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13 *Attorneys for Plaintiff*
 14 *Data Scape Limited*

15 **UNITED STATES DISTRICT COURT**
 16 **CENTRAL DISTRICT OF CALIFORNIA**
 17 **WESTERN DIVISION**

18 DATA SCAPE LIMITED,
 Plaintiff,
 19
 20 vs.
 21 APPLE INC.,
 Defendant.
 22

Case No. 2:18-cv-10659

JURY TRIAL DEMANDED

23 **FIRST AMENDED COMPLAINT FOR PATENT INFRINGEMENT**

24 This is an action for patent infringement arising under the Patent Laws of the
 25 United States of America, 35 U.S.C. § 1 *et seq.* in which Plaintiff Data Scape Limited
 26 (“Plaintiff,” “Data Scape”) makes the following allegations against Defendant Apple
 27 Inc. (“Defendant” or “Apple”):
 28

PARTIES

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2 1. Data Scape is a company organized under the laws of Ireland with its office
3 located at Office 115, 4-5 Burton Hall Road, Sandyford, Dublin 18, Ireland.

4 2. On information and belief, Apple is a California corporation with its
5 principal place of business at One Apple Park Way, Cupertino, California 95014. Apple
6 has regular and established places of business in this District, including, *e.g.*, at 8500
7 Beverly Blvd., Los Angeles, CA 90048. Apple further has a relevant and existing
8 presence in Hollywood, where it employs at least dozens of employees.
9 <https://www.linkedin.com/in/dking061>, <https://www.linkedin.com/in/jingw>,
10 <https://www.linkedin.com/in/tylergrisham/>, [https://www.linkedin.com/in/scott-](https://www.linkedin.com/in/scott-plagenhoef-a5785b54/)
11 [plagenhoef-a5785b54/](https://www.linkedin.com/in/scott-plagenhoef-a5785b54/). Further, Data Scape is informed and believes that Apple is in
12 the process of significantly expanding its operations in this District, including through
13 a lease of 8777 Washington Blvd., in Culver City, California. *See*
14 <https://www.latimes.com/business/hollywood/la-fi-ct-apple-culver-city-20180118->
15 [story.html](https://www.latimes.com/business/hollywood/la-fi-ct-apple-culver-city-20180118-). Apple can be served through its registered agent, CT Corporation System,
16 818 W. Seventh Street, Suite 930, Los Angeles, California, 90017.

17 **JURISDICTION AND VENUE**

18 3. This action arises under the patent laws of the United States, Title 35 of
19 the United States Code. This Court has original subject matter jurisdiction pursuant to
20 28 U.S.C. §§ 1331 and 1338(a).

21 4. This Court has personal jurisdiction over Apple in this action because
22 Apple has committed acts within the Central District of California giving rise to this
23 action and has established minimum contacts with this forum such that the exercise of
24 jurisdiction over Apple would not offend traditional notions of fair play and substantial
25 justice. Apple, directly and through subsidiaries or intermediaries, has committed and
26 continues to commit acts of infringement in this District by, among other things,
27 offering to sell and selling products and/or services that infringe the asserted patents.

1 storage medium, a communicator configured to communicate data with said first
2 apparatus, a detector configured to detect whether said first apparatus and said second
3 apparatus are connected, an editor configured to select certain data to be transferred and
4 to edit said management information based on said selection without regard to the
5 connection of said first apparatus, and a controller configured to control transfer of the
6 selected data stored in said second apparatus via said communicator based on said
7 management information edited by said editor when said detector detects that said first
8 apparatus and said second apparatus are connected, wherein said controller is
9 configured to compare said management information edited by said editor with
10 management information of data stored in said first storage medium and to transmit data
11 in said second apparatus based on the results of the comparison. Upon information and
12 belief, Apple uses the Accused Instrumentalities, which are infringing systems, for its
13 own internal non-testing business purposes, while testing the Accused Instrumentalities,
14 and while providing technical support and repair services for the Accused
15 Instrumentalities to Apple's customers.

16 10. On information and belief, Apple has had knowledge of the '929 Patent
17 since at least the filing of the original Complaint in this action, or shortly thereafter, and
18 on information and belief, Apple knew of the '929 Patent and knew of its infringement,
19 including by way of this lawsuit. By the time of trial, Apple will have known and
20 intended (since receiving such notice) that its continued actions would actively induce
21 and contribute to the infringement of the claims of the '929 Patent.

22 11. On information and belief, use of the Accused Instrumentalities in their
23 ordinary and customary fashion results in infringement of the claims of the '929 Patent.

24 12. Apple's affirmative acts of making, using, selling, offering for sale, and/or
25 importing the Accused Instrumentalities have induced and continue to induce users of
26 the Accused Instrumentalities to use the Accused Instrumentalities in their normal and
27 customary way to infringe Claim 1 of the '929 Patent, knowing that when the Accused
28 Instrumentalities are used in their ordinary and customary manner such systems

1 constitute infringing communication systems comprising: a first apparatus having a first
2 storage medium, and a second apparatus, said second apparatus comprising: a second
3 storage medium configured to store management information of data to be transferred
4 to said first storage medium, a communicator configured to communicate data with said
5 first apparatus, a detector configured to detect whether said first apparatus and said
6 second apparatus are connected, an editor configured to select certain data to be
7 transferred and to edit said management information based on said selection without
8 regard to the connection of said first apparatus, and a controller configured to control
9 transfer of the selected data stored in said second apparatus via said communicator
10 based on said management information edited by said editor when said detector detects
11 that said first apparatus and said second apparatus are connected, wherein said controller
12 is configured to compare said management information edited by said editor with
13 management information of data stored in said first storage medium and to transmit data
14 in said second apparatus based on the results of the comparison. For example, Apple
15 explains to customers the benefits of using the Accused Instrumentalities, such as by
16 touting their advantages communicating and sharing data among multiple devices:

17 iCloud File Management

18
19 Use the iCloud Storage APIs to write user documents and data to a central location and access
20 those items from all of a user's computers and iOS devices. Making a user's documents
21 ubiquitous using iCloud means that a user can view or edit those documents from any device
22 without having to sync or transfer files explicitly. Storing documents in a user's iCloud
23 account also provides a layer of security for that user. Even if a user loses a device, the
24 documents on that device are not lost if they are in iCloud storage.

25 **Important:** The iCloud APIs do not work with garbage collection in macOS. If your existing
26 code uses garbage collection, update your code to use ARC instead.

27 https://developer.apple.com/library/archive/documentation/FileManagement/Conceptual/FileSystemProgrammingGuide/iCloud/iCloud.html#//apple_ref/doc/uid/TP4001067-2-CH12-SW1. For similar reasons, Apple also induces its customers to use the Accused
28 Instrumentalities to infringe other claims of the '929 Patent. Apple specifically intended

1 and was aware that the normal and customary use of the Accused Instrumentalities on
2 compatible systems would infringe the '929 Patent. Apple performed the acts that
3 constitute induced infringement, and would induce actual infringement, with the
4 knowledge of the '929 Patent and with the knowledge, or willful blindness to the
5 probability, that the induced acts would constitute infringement. On information and
6 belief, Apple engaged in such inducement to promote the sales of the Accused
7 Instrumentalities, *e.g.*, through Apple's user manuals, product support, marketing
8 materials, demonstrations, installation support, and training materials to actively induce
9 the users of the accused products to infringe the '929 Patent. Accordingly, Apple has
10 induced and continues to induce end users of the accused products to use the accused
11 products in their ordinary and customary way with compatible systems to make and/or
12 use systems infringing the '929 Patent, knowing that such use of the Accused
13 Instrumentalities with compatible systems will result in infringement of the '929 Patent.
14 Accordingly, Apple has been (since at least as of filing of the original complaint), and
15 currently is, inducing infringement of the '929 Patent, in violation of 35 U.S.C. §
16 271(b).

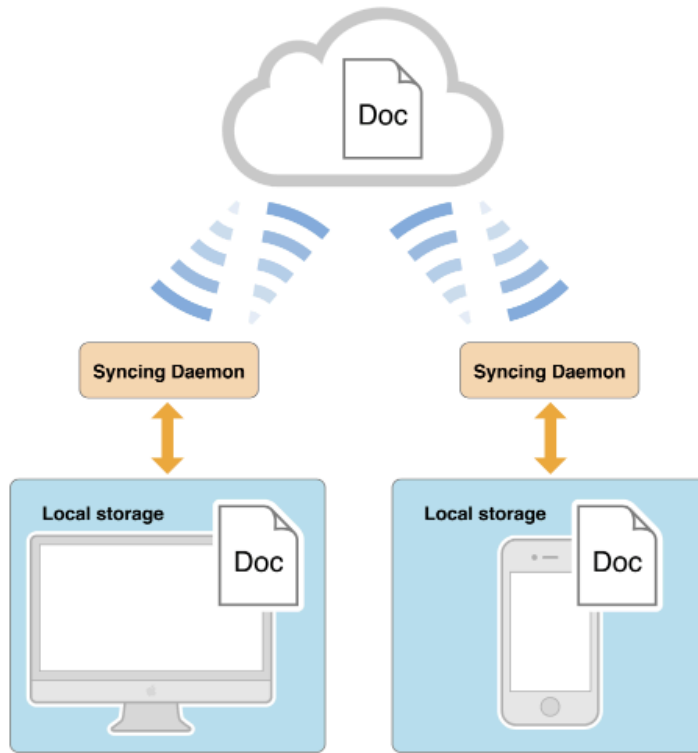
17 13. Apple also indirectly infringes the '929 Patent by manufacturing, using,
18 selling, offering for sale, and/or importing the accused products, with knowledge that
19 the accused products were and are especially manufactured and/or especially adapted
20 for use in infringing the '929 Patent and are not a staple article or commodity of
21 commerce suitable for substantial non-infringing use. On information and belief, the
22 Accused Instrumentality is designed to be used as an infringing communication systems
23 comprising: a first apparatus having a first storage medium, and a second apparatus,
24 said second apparatus comprising: a second storage medium configured to store
25 management information of data to be transferred to said first storage medium, a
26 communicator configured to communicate data with said first apparatus, a detector
27 configured to detect whether said first apparatus and said second apparatus are
28 connected, an editor configured to select certain data to be transferred and to edit said

1 management information based on said selection without regard to the connection of
2 said first apparatus, and a controller configured to control transfer of the selected data
3 stored in said second apparatus via said communicator based on said management
4 information edited by said editor when said detector detects that said first apparatus and
5 said second apparatus are connected, wherein said controller is configured to compare
6 said management information edited by said editor with management information of
7 data stored in said first storage medium and to transmit data in said second apparatus
8 based on the results of the comparison. Because the Accused Instrumentality is designed
9 to operate as the claimed system for communication, the Accused Instrumentality has
10 no substantial non-infringing uses, and any other uses would be unusual, far-fetched,
11 illusory, impractical, occasional, aberrant, or experimental. Apple’s manufacture, use,
12 sale, offering for sale, and/or importation of the Accused Instrumentality constitutes
13 contributory infringement of the ’929 Patent. Accordingly, Apple has been, and
14 currently is, contributorily infringing the ‘929 patent, in violation of 35 U.S.C. § 271(c).

15 14. The Accused Instrumentalities include a system for communicating data.
16 For example, the Accused Instrumentalities include “[a] communication system
17 including a first apparatus having a first storage medium, and a second apparatus.” For
18 example, the Accused Instrumentalities communicate and transfer a document stored
19 on one Apple device (e.g. a MacBook, iCloud Drive) to another Apple device (e.g. an
20 iPhone):

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Figure 4-1 Pushing document changes to iCloud



https://developer.apple.com/library/archive/documentation/FileManagement/Conceptual/FileSystemProgrammingGuide/iCloud/iCloud.html#//apple_ref/doc/uid/TP40010672-CH12-SW1.

iCloud File Management

Use the iCloud Storage APIs to write user documents and data to a central location and access those items from all of a user's computers and iOS devices. Making a user's documents ubiquitous using iCloud means that a user can view or edit those documents from any device without having to sync or transfer files explicitly. Storing documents in a user's iCloud account also provides a layer of security for that user. Even if a user loses a device, the documents on that device are not lost if they are in iCloud storage.

Important: The iCloud APIs do not work with garbage collection in macOS. If your existing code uses garbage collection, update your code to use ARC instead.

Storing and Using Documents in iCloud

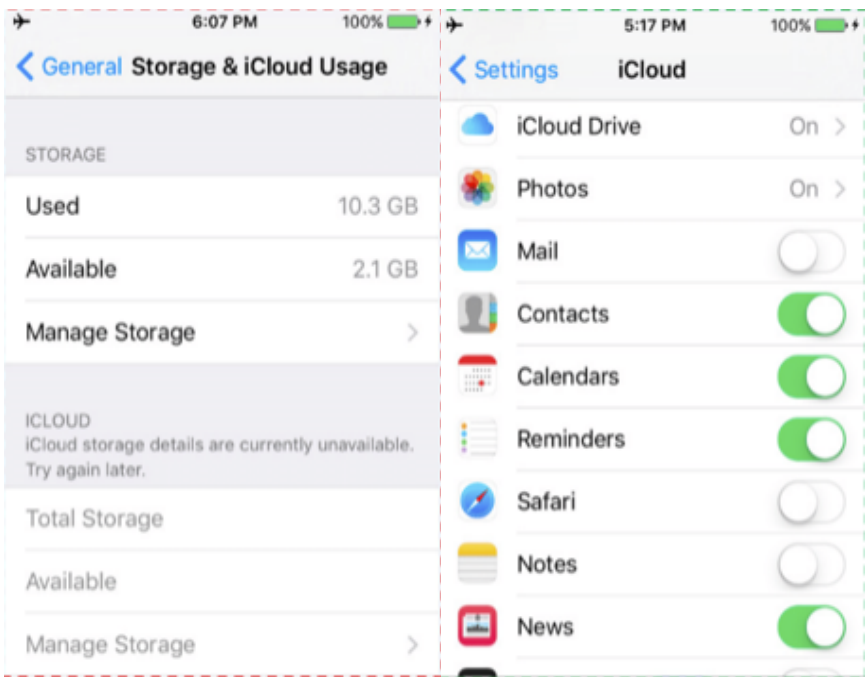
Documents in iCloud provide the central location from which updates can be delivered to a user's computers and iOS devices. All documents must be created on a local disk initially and moved to a user's iCloud account later. A document targeted for iCloud storage is not moved to iCloud immediately, though. First, it is moved from its current location in the file system to a local system-managed directory where it can be monitored by the iCloud service. After that transfer, the file is transferred to iCloud and to the user's other devices as soon as possible.

While in iCloud storage, changes made on one device are stored locally and then pushed to iCloud using a local daemon, as shown in Figure 4-1. To prevent large numbers of conflicting changes from occurring at the same time, apps are expected to use file coordinator objects to perform all changes. File coordinators mediate changes between your app and the daemon that facilitates the transfer of the document to and from iCloud. In this way, the file coordinator acts like a locking mechanism for the document, preventing your app and the daemon from modifying the document simultaneously.

https://developer.apple.com/library/archive/documentation/FileManagement/Conceptual/FileSystemProgrammingGuide/iCloud/iCloud.html#//apple_ref/doc/uid/TP40010672-CH12-SW1.

15. The Accused Instrumentalities include “said second apparatus comprising: a second storage medium configured to store management information of data to be transferred to said first storage medium.” As shown from the below screen captures from an iPhone (an example of the second apparatus), the iPhone includes gigabytes of storage, and can manage the transfer of data from itself to the iCloud Drive and then to another Apple Device (e.g. MacBook). Both the iCloud Drive and the MacBook include storage and are an examples of a first storage medium.

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16. The Accused Instrumentalities further include a second apparatus comprising “a communicator configured to communicate with said first apparatus.” For example, the iPhone is designed to communicate with the iCloud drive over cellular and/or WiFi networks:

iCloud File Management

Use the iCloud Storage APIs to write user documents and data to a central location and access those items from all of a user's computers and iOS devices. Making a user's documents ubiquitous using iCloud means that a user can view or edit those documents from any device without having to sync or transfer files explicitly. Storing documents in a user's iCloud account also provides a layer of security for that user. Even if a user loses a device, the documents on that device are not lost if they are in iCloud storage.

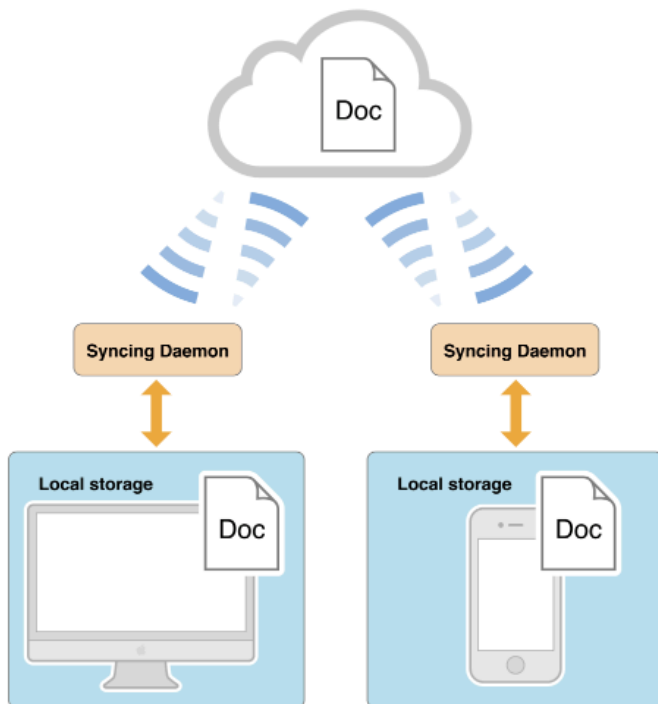
Important: The iCloud APIs do not work with garbage collection in macOS. If your existing code uses garbage collection, update your code to use ARC instead.

Storing and Using Documents in iCloud

Documents in iCloud provide the central location from which updates can be delivered to a user's computers and iOS devices. All documents must be created on a local disk initially and moved to a user's iCloud account later. A document targeted for iCloud storage is not moved to iCloud immediately, though. First, it is moved from its current location in the file system to a local system-managed directory where it can be monitored by the iCloud service. After that transfer, the file is transferred to iCloud and to the user's other devices as soon as possible.

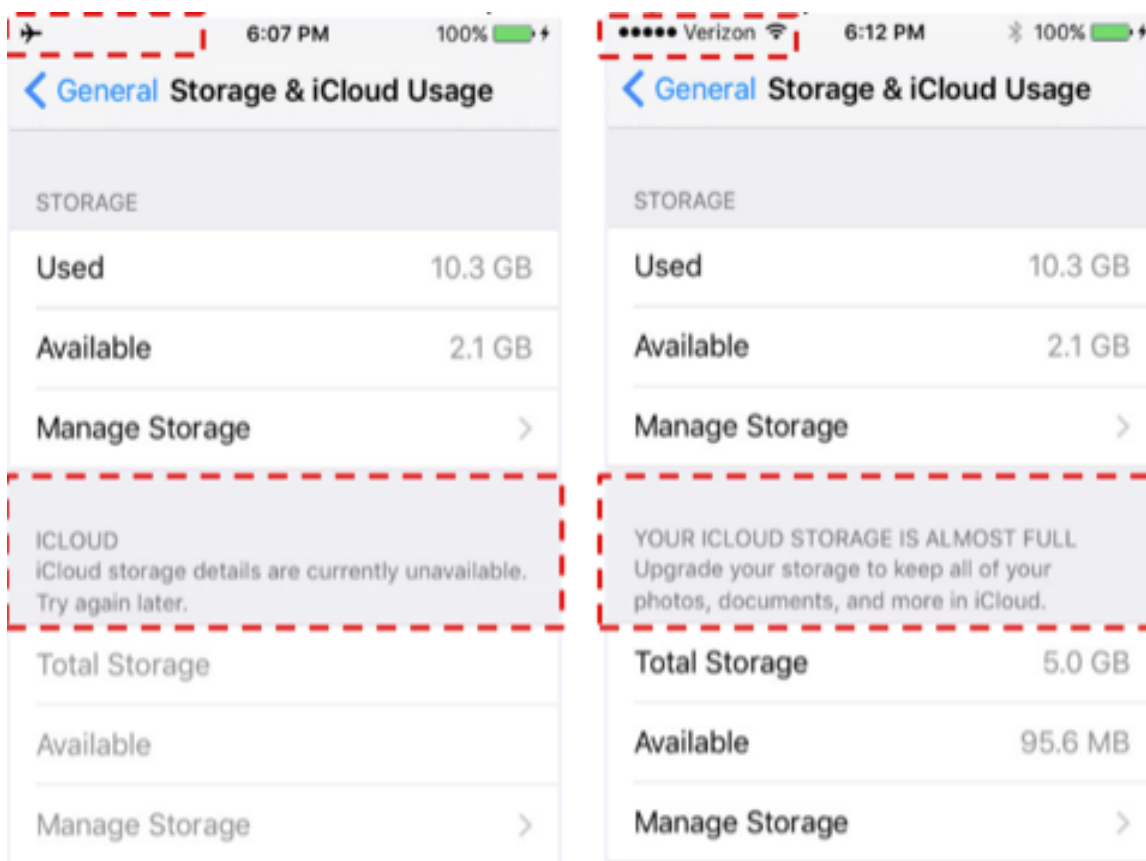
While in iCloud storage, changes made on one device are stored locally and then pushed to iCloud using a local daemon, as shown in Figure 4-1. To prevent large numbers of conflicting changes from occurring at the same time, apps are expected to use file coordinator objects to perform all changes. File coordinators mediate changes between your app and the daemon that facilitates the transfer of the document to and from iCloud. In this way, the file coordinator acts like a locking mechanism for the document, preventing your app and the daemon from modifying the document simultaneously.

Figure 4-1 Pushing document changes to iCloud

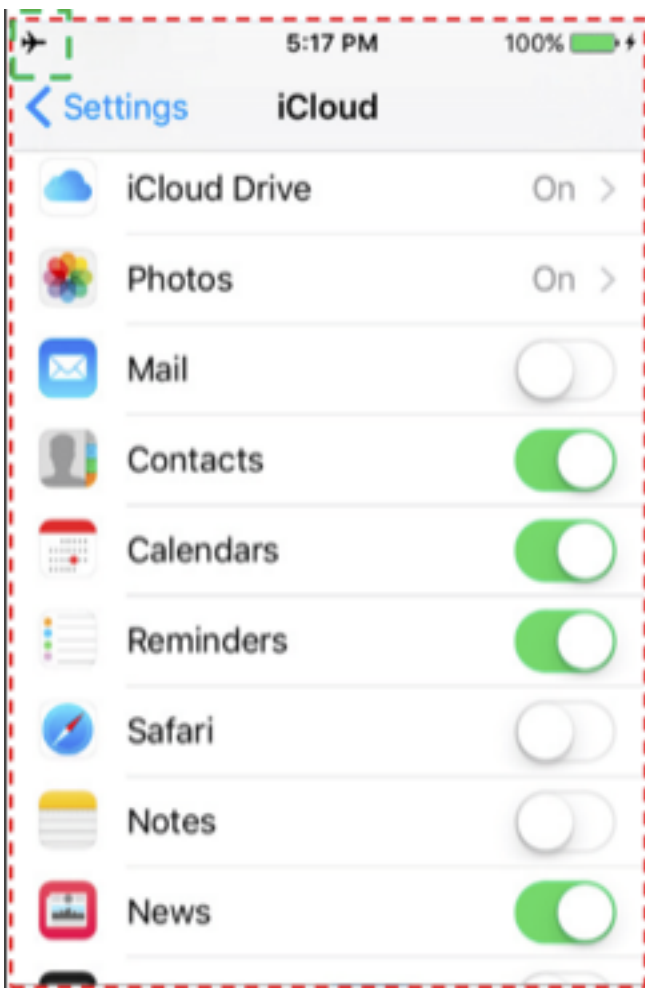


1 [https://developer.apple.com/library/archive/documentation/FileManagement/Conceptual/FileSystemProgrammingGuide/iCloud/iCloud.html#//apple_ref/doc/uid/TP4001067](https://developer.apple.com/library/archive/documentation/FileManagement/Conceptual/FileSystemProgrammingGuide/iCloud/iCloud.html#//apple_ref/doc/uid/TP40010672-CH12-SW1)
2 [2-CH12-SW1](https://developer.apple.com/library/archive/documentation/FileManagement/Conceptual/FileSystemProgrammingGuide/iCloud/iCloud.html#//apple_ref/doc/uid/TP40010672-CH12-SW1).
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4 17. The Accused Instrumentalities further include a second apparatus
5 comprising “a detector configured to detect whether said first apparatus and a second
6 apparatus are connected.”
7 For example, an iPhone can detect whether or not it is detected to a connected to the
8 iCloud Drive via a cellular and/or WiFi network:



23 18. The Accused Instrumentalities further include a second apparatus
24 comprising “an editor configured to select certain data to be transferred and to edit said
25 management information based on said selection without regard to the connection of
26 said first apparatus.” For example, the iPhone is configured to allow a user to select the
27 applications that share data with the iCloud Drive even when the user is not connected
28 to a cellular or WiFi network or the iCloud Drive (e.g. in Airplane Mode):



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18 19. The Accused Instrumentalities further include a second apparatus
19 comprising “a controller configured to control transfer of the selected data stored in said
20 second apparatus to said first apparatus via said communicator based on said
21 management information edited by said editor when said detector detects that said first
22 apparatus and said second apparatus.” For example, when the iPhone is connected to
23 the iCloud drive over a cellular and/or WiFi network, it will transfer the data stored in
24 the applications selected by the user to the iCloud Drive:

iCloud will:

- Sync Calendars
- SyncSafari Bookmarks (though not display them on the iCloud website)
- Sync Contacts
- Sync photos added to or taken on one device onto other devices
- Access @me.com email
- Sync iWork documents only between your Mac and iOS devices - automatically from iOS devices by dragging individual documents from a Mac to the iCloud website (and the cannot be re-downloaded until they have been edited on an iOS device)

Each of these can be turned on or off on each device; you cannot selectively sync within one data type - i.e. it's all or no Contacts, not a selection, and so on.

<https://discussions.apple.com/thread/3743670?tstart=0>

Here's how it works

iCloud Photos automatically keeps every photo and video you take in iCloud, so you can access your library from any device, anytime you want. [Any changes you make](#) to your collection on one device, change on your other devices too. Your photos and videos stay organized into Moments, Collections, and Years. And all of your [Memories](#) and [People](#) are updated everywhere. That way you can quickly find the moment, family member, or friend you're looking for.

Your collection uploads to iCloud each time your device connects to Wi-Fi and your battery is charged. When you have iOS 11 or later, your library updates over cellular too. Depending on your Internet speed, the time it takes for you to see your photos and videos on all of your devices and iCloud.com might vary.

<https://support.apple.com/en-sg/HT204264>

20. The Accused Instrumentalities further include a second apparatus wherein said controller “is configured to compare said management information edited by said editor with management information of data stored in said first storage medium and to transmit data in said second apparatus based on result of the comparison.” For example, the iPhone is configured to compare the data already transmitted to the iCloud Drive with the data present in the iPhone Applications that have been selected and transmit new or changed data for in the iPhone Applications (*e.g.* a new photo that was not previously saved on the iCloud Drive):

iCloud will:

- Sync Calendars
- SyncSafari Bookmarks (though not display them on the iCloud website)
- Sync Contacts
- Sync photos added to or taken on one device onto other devices
- Access @me.com email
- Sync iWork documents only between your Mac and iOS devices - automatically from iOS devices by dragging individual documents from a Mac to the iCloud website (and the cannot be re-downloaded until they have been edited on an iOS device)

Each of these can be turned on or off on each device; you cannot selectively sync within one data type - i.e. it's all or no Contacts, not a selection, and so on.

<https://discussions.apple.com/thread/3743670?tstart=0>

Here's how it works

iCloud Photos automatically keeps every photo and video you take in iCloud, so you can access your library from any device, anytime you want. [Any changes you make](#) to your collection on one device, change on your other devices too. Your photos and videos stay organized into Moments, Collections, and Years. And all of your [Memories](#) and [People](#) are updated everywhere. That way you can quickly find the moment, family member, or friend you're looking for.

Your collection uploads to iCloud each time your device connects to Wi-Fi and your battery is charged. When you have iOS 11 or later, your library updates over cellular too. Depending on your Internet speed, the time it takes for you to see your photos and videos on all of your devices and iCloud.com might vary.

<https://support.apple.com/en-sg/HT204264>

21. Apple also infringes other claims of the '929 Patent, directly and through inducing infringement and contributory infringement.

22. On information and belief, use of the Accused Instrumentalities in their ordinary and customary fashion results in infringement of the methods claimed by the '929 Patent.

23. By making, using, offering for sale, selling and/or importing into the United States the Accused Instrumentalities, and touting the benefits of using the Accused Instrumentalities' data communication features, Apple has injured Data Scape and is liable to Data Scape for infringement of the '929 Patent pursuant to 35 U.S.C. § 271.

1 at the apparatus, whether the apparatus and the external apparatus are connected;
2 comparing, by a controller at the apparatus, the edited management information with
3 management information of data stored in the external apparatus; determining, by the
4 controller, a size of the selected data in the communication apparatus; and transmitting,
5 by the controller, the selected data from the apparatus to the external apparatus based
6 on the management information, a result of the comparison, and a result of the
7 determination when the detection indicates that the apparatus and the external apparatus
8 are connected. Upon information and belief, Apple uses the Accused Instrumentalities,
9 which perform the infringing method, for its own internal non-testing business
10 purposes, while testing the Accused Instrumentalities, and while providing technical
11 support and repair services for the Accused Instrumentalities to Apple's customers.

12 29. On information and belief, Apple has had knowledge of the '751 Patent
13 since at least the filing of the original Complaint in this action, or shortly thereafter, and
14 on information and belief, Apple knew of the '751 Patent and knew of its infringement,
15 including by way of this lawsuit. By the time of trial, Apple will have known and
16 intended (since receiving such notice) that their continued actions would actively induce
17 and contribute to the infringement of the claims of the '751 Patent

18 30. On information and belief, use of the Accused Instrumentalities in their
19 ordinary and customary fashion results in infringement of the claims of the '751 Patent.

20 31. Apple's affirmative acts of making, using, selling, offering for sale, and/or
21 importing the Accused Instrumentalities have induced and continue to induce users of
22 the Accused Instrumentalities to use the Accused Instrumentalities in their normal and
23 customary way to infringe Claim 10 of the '751 Patent, knowing that when the Accused
24 Instrumentalities are used in their ordinary and customary manner they perform the
25 method of communicating comprising: editing management information of data to be
26 transferred from an apparatus to an external apparatus by selecting certain data to be
27 transferred, the management information stored in a storage medium of the apparatus,
28 without regard to the connection of the apparatus and the external apparatus; detecting,

1 at the apparatus, whether the apparatus and the external apparatus are connected;
2 comparing, by a controller at the apparatus, the edited management information with
3 management information of data stored in the external apparatus; determining, by the
4 controller, a size of the selected data in the communication apparatus; and transmitting,
5 by the controller, the selected data from the apparatus to the external apparatus based
6 on the management information, a result of the comparison, and a result of the
7 determination when the detection indicates that the apparatus and the external apparatus
8 are connected. For example, Apple explains to customers the benefits of using the
9 Accused Instrumentalities, such as by touting their advantages communicating and
10 sharing data among multiple devices:

11 iCloud File Management

PREVIOUS NEXT

12 Use the iCloud Storage APIs to write user documents and data to a central location and access
13 those items from all of a user's computers and iOS devices. Making a user's documents
14 ubiquitous using iCloud means that a user can view or edit those documents from any device
15 without having to sync or transfer files explicitly. Storing documents in a user's iCloud
account also provides a layer of security for that user. Even if a user loses a device, the
documents on that device are not lost if they are in iCloud storage.

16 **Important:** The iCloud APIs do not work with garbage collection in macOS. If your existing
17 code uses garbage collection, update your code to use ARC instead.

18
19 https://developer.apple.com/library/archive/documentation/FileManagement/Conceptual/FileSystemProgrammingGuide/iCloud/iCloud.html#//apple_ref/doc/uid/TP4001067-2-CH12-SW1. For similar reasons, Apple also induces its customers to use the Accused
20 Instrumentalities to infringe other claims of the '751 Patent. Apple specifically intended
21 and was aware that the normal and customary use of the Accused Instrumentalities
22 would infringe the '751 Patent. Apple performed the acts that constitute induced
23 infringement, and would induce actual infringement, with the knowledge of the '751
24 Patent and with the knowledge, or willful blindness to the probability, that the induced
25 acts would constitute infringement. On information and belief, Apple engaged in such
26 inducement to promote the sales of the Accused Instrumentalities, *e.g.*, through Apple's
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28

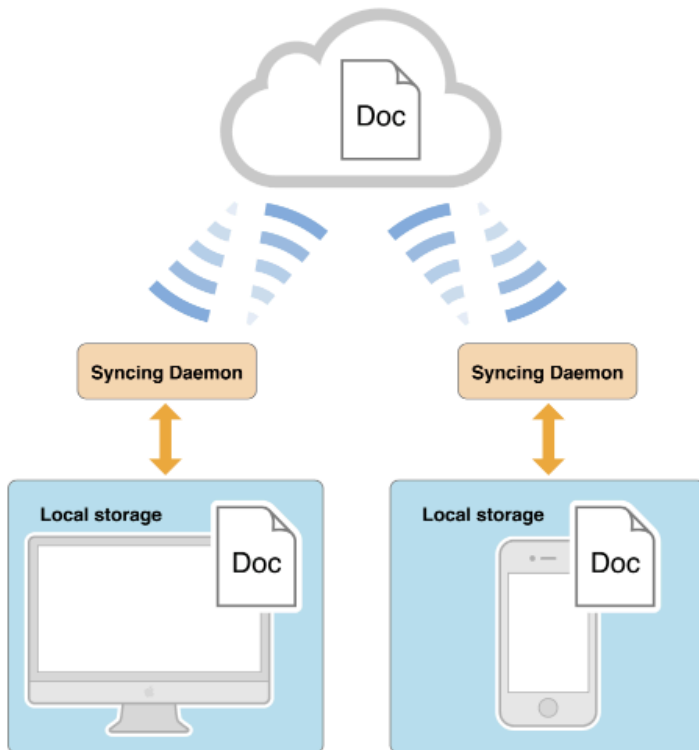
1 user manuals, product support, marketing materials, demonstrations, installation
2 support, and training materials to actively induce the users of the accused products to
3 infringe the '751 Patent. Accordingly, Apple as induced and continues to induce end
4 users of the accused products to use the accused products in their ordinary and
5 customary way with compatible systems to make and/or use systems infringing the '751
6 Patent, knowing that such use of the Accused Instrumentalities with compatible systems
7 will result in infringement of the '751 Patent. Accordingly, Apple has been (since at
8 least as of filing of the original complaint), and currently is, inducing infringement of
9 the '751 Patent, in violation of 35 U.S.C. § 271(b).

10 32. Apple also indirectly infringes the '751 Patent by manufacturing, using,
11 selling, offering for sale, and/or importing the accused products, with knowledge that
12 the accused products were and are especially manufactured and/or especially adapted
13 for use in infringing the '751 Patent and are not a staple article or commodity of
14 commerce suitable for substantial non-infringing use. On information and belief, the
15 Accused Instrumentality is designed to be used to perform the method of
16 communicating comprising: editing management information of data to be transferred
17 from an apparatus to an external apparatus by selecting certain data to be transferred,
18 the management information stored in a storage medium of the apparatus, without
19 regard to the connection of the apparatus and the external apparatus; detecting, at the
20 apparatus, whether the apparatus and the external apparatus are connected; comparing,
21 by a controller at the apparatus, the edited management information with management
22 information of data stored in the external apparatus; determining, by the controller, a
23 size of the selected data in the communication apparatus; and transmitting, by the
24 controller, the selected data from the apparatus to the external apparatus based on the
25 management information, a result of the comparison, and a result of the determination
26 when the detection indicates that the apparatus and the external apparatus are connected.
27 Because the Accused Instrumentality is designed to claimed method for
28 communication, the Accused Instrumentality has no substantial non-infringing uses,

1 and any other uses would be unusual, far-fetched, illusory, impractical, occasional,
 2 aberrant, or experimental. Apple’s manufacture, use, sale, offering for sale, and/or
 3 importation of the Accused Instrumentality constitutes contributory infringement of the
 4 ’751 Patent. Accordingly, Apple has been, and currently is, contributorily infringing the
 5 ‘751 patent, in violation of 35 U.S.C. § 271(c).

6 33. The Accused Instrumentalities perform a method of communicating data.
 7 For example, the Accused Instrumentalities perform a method comprising “editing
 8 management information of data to be transferred from an apparatus to an external
 9 apparatus by selecting certain data to be transferred, the management information stored
 10 within a storage medium of the apparatus without regard to the connection of the
 11 apparatus and the external apparatus.” For example, the Accused Instrumentalities
 12 transfer data from an iOS device (e.g. a MacBook, iPad, iPhone), an example of the
 13 claimed apparatus to the iCloud Drive, an example of the external apparatus:

14 **Figure 4-1** Pushing document changes to iCloud



1 https://developer.apple.com/library/archive/documentation/FileManagement/Conceptual/FileSystemProgrammingGuide/iCloud/iCloud.html#//apple_ref/doc/uid/TP4001067-2-CH12-SW1.

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4 iCloud File Management

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6 Use the iCloud Storage APIs to write user documents and data to a central location and access those items from all of a user's computers and iOS devices. Making a user's documents ubiquitous using iCloud means that a user can view or edit those documents from any device without having to sync or transfer files explicitly. Storing documents in a user's iCloud account also provides a layer of security for that user. Even if a user loses a device, the documents on that device are not lost if they are in iCloud storage.

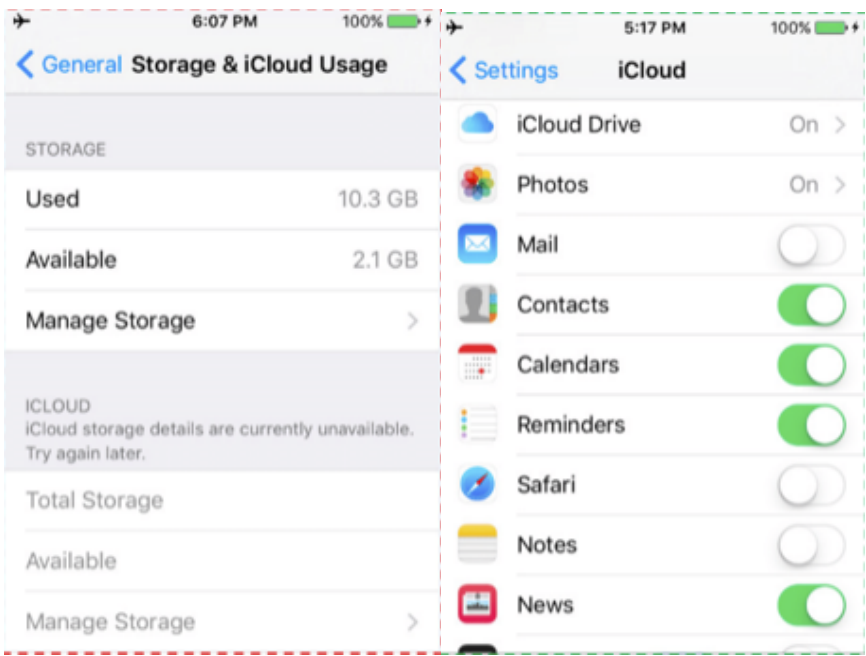
9
10 **Important:** The iCloud APIs do not work with garbage collection in macOS. If your existing code uses garbage collection, update your code to use ARC instead.

13 Storing and Using Documents in iCloud

14 Documents in iCloud provide the central location from which updates can be delivered to a user's computers and iOS devices. All documents must be created on a local disk initially and moved to a user's iCloud account later. A document targeted for iCloud storage is not moved to iCloud immediately, though. First, it is moved from its current location in the file system to a local system-managed directory where it can be monitored by the iCloud service. After that transfer, the file is transferred to iCloud and to the user's other devices as soon as possible.

17 While in iCloud storage, changes made on one device are stored locally and then pushed to iCloud using a local daemon, as shown in Figure 4-1. To prevent large numbers of conflicting changes from occurring at the same time, apps are expected to use file coordinator objects to perform all changes. File coordinators mediate changes between your app and the daemon that facilitates the transfer of the document to and from iCloud. In this way, the file coordinator acts like a locking mechanism for the document, preventing your app and the daemon from modifying the document simultaneously.

22 https://developer.apple.com/library/archive/documentation/FileManagement/Conceptual/FileSystemProgrammingGuide/iCloud/iCloud.html#//apple_ref/doc/uid/TP4001067-2-CH12-SW1. The iOS devices include code, an example of management information, stored within memory on the device that allows a user to select data to be transferred:



iCloud will:

- Sync Calendars
- Sync Safari Bookmarks (though not display them on the iCloud website)
- Sync Contacts
- Sync photos added to or taken on one device onto other devices
- Access @me.com email
- Sync iWork documents only between your Mac and iOS devices - automatically from iOS devices by dragging individual documents from a Mac to the iCloud website (and the cannot be re-downloaded until they have been edited on an iOS device)

Each of these can be turned on or off on each device; you cannot selectively sync within one data type - i.e. it's all or no Contacts, not a selection, and so on.

<https://discussions.apple.com/thread/3743670?tstart=0>

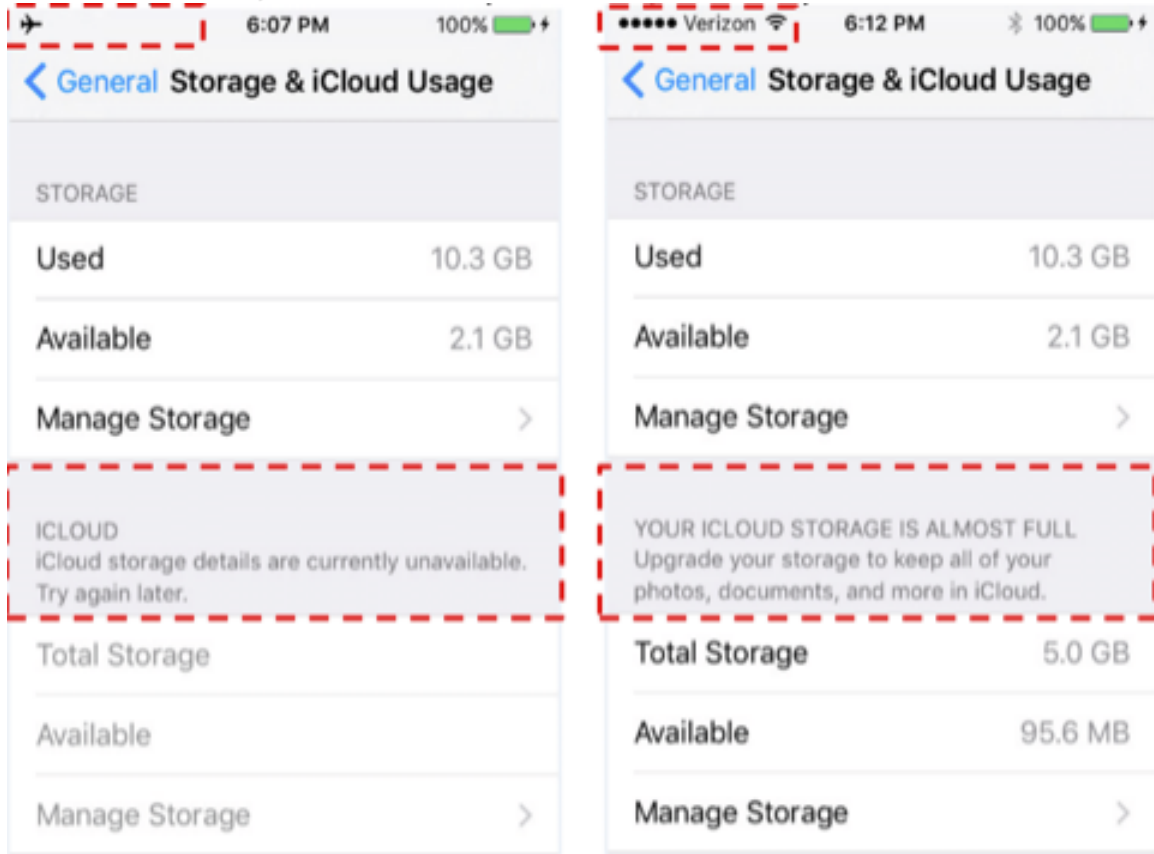
Here's how it works

iCloud Photos automatically keeps every photo and video you take in iCloud, so you can access your library from any device, anytime you want. [Any changes you make](#) to your collection on one device, change on your other devices too. Your photos and videos stay organized into Moments, Collections, and Years. And all of your [Memories](#) and [People](#) are updated everywhere. That way you can quickly find the moment, family member, or friend you're looking for.

Your collection uploads to iCloud each time your device connects to Wi-Fi and your battery is charged. When you have iOS 11 or later, your library updates over cellular too. Depending on your Internet speed, the time it takes for you to see your photos and videos on all of your devices and iCloud.com might vary.

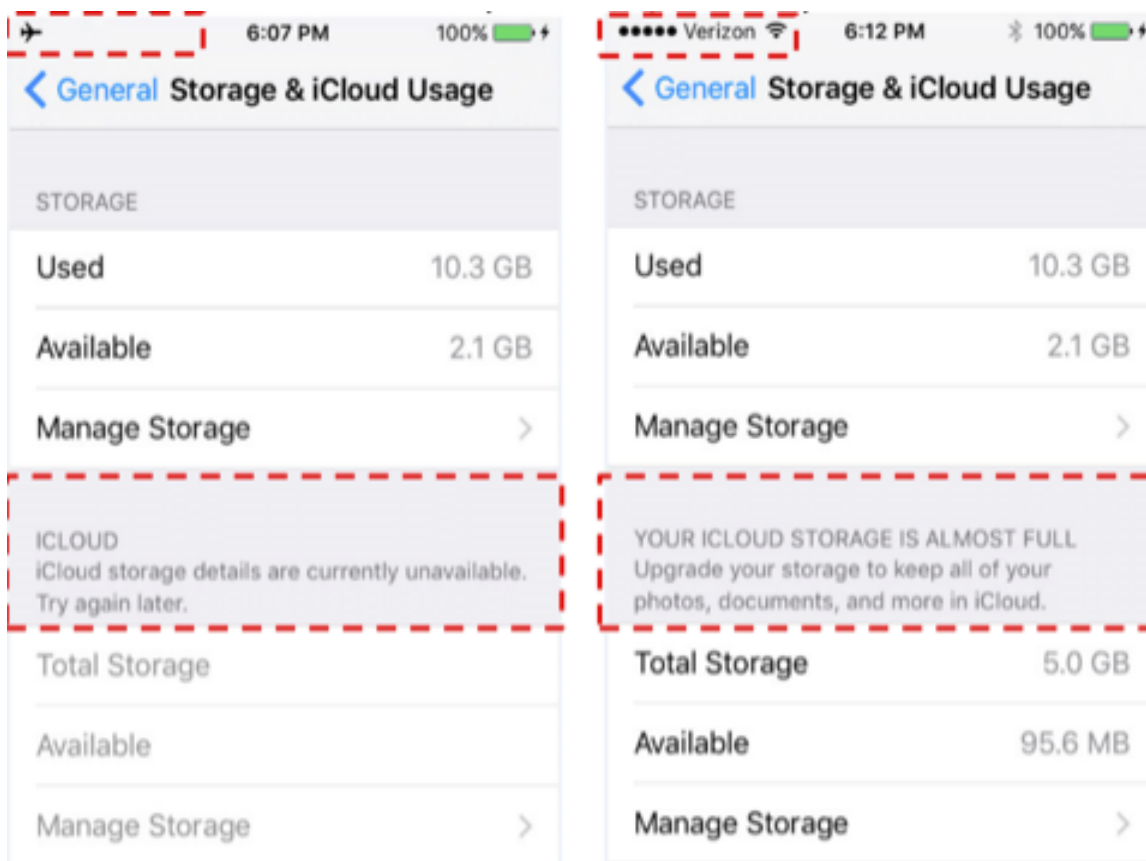
<https://support.apple.com/en-sg/HT204264>. For example, the user's ability to select the applications that will transfer data from the iOS device to the iCloud drive is not

1 dependent the apparatus (e.g. iOS device) being connected to the external device (e.g.
2 the iCloud Drive):



17 34. The Accused Instrumentalities further perform a method of
18 communicating comprising “detecting, at the apparatus, whether the apparatus and the
19 external apparatus are connected.” For example, the iOS device can determine whether
20 or not it is connected to the iCloud Drive:

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35. The Accused Instrumentalities further perform a method of communicating data comprising “comparing, by a controller at the apparatus, the edited management information with management information of data stored in the external apparatus.” For example, the iOS device (*e.g.* iPhone) is configured to compare the data already transmitted to the iCloud Drive with the data present in the iPhone Applications that have been selected and transmit new or changed data for in the iPhone Applications (*e.g.* a new photo that was not previously saved on the iCloud Drive:

iCloud will:

- Sync Calendars
- SyncSafari Bookmarks (though not display them on the iCloud website)
- Sync Contacts
- Sync photos added to or taken on one device onto other devices
- Access @me.com email
- Sync iWork documents only between your Mac and iOS5 devices - automatically from iOS devices by dragging individual documents from a Mac to the iCloud website (and the cannot be re-downloaded until they have been edited on an iOS device)

Each of these can be turned on or off on each device; you cannot selectively sync within one data type - i.e. it's all or no Contacts, not a selection, and so on.

1 <https://discussions.apple.com/thread/3743670?tstart=0>

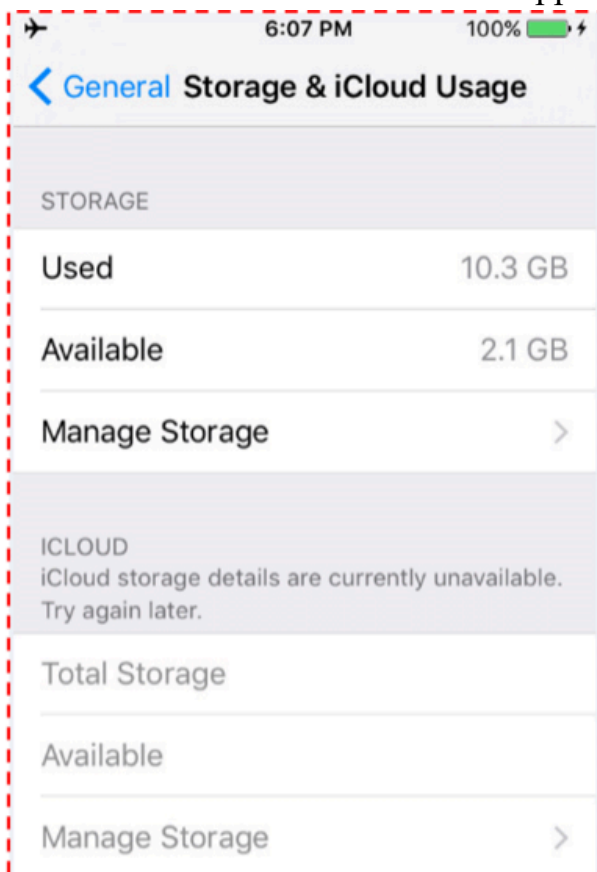
2 **Here's how it works**

3 iCloud Photos automatically keeps every photo and video you take in iCloud, so you can
4 access your library from any device, anytime you want. [Any changes you make](#) to your
5 collection on one device, change on your other devices too. Your photos and videos stay
6 organized into Moments, Collections, and Years. And all of your [Memories](#) and [People](#) are
7 updated everywhere. That way you can quickly find the moment, family member, or friend
8 you're looking for.

9
10 Your collection uploads to iCloud each time your device connects to Wi-Fi and your battery is charged.
11 When you have iOS 11 or later, your library updates over cellular too. Depending on your Internet speed,
12 the time it takes for you to see your photos and videos on all of your devices and iCloud.com might vary.

13 <https://support.apple.com/en-sg/HT204264>

14 36. The Accused Instrumentalities further perform a method of
15 communicating data comprising “determining, by the controller, a size of the selected
16 data in the communication apparatus.” For example, the iOS device (e.g. iPhone)
17 determines the size the data in the applications selected to be transferred to the iCloud:



1 37. The Accused Instrumentalities further perform a method of
2 communicating data comprising “transmitting, by the controller, the selected data from
3 the apparatus to the external apparatus based on the management information, a result
4 of the comparison, and a result of the determination when the detection indicates that
5 the apparatus and the external apparatus are connected. For example, when the iPhone
6 is connected to the iCloud drive over a cellular and/or WiFi network, it will transfer the
7 data stored in the applications selected by the user to the iCloud Drive, to the extent the
8 data has not been transferred and if there is storage available for the data in the iCloud

9 Drive:

10 iCloud will:

- 11 • Sync Calendars
- 12 • SyncSafari Bookmarks (though not display them on the iCloud website)
- 13 • Sync Contacts
- 14 • Sync photos added to or taken on one device onto other devices
- 15 • Access @me.com email
- 16 • Sync iWork documents only between your Mac and iOS devices - automatically from iOS devices by
17 by dragging individual documents from a Mac to the iCloud website (and the cannot be re-
18 downloaded until they have been edited on an iOS device)

19 Each of these can be turned on or off on each device; you cannot selectively sync within one data type -
20 i.e. it's all or no Contacts, not a selection, and so on.

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23 iCloud Photos automatically keeps every photo and video you take in iCloud, so you can
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25 collection on one device, change on your other devices too. Your photos and videos stay
26 organized into Moments, Collections, and Years. And all of your [Memories](#) and [People](#) are
27 updated everywhere. That way you can quickly find the moment, family member, or friend
28 you're looking for.

Your collection uploads to iCloud each time your device connects to Wi-Fi and your battery is charged.
When you have iOS 11 or later, your library updates over cellular too. Depending on your Internet speed,
the time it takes for you to see your photos and videos on all of your devices and iCloud.com might vary.

29 <https://support.apple.com/en-sg/HT204264>

30 38. Apple also infringes other claims of the '751 Patent, directly and through
31 inducing infringement and contributory infringement.

1 39. On information and belief, use of the Accused Instrumentalities in their
2 ordinary and customary fashion results in infringement of the methods claimed by
3 the '751 Patent.

4 40. By making, using, offering for sale, selling and/or importing into the
5 United States the Accused Instrumentalities, and touting the benefits of using the
6 Accused Instrumentalities' data communication features, Apple has injured Data Scape
7 and is liable to Data Scape for infringement of the '751 Patent pursuant to 35 U.S.C. §
8 271.

9 41. As a result of Apple's infringement of the '751 Patent, Plaintiff Data
10 Scape is entitled to monetary damages in an amount adequate to compensate for Apple's
11 infringement, but in no event less than a reasonable royalty for the use made of the
12 invention by Apple, together with interest and costs as fixed by the Court.

13 **COUNT III**

14 **INFRINGEMENT OF U.S. PATENT NO. 7,239,469**

15 42. Plaintiff realleges and incorporates by reference the foregoing paragraphs,
16 as if fully set forth herein.

17 43. Data Scape is the owner by assignment of United States Patent No.
18 7,239,469 ("the '469 Patent") entitled "Recording Apparatus, Server Apparatus,
19 Recording Method Program, and Storage Medium." The '469 Patent was duly and
20 legally issued by the United States Patent and Trademark Office on July 3, 2007. A
21 true and correct copy of the '469 Patent is included as Exhibit C.

22 44. On information and belief, Apple has offered for sale, sold and/or imported
23 into the United States Apple products and services that infringe the '469 patent, and
24 continues to do so. By way of illustrative example, these infringing products and
25 services include, without limitation, Apple's products and services, *e.g.*, Apple iCloud,
26 and the Apple devices on which they operate (*e.g.* iPhone, MacBook, iPad), and all
27 versions and variations thereof since the issuance of the '469 Patent ("Accused
28 Instrumentalities").

1 45. On information and belief, Apple has directly infringed and continues to
2 infringe the '469 Patent, for example, by making, selling, offering for sale, and/or
3 importing the Accused Instrumentalities, and through its own use and testing of the
4 Accused Instrumentalities, which constitute the data recording apparatus claimed by
5 Claim 1 of the '929 Patent comprising: receiver configured to receive data from an
6 external server having a first recording medium that stores data and having first
7 management data for managing the data, data recorder configured to record the data
8 received by the receiver on a second recording medium, management data producer
9 configured to produce second management data for managing data recorded on the
10 second recording medium based on the first management data, data reader configured
11 to read data from a third recording medium that stores data and third management data
12 for managing the data, and controller configured to control the data recorder to record
13 data read from the third recording medium when the third management data is not
14 found within the second management data recorded on the second recording medium.
15 Upon information and belief, Apple uses the Accused Instrumentalities, which are
16 infringing systems, for its own internal non-testing business purposes, while testing the
17 Accused Instrumentalities, and while providing technical support and repair services
18 for the Accused Instrumentalities to Apple's customers.

19 46. On information and belief, Apple has had knowledge of the '469 Patent
20 since at least the filing of the original Complaint in this action, or shortly thereafter,
21 and on information and belief, Apple knew of the '469 Patent and knew of its
22 infringement, including by way of this lawsuit. By the time of trial, Apple will have
23 known and intended (since receiving such notice) that their continued actions would
24 actively induce and contribute to the infringement of the claims of the '469 Patent.

25 47. On information and belief, use of the Accused Instrumentalities in their
26 ordinary and customary fashion results in infringement of the claims of the '469 Patent.

27 48. Apple's affirmative acts of making, using, selling, offering for sale, and/or
28 importing the Accused Instrumentalities have induced and continue to induce users of

1 the Accused Instrumentalities to use the Accused Instrumentalities in their normal and
2 customary way to infringe Claim 1 of the '469 Patent, knowing that when the Accused
3 Instrumentalities are used in their ordinary and customary manner such systems
4 constitute an infringing data recording apparatus claimed by Claim 1 of the '469 Patent
5 comprising each of the following: receiver configured to receive data from an external
6 server having a first recording medium that stores data and having first management
7 data for managing the data, data recorder configured to record the data received by the
8 receiver on a second recording medium, management data producer configured to
9 produce second management data for managing data recorded on the second recording
10 medium based on the first management data, data reader configured to read data from
11 a third recording medium that stores data and third management data for managing the
12 data, and controller configured to control the data recorder to record data read from the
13 third recording medium when the third management data is not found within the second
14 management data recorded on the second recording medium. For example, Apple
15 explains to customers the benefits of using the Accused Instrumentalities, such as by
16 touting their advantages communicating and sharing data among multiple devices:

17 **iCloud File Management**

18
19 Use the iCloud Storage APIs to write user documents and data to a central location and access
20 those items from all of a user's computers and iOS devices. Making a user's documents
21 ubiquitous using iCloud means that a user can view or edit those documents from any device
22 without having to sync or transfer files explicitly. Storing documents in a user's iCloud
23 account also provides a layer of security for that user. Even if a user loses a device, the
24 documents on that device are not lost if they are in iCloud storage.

25 **Important:** The iCloud APIs do not work with garbage collection in macOS. If your existing
26 code uses garbage collection, update your code to use ARC instead.

27 https://developer.apple.com/library/archive/documentation/FileManagement/Conceptual/FileSystemProgrammingGuide/iCloud/iCloud.html#//apple_ref/doc/uid/TP4001067-2-CH12-SW1. For similar reasons, Apple also induces its customers to use the Accused
28 Instrumentalities to infringe other claims of the '469 Patent. Apple specifically intended

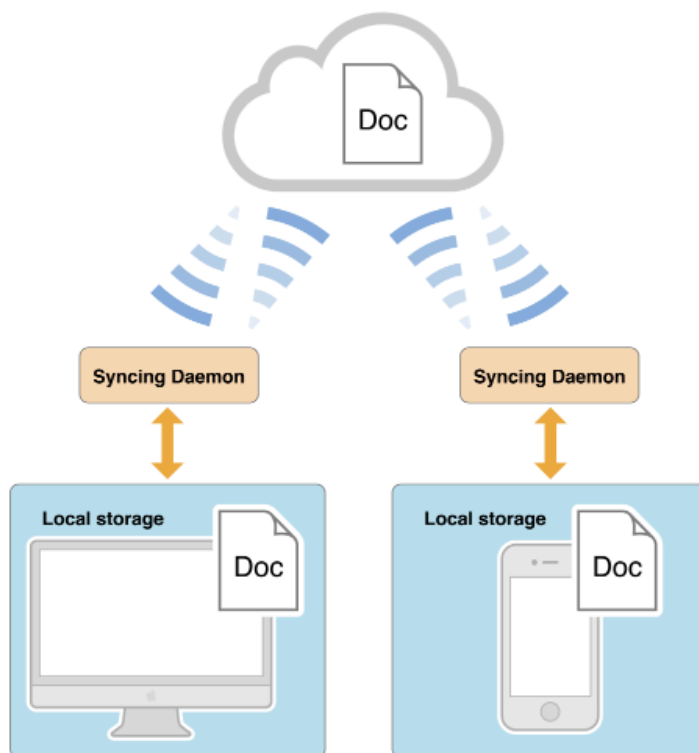
1 and was aware that the normal and customary use of the Accused Instrumentalities
2 would infringe the '469 Patent. Apple performed the acts that constitute induced
3 infringement, and would induce actual infringement, with the knowledge of the '469
4 Patent and with the knowledge, or willful blindness to the probability, that the induced
5 acts would constitute infringement. On information and belief, Apple engaged in such
6 inducement to promote the sales of the Accused Instrumentalities, *e.g.*, through Apple's
7 user manuals, product support, marketing materials, demonstrations, installation
8 support, and training materials to actively induce the users of the accused products to
9 infringe the '469 Patent. Accordingly, Apple as induced and continues to induce end
10 users of the accused products to use the accused products in their ordinary and
11 customary way with compatible systems to make and/or use systems infringing the '469
12 Patent, knowing that such use of the Accused Instrumentalities with compatible systems
13 will result in infringement of the '469 Patent. Accordingly, Apple has been (since at
14 least as of filing of the original complaint), and currently is, inducing infringement of
15 the '469 Patent, in violation of 35 U.S.C. § 271(b).

16 49. Apple also indirectly infringes the '469 Patent by manufacturing, using,
17 selling, offering for sale, and/or importing the accused products, with knowledge that
18 the accused products were and are especially manufactured and/or especially adapted
19 for use in infringing the '469 Patent and are not a staple article or commodity of
20 commerce suitable for substantial non-infringing use. On information and belief, the
21 Accused Instrumentality is designed to be used as a recording apparatus comprising
22 each of the following: receiver configured to receive data from an external server having
23 a first recording medium that stores data and having first management data for
24 managing the data, data recorder configured to record the data received by the receiver
25 on a second recording medium, management data producer configured to produce
26 second management data for managing data recorded on the second recording medium
27 based on the first management data, data reader configured to read data from a third
28 recording medium that stores data and third management data for managing the data,

1 and controller configured to control the data recorder to record data read from the third
 2 recording medium when the third management data is not found within the second
 3 management data recorded on the second recording medium. Because the Accused
 4 Instrumentality is designed to operate as the claimed recording apparatus, the Accused
 5 Instrumentality has no substantial non-infringing uses, and any other uses would be
 6 unusual, far-fetched, illusory, impractical, occasional, aberrant, or experimental.
 7 Apple's manufacture, use, sale, offering for sale, and/or importation of the Accused
 8 Instrumentality constitutes contributory infringement of the '469 Patent. Accordingly,
 9 Apple has been, and currently is, contributorily infringing the '469 patent, in violation
 10 of 35 U.S.C. § 271(c).

11 50. The Accused Instrumentalities include a "data recording apparatus." For
 12 example, the Accused Instrumentalities communicate and transfer a document stored
 13 on one Apple device (e.g. a MacBook), to another Apple device (e.g. an iPhone), over
 14 the iCloud drive—each of which include memory for storage of data:

15 **Figure 4-1** Pushing document changes to iCloud



1 [https://developer.apple.com/library/archive/documentation/FileManagement/Conceptual/FileSystemProgrammingGuide/iCloud/iCloud.html#//apple_ref/doc/uid/TP4001067](https://developer.apple.com/library/archive/documentation/FileManagement/Conceptual/FileSystemProgrammingGuide/iCloud/iCloud.html#//apple_ref/doc/uid/TP40010672-CH12-SW1)
2 [2-CH12-SW1](https://developer.apple.com/library/archive/documentation/FileManagement/Conceptual/FileSystemProgrammingGuide/iCloud/iCloud.html#//apple_ref/doc/uid/TP40010672-CH12-SW1).

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4 iCloud File Management

5
6 Use the iCloud Storage APIs to write user documents and data to a central location and access those items from all of a user's computers and iOS devices. Making a user's documents ubiquitous using iCloud means that a user can view or edit those documents from any device without having to sync or transfer files explicitly. Storing documents in a user's iCloud account also provides a layer of security for that user. Even if a user loses a device, the documents on that device are not lost if they are in iCloud storage.

9
10 **Important:** The iCloud APIs do not work with garbage collection in macOS. If your existing code uses garbage collection, update your code to use ARC instead.

13 Storing and Using Documents in iCloud

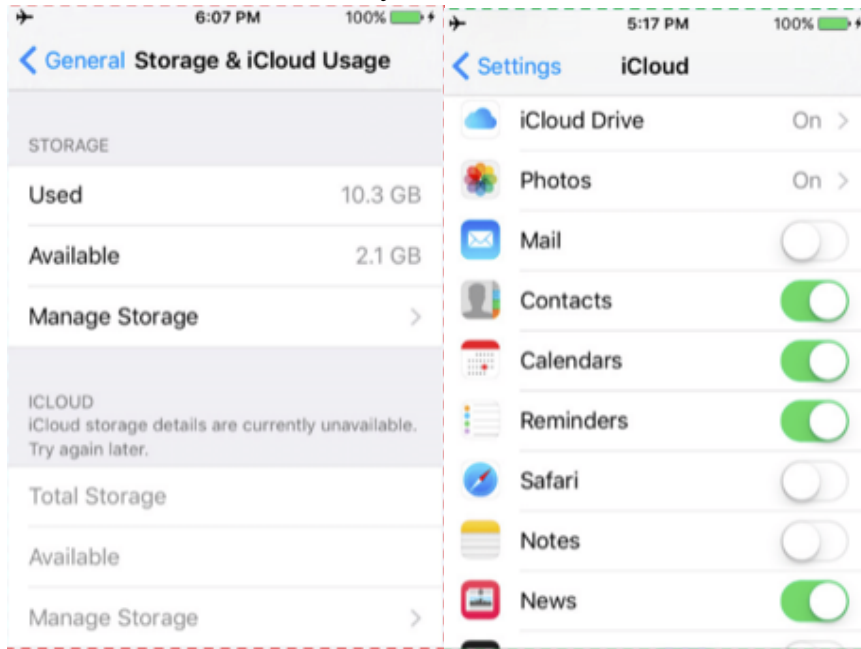
14 Documents in iCloud provide the central location from which updates can be delivered to a user's computers and iOS devices. All documents must be created on a local disk initially and moved to a user's iCloud account later. A document targeted for iCloud storage is not moved to iCloud immediately, though. First, it is moved from its current location in the file system to a local system-managed directory where it can be monitored by the iCloud service. After that transfer, the file is transferred to iCloud and to the user's other devices as soon as possible.

17 While in iCloud storage, changes made on one device are stored locally and then pushed to iCloud using a local daemon, as shown in Figure 4-1. To prevent large numbers of conflicting changes from occurring at the same time, apps are expected to use file coordinator objects to perform all changes. File coordinators mediate changes between your app and the daemon that facilitates the transfer of the document to and from iCloud. In this way, the file coordinator acts like a locking mechanism for the document, preventing your app and the daemon from modifying the document simultaneously.

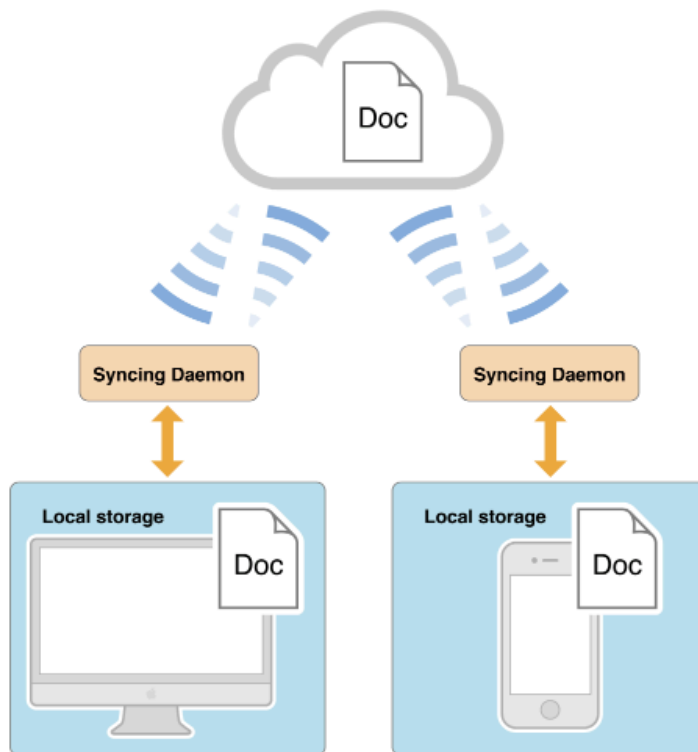
21
22 [https://developer.apple.com/library/archive/documentation/FileManagement/Conceptual/FileSystemProgrammingGuide/iCloud/iCloud.html#//apple_ref/doc/uid/TP4001067](https://developer.apple.com/library/archive/documentation/FileManagement/Conceptual/FileSystemProgrammingGuide/iCloud/iCloud.html#//apple_ref/doc/uid/TP40010672-CH12-SW1)
23 [2-CH12-SW1](https://developer.apple.com/library/archive/documentation/FileManagement/Conceptual/FileSystemProgrammingGuide/iCloud/iCloud.html#//apple_ref/doc/uid/TP40010672-CH12-SW1).

25 51. The Accused Instrumentalities include a “receiver configured to receive
26 data from an external server having a first recording medium that stores data and first
27 management data for managing the data.” For example, the iPhone includes a receiver
28 that receives information transmitted from, for example, the iCloud drive, which is an

1 example of an external server. For example, the iPhone includes gigabytes of storage,
2 on which data received by the iCloud Drive can be written.



13 **Figure 4-1** Pushing document changes to iCloud



1 [https://developer.apple.com/library/archive/documentation/FileManagement/Conceptual/FileSystemProgrammingGuide/iCloud/iCloud.html#//apple_ref/doc/uid/TP4001067](https://developer.apple.com/library/archive/documentation/FileManagement/Conceptual/FileSystemProgrammingGuide/iCloud/iCloud.html#//apple_ref/doc/uid/TP40010672-CH12-SW1)
2 [2-CH12-SW1](https://developer.apple.com/library/archive/documentation/FileManagement/Conceptual/FileSystemProgrammingGuide/iCloud/iCloud.html#//apple_ref/doc/uid/TP40010672-CH12-SW1).
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11 documents on that device are not lost if they are in iCloud storage.

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14 code uses garbage collection, update your code to use ARC instead.

15 Storing and Using Documents in iCloud

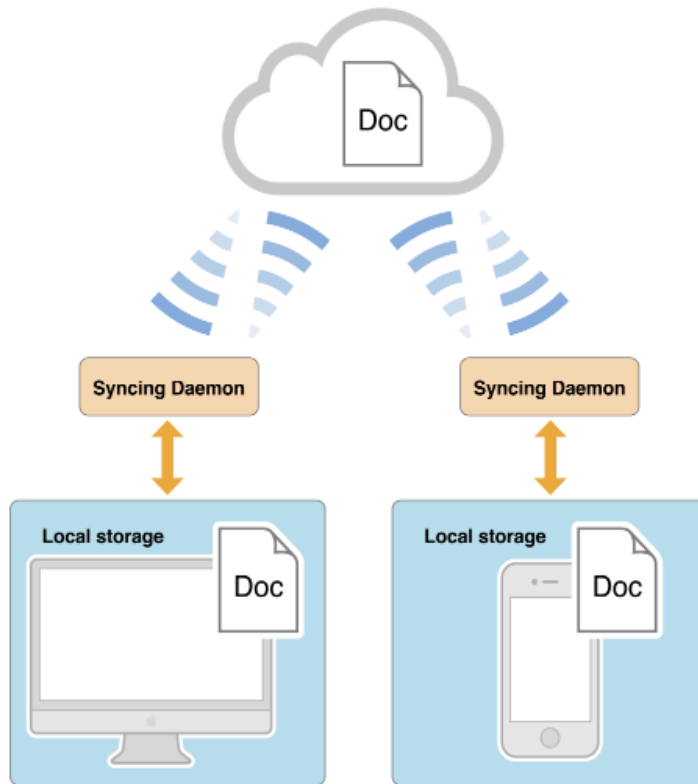
16 Documents in iCloud provide the central location from which updates can be delivered to a
17 user's computers and iOS devices. All documents must be created on a local disk initially and
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19 to iCloud immediately, though. First, it is moved from its current location in the file system to
20 a local system-managed directory where it can be monitored by the iCloud service. After that
21 transfer, the file is transferred to iCloud and to the user's other devices as soon as possible.

22 While in iCloud storage, changes made on one device are stored locally and then pushed to
23 iCloud using a local daemon, as shown in Figure 4-1. To prevent large numbers of conflicting
24 changes from occurring at the same time, apps are expected to use file coordinator objects
25 to perform all changes. File coordinators mediate changes between your app and the daemon
26 that facilitates the transfer of the document to and from iCloud. In this way, the file
27 coordinator acts like a locking mechanism for the document, preventing your app and the
28 daemon from modifying the document simultaneously.

29 [https://developer.apple.com/library/archive/documentation/FileManagement/Conceptual/FileSystemProgrammingGuide/iCloud/iCloud.html#//apple_ref/doc/uid/TP4001067](https://developer.apple.com/library/archive/documentation/FileManagement/Conceptual/FileSystemProgrammingGuide/iCloud/iCloud.html#//apple_ref/doc/uid/TP40010672-CH12-SW1)
30 [2-CH12-SW1](https://developer.apple.com/library/archive/documentation/FileManagement/Conceptual/FileSystemProgrammingGuide/iCloud/iCloud.html#//apple_ref/doc/uid/TP40010672-CH12-SW1).

31
32 52. The Accused Instrumentalities include a “data recorder configured to
33 record the data received by the receiver on a second recording medium.” For example,
34 the iCloud drive will record data received by the iPhone into memory contained therein.

Figure 4-1 Pushing document changes to iCloud



https://developer.apple.com/library/archive/documentation/FileManagement/Conceptual/FileSystemProgrammingGuide/iCloud/iCloud.html#//apple_ref/doc/uid/TP40010672-CH12-SW1

53. The Accused Instrumentalities further includes a “management data producer configured to produce second management data for managing data recorded on the second recording medium based on the first management data.” For example, the iCloud drive is designed to sync the data written on to the iPhone so that it stored and managed in the same manner as the data is stored on the MacBook (e.g. within the same kind of applications):

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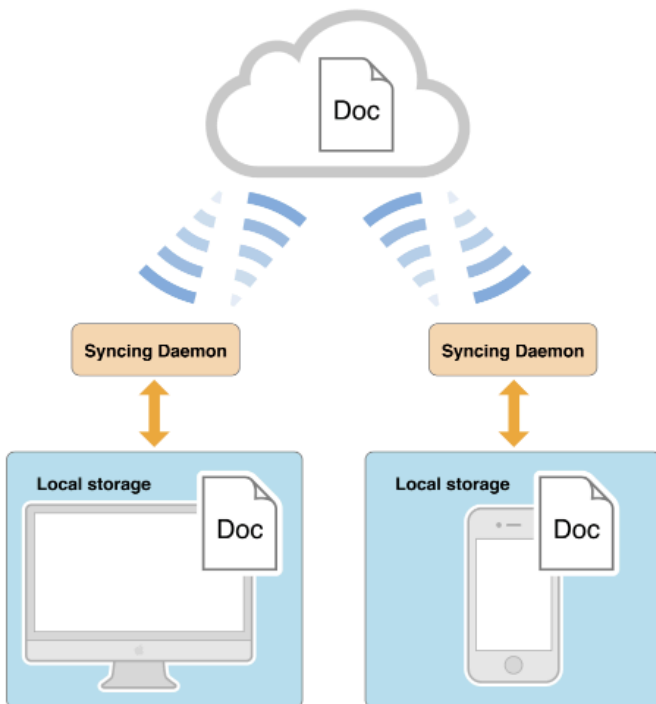
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Storing and Using Documents in iCloud

Documents in iCloud provide the central location from which updates can be delivered to a user's computers and iOS devices. All documents must be created on a local disk initially and moved to a user's iCloud account later. A document targeted for iCloud storage is not moved to iCloud immediately, though. First, it is moved from its current location in the file system to a local system-managed directory where it can be monitored by the iCloud service. After that transfer, the file is transferred to iCloud and to the user's other devices as soon as possible.

While in iCloud storage, changes made on one device are stored locally and then pushed to iCloud using a local daemon, as shown in Figure 4-1. To prevent large numbers of conflicting changes from occurring at the same time, apps are expected to use file coordinator objects to perform all changes. File coordinators mediate changes between your app and the daemon that facilitates the transfer of the document to and from iCloud. In this way, the file coordinator acts like a locking mechanism for the document, preventing your app and the daemon from modifying the document simultaneously.

Figure 4-1 Pushing document changes to iCloud



1 [https://developer.apple.com/library/archive/documentation/FileManagement/Conceptual/FileSystemProgrammingGuide/iCloud/iCloud.html#//apple_ref/doc/uid/TP4001067](https://developer.apple.com/library/archive/documentation/FileManagement/Conceptual/FileSystemProgrammingGuide/iCloud/iCloud.html#//apple_ref/doc/uid/TP40010672-CH12-SW1)
2 [2-CH12-SW1](https://developer.apple.com/library/archive/documentation/FileManagement/Conceptual/FileSystemProgrammingGuide/iCloud/iCloud.html#//apple_ref/doc/uid/TP40010672-CH12-SW1).

4 54. The Accused Instrumentalities further include a “data reader configured
5 to read data from a third recording medium that stores data and third management data
6 for managing the data.” For example, the Accused Instrumentalities will read data
7 stored in memory on a MacBook and will manage the data on the MacBook so that it is
8 synced with data on the iCloud Drive and iPhone.

9 iCloud will:

- 10 • Sync Calendars
- 11 • SyncSafari Bookmarks (though not display them on the iCloud website)
- 12 • Sync Contacts
- 13 • Sync photos added to or taken on one device onto other devices
- 14 • Access @me.com email
- 15 • Sync iWork documents only between your Mac and iOS devices - automatically from iOS devices by
16 by dragging individual documents from a Mac to the iCloud website (and the cannot be re-
17 downloaded until they have been edited on an iOS device)

18 Each of these can be turned on or off on each device; you cannot selectively sync within one data type -
19 i.e. it's all or no Contacts, not a selection, and so on.

20 <https://discussions.apple.com/thread/3743670?tstart=0>

21 Here's how it works

22 iCloud Photos automatically keeps every photo and video you take in iCloud, so you can
23 access your library from any device, anytime you want. [Any changes you make](#) to your
24 collection on one device, change on your other devices too. Your photos and videos stay
25 organized into Moments, Collections, and Years. And all of your [Memories](#) and [People](#) are
26 updated everywhere. That way you can quickly find the moment, family member, or friend
27 you're looking for.

28 Your collection uploads to iCloud each time your device connects to Wi-Fi and your battery is charged.
When you have iOS 11 or later, your library updates over cellular too. Depending on your Internet speed,
the time it takes for you to see your photos and videos on all of your devices and iCloud.com might vary.

<https://support.apple.com/en-sg/HT204264>

iCloud File Management

Use the iCloud Storage APIs to write user documents and data to a central location and access those items from all of a user's computers and iOS devices. Making a user's documents ubiquitous using iCloud means that a user can view or edit those documents from any device without having to sync or transfer files explicitly. Storing documents in a user's iCloud account also provides a layer of security for that user. Even if a user loses a device, the documents on that device are not lost if they are in iCloud storage.

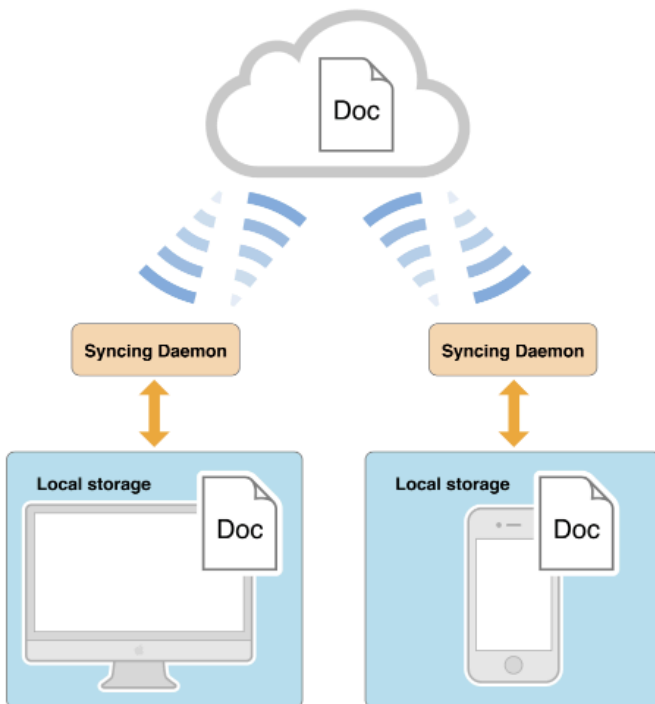
Important: The iCloud APIs do not work with garbage collection in macOS. If your existing code uses garbage collection, update your code to use ARC instead.

Storing and Using Documents in iCloud

Documents in iCloud provide the central location from which updates can be delivered to a user's computers and iOS devices. All documents must be created on a local disk initially and moved to a user's iCloud account later. A document targeted for iCloud storage is not moved to iCloud immediately, though. First, it is moved from its current location in the file system to a local system-managed directory where it can be monitored by the iCloud service. After that transfer, the file is transferred to iCloud and to the user's other devices as soon as possible.

While in iCloud storage, changes made on one device are stored locally and then pushed to iCloud using a local daemon, as shown in Figure 4-1. To prevent large numbers of conflicting changes from occurring at the same time, apps are expected to use file coordinator objects to perform all changes. File coordinators mediate changes between your app and the daemon that facilitates the transfer of the document to and from iCloud. In this way, the file coordinator acts like a locking mechanism for the document, preventing your app and the daemon from modifying the document simultaneously.

Figure 4-1 Pushing document changes to iCloud



1 [https://developer.apple.com/library/archive/documentation/FileManagement/Conceptual/FileSystemProgrammingGuide/iCloud/iCloud.html#//apple_ref/doc/uid/TP4001067](https://developer.apple.com/library/archive/documentation/FileManagement/Conceptual/FileSystemProgrammingGuide/iCloud/iCloud.html#//apple_ref/doc/uid/TP40010672-CH12-SW1)
2 [2-CH12-SW1](https://developer.apple.com/library/archive/documentation/FileManagement/Conceptual/FileSystemProgrammingGuide/iCloud/iCloud.html#//apple_ref/doc/uid/TP40010672-CH12-SW1).
3

4 55. Apple also infringes other claims of the '469 Patent, directly and through
5 inducing infringement and contributory infringement.

6 56. On information and belief, use of the Accused Instrumentalities in their
7 ordinary and customary fashion results in infringement of the methods claimed by
8 the '469 Patent.

9 57. By making, using, offering for sale, selling and/or importing into the
10 United States the Accused Instrumentalities, and touting the benefits of using the
11 Accused Instrumentalities' data communication features, Apple has injured Data Scape
12 and is liable to Data Scape for infringement of the '469 Patent pursuant to 35 U.S.C. §
13 271.

14 58. As a result of Apple's infringement of the '469 Patent, Plaintiff Data Scape
15 is entitled to monetary damages in an amount adequate to compensate for Apple's
16 infringement, but in no event less than a reasonable royalty for the use made of the
17 invention by Apple, together with interest and costs as fixed by the Court.

18 **COUNT IV**

19 **INFRINGEMENT OF U.S. PATENT NO. 7,617,537**

20 59. Plaintiff realleges and incorporates by reference the foregoing paragraphs,
21 as if fully set forth herein.

22 60. Data Scape is the owner by assignment of United States Patent No.
23 7,617,537 ("the '537 Patent") entitled "Communication System And Its Method and
24 Communication Apparatus And Its Method." The '537 Patent was duly and legally
25 issued by the United States Patent and Trademark Office on May 18, 2010. A true and
26 correct copy of the ' 537 Patent is included as Exhibit D.

27 61. On information and belief, Apple has offered for sale, sold and/or
28 imported into the United States Apple products and services that infringe the '537

1 patent, and continues to do so. By way of illustrative example, these infringing products
2 and services include, without limitation, Apple's products and services, *e.g.*, Apple
3 iCloud, Apple iTunes and the Apple devices on which they operate (*e.g.* iPhone,
4 MacBook, iPad), and all versions and variations thereof since the issuance of the '537
5 Patent ("Accused Instrumentalities").

6 62. On information and belief, Apple has directly infringed and continues to
7 infringe the '537 Patent, for example, by making, selling, offering for sale, and/or
8 importing the Accused Instrumentalities, and through its own use and testing of the
9 Accused Instrumentalities, which perform the communication method to transfer
10 content data to a first apparatus from a second apparatus claimed by Claim 1 of the '537
11 Patent comprising: judging whether said first apparatus and said second apparatus are
12 connected, comparing, upon judging that said first apparatus and said second apparatus
13 are connected, an identifier of said first apparatus with an identifier stored in said second
14 apparatus, comparing, when said identifier of said first apparatus corresponds to said
15 identified stored in said second apparatus, a first list of content data of said second
16 apparatus; transferring, from the second apparatus to the first apparatus, first content
17 data, which is registered in said second list and is not registered in said first list; and
18 deleting, from the first apparatus, second content data which is registered in said first
19 list and is not registered in said second list. Upon information and belief, Apple uses
20 the Accused Instrumentalities, which perform the infringing method, for its own
21 internal non-testing business purposes, while testing the Accused Instrumentalities, and
22 while providing technical support and repair services for the Accused Instrumentalities
23 to Apple's customers.

24 63. On information and belief, Apple has had knowledge of the '537 Patent
25 since at least the filing of the original Complaint in this action, or shortly thereafter, and
26 on information and belief, Apple knew of the '537 Patent and knew of its infringement,
27 including by way of this lawsuit. By the time of trial, Apple will have known and
28

1 intended (since receiving such notice) that their continued actions would actively induce
2 and contribute to the infringement of the claims of the '537 Patent.

3 64. On information and belief, use of the Accused Instrumentalities in their
4 ordinary and customary fashion results in infringement of the claims of the '537 Patent.

5 65. Apple's affirmative acts of making, using, selling, offering for sale, and/or
6 importing the Accused Instrumentalities have induced and continue to induce users of
7 the Accused Instrumentalities to use the Accused Instrumentalities in their normal and
8 customary way to perform methods that infringe Claim 1 of the '537 Patent, knowing
9 that when the Accused Instrumentalities are used in their ordinary and customary
10 manner such systems performing infringing communication methods to transfer content
11 data to a first apparatus from a second apparatus, comprising: judging whether said first
12 apparatus and said second apparatus are connected, comparing, upon judging that said
13 first apparatus and said second apparatus are connected, an identifier of said first
14 apparatus with an identifier stored in said second apparatus, comparing, when said
15 identifier of said first apparatus corresponds to said identified stored in said second
16 apparatus, a first list of content data of said second apparatus; transferring, from the
17 second apparatus to the first apparatus, first content data, which is registered in said
18 second list and is not registered in said first list; and deleting, from the first apparatus,
19 second content data which is registered in said first list and is not registered in said
20 second list. For example, Apple explains to customers the benefits of using the
21 Accused Instrumentalities, such as by touting their advantages of communicating and
22 sharing data among multiple devices:

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1 Sync your iPhone, iPad, or iPod using iTunes on 2 your computer

3 Learn how to sync music, movies, and more using iTunes on your Mac or PC.

4 Before you use iTunes to sync content to your iOS device, consider using iCloud, Apple Music, or similar
5 services to keep content from your Mac or PC in the cloud. This way, you can access your music, photos,
6 and more on your iOS devices when you aren't near your computer. Learn more about [using Apple Music](#)
7 or [iCloud Photos](#) instead of iTunes.

8 If you use iCloud or other services like Apple Music to keep your content up to date
9 across all of your devices, syncing through iTunes might be turned off.

10 What you can sync with iTunes

- 11 • Albums, songs, playlists, movies, TV shows, podcasts, books, and audiobooks.
- 12 • Photos and videos.
- 13 • Contacts and calendars.
- 14 • Device backups that you made using iTunes.

15 iTunes features might vary by country or region.

16 <https://support.apple.com/en-us/HT201253>. For similar reasons, Apple also induces its
17 customers to use the Accused Instrumentalities to infringe other claims of the '537
18 Patent. Apple specifically intended and was aware that the normal and customary use
19 of the Accused Instrumentalities would infringe the '537 Patent. Apple performed the
20 acts that constitute induced infringement, and would induce actual infringement, with
21 the knowledge of the '537 Patent and with the knowledge, or willful blindness to the
22 probability, that the induced acts would constitute infringement. On information and
23 belief, Apple engaged in such inducement to promote the sales of the Accused
24 Instrumentalities, *e.g.*, through Apple's user manuals, product support, marketing
25 materials, demonstrations, installation support, and training materials to actively induce
26 the users of the accused products to infringe the '537 Patent. Accordingly, Apple as
27 induced and continues to induce end users of the accused products to use the accused
28 products in their ordinary and customary way with compatible systems to make and/or

1 use systems infringing the '537 Patent, knowing that such use of the Accused
2 Instrumentalities with compatible systems will result in infringement of the '537 Patent.
3 Accordingly, Apple has been (since at least as of filing of the original complaint), and
4 currently is, inducing infringement of the '537 Patent, in violation of 35 U.S.C. §
5 271(b).

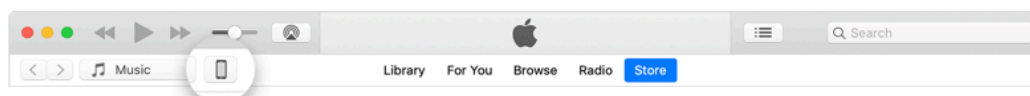
6 66. Apple also indirectly infringes the '537 Patent by manufacturing, using,
7 selling, offering for sale, and/or importing the accused products, with knowledge that
8 the accused products were and are especially manufactured and/or especially adapted
9 for use in infringing the '537 Patent and are not a staple article or commodity of
10 commerce suitable for substantial non-infringing use. On information and belief, the
11 Accused Instrumentality is designed to perform infringing communication methods to
12 transfer content data to a first apparatus from a second apparatus, comprising: judging
13 whether said first apparatus and said second apparatus are connected, comparing, upon
14 judging that said first apparatus and said second apparatus are connected, an identifier
15 of said first apparatus with an identifier stored in said second apparatus, comparing,
16 when said identifier of said first apparatus corresponds to said identified stored in said
17 second apparatus, a first list of content data of said second apparatus; transferring, from
18 the second apparatus to the first apparatus, first content data, which is registered in said
19 second list and is not registered in said first list; and deleting, from the first apparatus,
20 second content data which is registered in said first list and is not registered in said
21 second list. Because the Accused Instrumentality is designed to perform the claimed
22 method for communication, the Accused Instrumentality has no substantial non-
23 infringing uses, and any other uses would be unusual, far-fetched, illusory, impractical,
24 occasional, aberrant, or experimental. Apple's manufacture, use, sale, offering for sale,
25 and/or importation of the Accused Instrumentality constitutes contributory infringement
26 of the '537 Patent. Accordingly, Apple has been, and currently is, contributorily
27 infringing the '537 patent, in violation of 35 U.S.C. § 271(c).

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1 67. The Accused Instrumentalities perform a communication method to
2 transfer content data from a first apparatus to a second apparatus. For example, an
3 iPhone, iPad or iPod touch (e.g. a first apparatus) can be connected to a MacBook via,
4 e.g., a USB cable, to transfer files, e.g. music files, stored in the MacBook to the iPhone,
5 iPad or iPod touch (e.g. a second apparatus).

6 Sync or remove content using iTunes

- 7 1. Open iTunes and connect your device to your computer with a USB cable.
- 8 2. Click the device icon in the upper-left corner of the iTunes window. Learn what to do [if you don't see the icon](#).

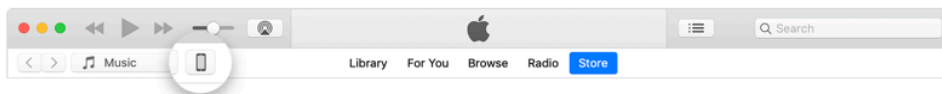


11
12 <https://support.apple.com/en-us/HT201253>.

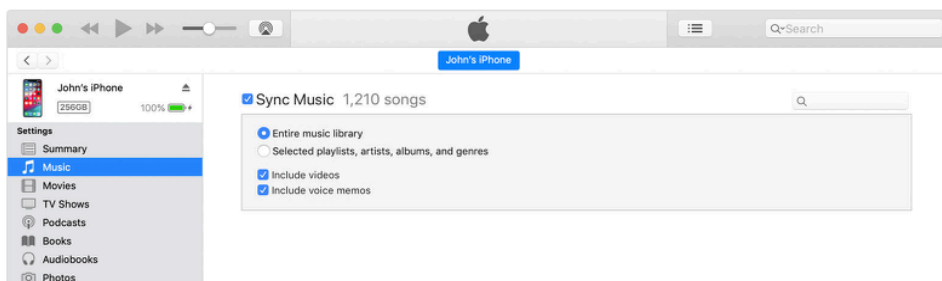
13 68. The Accused Instrumentalities perform a communication method to
14 transfer content data from a first apparatus to a second apparatus further comprising
15 judging whether said first apparatus and said second apparatus are connected. For
16 example, iTunes can only transfer music files between the MacBook and the iPhone,
17 iPad, or iPod touch if it determines that the devices are connected.

Sync or remove content using iTunes

1. Open iTunes and connect your device to your computer with a USB cable.
2. Click the device icon in the upper-left corner of the iTunes window. Learn what to do [if you don't see the icon](#).



3. From the list under Settings on the left side of the iTunes window, click the type of content that you want to sync or remove.¹ To turn syncing on for a content type, select the checkbox next to Sync.



4. Select the checkbox next to each item that you want to sync.
5. Click the Apply button in the lower-right corner of the screen. If syncing doesn't start automatically, click the Sync button.

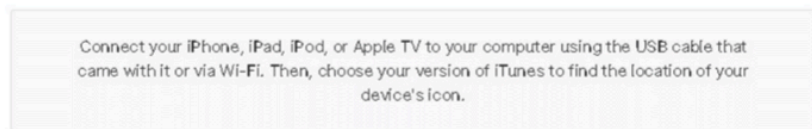
<https://support.apple.com/en-us/HT201253>.

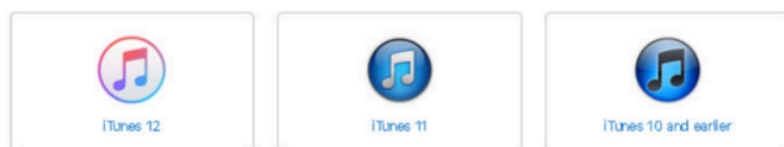
69. The Accused Instrumentalities perform a communication method to transfer content data from a first apparatus to a second apparatus further comprising comparing, upon judging that said first apparatus and said second apparatus are connected, an identifier of said first apparatus with an identifier stored in said second apparatus. For example, when a iOS device (*e.g.* iPhone, iPad, iPod Touch) is

1 connected to the MacBook, the MacBook will display an identifier associated with the
2 device.

3 **Locate and view your connected device in 4 iTunes**

5 After you connect your iPhone, iPad, iPod, or Apple TV to your computer, you can view it
6 and access its settings in different areas of iTunes depending on the version you're
7 using.

8 

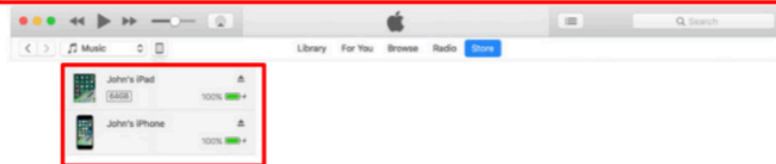


11 **iTunes 12**

12 View your device by clicking on the device's icon in the upper-left corner of the iTunes window.



14 **If you have multiple devices connected to your computer, click the device icon, then choose your device from the menu.**



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19 <https://support.apple.com/en-us/HT203060>. For example, iTunes permits several
20 playlists of music to be created which are unique to the iOS device, and, accordingly,
21 the identifier is unique to the device:

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 Jim VanLeeuwen |  Level 6 (18,874 points) |  iPhone

Sep 4, 2012 1:12 PM in response to Keiloon

I use Method 2 as described in **How to use multiple iPods, iPads, or iPhones with one computer:**
<http://support.apple.com/kb/HT1495>

I create several playlists and select which playlists I want on each device. Several playlists end up on all devices while others are only selected for one device. I keep one playlist strictly for "New Stuff" and I drag songs into or out of this playlist as my mood changes.

I don't ever check or uncheck items except holiday songs when the season passes.

https://discussions.apple.com/thread/4267230_

70. The Accused Instrumentalities perform a communication method to transfer content data from a first apparatus to a second apparatus further comprising comparing, when said identifier of said first apparatus corresponds to said identifier stored in second apparatus, a first list of content data of said first apparatus and a second list of content data of said second apparatus. For example, when the iOS device is connected to the MacBook, iTunes will compare playlists of music created

1 for that device to playlists stored on the MacBook to determine if the two are
2 identical.

3
4  Jim VanLeeuwen |  Level 6 (18,874 points)  iPhone

5 Sep 4, 2012 1:12 PM in response to Keiloon

6 I use Method 2 as described in **How to use multiple iPods, iPads, or iPhones with one computer:**
<http://support.apple.com/kb/HT1495>

7 I create several playlists and select which playlists I want on each device. Several playlists end up on all devices while others
8 are only selected for one device. I keep one playlist strictly for "New Stuff" and I drag songs into or out of this playlist as my
9 mood changes.

I don't ever check or uncheck items except holiday songs when the season passes.

10

11 <https://discussions.apple.com/thread/4267230>.

12  jeremy_v |  Community Specialists

13 Oct 19, 2013 11:42 AM in response to louiepatterson

14 Hi louiepatterson,

15 Thanks for visiting Apple Support Communities.

16 If your entire iTunes library is syncing every time you connect your iPhone, you may want to try setting up syncing in iTunes again by
17 following the steps in the appropriate article below. If you're syncing music, try un-checking and then re-checking the "Sync music"
checkbox in iTunes.

18 **iTunes 11 for Mac: Set up syncing for iPod, iPhone, or iPad**
<http://support.apple.com/kb/PH12113>

19 **iTunes 11 for Windows: Set up syncing for iPod, iPhone, or iPad**
<http://support.apple.com/kb/PH12313>

20 Your entire library will sync again once more after this, but then only new songs should sync thereafter. If the issue persists,
you'd try the troubleshooting steps in our iPhone assistant next:

21 **Frozen or unresponsive iPhone**
<http://www.apple.com/support/iphone/assistant/phone/>

22
23 <https://discussions.apple.com/thread/5452203?tstart=0>

24 71. The Accused Instrumentalities perform a communication method to
25 transfer content data from a first apparatus to a second apparatus further comprising
26 transferring, from the second apparatus to the first apparatus, first content data, which
27 is registered in said second list and is not registered in said first list. For example,
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1 iTunes will transfer only songs found in the playlist of the MacBook that are not
2 found in the playlist of the iOS device.



3 jeremy_v | Community Specialists

4 Oct 19, 2013 11:42 AM in response to louiepatterson

5 Hi louiepatterson,

6 Thanks for visiting Apple Support Communities.

7 If your entire iTunes library is syncing every time you connect your iPhone, you may want to try setting up syncing in iTunes again by following the steps in the appropriate article below. If you're syncing music, try un-checking and then re-checking the "Sync music" checkbox in iTunes.

8 **iTunes 11 for Mac: Set up syncing for iPod, iPhone, or iPad**

<http://support.apple.com/kb/PH12113>

9 **iTunes 11 for Windows: Set up syncing for iPod, iPhone, or iPad**

<http://support.apple.com/kb/PH12313>

10 Your entire library will sync again once more after this, but then only new songs should sync thereafter. If the issue persists, you'd try the troubleshooting steps in our iPhone assistant next:

11 **Frozen or unresponsive iPhone**

<http://www.apple.com/support/iphone/assistant/phone/>

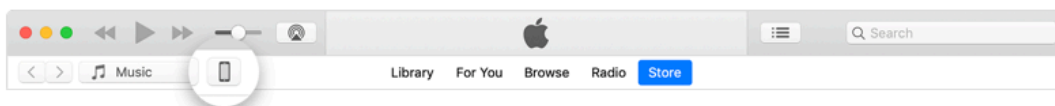
12
13 <https://discussions.apple.com/thread/5452203?tstart=0>.

14 72. The Accused Instrumentalities perform a communication method to
15 transfer content data from a first apparatus to a second apparatus further comprising
16 deleting, from the first apparatus, second content data, which registered in said first
17 list and is not registered in the second list. For example, if an item is deleted from the

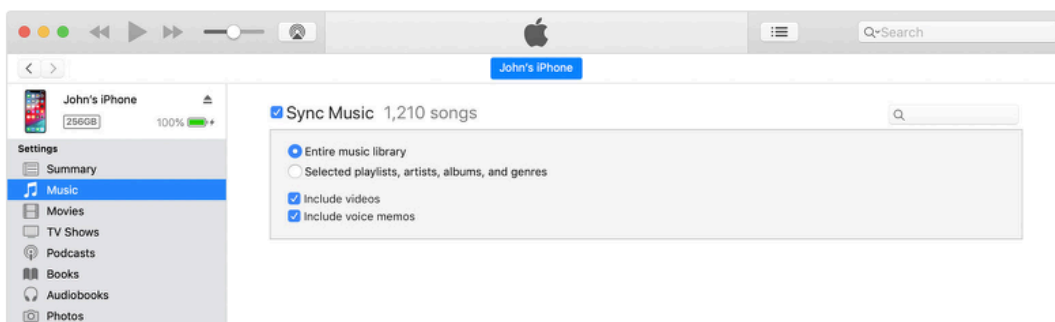
1 iTunes library on the MacBook, that item is deleted from the iTunes library of the
2 associated device the next time they sync.

4 Sync or remove content using iTunes

1. Open iTunes and connect your device to your computer with a USB cable.
2. Click the device icon in the upper-left corner of the iTunes window. Learn what to do [if you don't see the icon](#).



3. From the list under Settings on the left side of the iTunes window, click the type of content that you want to sync or remove.¹ To turn syncing on for a content type, select the checkbox next to Sync.



4. Select the checkbox next to each item that you want to sync.
5. Click the Apply button in the lower-right corner of the screen. If syncing doesn't start automatically, click the Sync button.

20 <https://support.apple.com/en-us/HT201253>.

21 5. By default, iTunes syncs your device whenever you connect it to your computer. If you want to have
22 iTunes ask you before syncing, do one of the following:

- 23 ■ Require a prompt before syncing this device: Click Summary, then deselect "Open iTunes when this
24 [device] is connected."
- 25 ■ Require a prompt before syncing all devices: Choose Edit > Preferences, click Devices, and select
26 "Prevent iPods, iPhones, and iPads from syncing automatically."

27 6. When you're ready to sync, click Apply.

28 Tip: To automatically sync a connected device at any time, choose File > Devices > Sync [device name].

WARNING: If you delete an automatically synced item from your iTunes library, the deleted item is removed from your device the next time you sync.

1 73. Apple also infringes other claims of the '537 Patent, directly and through
2 inducing infringement and contributory infringement.

3 74. On information and belief, use of the Accused Instrumentalities in their
4 ordinary and customary fashion results in infringement of the methods claimed by
5 the '537 Patent.

6 75. By making, using, offering for sale, selling and/or importing into the
7 United States the Accused Instrumentalities, and touting the benefits of using the
8 Accused Instrumentalities' data communication features, Apple has injured Data Scape
9 and is liable to Data Scape for infringement of the '537 Patent pursuant to 35 U.S.C. §
10 271.

11 76. As a result of Apple's infringement of the '469 Patent, Plaintiff Data Scape
12 is entitled to monetary damages in an amount adequate to compensate for Apple's
13 infringement, but in no event less than a reasonable royalty for the use.

14 **COUNT V**

15 **INFRINGEMENT OF U.S. PATENT NO. 9,380,112**

16 77. Plaintiff realleges and incorporates by reference the foregoing paragraphs,
17 as if fully set forth herein.

18 78. Data Scape is the owner by assignment of United States Patent No.
19 9,380,112 ("the '112 Patent") entitled "Communication System And Its Method and
20 Communication Apparatus And Its Method." The '112 Patent was duly and legally
21 issued by the United States Patent and Trademark Office on June 28, 2016. A true and
22 correct copy of the '112 Patent is included as Exhibit E.

23 79. On information and belief, Apple has offered for sale, sold and/or
24 imported into the United States Apple products and services that infringe the '112
25 patent, and continues to do so. By way of illustrative example, these infringing products
26 and services include, without limitation, Apple's products and services, *e.g.*, Apple
27 iTunes and the Apple devices on which they operate (*e.g.* iPhone, MacBook, iPad), and
28

1 all versions and variations thereof since the issuance of the '112 Patent ("Accused
2 Instrumentalities").

3 80. On information and belief, Apple has directly infringed and continues to
4 infringe the '112 Patent, for example, by making, selling, offering for sale, and/or
5 importing the Accused Instrumentalities, and through its own use and testing of the
6 Accused Instrumentalities, which include a communication apparatus configured to
7 transfer data to a portable apparatus claimed by Claim 1 of the '112 Patent comprising:
8 a memory configured to store a first list of musical content data; the data interface
9 configured to detect a connection between the communication apparatus and the
10 portable apparatus and circuitry configured to edit the first list of musical content data
11 based on input from a user without regard to the connection of the communication
12 apparatus and the portable apparatus, control transfer of selected musical content data
13 stored in the communication apparatus to the portable apparatus via the data interface
14 based on a result of the comparison after the connection of the communication apparatus
15 and the portable apparatus is detected, and control playback of musical content data
16 based on the edit first list of musical content data so that the musical content data
17 referenced in the edited first list of musical content data is played back as a collection,
18 the edited first list of musical content data being associated with an identifier stored in
19 the communication apparatus that uniquely identifies the portable apparatus. Upon
20 information and belief, Apple uses the Accused Instrumentalities, which consist of the
21 accused apparatus, for its own internal non-testing business purposes, while testing the
22 Accused Instrumentalities, and while providing technical support and repair services
23 for the Accused Instrumentalities to Apple's customers.

24 81. On information and belief, Apple has had knowledge of the '112 Patent
25 since at least the filing of the original Complaint in this action, or shortly thereafter, and
26 on information and belief, Apple knew of the '112 Patent and knew of its infringement,
27 including by way of this lawsuit. By the time of trial, Apple will have known and
28

1 intended (since receiving such notice) that their continued actions would actively induce
2 and contribute to the infringement of the claims of the '112 Patent.

3 82. On information and belief, use of the Accused Instrumentalities in their
4 ordinary and customary fashion results in infringement of the claims of the '112 Patent

5 83. Apple's affirmative acts of making, using, selling, offering for sale, and/or
6 importing the Accused Instrumentalities have induced and continue to induce users of
7 the Accused Instrumentalities to use the Accused Instrumentalities in their normal and
8 customary way that infringe Claim 1 of the '112 Patent, knowing that when the Accused
9 Instrumentalities are used in their ordinary and customary manner such systems include
10 a communication apparatus configured to transfer data to a portable apparatus claimed
11 by Claim 1 of the '112 Patent comprising: a memory configured to store a first list of
12 musical content data; the data interface configured to detect a connection between the
13 communication apparatus and the portable apparatus and circuitry configured to edit
14 the first list of musical content data based on input from a user without regard to the
15 connection of the communication apparatus and the portable apparatus, control transfer
16 of selected musical content data stored in the communication apparatus to the portable
17 apparatus via the data interface based on a result of the comparison after the connection
18 of the communication apparatus and the portable apparatus is detected, and control
19 playback of musical content data based on the edit first list of musical content data so
20 that the musical content data referenced in the edited first list of musical content data is
21 played back as a collection, the edited first list of musical content data being associated
22 with an identifier stored in the communication apparatus that uniquely identifies the
23 portable apparatus. For example, Apple explains to customers the benefits of using the
24 Accused Instrumentalities, such as by touting their advantages of communicating and
25 sharing data among multiple devices:

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1 Sync your iPhone, iPad, or iPod using iTunes on 2 your computer

3 Learn how to sync music, movies, and more using iTunes on your Mac or PC.

4 Before you use iTunes to sync content to your iOS device, consider using iCloud, Apple Music, or similar
5 services to keep content from your Mac or PC in the cloud. This way, you can access your music, photos,
6 and more on your iOS devices when you aren't near your computer. Learn more about [using Apple Music](#)
7 or [iCloud Photos](#) instead of iTunes.

8 If you use iCloud or other services like Apple Music to keep your content up to date
9 across all of your devices, syncing through iTunes might be turned off.

10 What you can sync with iTunes

- 11 • Albums, songs, playlists, movies, TV shows, podcasts, books, and audiobooks.
- 12 • Photos and videos.
- 13 • Contacts and calendars.
- 14 • Device backups that you made using iTunes.

15 iTunes features might vary by country or region.

16 <https://support.apple.com/en-us/HT201253>. For similar reasons, Apple also induces its
17 customers to use the Accused Instrumentalities to infringe other claims of the '112
18 Patent. Apple specifically intended and was aware that the normal and customary use
19 of the Accused Instrumentalities would infringe the '112 Patent. Apple performed the
20 acts that constitute induced infringement, and would induce actual infringement, with
21 the knowledge of the '112 Patent and with the knowledge, or willful blindness to the
22 probability, that the induced acts would constitute infringement. On information and
23 belief, Apple engaged in such inducement to promote the sales of the Accused
24 Instrumentalities, *e.g.*, through Apple's user manuals, product support, marketing
25 materials, demonstrations, installation support, and training materials to actively induce
26 the users of the accused products to infringe the '112 Patent. Accordingly, Apple as
27 induced and continues to induce end users of the accused products to use the accused
28 products in their ordinary and customary way with compatible systems to make and/or

1 use systems infringing the '112 Patent, knowing that such use of the Accused
2 Instrumentalities with compatible systems will result in infringement of the '112 Patent.
3 Accordingly, Apple has been (since at least as of filing of the original complaint), and
4 currently is, inducing infringement of the '112 Patent, in violation of 35 U.S.C. §
5 271(b).

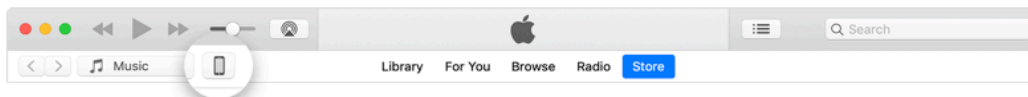
6 84. Apple also indirectly infringes the '112 Patent by manufacturing, using,
7 selling, offering for sale, and/or importing the accused products, with knowledge that
8 the accused products were and are especially manufactured and/or especially adapted
9 for use in infringing the '112 Patent and are not a staple article or commodity of
10 commerce suitable for substantial non-infringing use. On information and belief, the
11 Accused Instrumentality is designed to include a communication apparatus configured
12 to transfer data to a portable apparatus claimed by Claim 1 of the '112 Patent
13 comprising: a memory configured to store a first list of musical content data; the data
14 interface configured to detect a connection between the communication apparatus and
15 the portable apparatus and circuitry configured to edit the first list of musical content
16 data based on input from a user without regard to the connection of the communication
17 apparatus and the portable apparatus, control transfer of selected musical content data
18 stored in the communication apparatus to the portable apparatus via the data interface
19 based on a result of the comparison after the connection of the communication apparatus
20 and the portable apparatus is detected, and control playback of musical content data
21 based on the edit first list of musical content data so that the musical content data
22 referenced in the edited first list of musical content data is played back as a collection,
23 the edited first list of musical content data being associated with an identifier stored in
24 the communication apparatus that uniquely identifies the portable apparatus. Because
25 the Accused Instrumentality is designed to include the claims apparatus for
26 communication, the Accused Instrumentality has no substantial non-infringing uses,
27 and any other uses would be unusual, far-fetched, illusory, impractical, occasional,
28 aberrant, or experimental. Apple's manufacture, use, sale, offering for sale, and/or

1 importation of the Accused Instrumentality constitutes contributory infringement of the
2 '112 Patent. Accordingly, Apple has been, and currently is, contributorily infringing the
3 '112 patent, in violation of 35 U.S.C. § 271(c).

4 85. The Accused Instrumentalities includes “[a] communication apparatus
5 configured to transfer data to a portable apparatus.” For example, an iPhone, iPad or
6 iPod touch (e.g. a portable apparatus) can be connected to a MacBook via, e.g., a USB
7 cable, to transfer files, e.g. music files, stored in the MacBook (e.g. a communication
8 apparatus) to the iPhone, iPad or iPod touch.

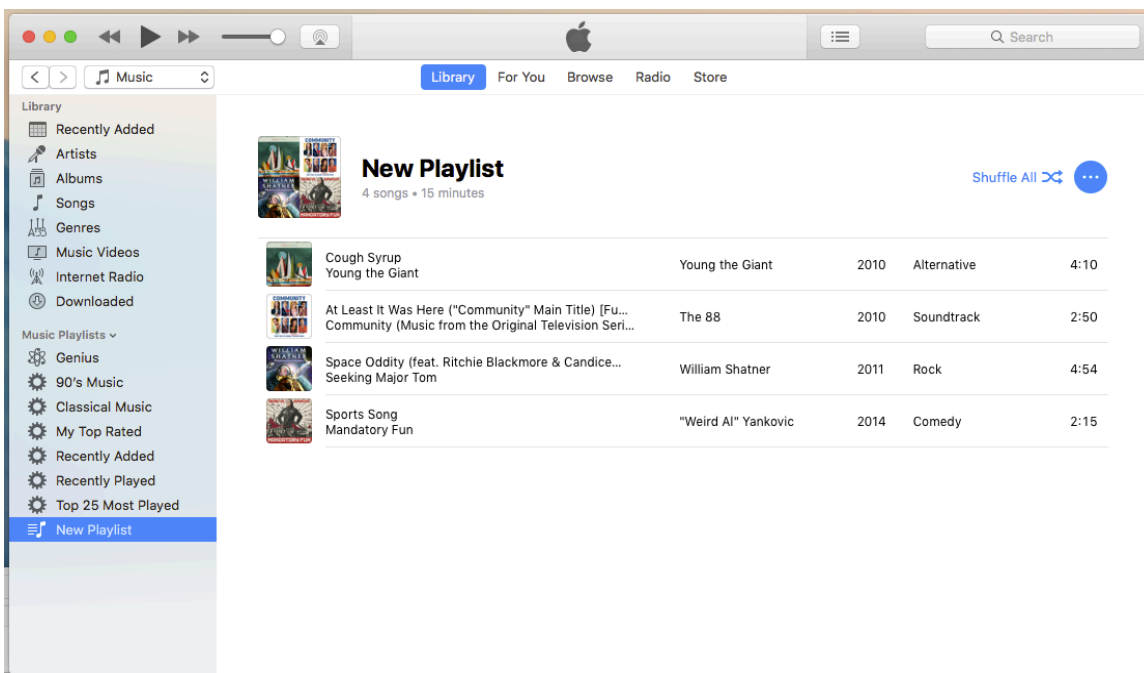
9 Sync or remove content using iTunes

- 10 1. Open iTunes and connect your device to your computer with a USB cable.
- 11 2. Click the device icon in the upper-left corner of the iTunes window. Learn what to do [if you don't see the icon](#).



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15 <https://support.apple.com/en-us/HT201253>.

16 86. The Accused Instrumentalities include a communication apparatus
17 comprising “a memory configured to store a first list of musical content data.” For
18 example, the MacBook using iTunes contains memory that will store musical files as
19 individual files, or as playlists:



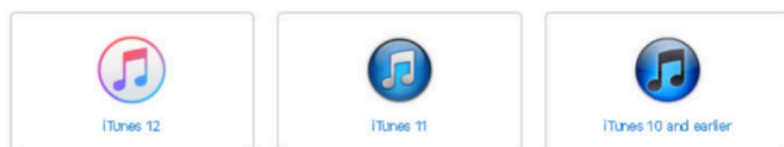
12 87. The Accused Instrumentalities include a communication apparatus
13 comprising “a data interface configured to detect a connection between the
14 communication apparatus and the portable apparatus.” For example, when an iOS

1 device (e.g. iPhone, iPad, iPod Touch) is connected to the MacBook, the MacBook
2 will display an identifier associated with the device.

3 **Locate and view your connected device in 4 iTunes**

4 After you connect your iPhone, iPad, iPod, or Apple TV to your computer, you can view it
5 and access its settings in different areas of iTunes depending on the version you're
6 using.

6 Connect your iPhone, iPad, iPod, or Apple TV to your computer using the USB cable that
7 came with it or via Wi-Fi. Then, choose your version of iTunes to find the location of your
8 device's icon.

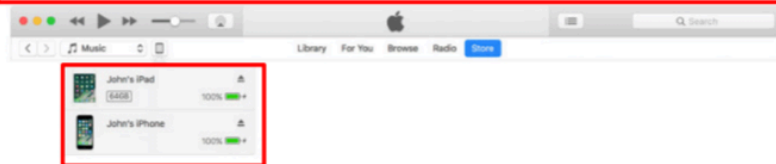


11 **iTunes 12**

12 View your device by clicking on the device's icon in the upper-left corner of the iTunes window.



14 If you have multiple devices connected to your computer, click the device icon, then choose your device
15 from the menu.



19 <https://support.apple.com/en-us/HT203060>. For example, when the devices are
20 connected, iTunes will display a graphic user interface, allowing access to the data
21 contained on the portable device:

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 Jim VanLeeuwen |  Level 6 (18,874 points)  iPhone

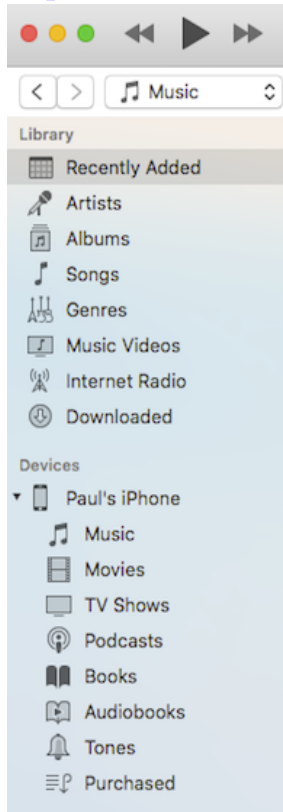
Sep 4, 2012 1:12 PM in response to Keiloon

I use Method 2 as described in **How to use multiple iPods, iPads, or iPhones with one computer:**
<http://support.apple.com/kb/HT1495>

I create several playlists and select which playlists I want on each device. Several playlists end up on all devices while others are only selected for one device. I keep one playlist strictly for "New Stuff" and I drag songs into or out of this playlist as my mood changes.


I don't ever check or uncheck items except holiday songs when the season passes.

<https://discussions.apple.com/thread/4267230>



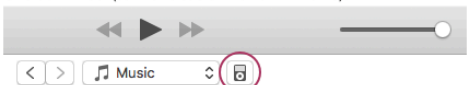
88. The Accused Instrumentalities further include circuitry configured to “edit the first list of musical content without regard to the connection of the communication apparatus and the portable apparatus.” For example, iTunes allows a

1 user to edit Playlists without regard to whether or not the portable device (e.g. iPhone,
2 iPod, iPad) is connected:

3  Oct 24, 2016 11:43 PM in response to dayarts

4 If you directly sync from an iTunes library to iPhone, there are several ways, but this one may be most convenient. First, in
5 your iTunes library, create a new playlist that **only has the songs you want on iPhone**. Or you can use an existing playlist
6 for this purpose. I'll call it the *iPhone Songs* playlist for this discussion.

7 Select iPhone in iTunes by clicking its *device button*. Here's my iPod's *device button* in upper-left corner of iTunes window,
8 circled in red (same location for an iPhone).

9 

10 iPhone's *Summary* settings screen appears in iTunes window. Along the left side, in the sidebar, under **Settings**, click **Music**.
11 iPhone's *Music* settings screen appears to the right.

12 If iTunes is currently syncing **all** of your songs, **Sync Music** is probably checked already. Instead of the **Entire music library**
13 option, choose option to sync **Selected playlists, artists, albums, and genres**. Below that, under *Playlists*, find that *iPhone*
14 *Songs* playlist and select (checkmark) it. You don't need to select anything else on this screen. Click *Apply* button to sync
15 just this one playlist and its songs to iPhone.

16 Going forward, to update songs on iPhone, update that *iPhone Songs* playlist in your iTunes library (add/remove songs).
17 Your iPhone does **not** need to be connected. The next time you connect iPhone (or click *Sync* if already connected), iTunes
18 automatically updates iPhone with the same changes.

19 NOTE: I described this method with just one *iPhone Songs* playlist, but you can also create and maintain multiple playlists
20 for your iPhone (for different purposes) in your iTunes library, and select them all for syncing on iPhone's *Music* settings
21 screen. They can be regular or smart playlists.

22 https://discussions.apple.com/thread/7720242_

23 89. The Accused Instrumentalities further include circuitry configured to
24 “control transfer of selected musical content data stored in the communication
25 apparatus to the portable apparatus via the data interface based on a result of the
26 comparison after the connection of the communication apparatus and the portable
27 apparatus in connected.” For example, when the portable device (e.g. iPhone, iPod,
28 iPad) is connected to the MacBook, iTunes will compare playlists of music created for
that device to playlists stored on the MacBook to determine if the two are identical.

1 For example, iTunes will transfer only songs found in the playlist of the MacBook that
2 are not found in the playlist of the portable device.

3
4 https://discussions.apple.com/thread/4267230_



5 jeremy_v



Community Specialists

6 Oct 19, 2013 11:42 AM in response to louiepatterson

Hi louiepatterson,

7 Thanks for visiting Apple Support Communities.

8 If your entire iTunes library is syncing every time you connect your iPhone, you may want to try setting up syncing in iTunes again by
following the steps in the appropriate article below. If you're syncing music, try un-checking and then re-checking the "Sync music"
checkbox in iTunes.

9 **iTunes 11 for Mac: Set up syncing for iPod, iPhone, or iPad**

10 <http://support.apple.com/kb/PH12113>

11 **iTunes 11 for Windows: Set up syncing for iPod, iPhone, or iPad**

<http://support.apple.com/kb/PH12313>

12 **Your entire library will sync again once more after this, but then only new songs should sync thereafter.** If the issue persists,
I'd try the troubleshooting steps in our iPhone assistant next:

13 **Frozen or unresponsive iPhone**

<http://www.apple.com/support/iphone/assistant/phone/>

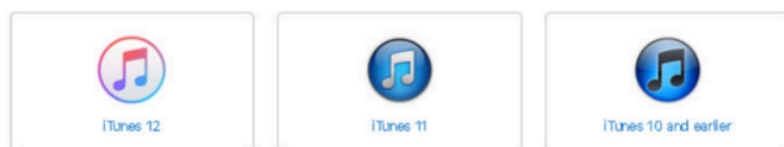
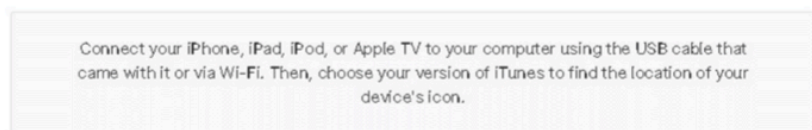
14
15 <https://discussions.apple.com/thread/5452203?tstart=0>

16 90. The Accused Instrumentalities further includes circuitry configured to
17 “control playback of musical content data based on a the edited first list of musical
18 content data so that the musical content data referenced in the edited first list of
19 musical content data is played back as a collection, the edited first list of musical
20 content data being associated with an identifier stored in the communication apparatus
21 that uniquely identifies the portable apparatus.” For example, when a portable device
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1 (e.g. iPhone, iPad, iPod Touch) is connected to the MacBook, the MacBook will
2 display an identifier associated with the device.

3 **Locate and view your connected device in 4 iTunes**

5 After you connect your iPhone, iPad, iPod, or Apple TV to your computer, you can view it
6 and access its settings in different areas of iTunes depending on the version you're
7 using.

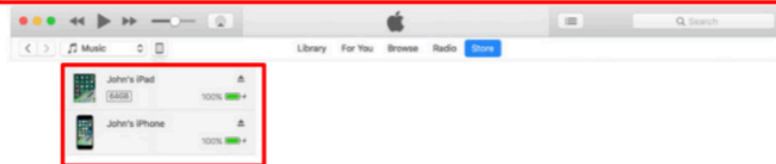


11 **iTunes 12**

12 View your device by clicking on the device's icon in the upper-left corner of the iTunes window.



14 If you have multiple devices connected to your computer, click the device icon, then choose your device
15 from the menu.



19 <https://support.apple.com/en-us/HT203060>. For example, iTunes permits several
20 playlists of music to be created which are unique to the iOS device, and, accordingly,
21 the identifier is unique to the device:


23 <https://discussions.apple.com/thread/4267230>. The edited playlists transferred to the
24 portable device can be played back as a collection on the portable device:



1 **Open Now Playing on your iPhone, iPad, iPod touch, or**
 2 **Android phone**

When playing music on your iOS device or Android phone, a player appears at the bottom or lower-right corner of the screen. Tap the player to open Now Playing. From the Now Playing screen, you can control playback or volume, turn on shuffle or repeat, [download the song](#), and more.

3 **Shuffle songs**



Open the Now Playing screen and scroll down.

4 Tap  to set Music to always shuffle a list of songs selected. Any album, playlist, or set of songs will play in a random order.

5 If shuffle is on, you'll see . To turn it off, tap the button until you see .



6 **Repeat songs**

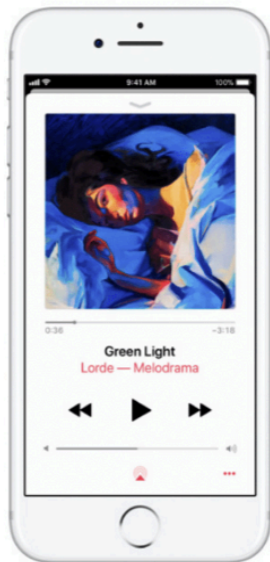
Open the Now Playing screen and scroll down.

7 Tap  once to turn on repeat for an entire playlist or album. Tap  again to turn on repeat for one song. Tap  a third time to clear the repeat.

8 If repeat is on, you'll see  or . To turn it off, tap the button until you see .

9 **More options**

10 Under the Shuffle and Repeat buttons on Now Playing, you'll find the song's Lyrics¹ and a list of songs that will play Up Next. To reorganize Up Next, drag songs with  to rearrange their order, or swipe left to remove a song that you want to skip. If you don't see , turn off repeat.



11 <https://support.apple.com/en-us/HT207230>.

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 13
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 15 91. Apple also infringes other claims of the '112 Patent, directly and through
 16 inducing infringement and contributory infringement.

17 92. On information and belief, use of the Accused Instrumentalities in their
 18 ordinary and customary fashion results in infringement of the methods claimed by
 19 the '112 Patent.

20 93. By making, using, offering for sale, selling and/or importing into the
 21 United States the Accused Instrumentalities, and touting the benefits of using the
 22 Accused Instrumentalities' data communication features, Apple has injured Data Scape
 23 and is liable to Data Scape for infringement of the '112 Patent pursuant to 35 U.S.C. §
 24 271

25 94. As a result of Apple's infringement of the '112 Patent, Plaintiff Data Scape
 26 is entitled to monetary damages in an amount adequate to compensate for Apple's
 27 infringement, but in no event less than a reasonable royalty for the use.

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COUNT VI

INFRINGEMENT OF U.S. PATENT NO. 9,712,614

95. Plaintiff realleges and incorporates by reference the foregoing paragraphs, as if fully set forth herein.

96. Data Scape is the owner by assignment of United States Patent No. 9,712,614 (“the ’614 Patent”) entitled “Communication System And Its Method and Communication Apparatus And Its Method.” The ’614 Patent was duly and legally issued by the United States Patent and Trademark Office on July 18, 2017. A true and correct copy of the ’614 Patent is included as Exhibit F.

97. On information and belief, Apple has offered for sale, sold and/or imported into the United States Apple products and services that infringe the ’614 patent, and continues to do so. By way of illustrative example, these infringing products and services include, without limitation, Apple’s products and services, *e.g.*, Apple iTunes and the Apple devices on which they operate (*e.g.* iPhone, MacBook, iPad), and all versions and variations thereof since the issuance of the ’614 Patent (“Accused Instrumentalities”).

98. On information and belief, Apple has directly infringed and continues to infringe the ’614 Patent, for example, by making, selling, offering for sale, and/or importing the Accused Instrumentalities, and through its own use and testing of the Accused Instrumentalities, which include a communication apparatus claimed by Claim 1 of the ’112 Patent comprising: a memory configured to store musical content data and a plurality of program lists associated with musical content data, a data interface configured to interface with an external reproduction apparatus, and circuitry configured to control playback of musical content data based on a program list so that the musical content data referenced in the program list is played back as a collection, the program list being associated with a predetermined identified uniquely identifying a predetermined external reproduction apparatus among a plurality of reproduction

1 apparatuses, control presentation of the program list to a user via a user interface, accept
2 edits to the program list via a user interface, determine whether an identifier received
3 by the circuitry via the data interface is the predetermined identified, control transfer of
4 the musical content data to the predetermined external reproduction apparatus via the
5 data interface based on the program list when the received identifier is the
6 predetermined identifier without receiving information on selection of the musical
7 content data from the predetermined external reproduction apparatus, compare the
8 program list with a second list of musical content data stored in the predetermined
9 external reproduction apparatus, identify a piece of musical content data common to the
10 program list and the second list based on a result of the comparison, and control transfer
11 to the predetermined external reproduction apparatus of the musical content data that is
12 in the program list and is not in the second list of musical content data based on the
13 result of the comparison such that transfer of the identified piece of musical content data
14 common to the program list and the second list is omitted. Upon information and belief,
15 Apple uses the Accused Instrumentalities, which consist of the accused apparatus, for
16 its own internal non-testing business purposes, while testing the Accused
17 Instrumentalities, and while providing technical support and repair services for the
18 Accused Instrumentalities to Apple's customers.

19 99. On information and belief, Apple has had knowledge of the '614 Patent
20 since at least the filing of the original Complaint in this action, or shortly thereafter, and
21 on information and belief, Apple knew of the '614 Patent and knew of its infringement,
22 including by way of this lawsuit. By the time of trial, Apple will have known and
23 intended (since receiving such notice) that their continued actions would actively induce
24 and contribute to the infringement of the claims of the '614 Patent.

25 100. On information and belief, use of the Accused Instrumentalities in their
26 ordinary and customary fashion results in infringement of the claims of the '929 Patent.

27 101. Apple's affirmative acts of making, using, selling, offering for sale, and/or
28 importing the Accused Instrumentalities have induced and continue to induce users of

1 the Accused Instrumentalities to use the Accused Instrumentalities in their normal and
2 customary way that infringes Claim 1 of the '614 Patent, knowing that when the
3 Accused Instrumentalities are used in their ordinary and customary manner such
4 systems include a communication apparatus claimed by Claim 1 of the '614 Patent
5 comprising: a memory configured to store musical content data and a plurality of
6 program lists associated with musical content data, a data interface configured to
7 interface with an external reproduction apparatus, and circuitry configured to control
8 playback of musical content data based on a program list so that the musical content
9 data referenced in the program list is played back as a collection, the program list being
10 associated with a predetermined identified uniquely identifying a predetermined
11 external reproduction apparatus among a plurality of reproduction apparatuses, control
12 presentation of the program list to a user via a user interface, accept edits to the program
13 list via a user interface, determine whether an identifier received by the circuitry via the
14 data interface is the predetermined identified, control transfer of the musical content
15 data to the predetermined external reproduction apparatus via the data interface based
16 on the program list when the received identifier is the predetermined identifier without
17 receiving information on selection of the musical content data from the predetermined
18 external reproduction apparatus, compare the program list with a second list of musical
19 content data stored in the predetermined external reproduction apparatus, identify a
20 piece of musical content data common to the program list and the second list based on
21 a result of the comparison, and control transfer to the predetermined external
22 reproduction apparatus of the musical content data that is in the program list and is not
23 in the second list of musical content data based on the result of the comparison such
24 that transfer of the identified piece of musical content data common to the program list
25 and the second list is omitted. For example, Apple explains to customers the benefits of
26 using the Accused Instrumentalities, such as by touting their advantages of
27 communicating and sharing data among multiple devices:

28

1 Sync your iPhone, iPad, or iPod using iTunes on 2 your computer

3 Learn how to sync music, movies, and more using iTunes on your Mac or PC.

4 Before you use iTunes to sync content to your iOS device, consider using iCloud, Apple Music, or similar
5 services to keep content from your Mac or PC in the cloud. This way, you can access your music, photos,
6 and more on your iOS devices when you aren't near your computer. Learn more about [using Apple Music](#)
7 or [iCloud Photos](#) instead of iTunes.

8 If you use iCloud or other services like Apple Music to keep your content up to date
9 across all of your devices, syncing through iTunes might be turned off.

10 What you can sync with iTunes

- 11 • Albums, songs, playlists, movies, TV shows, podcasts, books, and audiobooks.
- 12 • Photos and videos.
- 13 • Contacts and calendars.
- 14 • Device backups that you made using iTunes.

15 iTunes features might vary by country or region.

16 <https://support.apple.com/en-us/HT201253>. For similar reasons, Apple also induces its
17 customers to use the Accused Instrumentalities to infringe other claims of the '614
18 Patent. Apple specifically intended and was aware that the normal and customary use
19 of the Accused Instrumentalities would infringe the '614 Patent. Apple performed the
20 acts that constitute induced infringement, and would induce actual infringement, with
21 the knowledge of the '614 Patent and with the knowledge, or willful blindness to the
22 probability, that the induced acts would constitute infringement. On information and
23 belief, Apple engaged in such inducement to promote the sales of the Accused
24 Instrumentalities, *e.g.*, through Apple's user manuals, product support, marketing
25 materials, and training materials to actively induce the users of the accused products to
26 infringe the '614 Patent. Accordingly, Apple has induced and continues to induce end
27 users of the accused products to use the accused products in their ordinary and
28 customary way to make and/or use systems infringing the '614 Patent, knowing that

1 such use of the Accused Instrumentalities with compatible systems will result in
2 infringement of the '614 Patent. Accordingly, Apple has been (since at least as of filing
3 of the original complaint), and currently is, inducing infringement of the '614 Patent, in
4 violation of 35 U.S.C. § 271(b).

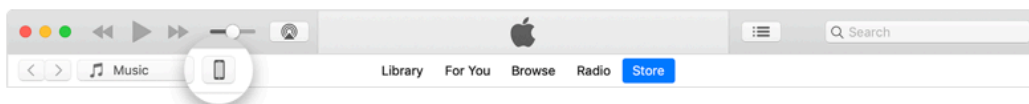
5 102. Apple also indirectly infringes the '614 Patent by manufacturing, using,
6 selling, offering for sale, and/or importing the accused products, with knowledge that
7 the accused products were and are especially manufactured and/or especially adapted
8 for use in infringing the '614 Patent and are not a staple article or commodity of
9 commerce suitable for substantial non-infringing use. On information and belief, the
10 Accused Instrumentality is designed to include a communication apparatus claimed by
11 Claim 1 of the '112 Patent comprising: a memory configured to store musical content
12 data and a plurality of program lists associated with musical content data, a data
13 interface configured to interface with an external reproduction apparatus, and circuitry
14 configured to control playback of musical content data based on a program list so that
15 the musical content data referenced in the program list is played back as a collection,
16 the program list being associated with a predetermined identified uniquely identifying
17 a predetermined external reproduction apparatus among a plurality of reproduction
18 apparatuses, control presentation of the program list to a user via a user interface, accept
19 edits to the program list via a user interface, determine whether an identifier received
20 by the circuitry via the data interface is the predetermined identified, control transfer of
21 the musical content data to the predetermined external reproduction apparatus via the
22 data interface based on the program list when the received identifier is the
23 predetermined identifier without receiving information on selection of the musical
24 content data from the predetermined external reproduction apparatus, compare the
25 program list with a second list of musical content data stored in the predetermined
26 external reproduction apparatus, identify a piece of musical content data common to the
27 program list and the second list based on a result of the comparison, and control transfer
28 to the predetermined external reproduction apparatus of the musical content data that is

1 in the program list and is not in the second list of musical content data based on the
2 result of the comparison such that transfer of the identified piece of musical content data
3 common to the program list and the second list is omitted. Because the Accused
4 Instrumentality is designed to include the claimed communication apparatus, the
5 Accused Instrumentality has no substantial non-infringing uses, and any other uses
6 would be unusual, far-fetched, illusory, impractical, occasional, aberrant, or
7 experimental. Apple's manufacture, use, sale, offering for sale, and/or importation of
8 the Accused Instrumentality constitutes contributory infringement of the '614 Patent.
9 Accordingly, Apple has been, and currently is, contributorily infringing the '614 Patent
10 in violation of 35 U.S.C. § 271(c).

11 103. The Accused Instrumentalities includes “[a] communication apparatus.”
12 For example, an iPhone, iPad or iPod touch can be connected to a MacBook via, e.g., a
13 USB cable, to transfer files, e.g. music files, stored in the MacBook (e.g. a
14 “communication apparatus”).

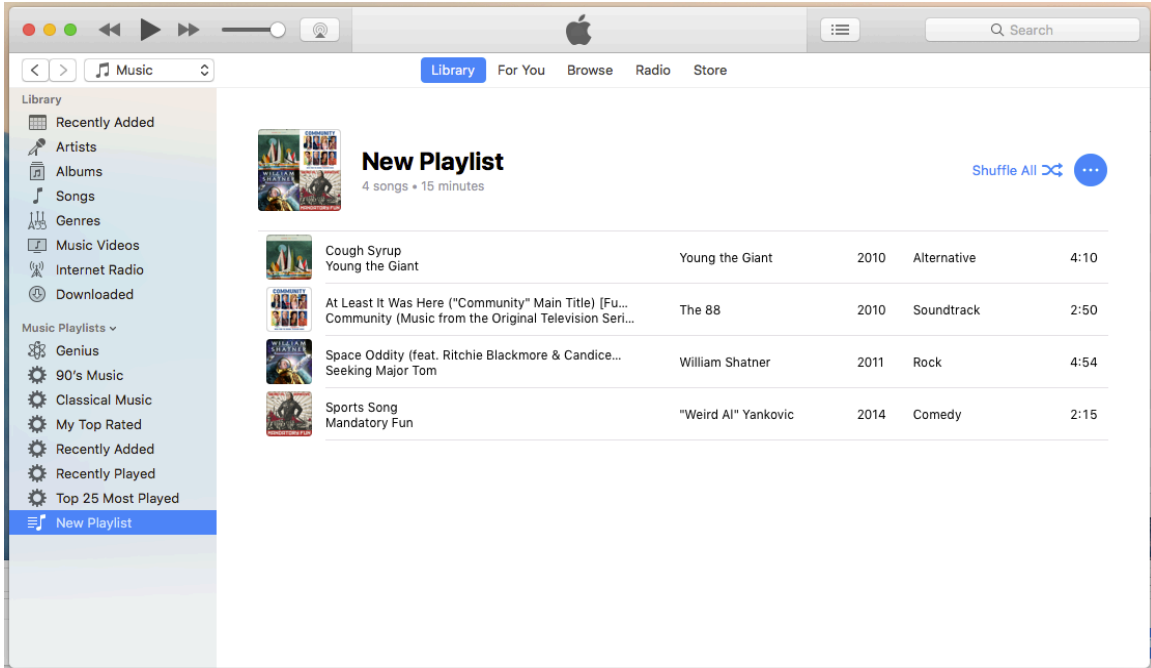
15 Sync or remove content using iTunes

- 16 1. Open iTunes and connect your device to your computer with a USB cable.
- 17 2. Click the device icon in the upper-left corner of the iTunes window. Learn what to do [if you don't see the icon](#).



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21 <https://support.apple.com/en-us/HT201253>.

22 104. The Accused Instrumentalities include a communication apparatus
23 comprising “a memory configured to store musical content data and a plurality of
24 program lists associated with the musical content data.” For example, the MacBook
25 using iTunes contains memory that will store musical files as individual files, or as
26 playlists associated with those files of music:
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12 The Accused Instrumentalities include a communication apparatus further comprising
13 “a data interface configured to interface with an external reproduction apparatus.” For
14 example, when an iOS device (e.g. iPhone, iPad, iPod Touch) (e.g. external
15 reproduction apparatus) is connected to the MacBook (e.g. the communication
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1 apparatus), iTunes will display a graphic user interface, allowing access to the data
2 contained on the portable device:



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4
5 Sep 4, 2012 1:12 PM in response to Keiloon

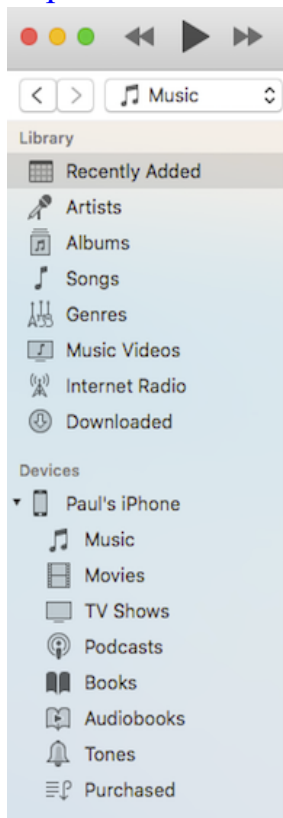
6 I use Method 2 as described in **How to use multiple iPods, iPads, or iPhones with one computer:**
<http://support.apple.com/kb/HT1495>

7 I create several playlists and select which playlists I want on each device. Several playlists end up on all devices while others
8 are only selected for one device. I keep one playlist strictly for "New Stuff" and I drag songs into or out of this playlist as my
9 mood changes.

I don't ever check or uncheck items except holiday songs when the season passes.



10
11 <https://discussions.apple.com/thread/4267230>.



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26 105. The Accused Instrumentalities further include a communication
27 apparatus comprising circuitry configured to “control playback of musical content
28 data based on a program lists so that the musical content data referenced in the


1 program list is played back as a collection, the program list being associated with a
2 predetermined identifier uniquely identifying a predetermined external reproduction
3 apparatus among a plurality of reproduction apparatuses. For example, iTunes allows
4 musical files to be played as a “Playlist” consisting of a collection of musical files:



5 **Open Now Playing on your iPhone, iPad, iPod touch, or
6 Android phone**

7 When playing music on your iOS device or Android phone, a player appears at the bottom or lower-
8 right corner of the screen. Tap the player to open Now Playing. From the Now Playing screen, you can
9 control playback or volume, turn on shuffle or repeat, [download the song](#), and more.

10 **Shuffle songs**

11 Open the Now Playing screen and scroll down.

12 Tap  to set Music to always shuffle a list of
13 songs selected. Any album, playlist, or set of songs will
14 play in a random order.

15 If shuffle is on, you'll see . To turn it off, tap
16 the button until you see .



17 **Repeat songs**

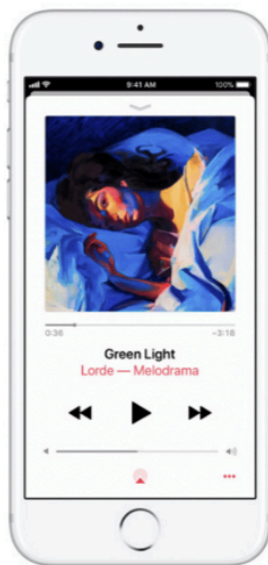
18 Open the Now Playing screen and scroll down.

19 Tap  once to turn on repeat for an entire
20 playlist or album. Tap  again to turn on repeat
21 for one song. Tap  a third time to clear the
22 repeat.

23 If repeat is on, you'll see  or . To
24 turn it off, tap the button until you see .

25 **More options**

26 Under the Shuffle and Repeat buttons on Now Playing,
27 you'll find the song's Lyrics¹ and a list of songs that will
28 play Up Next. To reorganize Up Next, drag songs with 
to rearrange their order, or swipe left to remove a song
that you want to skip. If you don't see , turn off **repeat**.

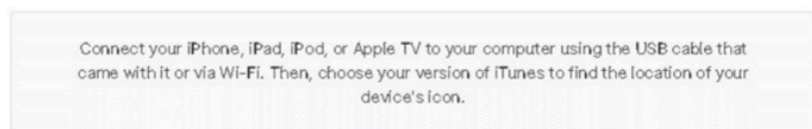


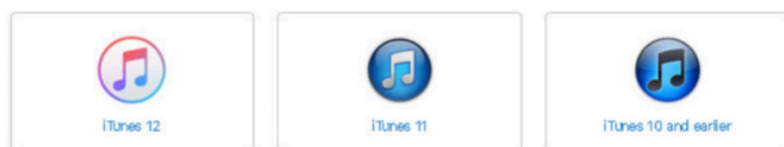
18 <https://support.apple.com/en-us/HT207230>. The Playlists can be uniquely associated
19 with different iOS devices (e.g. external reproduction apparatuses) and iTunes with
20

1 display an identifier associated with that device when the communication apparatus
2 and the external reproduction apparatus are connected:

3 **Locate and view your connected device in 4 iTunes**

5 After you connect your iPhone, iPad, iPod, or Apple TV to your computer, you can view it
6 and access its settings in different areas of iTunes depending on the version you're
7 using.

8 

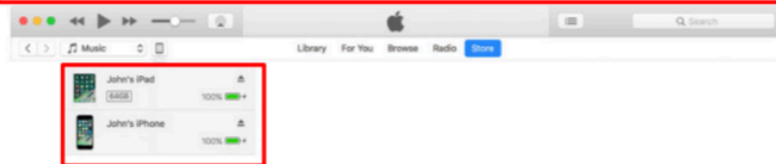


9 **iTunes 12**

10 View your device by clicking on the device's icon in the upper-left corner of the iTunes window.



11 **If you have multiple devices connected to your computer, click the device icon, then choose your device
12 from the menu.**



13 <https://support.apple.com/en-us/HT203060>.

14 

15 Sep 4, 2012 1:12 PM in response to Keiloon

16 I use Method 2 as described in **How to use multiple iPods, iPads, or iPhones with one computer:**
17 <http://support.apple.com/kb/HT1495>

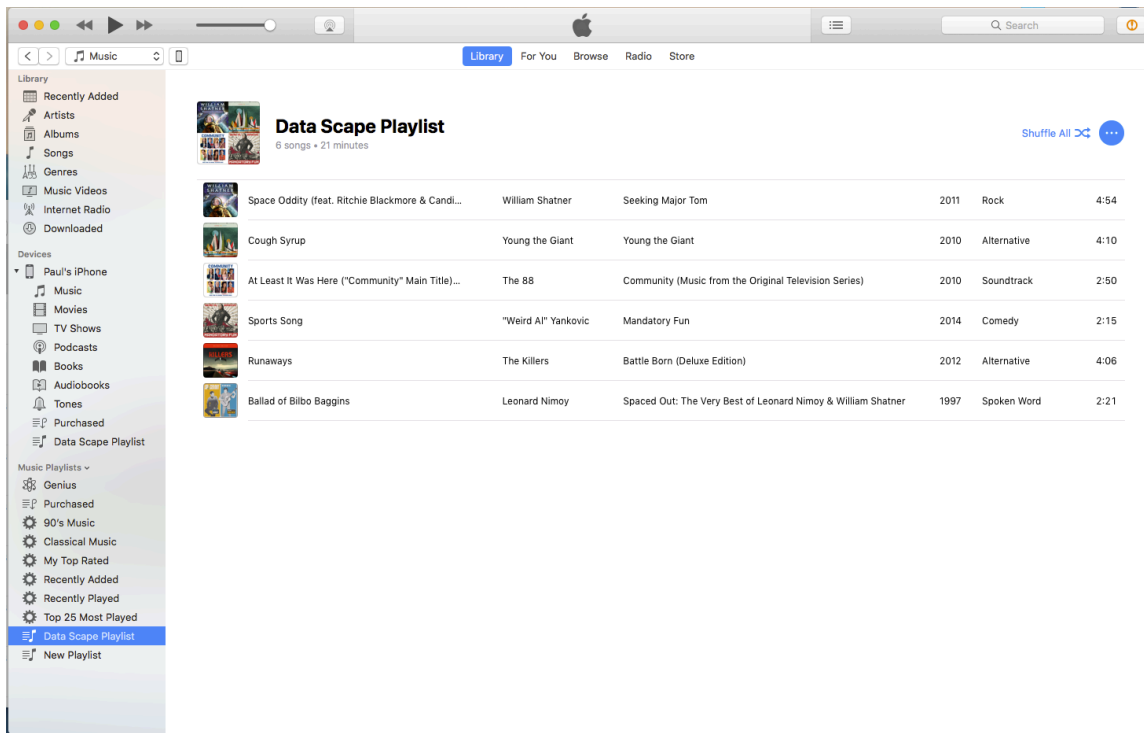
18 I create several playlists and select which playlists I want on each device. Several playlists end up on all devices while others
19 are only selected for one device. I keep one playlist strictly for "New Stuff" and I drag songs into or out of this playlist as my
20 mood changes.

21 I don't ever check or uncheck items except holiday songs when the season passes.

22

1 https://discussions.apple.com/thread/4267230_


2 106. The Accused Instrumentalities further include a communication
3 apparatus comprising circuitry configured to “control presentation of the program list
4 to a user via user interface.” For example, iTunes includes a graphic user interface that
5 will show the Playlists that are available both on the MacBook and on the external
6 reproduction device:



19 107. The Accused Instrumentalities further include a communication
20 apparatus comprising circuitry configured to accept edits to the program list via the
21

1 user interface. For example, using the iTunes interface, a user can edit or modify


2 **Playlists:**

3 

4 Oct 24, 2016 11:43 PM in response to dayarts

5 If you directly sync from an iTunes library to iPhone, there are several ways, but this one may be most convenient. First, in your iTunes library, create a new playlist that **only has the songs you want on iPhone**. Or you can use an existing playlist for this purpose. I'll call it the *iPhone Songs* playlist for this discussion.

6 Select iPhone in iTunes by clicking its *device button*. Here's my iPod's *device button* in upper-left corner of iTunes window, circled in red (same location for an iPhone).

7 

8 iPhone's *Summary* settings screen appears in iTunes window. Along the left side, in the sidebar, under **Settings**, click **Music**. iPhone's *Music* settings screen appears to the right.

9 If iTunes is currently syncing **all** of your songs, **Sync Music** is probably checked already. Instead of the **Entire music library** option, choose option to sync **Selected playlists, artists, albums, and genres**. Below that, under *Playlists*, find that *iPhone Songs* playlist and select (checkmark) it. You don't need to select anything else on this screen. Click *Apply* button to sync just this one playlist and its songs to iPhone.

10

11 Going forward, to update songs on iPhone, update that *iPhone Songs* playlist in your iTunes library (add/remove songs). Your iPhone does **not** need to be connected. The next time you connect iPhone (or click *Sync* if already connected), iTunes automatically updates iPhone with the same changes.

12

13 NOTE: I described this method with just one *iPhone Songs* playlist, but you can also create and maintain multiple playlists for your iPhone (for different purposes) in your iTunes library, and select them all for syncing on iPhone's *Music* settings screen. They can be regular or smart playlists.

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15 https://discussions.apple.com/thread/7720242_

16 108. The Accused Instrumentalities further include circuitry configured to

17 “determine whether an identifier received by the circuitry via the data interface is the

18 predetermined identifier.” For example, when external reproduction apparatus (*e.g.*

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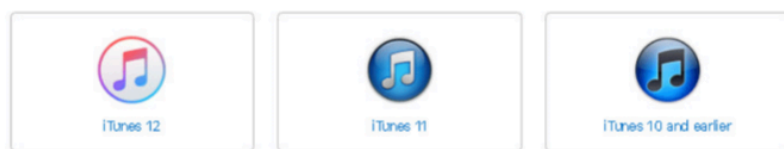
28

1 iPhone, iPod, iPad) is connected to the MacBook, iTunes will display an identifier
2 associated with that device along with Playlists associated with that device.

3 Locate and view your connected device in 4 iTunes

5 After you connect your iPhone, iPad, iPod, or Apple TV to your computer, you can view it
6 and access its settings in different areas of iTunes depending on the version you're
7 using.

8 Connect your iPhone, iPad, iPod, or Apple TV to your computer using the USB cable that
9 came with it or via Wi-Fi. Then, choose your version of iTunes to find the location of your
10 device's icon.

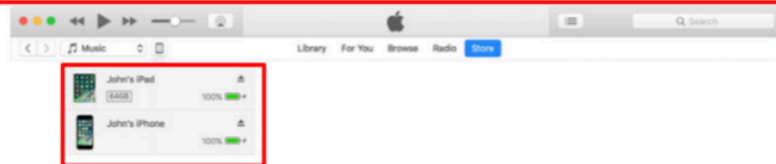


11 iTunes 12

12 View your device by clicking on the device's icon in the upper-left corner of the iTunes window.



14 If you have multiple devices connected to your computer, click the device icon, then choose your device
15 from the menu.



19 <https://support.apple.com/en-us/HT203060>.

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22 Sep 4, 2012 1:12 PM in response to Keiloon

23 I use Method 2 as described in **How to use multiple iPods, iPads, or iPhones with one computer:**
<http://support.apple.com/kb/HT1495>

24 I create several playlists and select which playlists I want on each device. Several playlists end up on all devices while others
25 are only selected for one device. I keep one playlist strictly for "New Stuff" and I drag songs into or out of this playlist as my
26 mood changes.

I don't ever check or uncheck items except holiday songs when the season passes.

27

1 https://discussions.apple.com/thread/4267230_

2 109. The Accused Instrumentalities further include circuitry configured to
3 “control transfer of the musical content data to the predetermine external reproduction
4 apparatus via the data interface based on the program list when the received identifier
5 is the predetermined identifier without receiving information on selection of the
6 musical content data from the predetermined external reproduction apparatus.” For
7 example, iTunes will sync the playlist on the MacBook with the playlist on the iOS
8 device, with regard to music content on the device, *e.g.*, music files on the iOS device,
9 may be deleted.

10 5. By default, iTunes syncs your device whenever you connect it to your computer. If you want to have
11 iTunes ask you before syncing, do one of the following:

- 12 ■ Require a prompt before syncing this device: Click Summary, then deselect “Open iTunes when this
[device] is connected.”
- 13 ■ Require a prompt before syncing all devices: Choose **Edit > Preferences**, click Devices, and select
14 “Prevent iPods, iPhones, and iPads from syncing automatically.”

15 6. When you’re ready to sync, click Apply.

16 Tip: To automatically sync a connected device at any time, choose **File > Devices > Sync** [device name].

17 **WARNING: If you delete an automatically synced item from your iTunes library, the deleted item is removed
from your device the next time you sync.**

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19 110. The Accused Instrumentalities further include circuitry configured to
20 “compare the program list with a second list of musical content data stored in the
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1 predetermined external reproduction apparatus.” For example, iTunes will compare
2 playlists found in the MacBook with corresponding playlists found in the iOS devices.

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4 <https://discussions.apple.com/thread/4267230>.



5 jeremy_v



Community Specialists

6 Oct 19, 2013 11:42 AM in response to louiepatterson

Hi louiepatterson,

7 Thanks for visiting Apple Support Communities.

8 If your entire iTunes library is syncing every time you connect your iPhone, you may want to try setting up syncing in iTunes again by
following the steps in the appropriate article below. If you're syncing music, try un-checking and then re-checking the "Sync music"
checkbox in iTunes.

9 **iTunes 11 for Mac: Set up syncing for iPod, iPhone, or iPad**

10 <http://support.apple.com/kb/PH12113>

11 **iTunes 11 for Windows: Set up syncing for iPod, iPhone, or iPad**

<http://support.apple.com/kb/PH12313>

12 **Your entire library will sync again once more after this, but then only new songs should sync thereafter.** If the issue persists,
I'd try the troubleshooting steps in our iPhone assistant next:

13 **Frozen or unresponsive iPhone**

<http://www.apple.com/support/iphone/assistant/phone/>

14
15 <https://discussions.apple.com/thread/5452203?tstart=0>

16 111. The Accused Instrumentalities further include circuitry configured to
17 “identify a piece of musical content data common to the program list and the second
18 list based on the result of the comparison.” For example, iTunes will determine

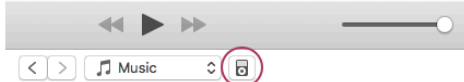
1 whether the playlists found in the MacBook and the iOS device are the same, or
2 whether there are additional files in the playlist of the MacBook.



4 Oct 24, 2016 11:43 PM in response to dayarts

5 If you directly sync from an iTunes library to iPhone, there are several ways, but this one may be most convenient. First, in your iTunes library, create a new playlist that **only has the songs you want on iPhone**. Or you can use an existing playlist for this purpose. I'll call it the *iPhone Songs* playlist for this discussion.

6 Select iPhone in iTunes by clicking its *device button*. Here's my iPod's *device button* in upper-left corner of iTunes window, circled in red (same location for an iPhone).



8 iPhone's *Summary* settings screen appears in iTunes window. Along the left side, in the sidebar, under **Settings**, click **Music**. iPhone's *Music* settings screen appears to the right.

9 If iTunes is currently syncing **all** of your songs, **Sync Music** is probably checked already. Instead of the **Entire music library** option, choose option to sync **Selected playlists, artists, albums, and genres**. Below that, under *Playlists*, find that *iPhone Songs* playlist and select (checkmark) it. You don't need to select anything else on this screen. Click *Apply* button to sync just this one playlist and its songs to iPhone.

10 Going forward, to update songs on iPhone, update that *iPhone Songs* playlist in your iTunes library (add/remove songs). Your iPhone does **not** need to be connected. The next time you connect iPhone (or click *Sync* if already connected), iTunes automatically updates iPhone with the same changes.

11 NOTE: I described this method with just one *iPhone Songs* playlist, but you can also create and maintain multiple playlists for your iPhone (for different purposes) in your iTunes library, and select them all for syncing on iPhone's *Music* settings screen. They can be regular or smart playlists.

12 <https://discussions.apple.com/thread/7720242>.

13 <https://discussions.apple.com/thread/4267230>.



15 Oct 19, 2013 11:42 AM in response to louiepatterson

16 Hi louiepatterson,

17 Thanks for visiting Apple Support Communities.

18 If your entire iTunes library is syncing every time you connect your iPhone, you may want to try setting up syncing in iTunes again by following the steps in the appropriate article below. If you're syncing music, try un-checking and then re-checking the "Sync music" checkbox in iTunes.

19 **iTunes 11 for Mac: Set up syncing for iPod, iPhone, or iPad**

20 <http://support.apple.com/kb/PH12113>

21 **iTunes 11 for Windows: Set up syncing for iPod, iPhone, or iPad**

22 <http://support.apple.com/kb/PH12313>

23 **Your entire library will sync again once more after this, but then only new songs should sync thereafter.** If the issue persists, try the troubleshooting steps in our iPhone assistant next.

24 **Frozen or unresponsive iPhone**

25 <http://www.apple.com/support/iphone/assistant/phone/>

26 <https://discussions.apple.com/thread/5452203?tstart=0>

1 112. The Accused Instrumentalities further include circuitry configured to
2 “control transfer to the predetermined external reproduction apparatus of the musical
3 content data that is in the program list and is not in the second list of musical content
4 data based on the result of the comparison such that transfer of the identified piece of
5 musical content data common to the program list and the second list is omitted.” For
6 example, after comparing playlists stored in the MacBook with the playlists stored in

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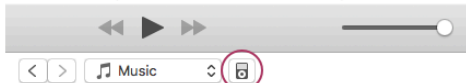
1 the iOS devices, iTunes will copy to the iOS devices only the music files found in the
2 MacBook that are not present in the iOS devices.



4 Oct 24, 2016 11:43 PM in response to dayarts

5 If you directly sync from an iTunes library to iPhone, there are several ways, but this one may be most convenient. First, in your iTunes library, create a new playlist that **only has the songs you want on iPhone**. Or you can use an existing playlist for this purpose. I'll call it the *iPhone Songs* playlist for this discussion.

6 Select iPhone in iTunes by clicking its *device button*. Here's my iPod's *device button* in upper-left corner of iTunes window, circled in red (same location for an iPhone).



8 iPhone's *Summary* settings screen appears in iTunes window. Along the left side, in the sidebar, under **Settings**, click **Music**. iPhone's *Music* settings screen appears to the right.

9 If iTunes is currently syncing **all** of your songs, **Sync Music** is probably checked already. Instead of the **Entire music library** option, choose option to sync **Selected playlists, artists, albums, and genres**. Below that, under *Playlists*, find that *iPhone Songs* playlist and select (checkmark) it. You don't need to select anything else on this screen. Click *Apply* button to sync just this one playlist and its songs to iPhone.

10 Going forward, to update songs on iPhone, update that *iPhone Songs* playlist in your iTunes library (add/remove songs). Your iPhone does **not** need to be connected. The next time you connect iPhone (or click *Sync* if already connected), iTunes automatically updates iPhone with the same changes.

11 NOTE: I described this method with just one *iPhone Songs* playlist, but you can also create and maintain multiple playlists for your iPhone (for different purposes) in your iTunes library, and select them all for syncing on iPhone's *Music* settings screen. They can be regular or smart playlists.

12 <https://discussions.apple.com/thread/7720242>.

13 <https://discussions.apple.com/thread/4267230>.



15 Oct 19, 2013 11:42 AM in response to louiepatterson

16 Hi louiepatterson,

17 Thanks for visiting Apple Support Communities.

18 If your entire iTunes library is syncing every time you connect your iPhone, you may want to try setting up syncing in iTunes again by following the steps in the appropriate article below. If you're syncing music, try un-checking and then re-checking the "Sync music" checkbox in iTunes.

19 **iTunes 11 for Mac: Set up syncing for iPod, iPhone, or iPad**

20 <http://support.apple.com/kb/PH12113>

21 **iTunes 11 for Windows: Set up syncing for iPod, iPhone, or iPad**

22 <http://support.apple.com/kb/PH12313>

23 **Your entire library will sync again once more after this, but then only new songs should sync thereafter.** If the issue persists, try the troubleshooting steps in our iPhone assistant next.

24 **Frozen or unresponsive iPhone**

25 <http://www.apple.com/support/iphone/assistant/phone/>

26 <https://discussions.apple.com/thread/5452203?tstart=0>

1 113. Apple also infringes other claims of the '614 Patent, directly and
2 through inducing infringement and contributory infringement.

3 114. On information and belief, use of the Accused Instrumentalities in
4 their ordinary and customary fashion results in infringement of the methods claimed by
5 the '614 Patent.

6 115. By making, using, offering for sale, selling and/or importing into the
7 United States the Accused Instrumentalities, and touting the benefits of using the
8 Accused Instrumentalities' data communication features, Apple has injured Data Scape
9 and is liable to Data Scape for infringement of the '614 Patent pursuant to 35 U.S.C. §
10 271.

11 116. As a result of Apple's infringement of the '614 Patent, Plaintiff Data
12 Scape is entitled to monetary damages in an amount adequate to compensate for Apple's
13 infringement, but in no event less than a reasonable royalty for the use.

14 **COUNT VII**

15 **INFRINGEMENT OF U.S. PATENT NO. 8,386,581**

16 117. Plaintiff realleges and incorporates by reference the foregoing
17 paragraphs, as if fully set forth herein.

18 118. Data Scape is the owner by assignment of United States Patent No.
19 8,386,581 ("the '581 Patent"), entitled "Communication System And Its Method and
20 Communication Apparatus And Its Method." The '581 Patent was duly and legally
21 issued by the United States Patent and Trademark Office on February 26, 2013. A true
22 and correct copy of the '581 Patent is included as Exhibit G.

23 119. On information and belief, Apple has offered for sale, sold and/or
24 imported into the United States products and services that infringe the '581 patent, and
25 continues to do so. By way of illustrative example, these infringing products and
26 services include, without limitation, Apple's products and services, *e.g.*, Apple iCloud,
27 Apple iTunes and the Apple devices on which they operate (*e.g.* iPhone, MacBook,
28

1 iPad), and all versions and variations thereof since the issuance of the '929 Patent
2 (“Accused Instrumentalities”).

3 120. On information and belief, Apple has directly infringed and continues to
4 infringe the '581 Patent, for example, by making, selling, offering for sale, and/or
5 importing the Accused Instrumentalities, and through its own use and testing of the
6 Accused Instrumentalities, which constitute communication apparatus of Claim 1 of the
7 '581 Patent comprising: a storage unit configured to store content data to a storage
8 medium; a communication unit configured to communicate with an external apparatus;
9 a controller configured to edit a list so that content data is registered in the list, to
10 uniquely associate the list with the external apparatus using a unique identification of
11 the external apparatus, to extract the list associated with the external apparatus from a
12 plurality of lists in the communication apparatus when the external apparatus is
13 connected to the communication apparatus, and to control transferring of content data
14 registered in the extracted list to the external apparatus. Upon information and belief,
15 Apple uses the Accused Instrumentalities, which are infringing systems, for its own
16 internal non-testing business purposes, while testing the Accused Instrumentalities, and
17 while providing technical support and repair services for the Accused Instrumentalities
18 to Apple's customers.

19 121. On information and belief, Apple has had knowledge of the '581 Patent
20 since at least the filing of the original Complaint in this action, or shortly thereafter, and
21 on information and belief, Apple knew of the '581 Patent and knew of its infringement,
22 including by way of this lawsuit. By the time of trial, Apple will have known and
23 intended (since receiving such notice) that their continued actions would actively induce
24 and contribute to the infringement of the claims of the '581 Patent.

25 122. On information and belief, use of the Accused Instrumentalities in their
26 ordinary and customary fashion results in infringement of the claims of the '581 Patent.

27 123. Apple's affirmative acts of making, using, selling, offering for sale, and/or
28 importing the Accused Instrumentalities have induced and continue to induce users of

1 the Accused Instrumentalities to use the Accused Instrumentalities in their normal and
 2 customary way to infringe the claims of the '581 Patent, knowing that when the Accused
 3 Instrumentalities are used in their ordinary and customary manner, such systems
 4 constitute infringing communication systems comprising: a storage unit configured to
 5 store content data to a storage medium; a communication unit configured to
 6 communicate with an external apparatus; a controller configured to edit a list so that
 7 content data is registered in the list, to uniquely associate the list with the external
 8 apparatus using a unique identification of the external apparatus, to extract the list
 9 associated with the external apparatus from a plurality of lists in the communication
 10 apparatus when the external apparatus is connected to the communication apparatus,
 11 and to control transferring of content data registered in the extracted list to the external
 12 apparatus. For example, Apple explains to customers the benefits of using the Accused
 13 Instrumentalities, such as by touting their advantages communicating and sharing data
 14 among multiple devices:

15 iCloud File Management

PREVIOUS NEXT

16
 17 Use the iCloud Storage APIs to write user documents and data to a central location and access
 18 those items from all of a user's computers and iOS devices. Making a user's documents
 19 ubiquitous using iCloud means that a user can view or edit those documents from any device
 without having to sync or transfer files explicitly. Storing documents in a user's iCloud
 account also provides a layer of security for that user. Even if a user loses a device, the
 documents on that device are not lost if they are in iCloud storage.

20 **Important:** The iCloud APIs do not work with garbage collection in macOS. If your existing
 21 code uses garbage collection, update your code to use ARC instead.

22
 23 [https://developer.apple.com/library/archive/documentation/FileManagement/Conceptu](https://developer.apple.com/library/archive/documentation/FileManagement/Conceptual/FileSystemProgrammingGuide/iCloud/iCloud.html#//apple_ref/doc/uid/TP4001067)
 24 [al/FileSystemProgrammingGuide/iCloud/iCloud.html#//apple_ref/doc/uid/TP4001067](https://developer.apple.com/library/archive/documentation/FileManagement/Conceptual/FileSystemProgrammingGuide/iCloud/iCloud.html#//apple_ref/doc/uid/TP4001067)

25 [2-CH12-SW1](#). Apple also induces its customers to use the Accused Instrumentalities to
 26 infringe other claims of the '581 Patent. Apple specifically intended and was aware
 27 that the normal and customary use of the Accused Instrumentalities on compatible
 28

1 systems would infringe the '581 Patent. Apple performed the acts that constitute
2 induced infringement, and would induce actual infringement, with the knowledge of the
3 '581 Patent and with the knowledge, or willful blindness to the probability, that the
4 induced acts would constitute infringement. On information and belief, Apple engaged
5 in such inducement to promote the sales of the Accused Instrumentalities, *e.g.*, through
6 Apple's user manuals, product support, marketing materials, demonstrations,
7 installation support, and training materials to actively induce the users of the accused
8 products to infringe the '581 Patent. Accordingly, Apple has induced and continues to
9 induce end users of the accused products to use the accused products in their ordinary
10 and customary way with compatible systems to make and/or use systems infringing the
11 '581 Patent, knowing that such use of the Accused Instrumentalities with compatible
12 systems will result in infringement of the '581 Patent. Accordingly, Apple has been
13 (since at least as of filing of the original complaint), and currently is, inducing
14 infringement of the '581 Patent, in violation of 35 U.S.C. § 271(b).
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19 124. Apple has also infringed, and continues to infringe, claims of the '581
20 patent by offering to commercially distribute, commercially distributing, making,
21 and/or importing the Accused Instrumentalities, which are used in practicing the
22 process, or using the systems, of the '581 patent, and constitute a material part of the
23 invention. Apple knows the components in the Accused Instrumentalities to be
24 especially made or especially adapted for use in infringement of the '581 patent, not a
25 staple article, and not a commodity of commerce suitable for substantial noninfringing
26 use. For example, the ordinary way of using the Accused Instrumentalities infringes
27 the patent claims, and as such, is especially adapted for use in infringement.
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1 Accordingly, Apple has been, and currently is, contributorily infringing the '581
2 patent, in violation of 35 U.S.C. § 271(c).

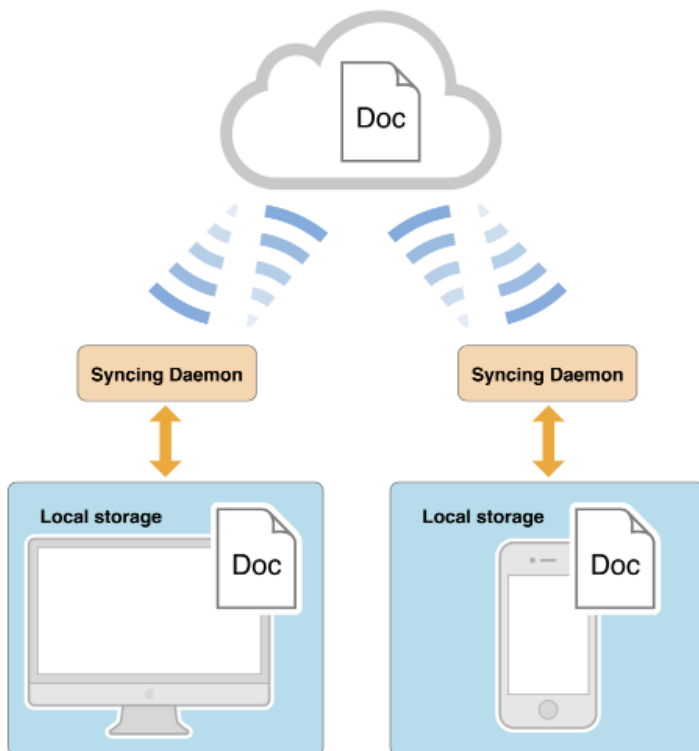
3 125. For similar reasons, Apple also infringes the '581 Patent by supplying or
4 causing to be supplied in or from the United States all or a substantial portion of the
5 components of the Accused Instrumentalities, where such components are uncombined
6 in whole or in part, in such manner as to actively induce the combination of such
7 components outside of the United States in a manner that would infringe the '581 Patent
8 if such combination occurred within the United States. For example, Apple supplies or
9 causes to be supplied in or from the United States all or a substantial portion of the
10 hardware and software components of the Accused Instrumentalities in such a manner
11 as to actively induce the combination of such components outside of the United States.

12 126. Apple also indirectly infringes the '581 Patent by supplying or causing to
13 be supplied in or from the United States components of the Accused Instrumentalities
14 that are especially made or especially adapted for use in infringing the '581 Patent and
15 are not a staple article or commodity of commerce suitable for substantial non-
16 infringing use, and where such components are uncombined in whole or in part,
17 knowing that such components are so made or adapted and intending that such
18 components are combined outside of the United States in a manner that would infringe
19 the '581 Patent if such combination occurred within the United States. Because the
20 Accused Instrumentalities are designed to operate as the claimed system and apparatus,
21 the Accused Instrumentalities have no substantial non-infringing uses, and any other
22 uses would be unusual, far-fetched, illusory, impractical, occasional, aberrant, or
23 experimental. For example, Apple supplies or causes to be supplied in or from the
24 United States all or a substantial portion of the hardware and software components that
25 are especially made or especially adapted for use in the Accused Instrumentalities,
26 where such hardware and software components are not staple articles or commodities
27 of commerce suitable for substantial noninfringing use, knowing that such components
28 are so made or adapted and intending that such components are combined outside of the

1 United States, as evidenced by Apple’s own actions or instructions to users in and
2 enabling and configuring the infringing functionalities of the Accused Instrumentalities.

3 127. The Accused Instrumentalities include “[a] communication apparatus.”
4 For example, the Accused Instrumentalities communicate and transfer a document or
5 file stored on a Mac and/or iOS device to the iCloud drive:

6 **Figure 4-1** Pushing document changes to iCloud



19 [https://developer.apple.com/library/archive/documentation/FileManagement/Conceptu](https://developer.apple.com/library/archive/documentation/FileManagement/Conceptual/FileSystemProgrammingGuide/iCloud/iCloud.html#//apple_ref/doc/uid/TP40010672-CH12-SW1)
20 [al/FileSystemProgrammingGuide/iCloud/iCloud.html#//apple_ref/doc/uid/TP4001067](https://developer.apple.com/library/archive/documentation/FileManagement/Conceptual/FileSystemProgrammingGuide/iCloud/iCloud.html#//apple_ref/doc/uid/TP40010672-CH12-SW1)
21 [2-CH12-SW1](https://developer.apple.com/library/archive/documentation/FileManagement/Conceptual/FileSystemProgrammingGuide/iCloud/iCloud.html#//apple_ref/doc/uid/TP40010672-CH12-SW1).
22

iCloud File Management

Use the iCloud Storage APIs to write user documents and data to a central location and access those items from all of a user's computers and iOS devices. Making a user's documents ubiquitous using iCloud means that a user can view or edit those documents from any device without having to sync or transfer files explicitly. Storing documents in a user's iCloud account also provides a layer of security for that user. Even if a user loses a device, the documents on that device are not lost if they are in iCloud storage.

Important: The iCloud APIs do not work with garbage collection in macOS. If your existing code uses garbage collection, update your code to use ARC instead.

Storing and Using Documents in iCloud

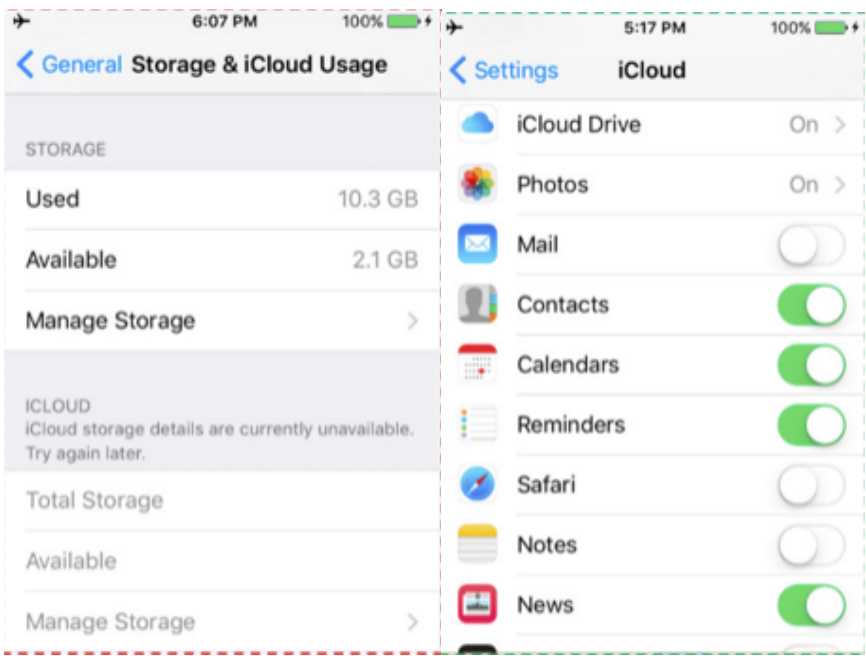
Documents in iCloud provide the central location from which updates can be delivered to a user's computers and iOS devices. All documents must be created on a local disk initially and moved to a user's iCloud account later. A document targeted for iCloud storage is not moved to iCloud immediately, though. First, it is moved from its current location in the file system to a local system-managed directory where it can be monitored by the iCloud service. After that transfer, the file is transferred to iCloud and to the user's other devices as soon as possible.

While in iCloud storage, changes made on one device are stored locally and then pushed to iCloud using a local daemon, as shown in Figure 4-1. To prevent large numbers of conflicting changes from occurring at the same time, apps are expected to use file coordinator objects to perform all changes. File coordinators mediate changes between your app and the daemon that facilitates the transfer of the document to and from iCloud. In this way, the file coordinator acts like a locking mechanism for the document, preventing your app and the daemon from modifying the document simultaneously.

https://developer.apple.com/library/archive/documentation/FileManagement/Conceptual/FileSystemProgrammingGuide/iCloud/iCloud.html#//apple_ref/doc/uid/TP40010672-CH12-SW1.

128. The Accused Instrumentalities include “a storage unit configured to store content data to a storage medium.” As shown from the below screen captures from an iPhone, the Mac and/or iOS devices include gigabytes of storage, and can manage the transfer of data from itself to the iCloud Drive and. The iCloud Drive include storage as well, in the form of a hard disk or solid state drive.

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129. The Accused Instrumentalities further include “a communication unit configured to communicate with an external apparatus.” For example, the Mac and/or iOS device is designed to communicate with the iCloud Drive over cellular and/or WiFi networks:

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iCloud File Management

Use the iCloud Storage APIs to write user documents and data to a central location and access those items from all of a user's computers and iOS devices. Making a user's documents ubiquitous using iCloud means that a user can view or edit those documents from any device without having to sync or transfer files explicitly. Storing documents in a user's iCloud account also provides a layer of security for that user. Even if a user loses a device, the documents on that device are not lost if they are in iCloud storage.

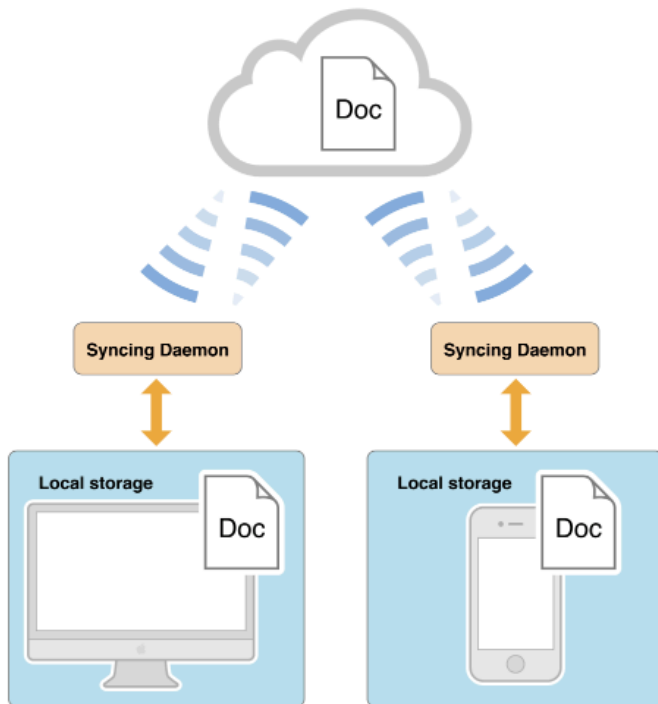
Important: The iCloud APIs do not work with garbage collection in macOS. If your existing code uses garbage collection, update your code to use ARC instead.

Storing and Using Documents in iCloud

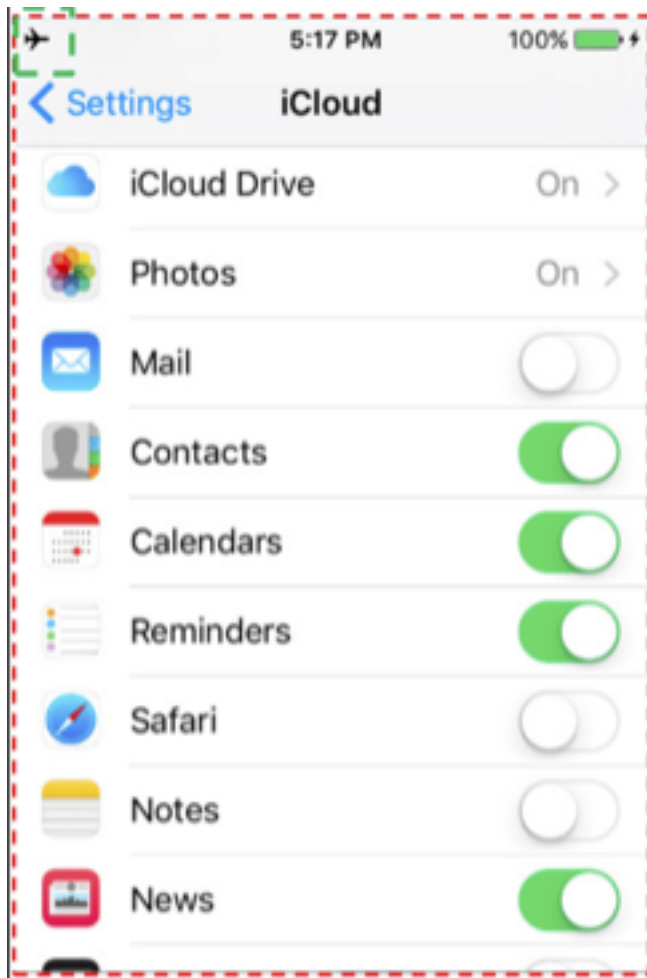
Documents in iCloud provide the central location from which updates can be delivered to a user's computers and iOS devices. All documents must be created on a local disk initially and moved to a user's iCloud account later. A document targeted for iCloud storage is not moved to iCloud immediately, though. First, it is moved from its current location in the file system to a local system-managed directory where it can be monitored by the iCloud service. After that transfer, the file is transferred to iCloud and to the user's other devices as soon as possible.

While in iCloud storage, changes made on one device are stored locally and then pushed to iCloud using a local daemon, as shown in Figure 4-1. To prevent large numbers of conflicting changes from occurring at the same time, apps are expected to use file coordinator objects to perform all changes. File coordinators mediate changes between your app and the daemon that facilitates the transfer of the document to and from iCloud. In this way, the file coordinator acts like a locking mechanism for the document, preventing your app and the daemon from modifying the document simultaneously.

Figure 4-1 Pushing document changes to iCloud



1 130. The Accused Instrumentalities further include “a controller configured to
2 edit a list so that content data is registered in the list.” For example, the Mac and/or iOS
3 is configured to allow a user to select the applications that are backed up and synced
4 with the iCloud Drive from a list:



21 131. The Accused Instrumentalities further include a controller configured “to
22 uniquely associate the list with the external apparatus using a unique identification of
23 the external apparatus.” For example, the iPhone will use the iCloud application to
24 transfer the selected data from the applications to other devices associated with the same
25 Apple ID based on a unique identification of the device. The Apple ID is also an
26 example of a unique identifier:



132. The Accused Instrumentalities further include a controller configured “to extract the list associated with the external apparatus from a plurality of lists in the communication apparatus when the external apparatus is connected to the communication apparatus.” For example, when the Mac and/ or iOS is connected to the iCloud drive over a cellular and/or WiFi network, it will transfer the data stored in the applications selected by the user to the iCloud Drive:

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iCloud will:

- Sync Calendars
- SyncSafari Bookmarks (though not display them on the iCloud website)
- Sync Contacts
- Sync photos added to or taken on one device onto other devices
- Access @me.com email
- Sync iWork documents only between your Mac and iOS devices - automatically from iOS devices by dragging individual documents from a Mac to the iCloud website (and the cannot be re-downloaded until they have been edited on an iOS device)

Each of these can be turned on or off on each device; you cannot selectively sync within one data type - i.e. it's all or no Contacts, not a selection, and so on.

<https://discussions.apple.com/thread/3743670?tstart=0>

Here's how it works

iCloud Photos automatically keeps every photo and video you take in iCloud, so you can access your library from any device, anytime you want. **Any changes you make** to your collection on one device, change on your other devices too. Your photos and videos stay organized into Moments, Collections, and Years. And all of your **Memories** and **People** are updated everywhere. That way you can quickly find the moment, family member, or friend you're looking for.

Your collection uploads to iCloud each time your device connects to Wi-Fi and your battery is charged. When you have iOS 11 or later, your library updates over cellular too. Depending on your Internet speed, the time it takes for you to see your photos and videos on all of your devices and iCloud.com might vary.

<https://support.apple.com/en-sg/HT204264>

133. The Accused Instrumentalities further include a controller configured “to control transferring of content data registered in the extracted list to the external apparatus.” For example, the Mac and/or iOS is configured to compare the data already transmitted to the iCloud Drive with the data present in the Applications that have been selected and transmit new or changed data for in the Applications to the iCloud Drive (e.g. a new photo that was not previously saved on the iCloud Drive).

1 iCloud will:

- 2
- Sync Calendars
 - SyncSafari Bookmarks (though not display them on the iCloud website)
 - Sync Contacts
 - Sync photos added to or taken on one device onto other devices
 - Access @me.com email
 - Sync iWork documents only between your Mac and iOS devices - automatically from iOS devices by dragging individual documents from a Mac to the iCloud website (and they cannot be re-downloaded until they have been edited on an iOS device)
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6 Each of these can be turned on or off on each device; you cannot selectively sync within one data type - i.e. it's all or no Contacts, not a selection, and so on.

7

8 <https://discussions.apple.com/thread/3743670?tstart=0>

9 **Here's how it works**

10 iCloud Photos automatically keeps every photo and video you take in iCloud, so you can
11 access your library from any device, anytime you want. **Any changes you make** to your
12 collection on one device, change on your other devices too. Your photos and videos stay
13 organized into Moments, Collections, and Years. And all of your **Memories** and **People** are
updated everywhere. That way you can quickly find the moment, family member, or friend
you're looking for.

14 Your collection uploads to iCloud each time your device connects to Wi-Fi and your battery is charged.
15 When you have iOS 11 or later, your library updates over cellular too. Depending on your Internet speed,
the time it takes for you to see your photos and videos on all of your devices and iCloud.com might vary.

16 <https://support.apple.com/en-sg/HT204264>

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18 134. Apple also infringes other claims of the '581 Patent, directly and through
19 inducing infringement and contributory infringement.

21 135. On information and belief, use of the Accused Instrumentalities in their
22 ordinary and customary fashion results in infringement of the methods claimed by
23 the '581 Patent.

25 136. By making, using, offering for sale, selling and/or importing into the
26 United States the Accused Instrumentalities, and touting the benefits of using the
27 Accused Instrumentalities' data communication features, Apple has injured Data Scape

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1 and is liable to Data Scape for infringement of the '581 Patent pursuant to 35 U.S.C. §
2 271.

3 137. As a result of Apple's infringement of the '581 Patent, Data Scape is
4 entitled to monetary damages in an amount adequate to compensate for each Apple's
5 infringement, but in no event less than a reasonable royalty for the use made of the
6 invention by Apple, together with interest and costs as fixed by the Court.

7 **PRAYER FOR RELIEF**

8 WHEREFORE, Plaintiff Data Scape respectfully requests that this Court enter:

9 a. A judgment in favor of Plaintiff that Apple has infringed, either literally
10 and/or under the doctrine of equivalents, the '929 Patent, the '751 Patent, the '469
11 Patent, the '537 Patent, the '112 Patent, the '614 Patent, and the '581 Patent.

12 b. A permanent injunction prohibiting Apple from further acts of
13 infringement of the '929 Patent, the '751 Patent, the '469 Patent, the '537 Patent,
14 the '112 Patent, the '614 Patent, and the '581 Patent.

15 c. A judgment and order requiring Apple to pay Plaintiff its damages, costs,
16 expenses, and prejudgment and post-judgment interest for its infringement of the '929
17 Patent, the '751 Patent, the '469 Patent, the '537 Patent, the '112 Patent, the '614 Patent,
18 and the '581 Patent; and

19 d. A judgment and order requiring Apple to provide an accounting and to pay
20 supplemental damages to Data Scape, including without limitation, prejudgment and
21 post-judgment interest;

22 e. A judgment and order finding that this is an exceptional case within the
23 meaning of 35 U.S.C. § 285 and awarding Data Scape its reasonable attorneys' fees
24 against Apple; and

25 f. Any and all other relief as the Court may deem appropriate and just under
26 the circumstances.

27 **DEMAND FOR JURY TRIAL**

28 Plaintiff, under Rule 38 of the Federal Rules of Civil Procedure, requests a trial

1 by jury of any issues so triable by right.

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Respectfully Submitted,

Dated: February 22, 2019

/s/ Reza Mirzaie
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