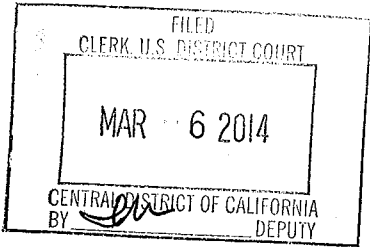


ORIGINAL

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10  
11  
12 UNITED STATES DISTRICT COURT  
13 CENTRAL DISTRICT OF CALIFORNIA  
14

15 The CALIFORNIA INSTITUTE OF  
TECHNOLOGY, a California  
16 corporation,

17 Plaintiff,

18 vs.

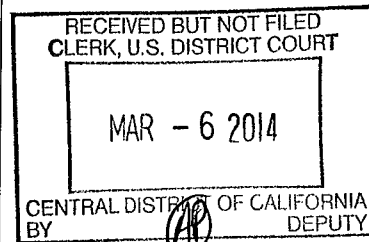
19 HUGHES COMMUNICATIONS,  
INC., a Delaware corporation,  
20 HUGHES NETWORK SYSTEMS,  
LLC, a Delaware limited liability  
21 company, DISH NETWORK  
CORPORATION, a Nevada  
22 corporation, DISH NETWORK L.L.C.,  
a Colorado limited liability company,  
23 and DISHNET SATELLITE  
BROADBAND L.L.C., a Colorado  
24 limited liability company,

25 Defendants.  
26  
27  
28

CASE NO. 2:13-cv-07245-MRP-JEM

**AMENDED COMPLAINT FOR  
PATENT INFRINGEMENT**

**JURY TRIAL DEMANDED**



CALTECH - EXHIBIT 2018

Apple Inc. v. California Institute of Technology

1 Plaintiff the California Institute of Technology (“Caltech” or “Plaintiff”), by  
2 and through its undersigned counsel, complains and alleges as follows against  
3 Hughes Communications, Inc., Hughes Network Systems, LLC, DISH Network  
4 Corporation, DISH Network L.L.C., and dishNET Satellite Broadband L.L.C.  
5 (collectively, “Defendants”):

6 **NATURE OF THE ACTION**

7 1. This is a civil action for patent infringement arising under the patent  
8 laws of the United States, 35 U.S.C. §§ 1 *et seq.*

9 2. Defendants have infringed and continue to infringe, contributed to and  
10 continue to contribute to the infringement of, and/or actively induced and continue  
11 to induce others to infringe Caltech’s U.S. Patent No. 7,116,710, U.S. Patent No.  
12 7,421,032, U.S. Patent No. 7,916,781, and U.S. Patent No. 8,284,833 (collectively,  
13 “the Asserted Patents”). Caltech is the legal owner by assignment of the Asserted  
14 Patents, which were duly and legally issued by the United States Patent and  
15 Trademark Office. Caltech seeks injunctive relief and monetary damages.

16 **THE PARTIES**

17 3. Caltech is a non-profit private university organized under the laws of  
18 the State of California, with its principal place of business at 1200 East California  
19 Boulevard, Pasadena, California 91125.

20 4. On information and belief, Hughes Communications, Inc. (“Hughes  
21 Communications”) is a corporation organized under the laws of the State of  
22 Delaware, with its principal place of business located at 11717 Exploration Lane,  
23 Germantown, Maryland 20876. On information and belief, Hughes  
24 Communications is a wholly-owned subsidiary of Hughes Satellite Systems  
25 Corporation, which is a wholly-owned subsidiary of EchoStar Corporation  
26 (“EchoStar”).

27 5. On information and belief, Hughes Network Systems, LLC (“Hughes  
28 Network”) is a limited liability company organized under the laws of the State of

1 Delaware, with its principal place of business located at 11717 Exploration Lane,  
2 Germantown, Maryland 20876. On information and belief, Hughes Network is a  
3 wholly owned subsidiary of Hughes Communications. Hughes Communications  
4 and Hughes Network, collectively, are referred to as "Hughes Defendants."

5 6. On information and belief, DISH Network Corporation ("DISH Corp.")  
6 is a corporation organized under the laws of the State of Nevada with its principal  
7 place of business located at 9601 South Meridian Boulevard, Englewood, Colorado  
8 80112.

9 7. On information and belief, DISH Network L.L.C. ("DISH L.L.C.") is a  
10 limited liability company organized under the laws of the State of Colorado with its  
11 principal place of business located at 9601 South Meridian Boulevard, Englewood,  
12 Colorado 80112. On information and belief, DISH L.L.C. is a wholly owned  
13 subsidiary of DISH Corp.

14 8. On information and belief, dishNET Satellite Broadband L.L.C.  
15 ("dishNET") is a limited liability company organized under the laws of the State of  
16 Colorado with its principal place of business located at 9601 South Meridian  
17 Boulevard, Englewood, Colorado 80112. On information and belief, dishNET is a  
18 wholly owned subsidiary of DISH Corp. On information and belief, dishNET and  
19 DISH L.L.C. are related entities. DISH Corp., DISH L.L.C., and dishNET,  
20 collectively, are referred to as "Dish Defendants."

21 9. On information and belief, Hughes Defendants' parent company,  
22 EchoStar, and Dish Defendants were previously one company. On information and  
23 belief, around January 2008, EchoStar and Dish Defendants became two separate  
24 companies (the "spin-off").

25 10. On information and belief, the business relationship among Dish  
26 Defendants, EchoStar and Hughes Defendants remains extremely integrated. The  
27 same individual serves as the Chairman of both Dish Defendants and EchoStar.  
28 Further, since the spin-off, a substantial majority of the voting power of the shares

1 of both Dish Defendants and EchoStar is owned beneficially by the Chairman, or by  
2 certain trusts established by the Chairman. Additionally, on information and belief,  
3 in addition to the Chairman, an individual responsible for the development and  
4 implementation of advanced technologies that are of potential utility and importance  
5 to both Dish Defendants and EchoStar serves on the board of both companies. On  
6 information and belief, in 2010, Dish Defendants accounted for 82.5% of EchoStar's  
7 total revenue and in 2012, Dish Defendants accounted for 49.5% of EchoStar's total  
8 revenue. Additionally, on information and belief, in October 2012, Dish Defendants  
9 and Hughes Defendants entered into a distribution agreement relating to Hughes  
10 Defendants' satellite internet service.

#### 11 JURISDICTION AND VENUE

12 11. This Court has jurisdiction over the subject matter of this action under  
13 28 U.S.C. §§ 1331 and 1338(a).

14 12. Hughes Defendants are subject to this Court's personal jurisdiction. On  
15 information and belief, Hughes Defendants regularly conduct business in the State  
16 of California, including in the Central District of California, and have committed  
17 acts of patent infringement and/or contributed to or induced acts of patent  
18 infringement by others in this District and elsewhere in California and the United  
19 States. As such, Hughes Defendants have purposefully availed themselves of the  
20 privilege of conducting business within this District; have established sufficient  
21 minimum contacts with this District such that they should reasonably and fairly  
22 anticipate being haled into court in this District; have purposefully directed activities  
23 at residents of this State; and at least a portion of the patent infringement claims  
24 alleged herein arise out of or are related to one or more of the foregoing activities.

25 13. Dish Defendants are subject to this Court's personal jurisdiction. On  
26 information and belief, Dish Defendants regularly conduct business in the State of  
27 California, including in the Central District of California, maintain employees in this  
28 District and elsewhere in California, and have committed acts of patent infringement

1 and/or contributed to or induced acts of patent infringement by others in this District  
2 and elsewhere in California and the United States. As such, Dish Defendants have  
3 purposefully availed themselves of the privilege of conducting business within this  
4 District; have established sufficient minimum contacts with this District such that  
5 they should reasonably and fairly anticipate being haled into court in this District;  
6 have purposefully directed activities at residents of this State; and at least a portion  
7 of the patent infringement claims alleged herein arise out of or are related to one or  
8 more of the foregoing activities.

9 14. Venue is proper in this judicial district pursuant to 28 U.S.C. §§ 1391  
10 and 1400 because Defendants regularly conduct business in this District, and certain  
11 of the acts complained of herein occurred in this District.

12 **CALTECH'S ASSERTED PATENTS**

13 15. On October 3, 2006, the United States Patent Office issued U.S. Patent  
14 No. 7,116,710, titled "Serial Concatenation of Interleaved Convolutional Codes  
15 Forming Turbo-Like Codes" (the "'710 patent"). A true and correct copy of the  
16 '710 patent is attached hereto as Exhibit A.

17 16. On September 2, 2008, the United States Patent Office issued U.S.  
18 Patent No. 7,421,032, titled "Serial Concatenation of Interleaved Convolutional  
19 Codes Forming Turbo-Like Codes" (the "'032 patent"). A true and correct copy of  
20 the '032 patent is attached hereto as Exhibit B. The '032 patent is a continuation of  
21 the application that led to the '710 patent.

22 17. On March 29, 2011, the United States Patent Office issued U.S. Patent  
23 No. 7,916,781, titled "Serial Concatenation of Interleaved Convolutional Codes  
24 Forming Turbo-Like Codes" (the "'781 patent"). A true and correct copy of the  
25 '781 patent is attached hereto as Exhibit C. The '781 patent is a continuation of the  
26 application that led to the '032 patent, which is a continuation of the application that  
27 led to the '710 patent.

28 18. On October 9, 2012, the United States Patent Office issued U.S. Patent

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