

1 Patrick H. Hicks, Bar No. 004632  
phicks@littler.com  
2 Kelsey E. Stegall, Bar No. 14279  
kstegall@littler.com  
3 LITTLER MENDELSON, P.C.  
3960 Howard Hughes Parkway, #300  
4 Las Vegas, Nevada 89169.5937  
Telephone: 702.862.8800  
5 - *Local Counsel*

6 Michael A. Oblon\*  
District of Columbia Bar No. 459363  
7 moblon@jonesday.com  
JONES DAY  
8 51 Louisiana Avenue, N.W.  
Washington, D.C. 20001  
9 Telephone: 202.879.3939

10 Keith Davis\*  
Texas State Bar No. 24037895  
11 kbdavis@jonesday.com  
JONES DAY  
12 2727 North Harwood  
Dallas, TX 75201  
13 Telephone: 214.969.4528

14 H. Albert Liou\*  
Texas State Bar No. 24061608  
15 aliou@jonesday.com  
JONES DAY  
16 717 Texas Ave. Suite 3300  
Houston, TX 77002  
17 Telephone: 832.239.3939  
\*To apply for admission pro hac vice.

18  
19 Attorneys for Plaintiff  
ALLEGIANT TRAVEL COMPANY

20 **UNITED STATES DISTRICT COURT**  
21 **DISTRICT OF NEVADA**

22 ALLEGIANT TRAVEL COMPANY,

23 Plaintiff,

24 v.

25 R2 SOLUTIONS LLC,

Defendant.

Case No.

**COMPLAINT FOR DECLARATORY  
JUDGMENT OF NON-INFRINGEMENT**

1 **INTRODUCTION AND SUMMARY**

2 1. Plaintiff Allegiant Travel Company (“Allegiant”) brings this action arising under the  
3 Declaratory Judgment Act, 28 U.S.C. § 2201, and the patent laws of the United States, 35 U.S.C. §  
4 1 *et seq.*, seeking declaratory judgment of non-infringement of United States Patent Nos. 7,698,329  
5 (“the ’329 Patent”); 8,190,610 (“ the ’610 Patent”); 8,307,029 (“the ’029 Patent”); 8,527,623 (“the  
6 ’623 Patent”); 9,558,175 (“the ’175 Patent”); 10,176,272 (“the ’272 Patent”); and 8,341,157 (“the  
7 ’157 Patent”) (collectively, the “Patents-in-Suit”).

8 2. Allegiant seeks this relief because Defendant R2 Solutions LLC ( “R2”), has accused  
9 Allegiant of infringing the Patents-in-Suit and has engaged in a patent enforcement campaign  
10 resulting in 22 lawsuits. R2’s actions have placed a cloud over Allegiant and its technology  
11 platforms. Allegiant believes it is not infringing the Patents-in-Suit and therefore asks this Court to  
12 declare Allegiant’s legal rights so that Allegiant may be granted relief from the uncertainty  
13 regarding its rights caused by Defendant.

14 **PARTIES**

15 3. Plaintiff Allegiant is a Nevada corporation having a principal place of business at  
16 1201 North Town Center Drive, Las Vegas, Nevada 89144. Founded in 1997, Allegiant provides  
17 travel and leisure services to under-served cities in the United States. Allegiant operates a low-cost  
18 passenger airline marketed primarily to leisure travelers in under-served cities. Allegiant also  
19 provides booking for certain third party travel products such as hotel rooms and ground  
20 transportation via Allegiant’s website, [www.allegiantair.com](http://www.allegiantair.com).

21 4. Allegiant employs over 3,800 employees, including department of Information  
22 Technology (IT) employees who reside or work in Nevada. Allegiant’s Las Vegas offices are also  
23 the headquarters for Allegiant’s corporate operations, including the operation, development, and  
24 maintenance of Allegiant’s website and information technology systems. Allegiant’s maintenance  
25 department is also headquartered in Las Vegas, where Allegiant’s technicians maintain its aircraft

1 fleet via Allegiant’s Federal Aviation Administration approved maintenance program.

2 5. Defendant R2 Solutions LLC (“R2”) is a limited liability company organized under  
3 the laws of the State of Texas, with its principal place of business at 6136 Frisco Square Blvd.,  
4 Suite 400, Frisco, Texas, 75034. On information and belief, R2 has no employees and conducts no  
5 business operations other than filing patent lawsuits and entering agreements to settle patent  
6 lawsuits and/or license patents in return for a fully-paid upfront fee.

7 6. R2 is a wholly-owned subsidiary of Acacia Research Corporation, a Delaware  
8 corporation. Acacia Research Corporation also wholly owns Acacia Research Group LLC, a Texas  
9 limited liability company that also has a principal place of business at 6136 Frisco Square Blvd.  
10 Suite 400, Frisco, TX 75034. On information and belief, Acacia Research Corporation and Acacia  
11 Research Group LLC conduct no business operations other than creating subsidiary companies that  
12 file patent lawsuits and enter agreements to settle patent lawsuits and/or license patents in return for  
13 a fully-paid upfront fee.

14 7. Evan W. Woolley, who has identified himself as Vice President of Licensing at  
15 Acacia Research Group LLC, and whose business address is 4 Park Plaza, Suite 550, Irvine,  
16 California, 92614, has on at least several occasions contacted Allegiant in his capacity as an agent  
17 of R2, as described in more detail below. On information and belief, Mr. Woolley has  
18 communicated with various other potential licensees of R2’s patents in his capacity as an agent of  
19 R2.

20 **JURISDICTION AND VENUE**

21 8. This action arises under the Declaratory Judgment Act, 28 U.S.C. § 2201 *et seq.*, and  
22 the patent laws of the United States, 35 U.S.C. § 1 *et seq.*

23 9. This court has subject matter jurisdiction over this action pursuant to 28 U.S.C. §§  
24 1331, 1338(a), 2201, and 2202.

25 10. This Court has personal jurisdiction over the parties because R2 has consciously and

1 purposefully directed its patent enforcement activities at this Judicial District, including by  
2 contacting Allegiant's officers and employees in this District on numerous occasions over the  
3 course of a year to propose that Allegiant enter into a license due to its alleged infringement, as well  
4 as entering into a nondisclosure agreement with Allegiant, a Nevada corporation. R2 is subject to  
5 personal jurisdiction because it has established the requisite minimum contacts with this District,  
6 including by deliberately directing its efforts in enforcing the Patents-in-Suit at Nevada.

7 11. Venue in this Judicial District is proper under 28 U.S.C. §§ 1391(b) and (c) because  
8 R2 is subject to personal jurisdiction in this District, and because a substantial part of the events  
9 giving rise to Allegiant's claims occurred in this District.

10 **A. Defendant has established extensive contacts with this District by directing**  
11 **its licensing and enforcement efforts with respect to the Patents-in-Suit at**  
12 **this District.**

13 12. Over the past year, Defendant R2 has consciously and deliberately directed written  
14 and oral communications to Allegiant and its officers and employees in this District regarding the  
15 licensing and enforcement of the Patents-in-Suit, and has also entered into an agreement with  
16 Allegiant, a Nevada corporation, relating to the licensing of the Patents-in-Suit.

17 13. On June 1, 2021, Allegiant's CEO Maurice Gallagher, a resident of Nevada, was  
18 contacted via letter by Evan W. Woolley, vice president of licensing for Acacia Research Group  
19 LLC. In the letter Mr. Woolley offered Allegiant a license to R2 Solutions' portfolio of patents that  
20 was formerly owned by Yahoo! Inc.

21 14. At that time, R2 had already begun an extensive patent enforcement campaign  
22 relating to its Yahoo! portfolio of patents, filing ten patent infringement lawsuits between January  
23 29, 2021 and June 1, 2021, against a myriad of defendants in different industries. The defendants  
24 sued by R2 included Workday, Inc., Target Corporation, Walmart Inc., Deezer SA, Samsung  
25 Electronics America, Inc., Fidelity Brokerage Services LLC, The Charles Schwab Corporation,  
JPMorgan Chase & Co., Roku, Inc., and iHeartMedia, Inc.

1           15.     Each of the lawsuits alleged infringement of patents formerly owned by Yahoo! Inc.  
2 In each of the lawsuits, R2 touted the strength of its portfolio of Yahoo! patents.

3           16.     For example, the lawsuits against Target Corporation, Walmart, Inc., Deezer, S.A.  
4 Roku, Inc. and iHeartMedia, Inc. alleged that search functionality relating to those companies'  
5 websites or music applications infringed the '329 patent.

6           17.     The lawsuits against Workday, Inc., Target Corporation, Walmart, Inc., Deezer,  
7 S.A., Samsung Electronics America, Inc., Fidelity Brokerage Services LLC, The Charles Schwab  
8 Corporation, JPMorgan Chase & Co., Roku, Inc. and iHeartMedia, Inc. alleged that those  
9 companies' data analytics platforms, including through their use of Apache Hadoop with  
10 MapReduce, infringed the '610 patent. Apache Hadoop is an open source framework for managing  
11 big data sets that is utilized by many different companies across multiple industries.

12           18.     The lawsuit against Samsung Electronics America, Inc. alleged that its Samsung  
13 SmartThings technology infringed the '029 patent.

14           19.     The lawsuits against Workday, Inc., Target Corporation, Walmart, Inc., Deezer,  
15 S.A., Roku, Inc. and iHeartMedia, Inc. alleged that search functionality relating to those companies'  
16 websites or music applications infringed the '157 patent.

17           20.     On October 18, 2021, Mr. Woolley emailed Mr. Gallagher to follow up on R2's  
18 license offer. Mr. Woolley's email referenced his June 1, 2021 letter "offering a broad license to  
19 the Yahoo! patent portfolio." A true and correct copy of this email is attached hereto as Exhibit A.  
20 Mr. Woolley reported to Mr. Gallagher that "[s]ince the last correspondence with you, R2 Solutions  
21 has licensed many companies through negotiated deals at our discounted royalty rates, and has  
22 resolved several lawsuits with companies including Samsung, Workday, and Fidelity, to name a  
23 few." Ex. A at 8.

24           21.     One week later, on October 25, 2021, Mr. Woolley again contacted Mr. Gallagher  
25 for a call to discuss, among other things, "licensing options for Allegiant Air." Ex. A at 7. On the

1 same day, Mr. Gallagher forwarded the email from Mr. Woolley to Laura Overton, Allegiant’s  
2 General Counsel and Vice President of Legal Affairs, who is also a resident of Nevada. Ex. A at 7.

3 22. Later that day, Ms. Overton responded to Mr. Woolley’s email, asking Mr. Woolley  
4 to “forward any future correspondence to Don Niles, [Allegiant’s] external intellectual property  
5 counsel.” Ex. A at 7.

6 23. On the same day, Mr. Woolley responded by email to both Ms. Overton and Mr.  
7 Niles, attaching a draft of a “mutually beneficial Non-Disclosure Agreement.” Ex. A at 6.  
8 According to Mr. Woolley, “[t]he NDA will enable us to share more information about the  
9 portfolio, applicability to Allegiant, and licensing options.” Ex. A at 6. The draft NDA was drafted  
10 to be entered between R2 Solutions LLC, a Texas limited liability company, and Allegiant Travel  
11 Company, a Nevada corporation.

12 24. On October 27, 2021, Mr. Niles sent an email to Mr. Woolley, copying Ms. Overton,  
13 and returning a copy of the NDA that was signed on behalf of Allegiant. In his email, Mr. Niles  
14 stated: “The only issue we have with the NDA was the Governing Law provision (formerly  
15 paragraph 10) which we deleted. If acceptable, please have R2 Solutions execute and return a copy  
16 to us.” Ex. A at 6.

17 25. On the same day, Mr. Woolley sent an email to Mr. Niles and Ms. Overton, stating,  
18 “We would prefer the certainty of having the governing law set out in the NDA. In the attached  
19 redline we propose New York as a neutral jurisdiction. We are comfortable with California as well.  
20 Please let us know if either of those are acceptable to Allegiant.” Ex. A at 6. On information and  
21 belief, R2 was aware that if the NDA did not contain a governing law clause, a dispute under  
22 agreement could be found to be governed by Nevada law.

23 26. On October 28, 2021, Mr. Niles responded, stating, “The Governing Law provision  
24 in the NDA seems to undercut the status quo ante protections of the NDA. Allegiant would prefer  
25 to simply not have this provision for this reason.” Ex. A at 5.

1           27.     Between October 28, 2021, and November 29, 2021, Mr. Woolley and Mr. Niles  
2 exchanged nine more emails about the draft NDA’s governing law provision, copying Ms. Overton.  
3 Mr. Niles insisted either on the law of Nevada as the governing law, or proceeding with the NDA  
4 without a governing law provision. On December 6, 2021, Mr. Woolley finally agreed and sent an  
5 email to Mr. Niles and Ms. Overton, attaching a “fully executed NDA between Allegiant and R2  
6 Solutions.” Ex. A at 1. A true and correct copy of the executed NDA is attached as Exhibit B. The  
7 stated purpose of the NDA was for the parties to enter into “licensing negotiations, during which  
8 either Party may disclose certain Confidential Information with the other Party.”

9           28.     Around January 6, 2022, Mr. Woolley commenced a phone call with Mr. Niles and  
10 Ms. Overton to discuss R2’s patents, after which he provided claim charts mapping Allegiant’s  
11 technologies as infringing the claims of the ’329 patent, the ’610 patent, the ’029 patent, the ’623  
12 patent, and the ’175 patent.

13           29.     After not receiving an immediate response from Allegiant, Mr. Woolley sent follow-  
14 up emails to Mr. Niles and Ms. Overton on January 12, 2022, and again on January 21, 2022. Mr.  
15 Woolley, Ms. Overton, and Mr. Niles then spoke on another conference call on February 16, 2022,  
16 about R2’s licensing proposal. Mr. Woolley followed up two more times on March 7, 2022 and  
17 March 21, 2022, via emails to Mr. Niles and Ms. Overton.

18           30.     On April 29, 2022, Ms. Overton sent an email to Mr. Woolley explaining that  
19 Allegiant did not believe it infringed the ’329 patent, the ’610 patent, the ’029 patent, the ’623  
20 patent, and the ’175 patent. Ms. Overton also asked Mr. Woolley to identify what was confidential  
21 about R2’s claim charts.

22           31.     Mr. Woolley responded to Ms. Overton by email on the same day, stating that the  
23 confidential information in R2’s claim charts consisted of its mapping of the patent claims onto  
24 Allegiant’s technologies.

25           32.     On May 12, 2022, Mr. Woolley sent an email to Ms. Overton, disagreeing with

1 Allegiant's positions in Ms. Overton's April 29, 2022 email. Mr. Woolley attached new claim  
2 charts mapping Allegiant's technologies as infringing the '272 patent and the '157 patent. After not  
3 receiving a response, Mr. Woolley sent another email to Ms. Overton and Ms. Niles on May 19,  
4 2022 to follow up.

5 33. By this time, R2 has expanded its patent enforcement campaign significantly.  
6 Subsequent to June 1, 2021, R2 filed twelve additional patent infringement lawsuits against  
7 companies in various industries. The defendants in those lawsuits included Expedia Group, Inc.,  
8 Roku, Inc., Redfin Corporation, Agoda Company Pte. Ltd., Booking.com Transport Limited,  
9 Booking.com BV, State Farm Mutual Automobile Insurance Company, FedEx Corporate Services,  
10 Inc., Citigroup Inc., Hilton Worldwide Holdings Inc., CVS Health Corporation, and American  
11 Airlines, Inc. The accused patents against these defendants included the '329 patent, the '610  
12 patent, and the '157 patent.

13 34. For example, the lawsuits against Expedia Group, Inc., Redfin Corporation, Agoda  
14 Company Pte. Ltd., Booking.com Transport Limited, Booking.com BV, State Farm Mutual  
15 Automobile Insurance Company, FedEx Corporate Services, Inc., Citigroup Inc., Hilton Worldwide  
16 Holdings Inc., CVS Health Corporation, and American Airlines, Inc. alleged that search  
17 functionality relating to those companies' websites or mobile applications infringed the '329 patent.

18 35. The lawsuits against Expedia Group, Inc., Roku Corporation, Redfin Corporation,  
19 Agoda Company Pte. Ltd., Booking.com Transport Limited, Booking.com BV, State Farm Mutual  
20 Automobile Insurance Company, FedEx Corporate Services, Inc., Citigroup Inc., Hilton Worldwide  
21 Holdings Inc., CVS Health Corporation, and American Airlines, Inc. alleged that those companies'  
22 data analytics platforms infringed the '610 patent.

23 36. The lawsuits against Expedia Group, Inc., Redfin Corporation, Agoda Company Pte.  
24 Ltd., Booking.com Transport Limited, Booking.com BV, FedEx Corporate Services, Inc., Citigroup  
25 Inc., Hilton Worldwide Holdings Inc., CVS Health Corporation, and American Airlines, Inc.



1 alleged that search functionality relating to those companies' websites or mobile applications  
2 infringed the '157 patent.

3 **B. A real and immediate controversy exists between Allegiant and R2.**

4 37. R2's correspondence to Allegiant and its numerous patent lawsuits against other  
5 companies has placed Allegiant in reasonable apprehension of a lawsuit against Allegiant regarding  
6 the alleged infringement of R2's patents.

7 38. Through its communications Allegiant's officers, employees, and lawyers described  
8 above, as well as its extensive patent enforcement campaign against various companies implicating  
9 their websites and music applications with search functionality, mobile applications, data analytics  
10 platforms, and other information technology platforms, R2 has created a real and immediate  
11 controversy between Allegiant and R2 regarding the alleged infringement of R2's patents by  
12 Allegiant's technologies. Allegiant risks a lawsuit by continuing to use its technologies, including  
13 its [www.allegiantair.com](http://www.allegiantair.com) website, mobile application, and other information technology platforms.

14 39. R2's actions have thus created a substantial controversy of sufficient immediacy and  
15 reality regarding Allegiant's use of its technologies to warrant the issuance of a declaratory  
16 judgment of non-infringement.

17 **COUNT I: NON-INFRINGEMENT OF THE '329 PATENT**

18 40. Allegiant repeats and realleges each and every allegation contained in Paragraphs 1  
19 through 39 as though fully set forth herein.

20 41. A true and correct copy of the '329 patent is attached hereto as Exhibit C. The '329  
21 patent is entitled "Method for Improving Quality of Search Results by Avoiding Indexing Sections  
22 of Pages." It issued on April 13, 2010, from an application filed on January 10, 2007. Priyank S.  
23 Garg, Amit J. Basu, and Timothy M. Converse are the named inventors. The '329 patent contains  
24 14 claims reciting apparatus and methods for ranking a plurality of documents recalled by a search  
25 engine for a query. On information and belief, the '329 patent is assigned to R2.

1 42. Allegiant, through its systems, products, and processes, including at least the  
2 [www.allegiantair.com](http://www.allegiantair.com) website, is not infringing any claim of the '329 patent.

3 43. For example, claim 1 of the '329 patent reads:

4 1. A method, comprising:

5 ranking a plurality of documents recalled by a search engine for a query;

6 wherein the plurality of documents contain certain documents, each document of  
7 said certain documents containing at least one section that is not used by said  
8 search engine for recall and one or more sections that are used by said search  
9 engine for recall;

10 wherein ranking a plurality of documents includes ranking said plurality of  
11 documents based, at least in part, on the at least one section of said certain  
12 documents not used by said search engine to recall documents; and

13 wherein the method is performed by one or more computing devices.

14 44. Allegiant's systems, products, and processes, including at least the  
15 [www.allegiantair.com](http://www.allegiantair.com) website, do not have the specific functionality claimed by the '329 patent,  
16 including, for example, ranking a plurality of documents that contain at least one section that is not  
17 used by a search engine for recall, based on said section that is not used by a search engine to recall  
18 documents. Allegiant's [www.allegiantair.com](http://www.allegiantair.com) website does not recall "documents", including  
19 "documents" with sections, in the course of operation. Allegiant does not maintain data in any  
20 "documents." Further, when Allegiant's website uses data from third parties, the search is  
21 conducted on the third-parties' data instead of Allegiant's own data records.

22 45. An actual and justiciable controversy therefore exists between Allegiant and R2 as to  
23 whether Allegiant is infringing the '329 patent. A judicial declaration is necessary to determine the  
24 parties' respective rights regarding the '329 patent. Allegiant is entitled to a judgment declaring  
25 that it is not infringing the '329 patent.

#### **COUNT II: NON-INFRINGEMENT OF THE '610 PATENT**

46. Allegiant repeats and realleges each and every allegation contained in Paragraphs 1  
through 45 as through fully stated herein.

1           47.     A true and correct copy of the '610 patent is attached hereto as Exhibit D. The '610  
2 patent is entitled "MapReduce for Distributed Database Processing." The '610 patent issued on  
3 May 29, 2012, from an application filed October 5, 2006. Ali Dasdan, Hung-Chih Yang, and Ruey-  
4 Lung Hsiao are the named inventors. The '610 patent contains 46 claims reciting methods and  
5 systems for treating an input data set as a plurality of grouped sets to enhance the utility of  
6 MapReduce programming methodology. On information and belief, the '610 patent is assigned to  
7 R2.

8           48.     Allegiant, through its systems, products, and processes, including at least the  
9 [www.allegiantair.com](http://www.allegiantair.com) website, is not infringing any claim of the '610 patent.

10          49.     For example, claim 1 of the '610 patent reads,

11           1. A method of processing data of a data set over a distributed system, wherein the data  
12 set comprises a plurality of data groups, the method comprising:

13               partitioning the data of each one of the data groups into a plurality of data partitions  
14               that each have a plurality of key-value pairs and providing each data partition to  
15               a selected one of a plurality of mapping functions that are each user-configurable  
16               to independently output a plurality of lists of values for each of a set of keys  
17               found in such map function's corresponding data partition to form corresponding  
18               intermediate data for that data group and identifiable to that data group, wherein  
19               the data of a first data group has a different schema than the data of a second data  
20               group and the data of the first data group is mapped differently than the data of  
21               the second data group so that different lists of values are output for the  
22               corresponding different intermediate data, wherein the different schema and  
23               corresponding different intermediate data have a key in common; and

24               reducing the intermediate data for the data groups to at least one output data group,  
25               including processing the intermediate data for each data group in a manner that is  
26               defined to correspond to that data group, so as to result in a merging of the  
27               corresponding different intermediate data based on the key in common,

28               wherein the mapping and reducing operations are performed by a distributed system.

29          50.     Allegiant's systems, products, and processes, including at least its information  
30 technology platforms, do not have the specific limitations of the '610 patent, including, for  
31 example, using MapReduce to process data over a distributed system or to process data from a  
32 plurality of groups having different schema over a computer system. According to the '610 patent,  
33

1 under a MapReduce programming methodology, “a ‘map’ function maps key-value pairs to new  
2 (intermediate) key-value pairs” and “[a] ‘reduce’ function represents all mapped (intermediate) key-  
3 value pairs sharing the same key to a single key-value pair or a list of values.” Allegiant has never  
4 installed a system on its computer servers, such as Apache Hadoop or Apache Spark, that uses  
5 MapReduce or analogous algorithm to process data. Allegiant is not using a MapReduce program.

6 51. An actual and justiciable controversy therefore exists between Allegiant and R2 as to  
7 whether Allegiant is infringing the ’610 patent. A judicial declaration is necessary to determine the  
8 parties’ respective rights regarding the ’610 patent. Allegiant is entitled to a judgment declaring  
9 that it is not infringing the ’610 patent.

10 **COUNT III: NON-INFRINGEMENT OF THE ’029 PATENT**

11 52. Allegiant repeats and realleges each and every allegation contained in Paragraphs 1  
12 through 51 as through fully stated herein.

13 53. A true and correct copy of the ’029 patent is attached hereto as Exhibit E. The ’029  
14 patent is entitled “System and Method for Conditional Delivery of Messages.” The ’029 patent  
15 issued on November 6, 2012, from an application filed December 10, 2007. Marc Eliot Davis,  
16 Marco Boerries, Christopher William Higgins, Joseph James O’Sullivan, Ronald Martinez, and  
17 Robert Carter Trout are the named inventors. The ’029 patent contains 20 claims, which recite  
18 methods, systems, and apparatus for delivering a message in accordance with delivery conditions.  
19 On information and belief, the ’029 patent is assigned to R2.

20 54. Allegiant, through its systems, products, and processes, including at least the  
21 [www.allegiantair.com](http://www.allegiantair.com) website and Allegiant’s mobile application, is not infringing any claim of the  
22 ’029 patent.

23 55. For example, claim 1 of the ’029 patent reads,

24 1. A method comprising:  
25

1 receiving from a sender, at a computing device, a request to deliver a first message a  
2 recipient, the request identifying at least one delivery condition set by the sender;

3 identifying, via the computing device, at least one real world entity (RWE) and  
4 information object (IO) associated with the at least one delivery condition;

5 retrieving, at the computing device, W4 COMN data associated with each of the  
6 identified at least one RWE and IO, the W4 COMN data comprising social data,  
7 spatial data, temporal data and logical data available to the network associated  
8 with the at least one RWE and IO;

9 monitoring, via the computing device, the W4 COMN data for current information  
10 related to the at least one RWE and IO indicating to determine that the at least  
11 one delivery condition is met; and

12 delivering, over a network, the first message when the at least one delivery condition  
13 is met.

14 56. Allegiant's systems, products, and processes, including at least the  
15 [www.allegiantair.com](http://www.allegiantair.com) website and Allegiant's mobile application, do not have the specific  
16 functionality of the '029 patent, including, for example, retrieving and monitoring W4 COMN data  
17 consisting of social data, spatial data, temporal data and logical data associated with a real world  
18 entity. Allegiant does not monitor W4 COMN data.

19 57. An actual and justiciable controversy therefore exists between Allegiant and R2 as to  
20 whether Allegiant is infringing the '029 patent. A judicial declaration is necessary to determine the  
21 parties' respective rights regarding the '029 patent. Allegiant is entitled to a judgment declaring  
22 that it is not infringing the '029 patent.

23 **COUNT IV: NON-INFRINGEMENT OF THE '623 PATENT**

24 58. Allegiant repeats and realleges each and every allegation contained in Paragraphs 1  
25 through 57 as through fully stated herein.

59. A true and correct copy of the '623 patent is attached hereto as Exhibit F. The '623  
patent is entitled "User Vacillation Detection and Response." The '623 patent issued on September  
3, 2013, from an application filed December 21, 2007. Cameron Marlow, Sihem Amer-Yahia,  
Ronald J. Brachman, and Frederick K. Schmidt are the named inventors. The '623 patent contains

1 23 claims directed to detecting when a user is in a state of vacillation and responding accordingly.  
2 On information and belief, the '623 patent is assigned to R2.

3 60. Allegiant, through its systems, products, and processes, including  
4 [www.allegiantair.com](http://www.allegiantair.com) website, is not infringing any claim of the '623 patent.

5 61. For example, claim 1 of the '623 patent reads,

6 1. A method for detecting and responding to user vacillation, comprising:

7 obtaining, by a processor, information associated with on-line behavior of a user;

8 automatically detecting, by the processor, a vacillation pattern relating to at least one  
9 object based on the obtained information;

10 constructing, by the processor, a vacillation event data structure based on the  
11 obtained information in response to detecting the vacillation pattern, the  
12 vacillation event data structure comprises information associated with the user,  
13 the at least one object, and a degree of vacillation demonstrated by the user with  
14 respect to the at least one object; and

15 providing, by the processor, information relating to the at least one object associated  
16 with the vacillation pattern to the user in response to detecting the vacillation  
17 pattern.

18 62. Allegiant's systems, products, and processes, including at least the  
19 [www.allegiantair.com](http://www.allegiantair.com) website, do not have the specific functionality claimed by the '623 patent,  
20 including, for example, detecting user vacillation, recording relevant parameters regarding the  
21 vacillation, and responding accordingly. Allegiant does not run code to detect and respond to user  
22 vacillation.

23 63. An actual and justiciable controversy therefore exists between Allegiant and R2 as to  
24 whether Allegiant is infringing the '623 patent. A judicial declaration is necessary to determine the  
25 parties' respective rights regarding the '623 patent. Allegiant is entitled to a judgment declaring  
that it is not infringing the '623 patent.

**COUNT V: NON-INFRINGEMENT OF THE '175 PATENT**

24 64. Allegiant repeats and realleges each and every allegation contained in Paragraphs 1  
25 through 63 as through fully stated herein.

1           65.     A true and correct copy of the '175 patent is attached hereto as Exhibit G. The '175  
2 patent is entitled "Generating an Individualized Web Page Template with Entities of a Web Page  
3 Publisher Organization Associated with Areas of the Template." The '175 patent issued on January  
4 31, 2017, from an application filed September 13, 2012. Evgeniy Makeev, Jeff Budzinski, Scott  
5 Roy, Annie Cheng, and Timothy Daly are the named inventors. The '175 patent contains 20 claims  
6 directed to systems and methods that produce a template for a webpage. On information and belief,  
7 the '175 patent is assigned to R2.

8           66.     Allegiant, through its systems, products, and processes, including at least the  
9 [www.allegiantair.com](http://www.allegiantair.com) website, is not infringing any claim of the '175 patent.

10          67.     For example, claim 1 of the '175 patent reads,

11           1. A method, comprising:

12                   generating one or more signals or states, or a combination thereof, comprising a  
13                   template for a web page individualized for a particular user utilizing at least in  
14                   part a processor of a computing device;

15                   associating a plurality of areas of the template with a respective plurality of entities  
16                   of a web page publisher organization utilizing at least in part the processor of the  
17                   computing device, wherein one or more entities of the plurality of entities for one  
18                   or more user areas of the plurality of areas are determined, implicitly or  
19                   explicitly, or a combination thereof, at least in part by the particular user and  
20                   another one or more entities of the plurality of entities for one or more system  
21                   areas of the plurality of areas are determined at least in part on a periodic or  
22                   rotating basis, or a combination thereof, by the web page publisher organization  
23                   at least in part to expose the particular user to new entities or to updated content  
24                   from existing entities, or a combination thereof; and

25                   selecting content for the plurality of areas of the template associated with the  
                    respective plurality of entities.

26          68.     Allegiant's systems, products, and processes, including at least the  
27 [www.allegiantair.com](http://www.allegiantair.com) website, do not have the specific functionality described by the '175 patent,  
28 including, for example, generating a template for a web page, individualized for a particular user.  
29 Allegiant does not generate individualized web page templates for its customers. Instead the web  
30 page template used by Allegiant is the same for all its customers.

1           69.     An actual and justiciable controversy therefore exists between Allegiant and R2 as to  
2 whether Allegiant is infringing the '175 patent. A judicial declaration is necessary to determine the  
3 parties' respective rights regarding the '175 patent. Allegiant is entitled to a judgment declaring  
4 that it is not infringing the '175 patent.

5                                           **COUNT VI: NON-INFRINGEMENT OF THE '272 PATENT**

6           70.     Allegiant repeats and realleges each and every allegation contained in Paragraphs 1  
7 through 69 as though fully set forth herein.

8           71.     A true and correct copy of the '272 patent is attached hereto as Exhibit H. The '272  
9 patent is entitled "System and Method of Automatically Sizing and Adapting a Widget to Available  
10 Space." It issued on January 8, 2019, from an application filed September 28, 2007. The '272  
11 patent lists Joseph Andrew Magnani and William MacDonald White as its inventors. The '272  
12 patent contains 22 claims relating to systems and methods that determine in a browser-based  
13 widget, which elements to display, and at what scale, so as to make the most efficient use of its  
14 available space. On information and belief, the '272 patent is assigned to R2.

15           72.     Allegiant, through its systems, products, and processes, including at least the  
16 [www.allegiantair.com](http://www.allegiantair.com) website, is not infringing any claim of the '272 patent.

17           73.     For example, claim 1 of the '272 patent reads,

18           1. A method comprising:

19                   receiving structural data associated with a web page, the web page including a  
20                   widget, the widget including a plurality of widget elements, wherein the  
                          structural data includes a size of a browser window used to display the web page;

21                   accessing a constraint regarding a pre-determined number of the widget elements to  
                          display within the widget;

22                   triggering during a display of the browser window and the plurality of widget  
23                   elements a reduction in a size of the widget and a reduction in a plurality of sizes  
24                   of the widget elements to display within the widget when the size of the browser  
                          window reduces;



1 removing one or more of the widget elements from being displayed within the  
2 widget after reducing the sizes of the widget elements, wherein said removing the  
3 one or more of the widget elements is performed until the constraint is achieved;  
4 increasing a size of remaining one of the widget elements of the reduced size to fit  
5 within the widget of the reduced size upon achieving the constraint; and  
6 sending data for displaying the widget.

7 74. Allegiant's systems, products, and processes, including at least the  
8 [www.allegiantair.com](http://www.allegiantair.com) website, do not have the specific functionality claimed by the '272 patent,  
9 including, for example, removing widget elements from being displayed within a widget on the  
10 [www.allegiantair.com](http://www.allegiantair.com) website after the sizes of widget elements have been reduced. The  
11 [www.allegiantair.com](http://www.allegiantair.com) website does not use "widget elements." To the extent that the appearance of  
12 input fields on the [www.allegiantair.com](http://www.allegiantair.com) website change when the size of a browser window  
13 changes, the input fields are not removed.

14 75. An actual and justiciable controversy therefore exists between Allegiant and R2  
15 whether Allegiant is infringing the '272 patent. A judicial declaration is necessary to determine the  
16 parties' respective rights regarding the '272 patent. Allegiant is entitled to a judgment declaring  
17 that it is not infringing the '272 patent.

#### 18 **COUNT VII: NON-INFRINGEMENT OF THE '157 PATENT**

19 76. Allegiant repeats and realleges each and every allegation contained in Paragraphs 1  
20 through 75 as though fully set forth herein.

21 77. A true and correct copy of the '157 patent is attached hereto as Exhibit I. The '157  
22 patent is entitled "System and Method for Intent-Driven Search Result Presentation." It issued on  
23 December 25, 2012, from an application filed on July 31, 2009. The '157 patent lists Robert  
24 Schulman as its inventor. The '157 patent contains 23 claims relating to systems and methods that  
25 enhance the effectiveness of information search, retrieval and presentation using user intent. On  
information and belief, the '157 patent is assigned to R2.

78. Allegiant, through its systems, products, and processes, including at least the

1 [www.allegiantair.com](http://www.allegiantair.com) website, is not infringing any claim of the '157 patent.

2 79. For example, claim 1 of the '157 patent reads,

3 1. A method comprising the steps of:

4 receiving, over a network, a query from a user, the query comprising at least one  
5 query token;

6 analyzing the query, using at least one computing device, to identify at least one  
7 query keyword;

8 determining, at least the one computing device, a plurality of intents from the at least  
9 one keyword, each of the plurality of intents indicates a type of information  
10 regarding the query keyword that is likely to be desired by a user submitting the  
11 query;

12 classifying the query, using the at least one computing device, into at least one of the  
13 plurality of intents;

14 identifying, using the at least one computing device, a plurality of data objects  
15 available over the network that match the at least one query keyword;

16 assigning, using the at least one computing device, at least one of the plurality of  
17 intents to at least some of the plurality of data objects;

18 ranking, using the at least one computing device, the plurality of data objects;

19 building a result, using the at least one computing device, using the ranked plurality  
20 of data objects, the result comprises a plurality of display entries, at least one  
21 display entry customized to a respective assigned intent is constructed for each of  
22 the ranked plurality of data objects; and

23 transmitting the result, over the network, to the user.

24 80. Allegiant's systems, products, and processes, including at least the

25 [www.allegiantair.com](http://www.allegiantair.com) website, do not have the specific functionality claimed by the '157 patent,  
including, for example, determining a plurality of intents from at least one keyword identified by  
analyzing a query submitted by a user of the [www.allegiantair.com](http://www.allegiantair.com) website, and assigning one of  
the plurality of intents to at least some of a plurality of data objects matching the at least one  
keyword. The search results returned from queries run on the [www.allegiantair.com](http://www.allegiantair.com) website are  
categorized using predetermined categories.

81. An actual and justiciable controversy therefore exists between Allegiant and R2

1 whether Allegiant is infringing the '157 patent. A judicial declaration is necessary to determine the  
2 parties' respective rights regarding the '157 patent. Allegiant is entitled to a judgment declaring  
3 that it is not infringing the '157 patent.

4 **PRAYER FOR RELIEF**

5 WHEREFORE, Plaintiff Allegiant respectfully requests that judgment be entered in its favor  
6 and against Defendant R2, and prays that the Court grant the following relief to Allegiant:

- 7 a. A judgment declaring that Allegiant is not infringing the '329 patent;
- 8 b. A judgment declaring that Allegiant is not infringing the '610 patent;
- 9 c. A judgment declaring that Allegiant is not infringing the '029 patent;
- 10 d. A judgment declaring that Allegiant is not infringing the '623 patent;
- 11 e. A judgment declaring that Allegiant is not infringing the '175 patent;
- 12 f. A judgment declaring that Allegiant is not infringing the '272 patent;
- 13 g. A judgment declaring that Allegiant is not infringing the '157 patent;
- 14 h. A declaration that this case is exceptional under 35 U.S.C. § 285 and an award of the  
15 reasonable attorney's fees, costs, and expenses incurred by Allegiant in this action;
- 16 i. An order awarding Allegiant its costs of suit incurred in this action; and
- 17 j. Such other and future relief as this Court may deem just and proper.

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**JURY TRIAL DEMAND**

Allegiant hereby demands a trial by jury of all issues and claims so triable.

Respectfully submitted,

Dated: May 24, 2022

LITTLER MENDELSON, P.C.



Patrick H. Hicks, Bar No. 004632  
Kelsey E. Stegall, Bar No. 14279  
LITTLER MENDELSON, P.C.  
3960 Howard Hughes Parkway, #300  
Las Vegas, Nevada 89169.5937  
*Local Counsel*

Michael A. Oblon (To Apply *Pro Hac Vice*)  
JONES DAY  
51 Louisiana Avenue, N.W.  
Washington, D.C. 20001

Keith Davis (To Apply *Pro Hac Vice*)  
JONES DAY  
2727 North Harwood  
Dallas, TX 75201

H. Albert Liou (To Apply *Pro Hac Vice*)  
JONES DAY  
717 Texas Avenue, Suite 3300  
Houston, TX 77002

Attorneys for Plaintiff  
ALLEGIANT TRAVEL COMPANY