodes must continue to work despite any communication breakdowns between nodes in the system.

b. <u>'130 Patent's Claimed Inventions Solved These Technological Problems With Technical Solutions And Improvements</u>

41. These 2005 operational challenges required an entirely new systemic technical approach/solution including parallel operational capabilities and one which operated as an ordered combination of technical advancements to create an intelligent and integrated internet enabled system that met all of these requirements and more, while designed for growth/expansion as well. As claimed and disclosed in the '130 patent, a MFCCS-based layered framework/architecture upon which the pieces of the system would be integrated together was needed.

42. The inventions claimed in the '130 patent are vastly different from the claimed inventions in Ameranth's earliest patents. Unlike the claims in Ameranth's earliest patents, the claims of the '130 patent provided improved technical solutions for web server computers and distributed database systems with parallel operational capabilities.

43. On their face, a POSITA would understand that the claims of the '130 patent are vastly different and directed to an entirely different concept and technological problem from the earlier patent claims invalidated in *Apple*, *Domino's*, and *Olo*. Exhibit C shows a representative claim from each of those cases and claim 1 of the '130 patent. Unlike the invalidated claims, the claims in the '130 patent are for and improve web server computers and include specific details for implementing and improving the web server computers, which result in a technological improvement to a network of distributed computing systems, including parallel operational

capability, because the claimed web server is able to achieve improvements in consistency, availability, and partition tolerance.

44. Claim 1 of the '130 patent includes a preamble that is limiting and that defines the "said web server computer" to which it is directed as "an intelligent web server, with multi-modes of contact, multi-communications protocols, multi-user and parallel operational capabilities."

45. Claim 1 of the '130 patent recites an ordered combination and includes each of the following elements:

- a web server with multi-modes of contact, multi-communications protocols, multi-user and parallel operational capabilities;
- at least one hospitality food/drink ordering software application
- an advanced master database, with its own database API; and its own learning and intelligence capabilities
- Middleware/Framework Communications Control Software (MFCCS), which enables at least one web server to communicate with at least two remote handheld computers and for multiple modes of contact and multiple communications protocols; and
- at least one external software API, which integrates the hospitality software application and the MFCCS with the Internet, at least one external, non hospitality application while importing POS databases into and leveraging the advanced master database including the automatic reflection into the menu tree file structure.

This combination of the above-listed elements in the '130 patent overcomes the challenge of simultaneously achieving consistency, availability, and partition-tolerance for a distributed database by changing the preconditions inherent in the environment for which these goals were typically articulated. For instance, rather than accepting the underlying assumption that there is only a single type of network and network protocol for connecting the devices in a distributed database design, the '130 patent introduces an approach utilizing multi-modes of contact, multi-communication protocols, and parallel operational capabilities for its system, and combines this with the above-listed elements. Accordingly, the '130 patent claims an invention that can effectively achieve consistency and availability, as well as partition-tolerance, for example, such

that when a communication link is down in one communication modality or protocol, the system can then utilize another communication modality or protocol that is not down. This combination of elements of claim 1 is supported in the specification, e.g., in embodiments disclosed in Fig. 10 at col. 16, ll. 25-40 and col. 18, ll. 58-67 of the '130 patent, for instance, which teach multi-modes of communication (e.g., instant messaging, text messaging, email, web pages, pages, facsimiles, text to voice, voice to text, and/or touch tone recognition, message, mobile app message, ethernet, paging (e.g., 27MHz/318MHz), Wi-Fi (802.11), and web links), multiple communications protocols (e.g., HTTP, 802.11, Paging, Ethernet, and WAN Wireless protocols), and parallel operational capabilities, together with a MFCCS, linked databases, servers, and handheld devices.

46. It cannot be reasonably argued that claim 1 does not claim improvements to the claimed web server computers, when claim 1 of the '130 patent explicitly recites that its new combination of elements provides the functionality of "improving efficiency while eliminating the necessity of continually querying or checking every tree branch in the master menu tree file structure when responding to remote user requested tasks and/or other inputs." This "eliminating the necessity of continually querying or checking" limitation claims a system that simultaneously achieves improved consistency and availability in a distributed database. That is, it achieves consistency, since one node in the system does not need to check or continually check another node in the system to know that its data is consistent with the data of the other node, and, further, the updated modifiers are, as recited in the claim, "automatically reflected throughout the master menu tree file structure." Similarly, this limitation achieves availability, since it implies that there is no need to continually be checking if another node is available or not. Moreover, the claimed invention of the '130 patent provides partition-tolerance through its multi-modes of contact, multi-communications protocols, multi-user and parallel operational capabilities, whereby a partition in

one mode of communication (such as the Internet) can be overcome by communicating over another alternate modality (such as wireless text messaging).

47. The '130 patent discloses how the claimed invention achieves web server improvements in both consistency and availability:

> According to various embodiments of the present invention, messaging (e.g., wireless text messaging and/or wireless instant messaging) and/or text-to-voice functionality may be employed, for instance, in appointment, waitlist, and/or reservation operations. Such functionality might, in various embodiments, involve messaging (e.g., wireless messaging), text-to-voice, and/or two-way interactivity, and/or may involve communication via landline telephones, cellular telephones, and/or wireless devices.

'130 patent at 13:31-40.

48. The claimed multi-modal communication is also taught as being performed in parallel with other operations:

> A computer operating to communicate with the entity as discussed herein might, for example, be dedicated to performing such operations. As another example, such a computer might be one performing other tasks (e.g., acting as a web server). It is noted that, in various embodiments, one or more rules may be followed in communicating with the entity and/or the user.

Id. at 17:35-41. Thus, the above passage expressly ties the consistency and availability achieved in the claimed invention of the '130 patent to its multi-modes of communication, provides partition-tolerance.

49. The '130 patent and its learning/intelligence further discloses the benefits and functionality of its claimed multi-modal communication approach as follows:

> A communications control program monitors and routes all communications to the appropriate devices. It **continuously monitors the wireless network access point and all other devices connected to the network** such as pagers, remote devices, internet Web links and POS software. Any message received is decoded by the software, and then routed to the appropriate device. No user action is needed during operation of the software once the application has been launched.

'130 patent at 10:48-56 (emphasis added).

50. Claim 1 of the '130 patent includes the following limitation:

> the external software API integrating with and leveraging the advanced master database to enable the importing of food/drink menus including required and non-required modifiers which are then **automatically reflected throughout the master menu tree file structure**, improving efficiency while eliminating the necessity of continually querying or checking every tree branch in the master menu tree file structure when responding to remote user requested tasks and/or other inputs;

(emphasis added). This limitation (the "automatic reflection" limitation) recites technological improvements to computers and is not reciting a routine or conventional element. It saves web server CPU cycles and reduces network traffic for updating menu trees and similar tree file structures, as it requires only one insertion or deletion rather than performing insertions or deletions at every node tagged with the same modifier name, which improves the functioning of computers in any context that involves tree file structures where insertions or deletions may involve node tags or node types rather than individual nodes, which is a broad scope of applications. Indeed, the "automatic reflection" limitation in claim 1 itself recites, "improving efficiency while eliminating the necessity of continually querying or checking every tree branch in the master menu tree file structure when responding to remote user requested tasks and/or other inputs."

51. More specifically, the "automatic reflection" limitation recites a "master menu tree file structure," where an update to a single tree-node type modifier is automatically reflected throughout the tree. *See, e.g.*, '130 patent at 9:48-62. That is, the imported modifier is reflected at each node with the same modifier name. Such a scheme is different from single-position methods for updating tree file systems, such as embodied in data structure libraries like JDSL and in tree-structured file systems, such as in Athos, MacOS, and Linux/Unix.

52. The claimed "automatic reflection" of the "modifiers" (and including the additional technical aspects of having to deal with the technical logic flows of either "required" and/or "non

required" claim limitations) and inventive concept of the '130 patent as part of its external API ordered combination provided computer improvements and was not routine or conventional in 2005, This was further confirmed, as stated by the inventor and then confirmed to be correct by the patent examiner in the Notice of Allowance issued at the USPTO:

> The following is an examiner's statement of reasons for allowance:
>
> The Examiner is in agreement with arguments submitted by the Applicant on 11/16/21. Applicant's arguments, in further view of the Examiner's amendments above, render the claims novel and unobvious.
>
> Therefore, the Examiner is allowing the case.

Exhibit D.

53. The "arguments submitted by the Applicant on 11/16/21" to which the Examiner referred to in paragraph 53 are attached hereto at Exhibit E, and they included the following text confirming that the new external API element was an ordered combination that combined aspects of the external API element with the master database, and that the claimed ordered combination was new and non-conventional as of 2005:

> Independent claim:
>
> 1.) Remotely initiated and then intelligently applies them
> 2.) For remote hospitality users
> 3.) Middleware/Framework Communications Control Software (MFCCS)
> 4.) Which integrates with and leverages the advanced master database*
> 5.) To enable the importing*
> 6.) Including required and non-required modifiers*
> 7.) Which are automatically reflected throughout the master menu file structure*
> 8.) While eliminating the necessity of continually querying or checking every tree branch in the master menu tree file structure*
> 9.) Enabled to support the completion of those tasks
>
> *(Further, these added limitations reflect their ordered combination, in an entirely new, added claim element, the how of which is taught to a PHOSITA only via the applicant's specification/figures, and as integrated into the newly amended independent claim as a whole.)

54. Claim 1 of the '130 patent also has the following limitation and ordered combination which provides an additional, nonconventional inventive concept:

> **Middleware/Framework Communications Control Software (MFCCS) which enables via its centralized system layer architecture** the at least one said web server computer to communicate with two or more remote wireless handheld computers and for multiple modes of contact, multiple communications protocol functionality, integrated with the master database and with the **at least one hospitality food/drink ordering software application**;

This limitation (the "middleware/framework" limitation), including the centralized system layer architecture, recites further technological improvements to computers, improves the web server computer, and is not reciting a routine or conventional element. The claimed middleware/framework architecture for a food/drink ordering distributed system for the hospitality industry would speed up and simplify the development, testing, deployment, and performance of the hospitality applications that are built on top of it. By providing a centralized system layer architecture, multi-modes of contact and multiple communications protocol functionality, which are integrated with the master database and with the at least one hospitality food/drink ordering software application, the "middleware/framework" limitation recites technological improvements to web server computers for food/drink ordering applications in the hospitality industry.

55. The MFCCS, inclusive of the added "framework" term and its centralized layered architecture, of Figure 10 is a specific technical solution and inventive concept that improves the prior web server computers and is specifically claimed and incorporated into the ‘130 patent's claims as evidenced in the prosecution history. More specifically, through the claim amendments and the specific inventor statement to the examiner on November 16, 2021 as is shown in Exhibit E including the overcoming and distinguishing of the examiner cited prior art, as is conclusively confirmed below:

> Turcan does not teach the previously claimed CCSF (renamed now as the MFCCS to fully align with the disclosure in the center of Figure 10) and its layered approach. There is no discussion/teaching of the layered design architecture in Turcan. Turcan also does not teach/disclose the intelligent learning capability of the claims.

Exhibit E at p. 6.

56. Further still, the importance of the centralized layered architecture from the MFCCS framework/platform and which resulted in the eHost system developed by Ameranth to overcome the limitations of web server computers in 2005 was confirmed by Intercontinental Hotels Group: "It's this platform that allows eHost to function as a single seamless system, despite actually being made up of thousands of individual, customized web portals (one per hotel location)." McNally Decl. at Ex. B.

57. Middleware will impact many parts of an application system built atop it and can be a make-or-break factor for the success of such systems, so great care should be undertaken in their design. Developing a middleware/framework therefore requires the development of a comprehensive design/framework, which provides the layer architecture for the middleware/framework and describes its functionality, and the '130 patent provides such a design for a non-routine and unconventional middleware/framework for the hospitality industry.

58. As stated above, the teachings of Figure 10 were non-conventional, and an inventive concept specifically incorporated into the '130 patent claims, and with the "how" shown to a POSITA in the claims themselves and via the figure/architecture itself, and via the inventor having specifically distinguished prior art based upon it during prosecution on November 21, 2021. *See* Exhibit E at pp. 9-11 (Response to Office Action).

59. Figure 10 and accompanying disclosures in the specification of the '130 patent disclose a system diagram, framework and design description for the claimed middleware/framework for distributed food/drink ordering applications in the hospitality industry. *See, e.g.*, the '130 patent at Fig. 10, 3:52-61, 14:40-60, 15:25-41, 15:42-46, 16:41-60, 16:61-17:4, 17:5-16, 18:19-32, 18:52-57. These disclosures describe multiple communication modes, multiple communications protocols and distributed computing components (including a server and multiple clients). These disclosures are new inventive concepts and are for a non-routine and

unconventional middleware/framework for distributed food/drink ordering applications in the hospitality industry.

c. A Person of Ordinary Skill in the Art, Dr. Goodrich, Recognized Technological Improvements of the '130 Patent's Claimed Inventions and Confirmed Their Non-Conventionality in 2005

60. Ameranth incorporates in its entirety the Declaration of Michael T. Goodrich, Ph.D. Regarding U.S. Patent No. 11,276,130 ("Goodrich Decl.), attached hereto as Exhibit F, into the pleadings here.

61. The "web server" of claim 1 of the '130 patent, and as it is defined in the preamble of the claim, was non-conventional in 2005, and is improved and specialized to involve multi-modes of contact, multi-communications protocols, multi-user, and parallel operational capabilities. Goodrich Decl. at ¶¶ 66-67.

62. As confirmed by Dr. Goodrich, using the external software API integrating and leveraging the advanced master database of the claimed invention of the '130 patent, CPU cycles and network traffic are decreased, which improves the functioning of the web server. Goodrich Decl. at ¶¶ 42-48.

63. As confirmed by Dr. Goodrich,

> a POSITA would also find ample support for the claimed web server being "[a]n intelligent web server computer" integrated with "an advanced master database … which intelligently learns, updates, and stores multiple communication modes of contact and related operational parameters for hospitality entities and for remote hospitality users along with their prior attributes or preferences, if any and then intelligently applies them," as well as at least one said web server being "programmed with instructions enabled to intelligently choose and apply multiple and different modes of contact and/or different communication protocols.

Goodrich Decl. at ¶ 36.

64. "[A] POSITA would understand that these [i.e., the following 'non-routine and unconventional combination of' claimed] components work together as disclosed in the

specification of the '130 Patent":

> A POSITA would understand that claim 1 of the ’130 recites a non-routine and unconventional combination of the following elements:
>
> - a web server with multi-modes of contact, multi-communications protocols, multi-user and parallel operational capabilities;
> - at least one hospitality food/drink ordering software application
> - an advanced master database, with its own database API;
> - Middleware/Framework Communications Control Software (MFCCS), which enables at least one web server to communicate with at least two remote handheld computers and for multiple modes of contact and multiple communications protocols; and
> - at least one external software API, which integrates the hospitality software application and the MFCCS with the Internet and leverages the advanced master database to support automatic reflection in a tree file structure (as I describe above).

Id. at ¶¶ 55-56.

65. A person of ordinary skill in the art would understand this "eliminating the necessity of continually querying or checking" limitation of claim 1 of the '130 patent to be claiming that its system effectively achieves consistency and availability in a distributed database. That is, it effectively achieves consistency, since one node in the system does not need to check or continually check another node in the system to know that its data is consistent with the data of the other node, and, further, the updated modifiers are, as recited in the claim, "automatically reflected throughout the master menu tree file structure." Similarly, this limitation effectively achieves availability, since it implies that there is no need to continually be checking if another node is available or not. Moreover, a person of ordinary skill in the art would understand that the invention of the '130 patent effectively provides partition-tolerance through its multi-modes of contact, multi-communications protocols, multi-user and parallel operational capabilities, whereby

a partition in one mode of communication (such as the Internet) can be overcome by communicating over another modality (such as text messaging). *See* Goodrich Decl. at ¶¶ 55-65.

66. The "automatic reflection" limitation of claim 1 is supported by the specification of the '130 patent and "is different from single-position methods for updating tree file systems, such as embodied in data structure libraries like JDSL and in tree-structured file systems, such as in Athos, MacOS, and Linux/Unix." *Id.* at ¶¶ 43-47.

67. Claim 1's "automatic reflection" limitation

> has a benefit of saving CPU cycles and network traffic for updating menu trees and similar tree file structures, as it requires only one insertion or deletion rather than performing insertions or deletions at every node tagged with the same modifier name. This improves the functioning of a web server in any context that involves tree file structures where insertions or deletions may involve node tags or node types rather than individual nodes, which is a broad scope of applications. Indeed, the "automatic reflection" limitation in claim 1 itself recites, "improving efficiency while eliminating the necessity of continually querying or checking every tree branch in the master menu tree file structure when responding to remote user requested tasks and/or other inputs."

Id. at ¶ 48.

68. The invention of the '130 patent is not tied to a specific computer programming language and "[t]he discrete programming steps are commonly known and thus programming details are not necessary to a full description of the invention " '130 patent at 13:7-12. This is an advantage, and not a hindrance. Goodrich Decl. at ¶ 76 ("The '130 patent advantageously teaches and discloses that its invention is not tied to a specific computer programming language, such as Visual Basic, SQL, or C++."); *id.* at ¶ 80.

69. More specifically,

> Given this disclosure, a POSITA would understand that embodiments for the'130 Patent can be written in any commonly used computer language, such as Visual Basic, C++, or SQL. Thus, a POSITA would understand that it is sufficient for the specification of the '130 Patent to describe its algorithms in prose or ***pseudocode***, which is a plain language description of the steps in an algorithm, which is written primarily for humans not machines. *See, e.g.,* the '130 Patent at 8:31-39, 9:20-47,

> 10:26-47, 14:19-60, 15:10-48, 16:25-66, and 17:18-34, for example algorithm descriptions. In fact, there are multi-faceted advantages to not limiting an invention to a particular software language via the inclusion of language specific, source code in a patent application, and as a repeated inventor myself, with multiple issued patents, I would not do so. For example, when it is considered that over the 20-year life of patents, computer languages are continually evolving and advancing.

Id. at ¶ 81 (footnote omitted).

70. The ’130 patent provides pseudocode for an exemplary algorithm for building a menu file structure:

> The steps taken in building a menu are as follows:
> 1. Add Modifiers;
> 2. Add Sub-Modifiers and link them to the Modifiers;
> 3. Create Menu categories;
> 4. Add menu items to the categories;
> 5. Assign Modifiers to the menu items;
> 6. Preview the menu on the POS emulator on the desktop PC;
> 7. Download the menu database to the handheld device.

Id. at ¶ 85; *see also* ’130 patent at 8:31-39..

71. The '130 patent specification includes

> examples from the newly added material and repeated references to Figure 10 and its framework, identifies specific exemplary technologies and embodiments for realizing menu building, updating, and querying, including a client-server system (’130 Patent at 19:11-55) utilizing client and server devices employing an advanced master database (’130 Patent at 11:61-62), Hypertext Transfer Protocol, HTTP (’130 Patent at 18:58-66), Hypertext Mark-up Language, HTML (*id.* at 18:66-19:4), Extensible Mark-up Language, XML (*id.* at 19:4-10), Structured Query Language, SQL (*id.* at 12:3-6), ActiveX Data Objects, ADO (*id.* at 11:64- 67), graphical user interfaces, GUIs (*id.* at Figs. 1-8, 6:15-56, 7:13-47, 11:1-22, 13:58-14:6[)]. In my opinion, a POSITA in 2005 would not have considered this suite of technologies to be a set of generic components and certainly not in their combination as in the ‘130 Patent claims , but rather to be specific technologies for realizing a specialized distributed client-server system for food/drink ordering applications and then which is further enhanced via the claimed combination of above-cited elements of claim 1.

Goodrich Decl. at ¶ 86.

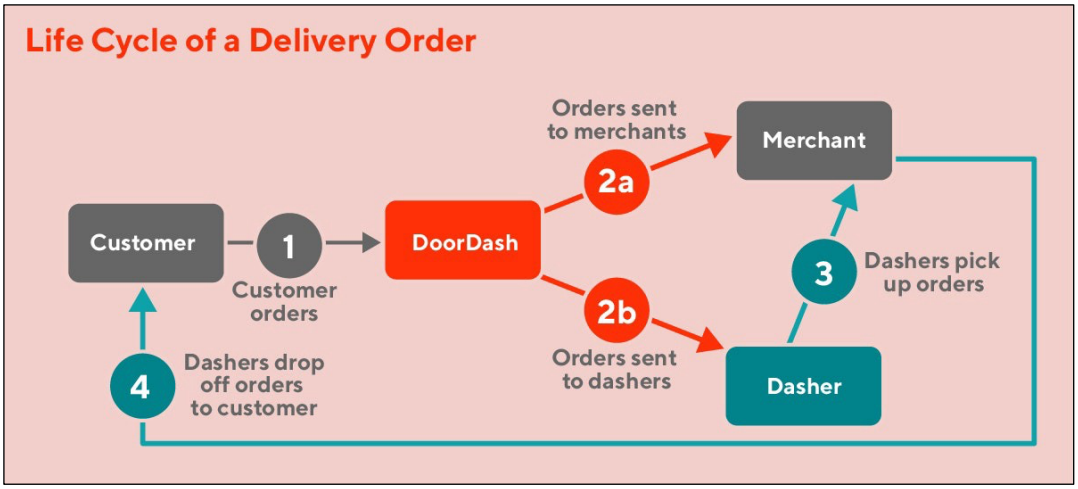
72. Confirming the claims of the '130 patent in view of the specification sufficiently

disclose "how" the result is achieved, a POSITA would know how to develop source code "given structure disclosed, e.g., with respect to the above-cited technology and algorithmic teachings from the '130 Patent specification/figures, as well as the claims themselves." *Id.* at ¶¶ 84-94; *see also id.* at ¶¶ 74-83. "A POSITA in 2005 would not have considered this suite of technologies to be a set of generic components and certainly not in their combination as in the '130 Patent claims, but rather to be specific technologies for realizing a specialized distributed client-server system for food/drink ordering applications . . . ." *Id.* at ¶ 86; *see also id.* at ¶ 67 ("[A] POSITA would understand that, rather than being a generic computer, the "web server" of claim 1, and as it is defined in the preamble is specialized to involve multi-modes of contact, multi-communications protocols, multi-user, and parallel operational capabilities, which is supported by the specification of the '130 Patent.").

DOORDASH BACKGROUND

73. Defendant was formed in 2012 by four Stanford students, Evan Charles Moore, Andy Fang, Stanley Tang and Tony Xu, who is the CEO today. Initially, understandably and admittedly, like most startups, they had little technology, nor experience nor the vision for the technology needed for a true, enterprise scale, system as DoorDash has become today. But they did have drive and vision and through that, they have become the number one food delivery company in the U.S. and in the world. As explained below, over time, Defendant and its engineering team realized that they needed an integrated web server-based solution, inclusive of the teachings of the '130 patent and its claims.

74. Below is a snippet of a screenshot from a video posted by Defendant and entitled "DoorDash Technical Showcase Event- Logistics Team" (available at https://www.youtube.com/watch?v=Um_s0AUjZd4 (last accessed Dec. 5, 2022):



75. The article "Future-proofing: How DoorDash Transitioned from a Code Monolith to a Microservice Architecture" (available at https://doordash.engineering/2020/12/02/how-doordash-transitioned-from-a-monolith-to-microservices/ (last accessed Dec. 5, 2022), contains the following text (bullet points added), reordered for purposes of this complaint:

- "DoorDash began its venture into food delivery in 2013. At that time, the mission from an engineering standpoint was to build a fast prototype to gather delivery orders and distribute them to a few businesses through basic communication channels like phone calls and emails. The application would need to accept orders from customers and transmit those orders to restaurants while at the same time engaging Dashers to pick up orders and deliver them to customers."

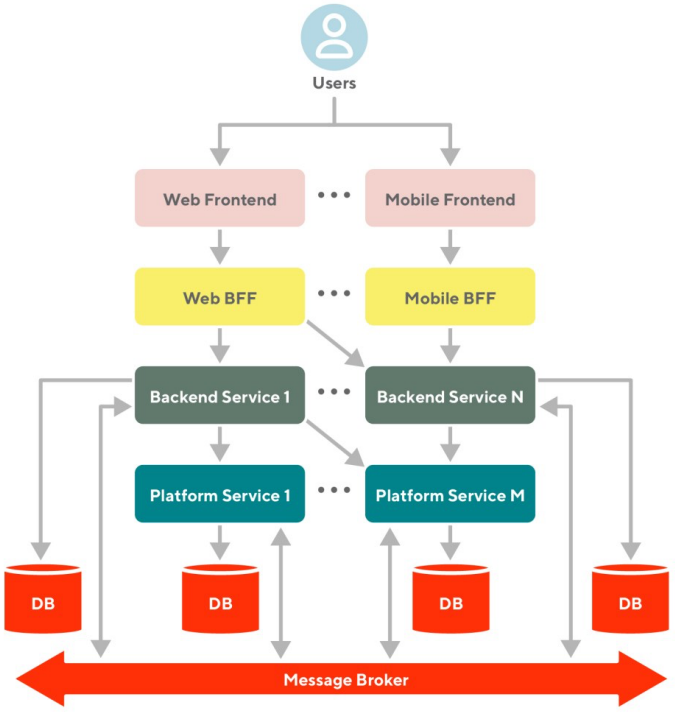
- "Although the monolithic architecture was a valid solution to enable agile development in the early phases, issues started emerging over time. This is a typical scenario in the lifecycle of a monolith that occurs when the application and the team building it cross a certain threshold in the scaling process. DoorDash reached this point in 2017, which was evident by the increasing challenge of building new functionalities and extending the framework.

  Eventually, the DoorDash application became somewhat brittle. New code sometimes caused unexpected side effects. Making a seemingly innocuous change could trigger cascading test failures on code paths that were supposed to be unrelated."

- "*In 2019, DoorDash's engineering organization initiated a process to completely reengineer the platform on which our delivery logistics business is based.*"

- "Originally developed as a monolithic codebase, the company's business growth in 2019 unveiled the weaknesses of our development model, including issues such as growing developer ramp up time, longer waits for test completion, and overall higher developer frustration as well as increased brittleness of the application. After some debate, the company began planning to transition the monolith to a microservice architecture."

- "After these phases, a multi-layered microservice architecture emerged:



"

76. Per the prior paragraph, Defendant's technical problems that needed to be solved in the mid- to late 2010s were solved by Defendant's "multi-layered microservice architecture," which is Defendant's version of the MFCCS and layer approach claimed in the '130 patent. Thus, Defendant made a 2019 factual admission that the layered framework/architecture of the '130 patent's claims improved computers and thus was surely not conventional much earlier in 2005. This admission is further confirmed by Defendant's parallel activities to seek to patent such technology for itself, as is further detailed below.

77. The article "2020 Hindsight: Building Reliability and Innovating at DoorDash" (available at https://doordash.engineering/2020/12/23/2020-engineering-highlights/ (last accessed

Dec. 5, 2022)), includes the following text (bullet points added):

- "Highlights from this year include work on our microservices architecture and migrating business logic, a process begun in 2019, improving our reliability metrics on a platform facilitating millions of deliveries per day. To support the many data-driven aspects of our business, we built new pipelines and found other ways to improve our data infrastructure's speed, reliability, and usability."

- "The continued growth of DoorDash's business brought us to the realization in 2019 that we needed to fundamentally re-architect our platform. Our original monolithic codebase was stressed from the need to facilitate millions of deliveries per day, while a growing engineering organization meant hundreds of engineers working to improve it. To support our scale, we began migrating from the original codebase to a microservices architecture, work that continues through 2020, improving reliability and developer velocity."

78. After recognizing its technological problems as discussed above and then envisioning what was needed to address them, Defendant not only initiated technical developments, but it also sought patent protections for the concepts they believed to be new and non-conventional as of 2018/2019. Defendant has publicly acknowledged its valuing and support of the U.S. patent system, including in its own SEC Form 10-K Annual Statement, available at https://d18rn0p25nwr6d.cloudfront.net/CIK-0001792789/628c3275-56ed-4bc8-a246-20e7c40742ce.pdf, and it now owns over 20 patents, many of which, (including the four patents further identified below) that include copied and/or complementary technology as to that disclosed and claimed in the '130 patent claims. Defendant has vigorously argued the patent eligibility of its own patents, including its copying of many technical aspects of the '130 claims as is exemplified in Exhibit L attached hereto.

79. Defendant filed for and was awarded multiple patents for inventive concepts it believed it was the first to invent and the inventors of the claimed inventions in those patents signed sworn statements attesting to those beliefs.

80. However, Defendant and the inventors of Defendant's patents were wrong, because Ameranth had invented many of those concepts long before they did, and Defendant's filing for and receiving these patents are direct admissions that Ameranth's inventive concepts were improvements to computers and were thus not conventional 14+ years earlier in 2005.

81. That the inventive concepts claimed in the '130 patent provide non-abstract, technical solutions to technical problems that improve computers is further confirmed by Defendant itself by its repeated statements when prosecuting the patents identified below and through the disclosures, inventors' admissions and statements within those patents themselves, all of which rely on, in part or in whole, key aspects of the '130 patent's claimed external API and related technology improvements. For example, Exhibit L attached hereto is a Reply to Office Action of March 19, 2020 with relevant text highlighted.

82. As evidenced in bold text below, each of Defendant's following four patents include various aspects of the external API elements and other inventive concepts of the '130 patent's claims, and include multiple admissions that these same API-based features improved computers and provided the same platform as claimed in the '130 patent. These specification statements along with the inventors' sworn declarations, attached hereto as Exhibits M-P, wherein they each swore under oath that they believed they were the original inventors of the same external API elements and other inventive concepts of the '130 patent's claims, are factual evidence that these external API elements and inventive concepts were not conventional in 2005,

a. U.S. Patent No. 11,010,819, entitled, ""Application Programming Interfaces for Fulfillment Services," filed on May 9, 2018, issued on May 18, 2021, attached hereto as Exhibit G (emphasis added):

> Abstract: "**In some examples, a computing device exposes, to a merchant device, one or more Application Programming Interfaces**

> **(APIs) for accessing a delivery service**. The computing device receives, from the merchant device, via the one or more APIs, a request regarding delivery of an order specified by a customer for delivery from the merchant. The computing device may send a communication to a courier to instruct the courier to deliver the order. The computing device may receive, from the merchant device, via the one or more APIs, a request for a delivery status of the order received via a user interface. The computing device may determine the delivery status of the order based at least partially on location information received from the courier, and sends the delivery status to prompt the merchant device to present the delivery status in the user interface."
>
> Col. 2, ll. 11-24: "**The technology described herein** provides a system and environment to enable entities to utilize courier services provided by a service provider. In some examples, the service provider exposes the courier services to a computing device associated with a merchant, buyer, and/or others **using one or more Application Programming Interfaces (APIs)** provided by the service provider. In some instances, the service provider may be a third party that operates remotely and/or independently from the merchant, buyer, and/or others. **The one or more APIs may enable merchants and/or others to automatically integrate the courier services into technologies used by the merchants and/or others in order to facilitate delivery of items that are offered for acquisition by the merchants**.
>
> Col. 3, ll. 44-52: "In many instances, **the techniques and environments described herein provide one or more APIs** to access courier services provided by a service provider. That is, **the one or more APIs may provide entities with a flexible structure** to integrate courier services into technologies of the entities."
>
> Col. 3, ll. 60-66: "**Moreover, the techniques and environments provide a flexible structure** to modify the underlying technology used by the service provider to implement the courier services. In other words, the underlying technology of the courier services **may be updated in a unified and/or simplified manner**, without requiring an update to technologies implemented by merchants, buyers, and/or others."

b. U.S. Patent No. 11,205,212, entitled "Integration of Functionality of a Fulfillment Service Provider into Third Party Application, filed on May 8, 2019, issued December 21, 2021, attached hereto as Exhibit H (emphasis added):

> Abstract: "**Integrating a fulfillment service provider into a third-party application via an Application Programming Interface (API) is described**. In an example, a computing device associated with a fulfillment

service provider can determine, based at least in part on an indication of an interaction between a user and a third-party application, that the fulfillment service provider has been initialized. In one example, functionality associated **with the fulfillment service provider can be accessible to the third-party application via an API**."

Col. 2, ll. 15-24: "Techniques described herein are directed to the integration of functionality of a fulfillment service provider into a third-party application, for instance, via an Application Programming Interface (API). **In an example, third-party developers can integrate functionality of a fulfillment service provider into their own software or web services via an API provided by the fulfillment service provider**. The fulfillment service provider can provide food-preparation services, food-ordering services, food-delivery services, and so on."

Col. 3, ll. 54-61: "As will be described below, techniques described herein can be implemented via a communication network that enables third-party applications to communicate with server(s) that are associated with a fulfillment service provider. Techniques described herein thus utilize the technical capability of such a communication network **to enable the integration of services and/or functionalities that are available via different service providers into a single access point."**

Col. 4, ll. 6-16: "**The third-party applications can exchange data with the server(s) that host the fulfillment service provider, using the technical capabilities of communication networks**, to provide such functionality and/or services. In many examples, as described below, the use of fulfillment service provider functionality and/or services can be dynamic and individualized for each of the third-party applications, thereby providing more efficient use of functionalities and/or services available via the fulfillment service provider. **As such, techniques described herein are directed to improved performance of computing systems**."

Col. 4, ll. 38-60: "Current technology requires users to transition between applications to access different services, and in some cases where the uses do not have accounts with these services, users have to first generate accounts with those services. For instance, if a user is watching a video via a content providing application and wants to order a pizza, the user is required to exit the content providing application, determine a service that would deliver the pizza, and then open another application for ordering the pizza. Such a transition causes friction for users and, additionally, consumes computational resources, as described below. **That is, existing capabilities of computing devices are inefficient. Techniques described herein provide a specific improvement in the capabilities of computing devices**. For instance, instead of requiring a user to open two separate applications to access two different services, such is the case with existing capabilities of computing devices, techniques described herein are directed

> to the integration of services and/or functionalities via API(s). Accordingly, the user need not toggle between the third-party application and an application associated with the fulfillment service provider, for example, to access services and/or functionalities provided by the different service providers.
>
> Col. 5, ll. 18-27: "Additional details associated with the server(s) 102 and the user device 106 are described below. In at least one example, the server(s) 102 can be associated with a fulfillment service provider, which can provide one or more fulfillment services. For instance, the server(s) 102 can be associated with one or more functional components, including, but not limited to, a fulfillment module 108, which can be configured to facilitate food-ordering services, food-delivery services, food-preparation services, combinations of the foregoing, and the like."
>
> Col. 5, ll. 35-41: "In at least one example, the fulfillment service provider can be associated with a plurality of devices 112 used by partners and/or patrons of the fulfillment service provider. Partners can include merchants or other entities providing, among other services, food-ordering services, food-delivery services, food-preparation services, combinations of the foregoing, and the like."
>
> Col. 6, ll. 26-35: "**In some examples, the fulfillment module 108 can track timing of order preparation and/or delivery schedules to batch order preparation and/or delivery**. That is, in some examples, the fulfillment module 108 can receive data indicative of actions of the partners of the fulfillment service provider (e.g., via interactions with the fulfillment user interface 114) and can determine when to batch multiple deliveries into a single delivery for a courier (e.g., delivering food) or batch multiple orders of a food item into a single preparation by a cook."

c. U.S. Patent No. 11,037,254, entitled "Item Selection Based on User Interactions," filed on June 11, 2019, issued on June 15, 2021, attached hereto as Exhibit I (emphasis added):

> Abstract: "In some examples, a service device may receive, from buyer applications on respective buyer devices, communications indicating a number of times item information about a first item is presented in user interfaces on the buyer devices. The service device may further receive respective orders through the user interfaces, for the first item or other items."
>
> Col. 1, l. 63 – col. 2, l. 1: "The technology herein provides a novel system that enables people to participate as couriers in a new type of crowdsourced service economy**. The disclosed crowdsourcing systems include new**

types of interactive networks and apparatuses that enable non-abstract and novel innovations for fast delivery of items.

Col. 2, ll. 5-10: "Additionally, through the interaction of a plurality of computing devices, mobile devices, and location sensors that make up the system, some examples herein are able to select items for couriers to add to inventory in advance of receiving orders to enable fast delivery of the items to buyers when orders are received."

Col. 2, ll. 11-13: "In some examples, a service provider may provide a delivery service that enables buyers to order items, such as food items, that are delivered by couriers."

Col. 5, ll. 54-57: "In some cases, the buyer application 130 and the service computing device 102 may communicate with each other via one or more APIs (application programming interfaces).

Col,. 6, ll. 38-43: "**In some examples, the courier application 132 and the service computing device 102 may communicate with each other via one or more APIs**. **Alternatively, in other examples, the courier device 122 may receive the order information 112 via an SMS text message, a voicemail, a telephone call, or the like."**

Col. 6, ll. 54-60: "Protocols for communicating over such networks are well known and will not be discussed herein in detail. Accordingly, the service computing device 102, the buyer devices 128, and the courier devices 122 are able to communicate over the one or more networks 106 using wired or wireless connections, and combinations thereof."

d. U.S. Patent No. 11,397,981, entitled "System and Method for Universal Menu Integration Interface," filed on December 30, 2019, issued on July 26, 2022, attached hereto as Exhibit J (emphasis added):

Abstract: "**Systems and methods for universal menu integration**. A digital key is issued to a vendor to access an interface. An uploaded menu is received from the vendor. **The uploaded menu is in a universal format based on pre-determined criteria. The menu may be received from the vendor via HyperText Transfer Protocol (HTTP)**."

Col. 1, ll. 11-30: "With the advent of on-demand delivery services, food delivery is becoming increasingly prevalent. Traditionally, people ordered food by first calling into a restaurant, ordering food from the delivery menu, and having the order delivered by the restaurant. However, such a service requires the restaurant to hire a delivery person. For many restaurants, hiring

delivery people in house may be too costly to implement. Thus, for such restaurants, using a third party delivery service may be a better option. However, since each restaurant has its own unique menu, new restaurant integration into a third party delivery system is a time-consuming process that can take up to several months to complete. In addition, different third party delivery platforms have their own interfaces. Consequently, a single restaurant with multiple third party delivery systems must have a different interface for each different third party delivery service. **Thus, there exists a need for a universal menu integration interface that allows multiple restaurants with unique menus to upload their unique menu items to a single universal interface**."

Col. 1, ll. 42-51: "**Aspects of the present disclosure relate to a method, computer readable medium, and a system for universal menu integration. The system comprises a processor, an interface, and memory**. A digital key is issued to a vendor to access an interface. An uploaded menu is received from the vendor. The uploaded menu is in a universal format based on pre-determined criteria. **The uploaded menu is posted for receiving online delivery orders.** An online delivery order is received from a user device. Last, the online delivery order is transmitted to the vendor."

Col. 1, ll. 52-54: "**In some examples, receiving the uploaded menu includes receiving a full menu from the vendor via a HyperText Transfer Protocol (HTTP) request**."

Col. 2, ll. 2-6: "**In some embodiments, the interface is an application programming interface (API) utilizing an API library including post, get, and patch functions.** In some embodiments, the interface is an application programming interface (API) utilizing an API library including out of stock and item availability fields. In some embodiments, the system is configured to receive menu updates after posting the uploaded menu."

Col. 2, ll. 7-11: "**Additional advantages and novel features of these aspects will be set forth in part in the description that follows, and in part will become more apparent to those skilled in the art upon examination of the following or upon learning by practice of the disclosure**."

Col. 3, ll. 33-41: "It should be noted that a connection between two entities does not necessarily mean a direct, unimpeded connection, as a variety of other entities may reside between the two entities. For example, a processor may be connected to memory, but it will be appreciated that a variety of bridges and controllers may reside between the processor and memory. Consequently, a connection does not necessarily mean a direct, unimpeded connection unless otherwise noted."

> Col. 3, ll. 42-54: **"A universal menu integration interface may allow multiple vendors or merchants, such as restaurants, with unique menus to upload their unique menu items to a single universal interface. As used herein, the term 'universal' is used interchangeably with 'open**.' As used herein, the term 'vendor' is used interchangeably with 'merchant' to describe users of the described interfaces. A universal interface could be applied to arbitrary situations where inventories need to be synchronized between multiple parties. **In addition, the menu structure would allow merchants to apply customization on their products. For each customization option, the structure allows merchants to apply an infinite amount of customizations**."
>
> Col. 6, ll. 5-22: "Once a menu is successfully processed and integrated within the logistics platform, the menu may be accessible by customers via a network such as the Internet. Customers may access one or more integrated menus using various applications on a client device, such as a personal computer or smartphone. As used herein, client devices used by customers may be referred to as customer devices. For example, a customer may use a web browser to visit a webpage with links to a plurality of menus. The customer may select items and place orders for delivery of such items."

COUNT I – INFRINGEMENT OF U.S. PATENT NO. 11,276,130

83. Ameranth repeats and realleges the allegations of the preceding paragraphs as if fully set forth herein.

84. Without license or authorization and in violation of 35 U.S.C. § 271(a), Defendant is liable for infringement of claims 1-3 of the '130 patent by making, using, importing, offering for sale, and/or selling, an intelligent web server computer with multi-modes of contact, multi-communications protocols, multi-user and parallel operational capabilities for use in completing remotely initiated hospitality food/drink delivery or pick up ordering tasks, including, but not limited to, the DoorDash system such as, but notwithstanding, the DoorDash system shown in the Iguazo framework/architecture diagram and in Defendant's Flywheel diagram (the "Accused Instrumentality"), because each and every element is met either literally or equivalently.

85. Upon information and belief, Defendant has used and tested the Accused Instrumentality in the United States, directly infringing one or more claims of the '130 patent.

86. The Accused Instrumentality satisfies each and every element of each asserted claim of the 130 patent, either literally or under the doctrine of equivalents. An exemplary preliminary claim chart illustrating infringement of claims 1-3 is attached hereto as Exhibit K, and incorporated herein by reference.

87. In addition to the extensive and detailed infringement chart, backed by 100+ evidentiary citations attached thereto, including extensive and detailed technical video presentations and case studies directly from the Defendant, Defendant has admitted to infringement in various public statements, not only as detailed in the extensive claims chart, but as shown below via an August 2022 interview of Defendant's Vice President of Analytics and Data Science, Jessica Lachs, and when combined with the Defendant's post about its recently created Iguazo "Big Picture" framework/architecture pictorially reflecting its infringement of the '130 patent claims. The Iguazo "Big Picture"(further illuminated by the statements by Ms. Lachs and many other Defendant engineering team leaders and developers as is shown in the evidence attached to the preliminary claim chart) clearly demonstrates, explains, and admits to Defendant's infringement of the '130 patent claims and is further explained as to the Iguazo system diagram below.

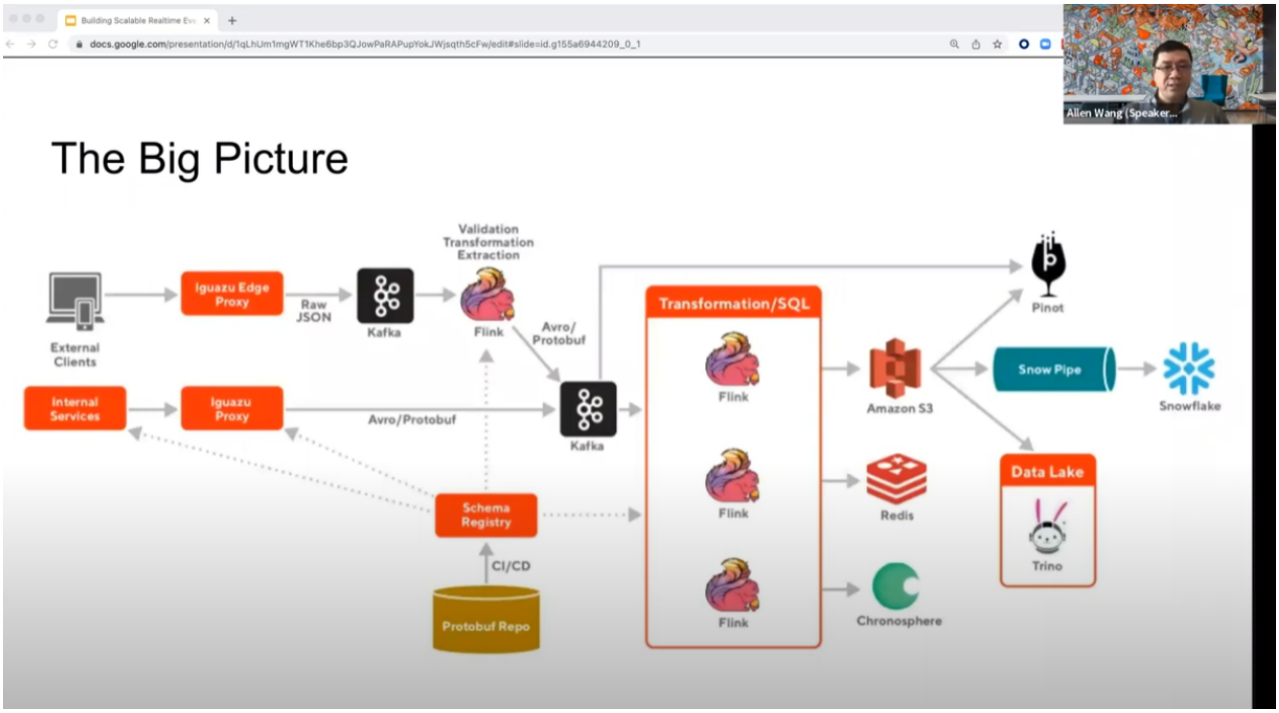
88. In the interview, a video of which is attached as Exhibit 98 to the preliminary claim chart and also available at https://www.youtube.com/watch?v=g-1MaOCFgUc (last accessed Dec. 5, 2022), Defendant's Vice President of Data Science admits:

- "And so for us, it's really about collecting as much information as we can about all sides of the marketplace, bringing all of that data together into a central data platform, where all of that data is accessible no matter the source. Whether it is coming from our production systems, transactional data, whether it is event data in our apps, whether that's the consumer app, the dasher app, the merchant app . . . whether it is coming from our CRM systems. All of that data needs to come in to one central place so that we can tie it together and use the insights together to create a 360 degree picture of what's

> happening on our platform and off our platform so that we can use that information not just to provide accurate menus and inventory for consumers but also so we can send the right email communications to consumers, to dashers, so that we really have a full picture of what's happening and can use that for personalization and to help all three sides of our marketplace really optimize that they are at their peak efficiency."

- "So, for us, we want data to be easily accessible to all the different teams that need access to it. Analytics, being one of the largest customers of data at DoorDash, of course, but the way we think about our data models is really about increasing accessibility and consistency to that data. So, having all of our data in one central place and making sure that it is high in performance and so like query speeds are fast and that data models are thoughtful, so that it makes it a lot easier for data scientists, analysts, operators, product managers to be able to query the data that is needed and use the data in our production, in our production systems as well. So, we try to be thoughtful about how we structure our data models and how we ensure that all of the different production systems tie together into that central, as you mentioned, that central data lake."

89. In the post "Building Scalable Real Time Event Processing" (available at https://www.youtube.com/watch?v=BqbN-DD24SE (last accessed Dec. 5, 2022)), a lead engineer at Defendant working on its real-time data infrastructure showed the "architectural overview of Iguazu." As a POSITA would understand, the Iguazo system diagram shows the DoorDash platform and "360 degree picture," and as illuminated by many other Defendant technical statements, papers, admissions and presentations in the attached exhibits, it depicts the framework and layered architecture of the '130 claims, clearly operating with/on clusters of the claimed web servers and including its master database as is shown on the far right, the hospitality tasks from, e.g., consumers and Dashers and food importation inputs from the restaurants on the far left (i.e. their external clients) and the integration, API's communication protocols, and intelligence of the claimed '130 patent inventions in the center and including the interactivity and integration of the system elements in their ordered combination.



90. Ameranth is entitled to recover from Defendant the damages sustained by Ameranth as a result of Defendant's infringement of the '130 patent in an amount subject to proof at trial, which, by law, cannot be less than a reasonable royalty, together with interest and costs as fixed by this Court under 35 U.S.C. § 284.

WILLFULNESS AND INDIRECT INFRINGEMENT

91. Ameranth's initial complaint was filed on December 9, 2022.

92. Defendant was served the initial complaint on December 21, 2022.

93. Thus, Defendant has been on notice of the '130 patent since, at the latest, the date it was served the Complaint.

94. Upon information and belief, Defendant has not altered its infringing conduct after receiving the initial complaint.

95. Upon information and belief, Defendant's continued infringement despite its knowledge of the '130 patent and the accusations of infringement has been objectively reckless and willful.

96. In particular, Defendant's customers' and end-users' use of Defendant's products and services which operate intelligent web server computers with multi-modes of contact, multi-communications protocols, multi-user and parallel operational capabilities for use in completing remotely initiated hospitality food/drink delivery or pick up ordering tasks such as, the Accused Instrumentality, is facilitated by the use of technology patented under the '130 patent. Thus, Defendant's customers and end-users are complete remotely initiated hospitality food/drink delivery or pick up ordering tasks using such products and services.

97. On information and belief, in order to generate profits and revenues, Defendant markets and promotes, e.g., through its website, television advertisements, and sales personnel, the use of its products and services that infringe the '130 patent when used as intended by Defendant's customers and end-users. Defendant's customers and end-users use such products and services (including, e.g., Defendant's software). Defendant further instructs its customers and end-users how to use such products and services in a manner that infringes the '130 patent (e.g., through on-line technical documentation, instructions, and technical support). Defendant further instructs its customers and end-users to infringe the '130 patent through the products and services themselves, e.g., through on-line instructions and intuitive user interfaces, such as those found in the Accused Instrumentality.

98. In particular, Defendant instructs its customers , partners and end-users through at least on-line support instructions and documentation over the Internet how to use the Accused Instrumentality.

99. Defendant still further makes such products and services accessible to its customers and end-users via mobile apps, thus enabling and encouraging its customers and end-users to use such products and services, including supporting software systems, to infringe the '130 patent.

100. On information and belief, even though Defendant has been aware of the '130 patent and that its customers and end-users infringe the '130 patent since no later than December 21, 2022, and Defendant has neither made any changes to the functionality, operations, marketing, sales, technical support, etc. of such products and services to avoid infringing the '130 patent nor informed its customers or end-users how to avoid infringing the '130 patent. To date, Defendant has not identified a single action that it has taken to avoid infringement (e.g., by designing around or notifying its customers or end-users how to avoid infringement) by itself or its customers or end-users since it became aware of the '130 patent.

101. On information and belief, Defendant had no reasonable or legitimate legal or factual basis that its actions solely, or in combination with the actions of its customers and end-users, do not constitute direct or indirect infringement of the '130 patent.

102. As such, on information and belief, despite the information Defendant obtained from the original complaint in this action, Defendant continues to specifically intend for and encourage its customers and end-users to use its products and/or services in a manner that infringe claims of the '130 patent. In addition, since at least the filing of the original complaint in this action, Defendant has deliberately avoided taking any actions (e.g., designing around, or providing notice to its customers) to avoid confirming that its actions continue to specifically encourage its customers and end-users to use its products and/or services in a manner that infringe the claims of the '130 patent.

103. Defendant's actions of, *inter alia*, making, importing, using, offering for sale, and/or selling such products and/or services constitute an objectively high likelihood of infringement of the '130 patent, which was duly issued by the United States Patent and Trademark Office and is presumed valid. Since at least the filing of the original complaint, Defendant is aware that there is an objectively high likelihood that its actions constituted, and

continue to constitute, infringement of the '130 patent and that the '130 patent is valid. Despite Defendant's knowledge of that risk, on information and belief, Defendant has not made any changes to the relevant operation of its products and/or services and has not provided its users and/or customers with instructions on how to avoid infringing the '130 patent. Instead, Defendant has continued to, and still is continuing to, among other things, make, use, offer for sale, and/or sell products and/or services patented under the '130 patent. As such, Defendant willfully, wantonly and deliberately infringed and is infringing the '130 patent in disregard of Ameranth's rights under the '130 patent.

JURY DEMAND

Ameranth hereby demands a trial by jury on all issues so triable.

PRAYER FOR RELIEF

WHEREFORE, Ameranth requests that this Court enter judgment against Defendant as follows:

A. An adjudication that Defendant has infringed the '130 patent;

B. A judgment that Defendant has induced infringement of the '130 patent;

C. An award of damages to be paid by Defendant adequate to compensate Ameranth for Defendant's past infringement of the '130 patent and any continuing or future infringement through the date such judgment is entered, including interest, costs, expenses and an accounting of all infringing acts including, but not limited to, those acts not presented at trial;

D. An award of enhanced damages pursuant to 35 U.S.C. § 284 for Defendant's willful infringement of the '130 patent subsequent to the date of its notice of the '130 patent;

E. A declaration that this case is exceptional under 35 U.S.C. § 285, and an award of Ameranth's reasonable attorneys' fees; and

F. An award to Ameranth of such further relief at law or in equity as the Court deems just and proper.

Dated: May 15, 2023

/s/ Vincent A. Coppola
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