

IN THE UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF DELAWARE

INTERNATIONAL BUSINESS	)	
MACHINES CORPORATION,	)	
	)	
Plaintiff,	)	
	)	
v.	)	C.A. No. _____
	)	
AIRBNB, INC.,	)	<b>JURY TRIAL DEMANDED</b>
	)	
Defendant.	)	

**COMPLAINT FOR PATENT INFRINGEMENT**

Plaintiff International Business Machines Corporation (“IBM”), for its Complaint for Patent Infringement against Airbnb, Inc. (“Airbnb”) demands a trial by jury on all issues so triable and alleges as follows:

**INTRODUCTION**

1. IBM is in the innovation business. Every year, IBM spends billions of dollars on research and development to invent, market, and sell new technology. For example, through its investments and innovations in the new frontier of quantum information science, IBM is the leader in commercializing quantum computing, once thought to be a purely academic exercise. IBM’s Q Network service—a community of Fortune 500 companies, academic institutions, research organizations, and startups working with IBM to advance quantum computing—now has over 100 members.

2. IBM obtains patents on the technology its inventors develop. The United States Patent Office awards thousands of patents to IBM each year. In fact, for each of the last 27 years, the Patent Office has awarded IBM more patents than any other company. Each of those patents grants IBM protection from those who would take its technology without permission. Those

patents are critical to IBM's business and its licensing philosophy.

3. For over twenty years, IBM has been a strong proponent of open source technologies. IBM was a founding member of Open Invention Network, the largest patent non-aggression community in history, which supports freedom of action in Linux, a key element of open source software. IBM has also pledged to provide open access to key innovations covered by hundreds of IBM software patents for those working on open source software. And early in 2020, IBM joined the License on Transfer Network ("LOT Network"), a non-profit community of companies that supports open innovation and responsible stewardship of technology. LOT Network affirms the traditional use of patents—safeguarding the innovations of companies who research, develop, and sell new technologies—while protecting its members against companies who purchase or acquire patents from others.

4. IBM also believes in the protection of its proprietary technologies, which result from IBM's extensive investments in research and development and the hard work of IBM's employees. IBM believes that companies who use IBM's patented technology should agree to a license and pay a fair royalty. When a company is using IBM's patents without authorization, IBM first seeks to negotiate an agreement whereby IBM and the other company each receive a license to the other's patent portfolio. That way, each company can avoid litigation, be fairly compensated for the use of all of their patents, and maintain freedom to operate in their respective markets.

5. IBM's research and development is currently focused on technology that includes quantum computing, big data analytics, artificial intelligence, and natural language processing. But IBM also has a long history of innovating and licensing its technology in the field of internet commerce. In fact, long before Airbnb existed, IBM partnered with other companies to launch

Prodigy, one of the very first e-commerce services. Airbnb, which was founded in 2008, long after e-commerce was already established, took those prior innovations made by IBM and others to create and run its new business.

6. For almost six years, IBM has tried to negotiate a cross license with Airbnb. Dozens of similar companies, including Amazon, Apple, Google, and Facebook, have agreed to cross licenses with IBM. Unfortunately, Airbnb is not among them. Instead, to this day, Airbnb has chosen to willfully infringe IBM's patents.

7. After six years, enough is enough. This lawsuit seeks to end Airbnb's unauthorized use of IBM's patented technology.

#### **NATURE OF THE CASE**

8. This action arises under 35 U.S.C. § 271 for Defendant's infringement of IBM's United States Patent Nos. 7,072,849 (the "'849 patent"), 6,778,193 (the "'193 patent"), 7,631,346 (the "'346 patent"), and 6,966,038 (the "'038 patent") (collectively the "Patents-In-Suit").

#### **THE PARTIES**

9. Plaintiff IBM is a New York corporation, with its principal place of business at 1 New Orchard Road, Armonk, New York 10504.

10. Defendant Airbnb is a Delaware corporation, with its principal place of business at 888 Brannan Street, San Francisco, California 94103.

#### **JURISDICTION AND VENUE**

11. IBM incorporates by reference paragraphs 1-10.

12. This action arises under the patent laws of the United States, including 35 U.S.C. § 271 *et seq.* The jurisdiction of this Court over the subject matter of this action is proper under 28 U.S.C. §§ 1331 and 1338(a).

13. Venue is proper in this Court pursuant to 28 U.S.C. §§ 1391(b) and (c) and 1400(b).

Airbnb is an entity organized under the laws of Delaware and resides in Delaware for purposes of venue under 28 U.S.C. §1400(b). Airbnb conducts business in Delaware, at least by offering for sale and selling products and services through its websites and mobile applications, which are accessible in Delaware. Infringement has occurred and continues to occur in Delaware.

14. Personal jurisdiction exists over Airbnb because Airbnb conducts business in Delaware, at least by offering for sale and selling products and services through its websites and mobile applications, which are accessible in Delaware, and because infringement has occurred and continues to occur in Delaware. Personal jurisdiction also exists over Airbnb because it is an entity organized under the laws of Delaware.

### **FACTUAL BACKGROUND**

#### **A. IBM Is A Recognized Innovator.**

15. IBM is recognized throughout the world as a pioneer in many aspects of science and technology. On ten occasions—more times than any other company or organization—IBM has been awarded the U.S. National Medal of Technology, the nation’s highest award for technological innovation. During IBM’s over 100-year history, IBM’s employees have included six Nobel laureates, five National Medal of Science recipients, and at least fourteen inventors in the National Inventors Hall of Fame.

16. These and other IBM employees have introduced the world to technology that the global community takes for granted today, including the dynamic random access memory (DRAMs) found in nearly all modern computers; magnetic disk storage (hard disk drives) found in computers and portable music players; and some of the world’s most powerful supercomputers, and including Deep Blue, the first computer to beat a reigning chess champion. IBM’s commitment to developing these types of advanced computing technologies has helped to usher in the information age.

**B. IBM Is Committed To Protecting Its Innovations Through The Patent System.**

17. IBM's research and development operations differentiate IBM from many other companies. IBM annually spends billions of dollars for research and development. In addition to yielding inventions that have literally changed the way in which the world works, IBM's research and development efforts have resulted in more than 60,000 patents worldwide.

18. Like the research upon which the patents are based, IBM's patents also benefit society. Indeed, the Supreme Court has recognized that the patent system encourages both the creation and the disclosure of new and useful advances in technology. Such disclosure, in turn, permits society to innovate further. And, as the Court has further recognized, as a reward for committing resources to innovation and for disclosing that innovation, the patent system provides patent owners with the exclusive right to prevent others from practicing the claimed invention for a limited period of time.

**C. IBM Routinely Licenses Its Patents In Many Fields But Will Enforce Its Rights Against Those Who Use Its Intellectual Property Unlawfully.**

19. IBM's commitment to creating a large patent portfolio underscores the value that IBM places in the exchange of innovation, and disclosure of that innovation, in return for limited exclusivity. Indeed, IBM has used its patent portfolio to generate revenue and other significant value for the company by executing patent cross-license agreements. The revenue generated through patent licensing enables IBM to continue to commit resources to innovation. Cross licensing, in turn, provides IBM with the freedom to innovate and operate in a manner that respects the technology of others.

20. Given the investment IBM makes in the development of new technologies and the management of its patent portfolio, IBM and its shareholders expect companies to act responsibly with respect to IBM's patents. IBM facilitates this by routinely licensing its patents in many fields

and by working with companies that wish to use IBM's technology in those fields in which IBM grants licenses. When a company appropriates IBM's intellectual property but refuses to negotiate a license, IBM has no choice but to seek judicial assistance.

**D. IBM Invented Methods For Presenting Applications And Advertisements In An Interactive Service While Developing The PRODIGY Online Service.**

21. The inventors of the '849 patent developed the patented technology as part of the efforts to launch the PRODIGY online service ("Prodigy"), a forerunner to today's Internet, in the late 1980s. The inventors believed that to be commercially viable, Prodigy would have to provide interactive applications to millions of users with minimal response times. The inventors believed that the "dumb" terminal approach that had been commonly used in conventional systems, which heavily relied on host servers' processing and storage resources for performance, would not be suitable. As a result, the inventors sought to develop more efficient methods of communication that would improve the speed and functionality of interactive applications and reduce equipment capital and operating costs.

22. In light of the above considerations, the inventors developed novel methods for presenting applications and advertisements in an interactive service that would take advantage of the computing power of each user's PC and thereby reduce demand on host servers, such as those used by Prodigy. The inventors recognized that if applications were structured to be comprised of "objects" of data and program code capable of being processed by a user's PC, the Prodigy system would be more efficient than conventional systems. By harnessing the processing and storage capabilities of the user's PC, applications could then be composed on the fly from objects stored locally on the PC, reducing reliance on Prodigy's server and network resources.

23. The service that would eventually be called Prodigy embodied inventions from the '849 patents when it launched in late 1988, before the existence of the World Wide Web. The

efficiencies derived from the use of the patented technology permitted the implementation of one of the first graphical user interfaces for online services. The efficiencies also allowed Prodigy to quickly grow its user base. By 1990, Prodigy had become one of the largest online service providers with hundreds of thousands of users. The technological innovations embodied in this patent persist to this day and are fundamental to the efficient communication of Internet content.

**E. IBM Invented Methods of Improving Contextual Searching Using Visual Workspaces.**

24. The inventors of the '193 patent developed the patented technology as part of IBM's efforts to improve graphical user interfaces ("GUIs") for customer self-service search and retrieval systems. Customer search and retrieval may include knowledge management systems, information portals, search engines, and data miners. Providing efficient and satisfactory search results using such systems requires that users provide relevant contextual information in conjunction with a search query. At the time of the invention, engineers attempted to solve this problem through the use of GUIs, which represented available applications and data sets via icons. However, these prior art GUIs failed to address the full range of relevant contextual variables for user queries, and also did not provide a graphical method for fine tuning the relevant context variables.

25. The inventors of the '193 patent thus recognized a need to provide an improved GUI for customer search and retrieval functions to facilitate the efficient location of relevant resources in response to a query by enabling the expression of a user's context as part of the query and indicating the relevance of returned results in that context. The inventors of the '193 patent developed systems and methods of using user context attributes and graphical user interfaces to allow users to search for content and subsequently narrow the results based on user context to obtain increased specificity and accuracy in search results. The patented technology of the '193

patent provides for more efficient search and retrieval in part through a novel iconic graphical user interface that enables the expression of a user's context as part of the user query, which has the benefit of minimizing user time and resource intensive system processes. For example, the more efficient search processes of the '193 patent reduce the server processing steps required to provide relevant search results and thus allow the server to process search queries faster.

**F. IBM Invented Methods For A Runtime User Account Creation Operation Using A Single-Sign-On Process In A Federated Computer Environment.**

26. The inventors of the '346 patent developed the patented technology as part of IBM's efforts to improve single-sign-on technology. To access a protected resource at a service provider on the Internet, a user typically has to authenticate him or herself with the service provider. Single-sign-on technology facilitates a user's connection to resources by requiring only one authorization operation during a particular user session. However, conventional technology at the time of the invention required that the user already have an account with the service provider to use single-sign-on technology.

27. The inventors of the '346 patent sought to develop single-sign-on technology that would permit a new user of a service provider to access protected resources. They developed novel methods for systems interacting within a federated computing environment to trigger a single-sign-on operation on behalf of a user that would obtain access to a protected resource and create an account for the user. The specification discloses how to structure a federated computing environment and the sequence and content of interactions between different systems that can support the patented methods. The '346 patent thus extends the benefits of single-sign-on technology.

**G. IBM Invented Methods For Improved Navigation Using Bookmarks For Movement Between File And Program Locations In A Computer Network Environment.**

28. The inventors of the '038 patent developed the patented technology as part of



IBM's efforts to provide easy navigation between distributed resources in a computer environment. Prior to the '038 patent, to access a program or file on a computer system, a user typically had two options. The user could enter the name of the program or file into a menu, which typically required the user to remember the name of the file for the program or browse through a number of options. Alternatively, the user could manually search the computer system to find and select the desired program. To access a file within a particular program, the user would take the additional step of opening the file by accessing it using the associated program. Both of these conventional methods presented major drawbacks, especially as computer systems became more complex. A user would have to either remember or have a list of every file and program name in the computer system in order to locate and access any desired program or file.

29. The inventors of the '038 patent recognized a need for a more efficient method of navigating to different locations in one or more computer systems. The inventors therefore developed technology for enabling a user to select specialized bookmarks in a graphical user interface. The bookmarks could refer to one or more locations in the computer system and allow the user to instantly access files, programs, files within programs, views within programs, or other resources. Users could thus proceed directly to the desired location through the desired program in the desired computer system. Computer systems at the time of the invention were growing in storage space and processing power, and the inventions of the '038 patent helped address new demands to easily and efficiently access an ever-growing number of files, programs, interfaces, and computer systems.

#### **H. Airbnb Has Built Its Business By Infringing IBM's Patents.**

30. Airbnb connects consumers wishing to make reservations related to lodging, tourism, and other travel experiences with providers of those services. Airbnb has grown rapidly and now has billions of dollars of revenue per year.

31. Rather than build its business on its own technologies, Airbnb has appropriated the inventions of the Patents-In-Suit. Websites under Airbnb's control, including at least [www.airbnb.com](http://www.airbnb.com), use the technology claimed by the Patents-In-Suit to provide services related to lodging, tourism, and other travel experiences to their users. Mobile applications under Airbnb's control, including at least mobile applications running on, for example, Apple iOS and Google Android operating systems, use the technology claimed by the Patents-In-Suit to provide services related to lodging, tourism, and other travel experiences to their users.

32. IBM has tried to work with Airbnb to negotiate a licensing agreement since May 2014.

33. In May 2014, IBM first contacted Airbnb about a potential license agreement. In the following months, the parties discussed IBM's patent portfolio, including the '849 and '346 patents. In August 2014, IBM met with Airbnb to attempt to reach a license agreement without success.

34. In the following year, IBM continued to attempt to engage with Airbnb. In May and June 2015, IBM informed Airbnb that it was infringing the '849 and '346 patents, among several other IBM patents.

35. Over the next several years, IBM continued to attempt to resolve Airbnb's continued infringement without success. In March 2017, IBM provided Airbnb with detailed evidence showing how Airbnb infringed the '849 and '346 patents, among other IBM patents. Airbnb refused to engage in serious discussions to end Airbnb's unauthorized use of IBM's patents.

36. In December 2019, IBM provided Airbnb with detailed evidence showing how it infringed additional patents, including the '193 and '038 patents. Airbnb continued to stonewall

and delay rather than engaging in negotiations. In January 2020, IBM made one final attempt to negotiate a license to its patented technology with Airbnb, but Airbnb steadfastly refused to enter into a license agreement fairly compensating IBM for its longstanding use of IBM's patented technology.

37. Since 2014, IBM has repeatedly attempted to engage with Airbnb. During this process, Airbnb has refused to engage in any meaningful discussions about reaching a license to end Airbnb's infringement of IBM's patents. Instead, Airbnb has continued to willfully infringe IBM's patents so as to obtain the significant benefits of IBM's innovations without paying any compensation to IBM.

38. Because IBM's over five-year struggle to negotiate a license agreement that remedies Airbnb's unlawful conduct has failed, IBM has been forced to seek relief through litigation. Among other relief sought, IBM seeks royalties and damages on the billions of dollars in revenue that Airbnb has received based on their willful infringement of IBM's patented technology.

### **COUNT ONE**

#### **INFRINGEMENT OF THE '849 PATENT**

39. IBM incorporates by reference paragraphs 1-38.

40. IBM is the owner of all right, title and interest in the '849 patent. The '849 patent was duly and properly issued by the USPTO on July 4, 2006. The '849 patent was duly assigned to IBM. A copy of the '849 patent is attached hereto as Exhibit A.

41. In violation of 35 U.S.C. § 271, Airbnb has infringed, contributed to the infringement of, and/or induced others to infringe one or more of the claims of the '849 patent by having made, designed, offered for sale, sold, provided, used, maintained, and/or supported its websites, including [www.airbnb.com](http://www.airbnb.com) and its mobile applications, including the Airbnb

applications for mobile devices running on, for example, the Apple iOS and Google Android operating systems. Airbnb's infringement is continuing.

42. For example, [www.airbnb.com](http://www.airbnb.com) and Airbnb mobile applications infringe at least claim 1 of the '849 patent at least by:

a. presenting advertising obtained from a computer network (such as the Internet), the network including a multiplicity of user reception systems (such as the computers or mobile devices of Airbnb's customers) at which respective users can request applications (such as Stays, Experiences, and Adventures), from the network, that include interactive services (such as offering reservations), the respective reception systems including a monitor (such as a computer monitor or mobile screen of an Airbnb customer's computer or mobile device) at which at least the visual portion of the applications can be presented as one or more screens of display, the method comprising the steps of:

b. structuring applications (such as Stays, Experiences, and Adventures) so that they may be presented, through the network, at a first portion (such as the portion of the webpage in which the content for Stays, Experiences, and Adventures is presented) of one or more screens of display; and

c. structuring advertising (such as advertising for stays) in a manner compatible to that of the applications so that it may be presented, through the network, at a second portion (such as the portion of the webpage in which the advertising for stays is presented) of one or more screens of display concurrently with applications (such as Stays, Experiences, and Adventures), wherein structuring the advertising includes configuring the advertising as objects (such as HTTP Responses containing png or jpeg files) that include advertising data and;

d. selectively storing (such as by setting a cache control parameter) advertising objects at a store (such as the browser cache) established at the reception system.

43. IBM has been damaged by the infringement of its '849 patent by Airbnb and will continue to be damaged by such infringement. IBM is entitled to recover from Airbnb the damages sustained by IBM as a result of Airbnb's wrongful acts.

44. The continued infringement by Airbnb of the '849 patent is deliberate and willful, entitling IBM to increased damages under 35 U.S.C. § 284 and to attorney fees and costs incurred in prosecuting this action under 35 U.S.C. § 285.

45. IBM has suffered and continues to suffer irreparable harm, for which there is no adequate remedy at law, and will continue to do so unless Airbnb is enjoined therefrom by this Court.

## **COUNT TWO**

### **INFRINGEMENT OF THE '193 PATENT**

46. IBM incorporates by reference paragraphs 1-45.

47. IBM is the owner of all right, title and interest in the '193 patent. The '193 patent was duly and properly issued by the USPTO on August 17, 2004. The '193 patent was duly assigned to IBM. A copy of the '193 patent is attached hereto as Exhibit B.

48. In violation of 35 U.S.C. § 271, Airbnb has infringed, contributed to the infringement of, and/or induced others to infringe one or more of the claims of the '193 patent by having made, designed, offered for sale, sold, provided, used, maintained, and/or supported its websites, including [www.airbnb.com](http://www.airbnb.com), and its mobile applications, including the Airbnb applications for mobile devices running on, for example, the Apple iOS and Google Android operating systems. Airbnb's infringement is continuing.

49. For example, Airbnb infringes because [www.airbnb.com](http://www.airbnb.com) and Airbnb mobile

applications infringe at least claim 1 of the '193 patent at least by:

a. Providing a graphical user interface (such as an Airbnb GUI) for a customer self service system (such as the Airbnb web site) that performs resource search and selection (such as allowing travelers to select and search “places to stay” and “things to do”) comprising:

b. a first visual workspace (such as the initial Airbnb search/query screen) comprising entry field enabling entry of a query for a resource (such as the query fields on the initial Airbnb search/query screen) and, one or more selectable graphical user context elements (such as the search options in the Airbnb search/query screen), each element representing a context associated with the current user state and having context attributes (such as the number and type of guests and options for stays, experiences, and adventures) and attribute values (such as the values associated with the aforementioned context attributes) associated therewith;

c. a second visual workspace for visualizing (such as Airbnb search results) the set of resources that the customer self service system has determined to match the user's query (such as each search result displayed on the search results page), said system indicating a degree of fit of said determined resources with said query (such as the sort order of the search results displayed on the search results page);

d. a third visual workspace (such as the “More filters” window accessed from the Airbnb search results screen) for enabling said user to select and modify context attribute values to enable increased specificity and accuracy of a query's search parameters (such as the dropdown fields that appear on selection), said third visual workspace further enabling said user to specify resource selection parameters and relevant resource evaluation

criteria (such as checkboxes for superhost and Amenities) utilized by a search mechanism in said system (such as the search button in the “More filters” window), said degree of fit indication based on said user's context, and said associated resource selection parameters and relevant resource evaluation criteria (such as the sort order of the search results displayed on the search results page); and,

e. a mechanism enabling said user to navigate among said first, second and third visual workspaces to thereby identify and improve selection logic and response sets fitted to said query (such as the search button on the initial Airbnb search/query screen and/or the “More filters” link in the Airbnb search results screen).

50. IBM has been damaged by the infringement of its '193 patent by Airbnb. IBM is entitled to recover from Airbnb the damages sustained by IBM as a result of Airbnb's wrongful acts.

51. The infringement by Airbnb of the '193 patent was deliberate and willful, entitling IBM to increased damages under 35 U.S.C. § 284 and to attorney fees and costs incurred in prosecuting this action under 35 U.S.C. § 285.

### **COUNT THREE**

#### **INFRINGEMENT OF THE '346 PATENT**

52. IBM incorporates by reference paragraphs 1-51.

53. IBM is the owner of all right, title and interest in the '346 patent. The '346 patent was duly and properly issued by the USPTO on December 8, 2009. The '346 patent was duly assigned to IBM. A copy of the '346 patent is attached hereto as Exhibit C.

54. In violation of 35 U.S.C. § 271, Airbnb has infringed, contributed to the infringement of, and/or induced others to infringe one or more of the claims of the '346 patent by having made, designed, offered for sale, sold, provided, used, maintained, and/or supported their

websites, including [www.airbnb.com](http://www.airbnb.com) and its mobile applications, including the Airbnb applications for mobile devices running on, for example, the Apple iOS and Google Android operating systems. Airbnb's infringement is continuing.

55. For example, [www.airbnb.com](http://www.airbnb.com) and Airbnb mobile applications infringe claim 1 of the '346 patent by, for example:

- a. managing user authentication (such as verifying the identity of an Airbnb user) within a distributed data processing system (such as a computer network), wherein a first system (such as Facebook and its network) and a second system (such as Airbnb and its network) interact within a federated computing environment (such as a computer network; for example, the Internet, including Facebook and Airbnb) and support single-sign-on operations ("Sign in" operations) in order to provide access to protected resources (such as the "Trips" option), at least one of the first system and the second system comprising a processor, the method comprising;
- b. triggering a single-sign-on operation (such as launching an operation to "Sign up" using Facebook) on behalf of the user in order to obtain access to a protected resource that is hosted by the second system, wherein the second system requires a user account for the user to complete the single-sign-on operation (such as requiring the user to have an Airbnb account) prior to providing access to the protected resource;
- c. receiving from the first system at the second system an identifier associated with the user (such as an email address, Facebook ID, name, or access token);
- d. creating a user account (such as an Airbnb account) for the user at the second system based at least in part on the received identifier associated with the user after triggering the single-sign-on operation but before generating at the second system a



response for accessing the protected resource (such as the “Trips” option), wherein the created user account supports single-sign-on operations (such as future Airbnb single-sign-on operations) between the first system and the second system on behalf of the user;

56. IBM has been damaged by the infringement of its '346 patent by Airbnb and will continue to be damaged by such infringement. IBM is entitled to recover from Airbnb the damages sustained by IBM as a result of Airbnb's wrongful acts.

57. The continued infringement by Airbnb of the '346 patent is deliberate and willful, entitling IBM to increased damages under 35 U.S.C. § 284 and to attorney fees and costs incurred in prosecuting this action under 35 U.S.C. § 285.

58. IBM has suffered and continues to suffer irreparable harm, for which there is no adequate remedy at law, and will continue to do so unless Airbnb is enjoined therefrom by this Court.

#### **COUNT FOUR**

#### **INFRINGEMENT OF THE '038 PATENT**

59. IBM incorporates by reference paragraphs 1-58.

60. IBM is the owner of all right, title and interest in the '038 patent. The '038 patent was duly and properly issued by the USPTO on November 15, 2005. The '038 patent was duly assigned to IBM. A copy of the '038 patent is attached hereto as Exhibit D.

61. In violation of 35 U.S.C. § 271, Airbnb has infringed, contributed to the infringement of, and/or induced others to infringe one or more of the claims of the '038 patent by having made, designed, offered for sale, sold, provided, used, maintained, and/or supported their websites, including [www.airbnb.com](http://www.airbnb.com) and its mobile applications, including the Airbnb applications for mobile devices running on, for example, the Apple iOS and Google Android operating systems. Airbnb's infringement is continuing.

62. For example, [www.airbnb.com](http://www.airbnb.com) and Airbnb mobile applications infringe claim 7 of the '038 patent by, for example:

a. enabling a user to navigate within a computer system (such as servers supported by Airbnb and/or its content delivery networks) through the use of bookmarks (such as deep links) comprising the steps of:

b. presenting one or more bookmarks (such as deep links) in a graphical user interface (such as the Airbnb computer interface presented to a user), the one or more bookmarks corresponding to at least one link to any location within the computer system (such as a particular resource location at servers supported by Airbnb and/or its content delivery networks);

c. enabling the user to select one or more bookmarks (such as deep links) corresponding to one or more programs (such as programs supporting Airbnb's website and mobile applications) and one or more views within the programs,

d. wherein the bookmarks (such as deep links) are presented in the graphical user interface (such as the Airbnb computer interface presented to a user); and responding to the bookmark selection (such as selection of a deep link) means to resolve the link and present information to which the link refers (such as by accessing and presenting information at the resource location specified by a deep link), wherein the link is capable of referring to a Uniform Resource Locator and is also capable of referring to other location identifying information within the computer system.

63. IBM has been damaged by the infringement of its '038 patent by Airbnb and will continue to be damaged by such infringement. IBM is entitled to recover from Airbnb the damages sustained by IBM as a result of Airbnb's wrongful acts.

64. The continued infringement by Airbnb of the '038 patent is deliberate and willful, entitling IBM to increased damages under 35 U.S.C. § 284 and to attorney fees and costs incurred in prosecuting this action under 35 U.S.C. § 285.

65. IBM has suffered and continues to suffer irreparable harm, for which there is no adequate remedy at law, and will continue to do so unless Airbnb is enjoined therefrom by this Court.

### **RELIEF REQUESTED**

Wherefore, IBM respectfully requests that this Court enter judgment against Airbnb as follows:

- A. That the '849 patent has been and continues to be infringed by Airbnb;
- B. That Airbnb's infringement of the '849 patent has been and continues to be willful;
- C. An injunction against further infringement of the '849 patent;
- D. That the '193 patent has been infringed by Airbnb;
- E. That Airbnb's infringement of the '193 patent has been and continues to be willful;
- F. An injunction against further infringement of the '193 patent;
- G. That the '346 patent has been and continues to be infringed by Airbnb;
- H. That Airbnb's infringement of the '346 patent has been and continues to be willful;
- I. An injunction against further infringement of the '346 patent;
- J. That the '038 patent has been and continues to be infringed by Airbnb;
- K. That Airbnb's infringement of the '038 patent has been and continues to be willful;
- L. An injunction against further infringement of the '038 patent;
- M. An award of damages adequate to compensate IBM for the patent infringement that has occurred, together with pre-judgment interest and costs;
- N. An award of all other damages permitted by 35 U.S.C. § 284, including increased

damages up to three times the amount of compensatory damages found;

O. That this is an exceptional case and an award to IBM of its costs and reasonable attorneys' fees incurred in this action as provided by 35 U.S.C. § 285; and

P. Such other relief as this Court deems just and proper.

**DEMAND FOR JURY TRIAL**

IBM hereby demands trial by jury on all claims and issues so triable

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Dated: March 11, 2020

*/s/ Karen E. Keller*

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