John E. Lord (SBN 216111)
SKIERMONT DERBY LLP
633 W. Fifth Street, Suite 5800
Los Angeles, CA 90071
Phone: (213) 788-4500
Fax: (213)788-4545
jlord@skiermontderby.com

Paul J. Skiermont (*pro hac vice*)
(TX Bar No. 24033073)
Jaime K. Olin (SBN 243139)
Ryan A. Hargrave (*pro hac vice*)
(TX Bar No. 24071516)
Alexander E. Gasser (*pro hac vice*)
(WI Bar 1022659)
SKIERMONT DERBY LLP
1601 Elm Street, Suite 5800
Dallas, TX 75201
Phone: (214) 978-6600
Fax: (214) 978-6601
pskiermont@skiermontderby.com
jolin@skiermontderby.com
rhargrave@skiermontderby.com
agasser@skiermontderby.com

Attorneys for Plaintiff
ENTANGLED MEDIA, LLC

IN THE UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF CALIFORNIA
SAN JOSE DIVISION

ENTANGLED MEDIA, LLC,

Plaintiff,

v.

DROPBOX, INC.,

Defendant.

C.A. No. 5:23-cv-03264-PCP-VKD

PLAINTIFF ENTANGLED MEDIA, LLC'S SECOND AMENDED COMPLAINT

JURY TRIAL DEMANDED

Pursuant to Fed. R. Civ. P. 15(a)(1)(B), Local Rule CV-15, and this Court's Case Management Order (Dkt. 75) for its Second Amended Complaint against Dropbox, Inc. ("Dropbox" or "Defendant"), alleges the following:

THE PARTIES

1. Entangled Media is a Delaware limited liability company, with a registered address at 1209 Orange Street, Corporation Trust Center, Wilmington, County of New Castle, Delaware 19801.

2. Dropbox is a corporation organized under the laws of Delaware. Dropbox has a regular and established physical place of business in this District, including its principal place of business located at 1800 Owens Street, San Francisco, California 94158.

JURSIDICTION AND VENUE

3. This is an action for patent infringement arising under the provisions of the Patent Laws of the United States of America, Title 35, U.S.C., § 1 *et seq.*

4. This Court has subject matter jurisdiction over Entangled Media's claims under 28 U.S.C. §§ 1331 and 1338(a).

5. This Court has personal jurisdiction over Dropbox in this action because Dropbox has committed acts within the Northern District of California giving rise to this action and has established minimum contacts with this forum through at least its principal place of business located at 1800 Owens Street, San Francisco, California 94158 such that the exercise of jurisdiction over Dropbox would not offend traditional notions of fair play and substantial justice. The website www.dropbox.com solicits sales of infringing products and services to consumers in this District and in California. Dropbox, directly and indirectly, and through subsidiaries or intermediaries, has committed and continues to commit acts of infringement in this District by, among other things, offering to sell and selling products and/or services that infringe the Entangled Media Patents-in-Suit.

6. Venue is proper in this judicial district pursuant to 28 U.S.C. §§ 1391 and 1400 because Dropbox has committed infringing acts in this District and has a regular and established physical place of business in this District, located at 1800 Owens Street, San Francisco, California 94158.

7. The Dropbox place of business located at 1800 Owens Street, San Francisco, California 94158 is a regular, physical, continuous, and established place of business of Dropbox, which Dropbox has established, ratified, and controlled; has listed on its website as a place of business of Dropbox; has employed numerous Dropbox employees to conduct Dropbox's business in and from this District; and from which Dropbox has infringed and willfully infringed the Entangled Media Patents-in-Suit in order to benefit Dropbox in this District. Moreover, the regular and established place of business of Dropbox, at which Dropbox employees conduct Dropbox business, is not limited to this principal place of business, and upon information and belief, also include the place of business of customer on-site employees in this District who conduct Dropbox business, as well as home office employees who conduct Dropbox business in this District. Dropbox commits acts of infringement in this District, including as explained further below by performing at least one step of the accused methods of the Entangled Media Patents-in-Suit at or from Dropbox's regular and established place of business in this District.

8. Entangled Media originally filed the present suit in the Western District of Texas, and believes that venue is proper in that District. Dropbox successfully moved to transfer venue to this District under 28 U.S.C. § 1404(a) and has admitted that Venue is proper in this District.

THE ENTANGLED MEDIA PATENTS-IN-SUIT

9. United States Patent No. 8,296,338 ("the '338 Patent") is titled "Method For a Cloud-Based Meta-File System to Virtually Unify Remote and Local Files Across a Range of Devices' Local File Systems." The '338 Patent issued on October 23, 2012. A true and correct copy of the '338 Patent is attached as Exhibit 1.

10. United States Patent No. 8,484,260 ("the '260 Patent") is a divisional of the application leading to the '338 Patent. The '260 Patent is titled "Method For a Cloud-Based Meta-File System to Virtually Unify Remote and Local Files Across a Range of Devices' Local File Systems." The '260 Patent issued on July 9, 2013. A true and correct copy of the '260 Patent is attached as Exhibit 2.

11. Inventor Erik Caso founded Entangled Media Corp. in 2010 and acted as its CEO from the company's inception. Inventor Michael Abraham served as Entangled Media's Chief Technology Officer from the company's inception.

12. Messrs. Erik Caso and Michael Abraham are the named inventors on both the '338 and '260 Patents (collectively, the "Entangled Media Patents-in-Suit").

13. The Entangled Media Patents-in-Suit both claim priority to U.S. Provisional Patent Application Ser. No. 61/175,489, filed May 5, 2009, entitled "Method for Virtual Synchronization of Data Across Heterogeneous Devices and Performing On-Demand Transfer of Remote Data Between Devices."

14. Entangled Media owns all rights, title, and interest in the Entangled Media Patents-in-Suit by assignment, and has the exclusive right to sue and collect remedies for past, present, and future infringement.

BACKGROUND

15. In the first decade of the twenty-first century, many consumers purchased multiple internet-connected devices. For example, a typical user might own a laptop computer, a desktop computer, and a smartphone. Because of this, the need arose for users to be able to share and synchronize their digital content and data, such as photos, videos, and documents, across all their devices.

16. Prior art methods and products for data sharing and synchronization across multiple devices fell short of what users needed, often taking up far too much storage space on users' devices and requiring the user to store the data in a designated folder on a local computer for it to be automatically synced or to have the forethought to choose which files would be made available.

17. For example, one prior art method involved locally installing software for file replication across devices to ensure that all devices with the same software had the same data physically replicated on each device. Once configured by the user, the software could identify updates to files on one device and update the corresponding files on other devices. Essentially, this meant duplicating all designated data on each of the devices being synchronized. *See* '338 Patent at col. 1:26-38.

18. Another option was to install online backup/storage-based file replication software on all devices, along with online storage. That option required all designated data to be stored online, and then replicated across all devices connected to the online server. That service would duplicate all the designated data between the devices being synchronized and store an additional copy of the data on the server. *Id.* at col. 1:38-46.

19. One major drawback to these prior art methods was the amount of storage space required. Because the data would be replicated on each device, each device would need a certain amount of storage space allotted for that data. But devices with limited storage space might not have room for these replications, and the synchronization process would then either be limited or prohibited. Alternate solutions for additional storage (such as third-party online storage or device storage upgrades) were expensive and often unwieldy. *Id.* at col. 1:50-58. And taking up too much storage space on electronic devices meant the user would run out of space for additional data or applications, and could also slow down processing speeds.

20. Another drawback to these prior art solutions was that the synchronized-local data would be stored within one device's operating system's native file system (such as a "My Documents" folder), while remote data on other devices would be kept in a new or different location, such as an external hard drive. *Id.* at col. 1:58-65. Keeping the data on separate devices with separate operating systems created device compatibility issues, and slowed or otherwise limited the functionality of the software on the device.

21. Yet another drawback was that users had to be directly involved in the process for the solutions to work. Users had to designate certain files and/or directories for synchronization or backup and manually store the content and/or data they wanted synced or backed up in those locations. *Id.* at 1:65-2:2.

22. In sum, the prior art did not provide a satisfactory solution to the problem of facilitating access to content that physically resided on one of multiple user devices without needing to physically store that content on every device, without complex and direct interaction by the user, and without the data from multiple devices being treated as separate and segregated within the file system. *Id.* at col. 2:3-11.

23. Recognizing the need for a better solution to this problem, Entangled Media developed the Younity app that allowed users to access all of their digital content (such as their music, photos, videos and documents) across multiple electronic devices, regardless of storage capacity or cost. The technology underlying the Younity app is also captured in part by the Entangled Media Patents-in-Suit.

24. The invention relates to creating a unified representation of all data on all registered devices. Unlike the prior art, this solution does not require physical data replication across all devices. Instead, the patented invention creates a virtual representation of the data on all the devices using metadata indexing. Virtually representing the data means the files are not stored anywhere other than one physical location – the virtual representations therefore take up limited storage space on the additional devices' hard drives. *Id.* at 2:11-26.

25. Since the synchronized data can be virtually stored on each device even when the device has no physical storage room available, that, in turn, frees up space on the device for additional content, applications, or other uses. *Id.* at col. 2:26-28. Freeing up storage space can also increase the device's processing speeds.

26. The invention also allows for lightweight metadata (a small fraction of information about the files) to be stored online, rather than all the data itself. *Id.* at col. 2:29-32. The solution therefore cuts down on costs for third-party online storage and helps keep the data secure.

27. In addition, the invention allows for user devices to become aware of one another, and to become aware of online service accounts (such as YouTube), and communicate directly when data is requested. *Id.* at col. 2:32-40.

28. Further, after the initial installation, user involvement in the system is minimal. The invention allows the operating systems of the user's devices to communicate with each other and it can modify those operating systems to account for locally stored files and files on all other user devices. These modifications are made without adding storage locations (which can be unwieldy and expensive) and without the user continually having to designate files for inclusion. *Id.* at col. 2:37-51.

29. The invention can also recognize and account for differences in file structures and nomenclatures, a problem that often arises when one user device runs on the Windows operating

system and another runs on a Mac or Linux operating system, for example. *Id*. at col. 9:8-50. The logical mapping technique employed by the Patents-in-Suit allows for a more seamless transition between different operating systems, and otherwise incompatible file formats, which enables the computing devices to function more efficiently.

30. In addition, for greater computational efficiency, the components of the patented system can be arranged at any location within a distributed network without affecting the operation of the system, or they may be embedded in a dedicated machine. *Id.* at col. 10:63-67. These options allow for greater flexibility in arranging other components of the computing environment, which enable the computer to perform faster and more efficiently.

31. The claims of the ’260 Patent additionally disclose using a peer-to-peer network for transferring the data between devices. This option allows the devices to communicate and share their data and resources directly and negates the need for a server, which eliminates additional costs and complex set-ups. Transferring the virtual files over a peer-to-peer network is typically faster than transferring over other types of network connections and, because a peer-to-peer network extends to include new devices easily, these networks are more flexible than other types of networks.

32. In sum, the Entangled Media Patents-in-Suit address, among other things, a specific improvement to virtually unify remote and local electronic files across a range of devices. The Entangled Media Patents-in-Suit claim processes for establishing a single file system across multiple devices, including the use of a server and at least one software client plug-in, where the client plug-in scans the devices to inventory files. The patented invention creates a meta-index for the inventoried data, and includes individual software clients that facilitate storage of the data within each of the multiple devices in accordance with the single meta-data index, among other system features. The claims specify, for example, processes that solve the technical problem of how to establish a single electronic file system across multiple devices.

33. The Entangled Media Patents-in-Suit identify the components necessary to create the patented solution and also describe how to establish the singular file system across multiple user devices. *See id. generally*; cls. 1-6; *see* ’260 Patent, *generally*; cls. 1-6.

34. As a technology start-up company, the inventors' unconventional approach to cloud-based file systems raised millions of dollars in funding from a well-known syndicate of investors, and was featured and lauded in Forbes, PC World, and numerous other outlets.

35. For example, in its 2012 review of the Younity app, PC World noted "Younity has tremendous potential. With a few minor tweak or updates, I can see Younity becoming an indispensable tool that lets me have simple, universal access to all of my data from any of my devices no matter where that data is actually stored. That is awesome." *See* Bradley, T., With Younity, access your PC's data from your iPhone or iPad, PCWorld, Dec. 4, 2012 (pcworld.com/article/455918/with-younity-access-your-pcs-data-from-your-iphone-or-ipad.html; last visited March 24, 2023). In 2013, the same author reviewed a later version of Younity. He noted that, with respect to file sharing and storage, "Younity has an entirely different approach, and it could make cloud storage obsolete." Bradley, T., Younity 1.5 could render cloud storage obsolete, PCWorld, Apr. 26, 2013 (pcworld.com/article/451539/younity-1-5-could-render-cloud-storage-obsolete.html; last visited March 24, 2023). The author explained that, in contrast to other cloud-storage and file-sharing services, Younity "simply indexes all your data wherever it's stored on Mac OS X or Windows PCs, and then it makes that data – all of it – accessible and shareable from your iPhone or iPad." (*Id.*). The author also notes that "[a]nother advantage Younity has over cloud storage is security: I don't have to rely on a third party to protect my data, or concern myself with configuring and maintaining separate security controls. Younity doesn't store any of my data, so Younity could suffer a devastating security breach, and it wouldn't impact me in the least." (*Id.*)

36. TechCrunch reiterated these accolades: "Essentially, [Younity] makes the experience of the cloud come to you, rather than the other way around." Taylor, C., A First Look at Younity, the App That Lets You Access All Your Files All the Time, TechCrunch, July 26, 2013 (techcrunch.com/2013/07/26/younity/; last visited March 24, 2023).

37. Entangled Media filed U.S Provisional Patent Application Ser. No. 61/175,489, entitled "Method for Virtual Synchronization of Data Across Heterogeneous Devices and Performing On-Demand Transfer of Remote Data Between Devices" on May 5, 2009.

38. On May 5, 2010, Entangled Media filed the application leading to the ’338 Patent, which issued on October 23, 2012.

39. On March 19, 2012, Entangled Media filed the application leading to the ’260 Patent, a divisional of the ’338 Patent, which issued on July 9, 2013.

40. The technological improvements described and claimed in the Entangled Media Patents-in-Suit were not conventional, well-known, or routine at the time of their respective inventions but rather involved novel and non-obvious approaches to problems and shortcomings prevalent in the art at the time. *See, e.g.*, ’338 patent at col. 1:50-col. 2:55.

41. The ’338 Patent prosecution history establishes that the Patent Examiner conducted prior art and/or other searches using at least the patent examiner system Examiner Automated Search Tool (“EAST”), across multiple databases, including the Pre-Grant Publications (US-PGPUB), United States Patents (USPAT), United States Optical Character Recognition (USOCR), European Patent Office (EPO) Abstracts, Japanese Patent Office (JPO) Abstracts, and Foreign Patent Retrieval System (FPRS) , Derwent, and IBM Technical Disclosure Bulletin databases, and performed searches on at least December 23, 2011; January 31, 2012; April 13, 2012; April 17, 2012; April 18, 2012; April 19, 2012; April 20, 2012; and September 6, 2012. The Patent Examiner formally cited at least ten separate references during the prosecution of the ’338 Patent.

42. Between the prior art references located and cited by the Patent Examiner, and the references submitted by the applicants and considered by the Patent Examiner during the prosecution of the ’338 Patent, at least forty references were formally considered by the Patent Examiner, as indicated on the front two pages of the issued ’338 Patent.

43. It is the practice of the USPTO not to cite excessive cumulative art. For this reason, the art cited by the Patent Examiners is representative of considerable other art located by the USPTO and not cited. It is also the practice of the USPTO to discuss in its Office Actions those references of which the Patent Examiners are aware that most closely resemble the claimed inventions.

44. The issued claims from the ’338 Patent are patentably distinct from the at least forty references identified and/or discussed during prosecution. That is, each of the fourteen claims, as a whole, were found to be patentably distinct from at least the forty formally identified references. And

throughout the prosecution history, the applicant successfully distinguished several prior art references with specific reference to claim elements and novel combinations of claim elements that establish the claimed inventions are different than numerous prior art systems the Examiners identified.

45. The Patent Examiner during prosecution of the ’338 Patent stated the following when allowing the issued claims:

> The following is an examiner's statement of reason for allowance:
>
> Claims 1, 13, and 16 are considered allowable since the prior [art] made of record and considered pertinent to the applicant's disclosure does not teach or suggest the claimed limitations. Vesper (U.S. 2011/0110568) Or Willis (U.S. 2012/0079117), Floyd (U.S. 2007/0153703) or Ben-Shaul (U.S. 2011/0231844), taken individually or in combination, do not teach the claimed invention having a process for establishing a singular file system across multiple devices comprising: receiving user information to open an account for establishing a singular file system across multiple devices via a web-based system that includes at least one server; accepting registration; scanning each of the multiple devices by each of the individual software clients to inventory data on each of the multiple devices and create a meta-index of the files for the inventoried data; providing by the individual software clients via the multiple devices individual meta-indices of the inventoried data for each of the multiple devices to the at least one server; providing by the at least one server the single master meta-index and meta-indices for each of the other multiple devices; integrating metadata from the meta-indices of each of the other multiple devices into a local file system of each of the multiple devices to generate virtual files stored in the same locations as local files of the local file system, the virtual files indistinguishable from the local files by the local file system at each of the multiple devices; and continually updating the single master meta-index on the at least one server and each of the multiple devices in response to changes to the data indexed thereon, wherein the individual software clients facilitate storage of the data within each of the multiple devices in accordance with the single meta-data index by modifying file systems of each of the multiple devices to include virtual files for data from the single meta-data index that is not local to a multiple device with a combination of all recitations as defined in claims 1, 13, and 16.
>
> Therefore, claims 1-4, 6-7, and 13-20 *are* presently allowed.

(Notice of Allowability for the ’338 Patent, mailed 09/12/2012, at 7-8.)

46. By issuing the ’338 Patent, each of its claims was shown to be inventive, novel, non-obvious, and innovative over at least the disclosures in the forty identified references.

47. As each claim as a whole from the ’338 Patent is inventive, novel, and innovative as compared to the at least forty specific patents and other publications, each claim, as a whole, constitutes more than the application of well-understood, routine, and conventional activities.

48. The ’260 Patent prosecution history establishes that the Patent Examiner conducted prior art and/or other searches using at least the patent examiner system Examiner Automated Search

Tool ("EAST"), across multiple databases, including the Pre-Grant Publications (US-PGPUB), United States Patents (USPAT), United States Optical Character Recognition (USOCR), European Patent Office (EPO) Abstracts, Japanese Patent Office (JPO) Abstracts, and Foreign Patent Retrieval System (FPRS), Derwent, and IBM Technical Disclosure Bulletin databases, and performed searches on at least December 23, 2011; January 31, 2012; April 12, 2012; April 13, 2012; April 17, 2012; April 18, 2012; April 19, 2012; April 20, 2012; and September 6, 2012; October 19, 2012; October 20, 2012; October 21, 2012; and March 9, 2013. The Patent Examiner formally cited at least seven separate references during the prosecution of the '338 Patent.

49. Between the prior art references located and cited by the Patent Examiner, and the references submitted by the applicants and considered by the Patent Examiner during the prosecution of the '260 Patent, at least fifty references were formally considered by the Patent Examiner, as indicated on the front two pages of the issued '260 Patent.

50. The issued claims from the '260 Patent are patentably distinct from the at least fifty references identified and/or discussed during prosecution. That is, each of the eight claims, as a whole were found to be patentably distinct from at least the fifty formally identified references. And throughout the prosecution history, the applicant successfully distinguished several prior art references with specific reference to claim elements and novel combinations of claim elements that establish the claimed inventions are different than numerous prior art systems the Examiners identified.

51. The Patent Examiner during prosecution of the '260 Patent stated the following when allowing the issued claims:

> The following is an examiner's statement of reason for allowance:
>
> Claims 1, 8-9 are considered allowable since the prior made of record and considered pertinent to the applicant's disclosure does not teach or suggest the claimed limitations. The Prior Art does not teach the claimed invention having a process for operating on files located on multiple devices using a singular file system comprising accepting a request to operate on a file at a first device; modifying the singular file system on the first device to make local files and virtual files appear indistinguishable to the singular file system, the local files and virtual files sharing a same location on the first device; determining by the software client if the file is physically located on the first device or if the file is a virtual file of a corresponding file physically stored on a second device by reviewing file metadata, wherein a visual representation of the singular file system on the first device is identical to a visual

representation of the singular file system on the second device with a combination of all recitations as defined in claims 1, 8-9.

Therefore, claims 1-3, 5-9 *are* presently allowed.

(Notice of Allowability for the '260 Patent, mailed 03/26/2013, at 6.)

52. By issuing the '260 Patent, each of its claims was shown to be inventive, novel, non-obvious, and innovative over at least the disclosures in the fifty identified references.

53. As each claim as a whole from the '260 Patent is inventive, novel, and innovative as compared to the at least fifty specific patents and other publications, each claim, as a whole, constitutes more than the application of well-understood, routine, and conventional activities.

54. Entangled Media's patented innovations have become essential to the development of modern storage and syncing technology. The Entangled Media Patents-in-Suit have been cited as pertinent prior art against later patent applications from leading technology companies such as IBM, Google, Microsoft, Dell, and Samsung on more than seventy-five occasions, including during the prosecution of at least eight different patent applications filed by Dropbox. *See, e.g.,* U.S. Patent Nos. 9,870,422; 9,922,201; 10,685,038; 10,691,718; 10,817,472; 10,819,559; 10,963,430; and 11,290,531.

55. The numerous forward citations to the Entangled Media Patents-in-Suit, as well as the many patents that have issued despite identification of these Patents-in-Suit during the third-party prosecutions reveal that the Patents-in-Suit and their claimed inventions relate to specific processes, systems, storage media, and programs for improved data sharing and synchronization across multiple devices, rather than merely disclosing an aspiration or result of that technology that would preempt the use of, or innovations in, this technology area.

DROPBOX INFRINGES THE ENTANGLED MEDIA PATENTS-IN-SUIT

56. Dropbox makes, uses, sells, offers for sale, and/or imports, infringing products and services that include, by way of example and without limitation, Dropbox Plus, Family, Professional, Business (Standard, Advanced, Enterprise), and all versions and variations thereof that contain Smart Sync (also known as "online-only") and any process/software identified in Plaintiff's Preliminary Infringement Contentions (including any amendments or supplements thereto) (collectively, the "Accused Products").

57. Dropbox had actual notice of the Entangled Media Patents-in-Suit since no later than March 2017 when Mr. Caso identified them in writing to at least Morgan Kyauk, a senior executive on the Dropbox corporate development team. Over the course of several discussions, Mr. Caso disclosed the Entangled Media Patents-in-Suit to Dropbox and explained that Dropbox's core technology infringed the claims of the Entangled Media Patents-in-Suit. After a few discussions between Mr. Caso and Dropbox, Dropbox decided not to license the technology developed by Entangled Media. Dropbox introduced Smart Sync, which incorporated the claimed technology.

58. Entangled Media has, to the extent required, complied with the marking statute, 35 U.S.C. § 287.

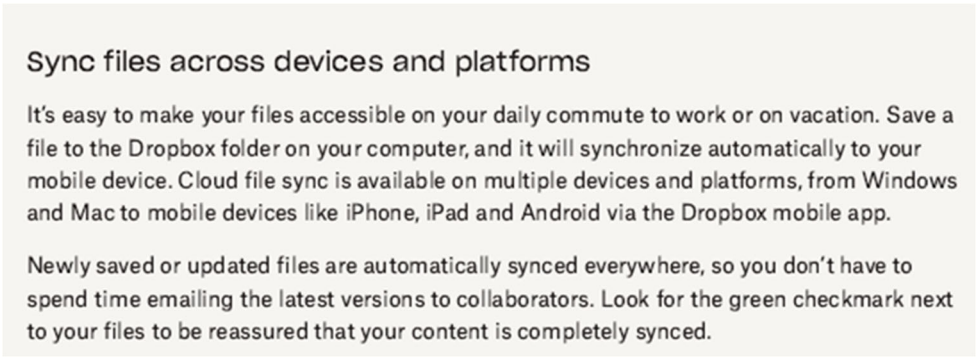
59. As set forth below, the Accused Products incorporate, without any license or permission from Entangled Media, technology protected by the Entangled Media Patents-in-Suit.

COUNT I: INFRINGEMENT OF U.S. PATENT NO. 8,296,338

60. Entangled Media reasserts and incorporates herein by reference the allegations of all preceding paragraphs of this Complaint as if fully set forth herein.

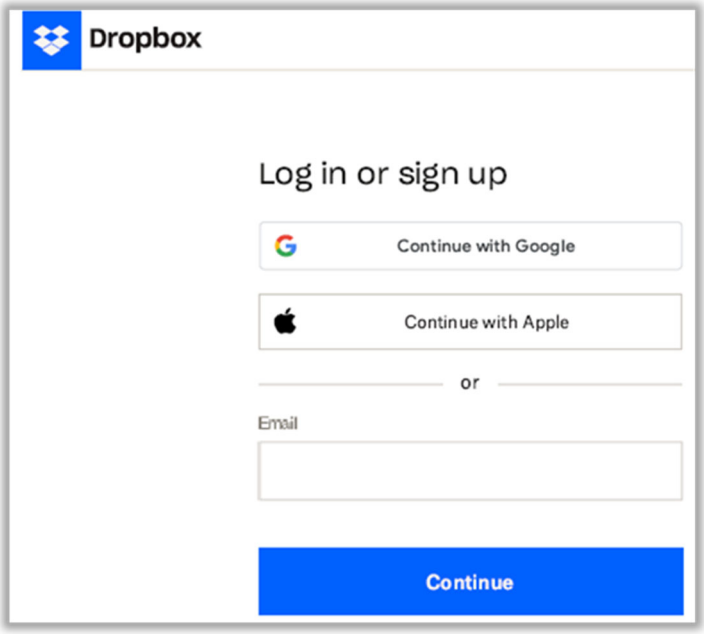
61. Dropbox has infringed and continues to infringe claims 1-6 of the '338 Patent under 35 U.S.C. § 271(a) and § 271(b), literally or under the doctrine of equivalents, by making, using, selling, and/or offering for sale in the United States, and/or importing into the United States, the Accused Products.

62. Set forth below with claim language in italics is a description of infringement of claim 1 of the '338 Patent (Entangled Media reserves the right to modify this description, including based on information it obtains during discovery): *a process for establishing a singular file system across multiple devices comprising*:. To the extent the preamble is limiting, Dropbox, via Smart Sync as one example, performs a process for establishing a single file system across multiple devices.



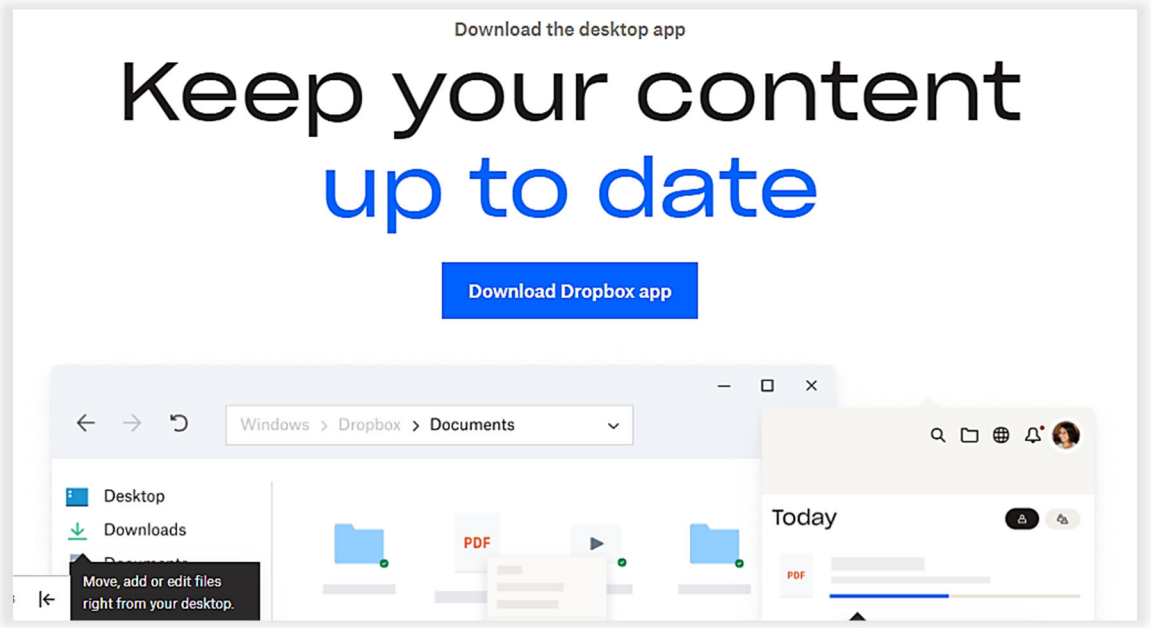
See https://www.dropbox.com/features/sync. (last visited 1/8/2024)

63. Dropbox performs the process of *receiving user information to open an account for establishing a singular file system across multiple devices via a web-based system that includes at least one server.* The Dropbox server receives registration information via a web page to set up an account. The registration information includes username, e-mail address, password and other personal information.



See https://www.dropbox.com/register. (last visited 1/8/2024)

64. Dropbox performs the process of *installing an individual software client on each of the multiple devices via the web-based system.* The Dropbox software client is installed on each device.



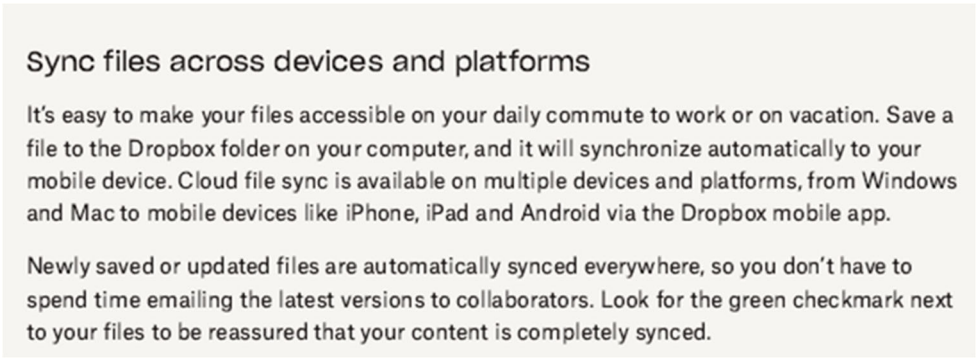
See https://www.dropbox.com/install. (last visited 1/8/2024)

65. Dropbox performs the process of *accepting registration of multiple devices via the web-based system.* The Dropbox server registers the devices.

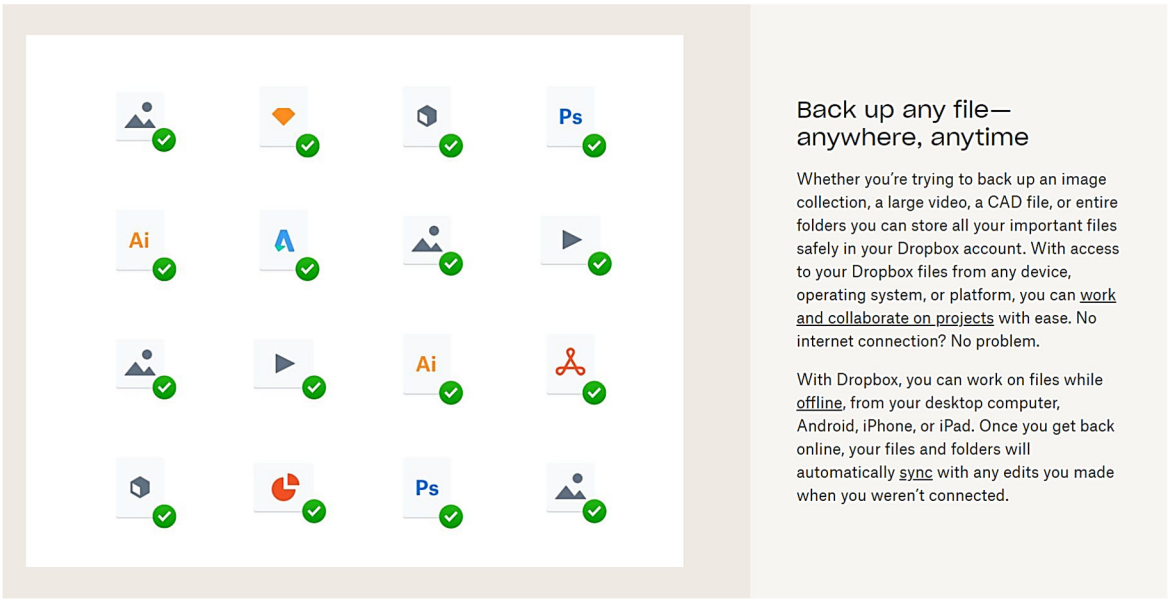
> **How do I sync files and folders in Dropbox?**
>
> You can sync Dropbox files and folders across devices with the Dropbox app. Sign in to your Dropbox account on each device, then add your files and folders to the Dropbox folder on your computer, phone, or tablet. The latest version of all your files and folders will be available across every device.

See https://www.dropbox.com/features/sync.

66. Dropbox performs the process of *scanning each of the multiple devices by each of the individual software clients to inventory data on each of the multiple devices and create a meta-index of the files for the inventoried data*. Dropbox is downloaded on each of the user's multiple devices. The Dropbox software client scans and inventories the data available on each user device. Dropbox collects and stores the inventories, including through the use of Dropbox Backup, as another example.



See https://www.dropbox.com/features/sync. (last visited 1/8/2024)



See https://www.dropbox.com/features/cloud-storage/file-backup (last visited 1/8/2024).

67. Dropbox performs the process of *providing by the individual software clients via the multiple devices individual meta-indices of the inventoried data for each of the multiple devices to the at least one server.* The Dropbox software clients report file data to the server.

File sync

Dropbox offers industry-recognized, best-in-class file sync. Our sync mechanisms ensure fast, responsive file transfers and enable anywhere access to data across devices. Dropbox sync is also resilient. In the event of a failed connection to the Dropbox service, a client will gracefully resume operation when a connection is reestablished. Files will only be updated on the local client if they have synchronized completely and successfully validated with the Dropbox service. Load balancing across multiple servers ensures redundancy and a consistent synchronization experience for the end user.

Delta sync

Using this sync method, only modified portions of files are downloaded/uploaded. Dropbox stores each uploaded file in discrete, encrypted blocks and only updates the blocks that have changed.

Streaming sync

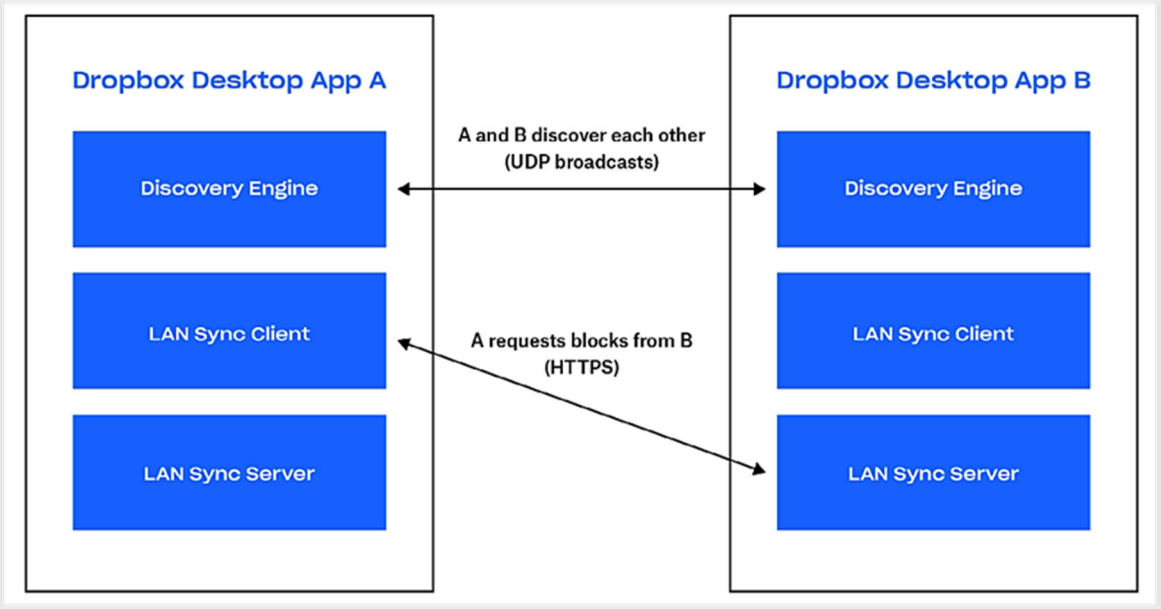
Instead of waiting for a file upload to complete, streaming sync will begin downloading synced blocks to a second device before all of the blocks have finished uploading from the first device. This is automatically employed when separate computers are linked to the same Dropbox account or when different Dropbox accounts share a folder.

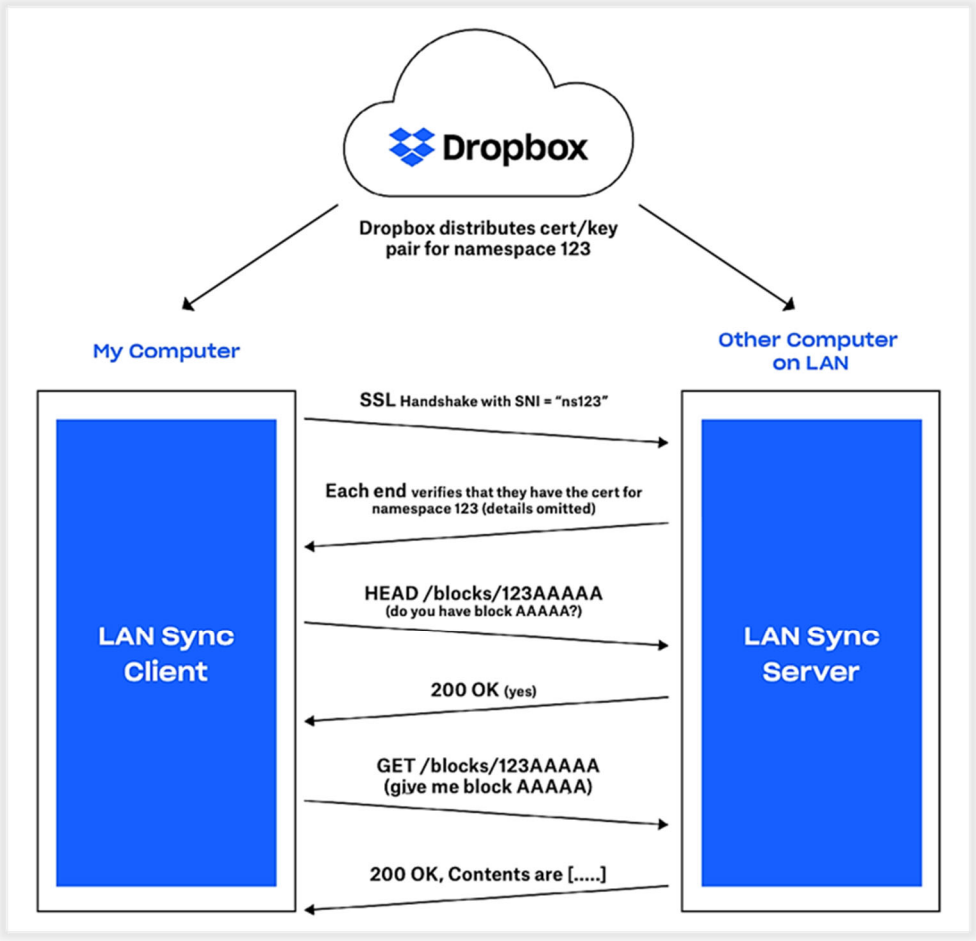
Smart Sync

This feature can free up storage space on a user's computer by syncing only the files they want to their hard drives. Smart Sync frees up computer space by moving files and folders off the local hard drive while keeping everything in the cloud in the user's dropbox.com account. Smart Sync also moves files and folders that haven't been accessed in a while off the user's hard drive automatically to free up additional storage space.

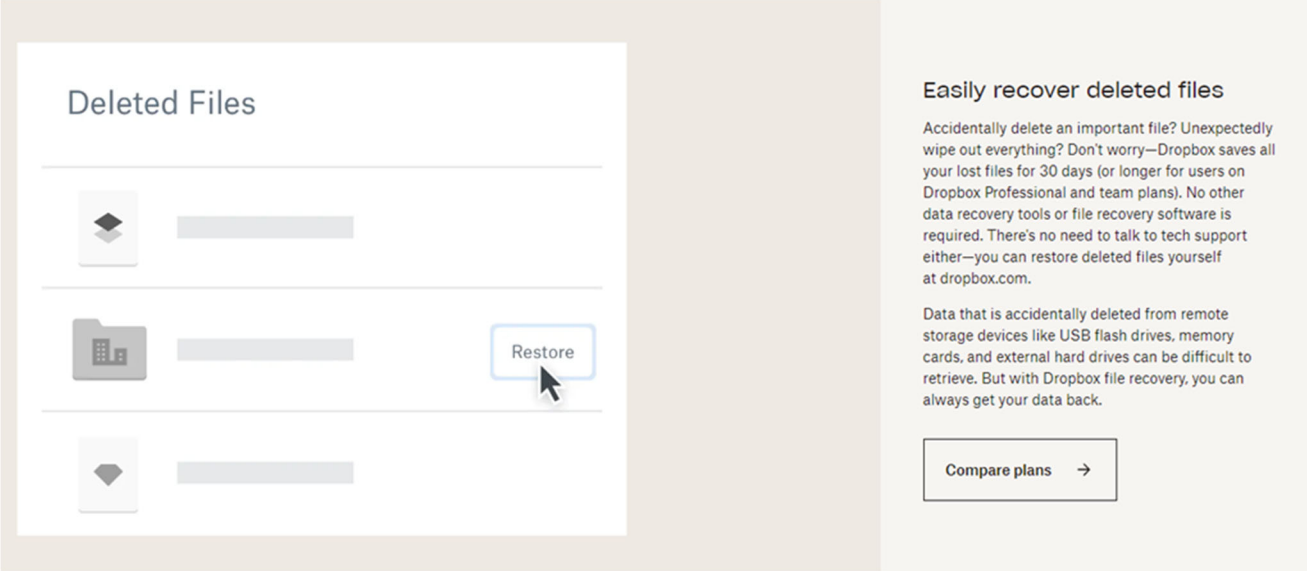
LAN sync

When enabled, this feature downloads new and updated files from other computers on the same Local Area Network (LAN), saving time and bandwidth compared to downloading the files from Dropbox servers.



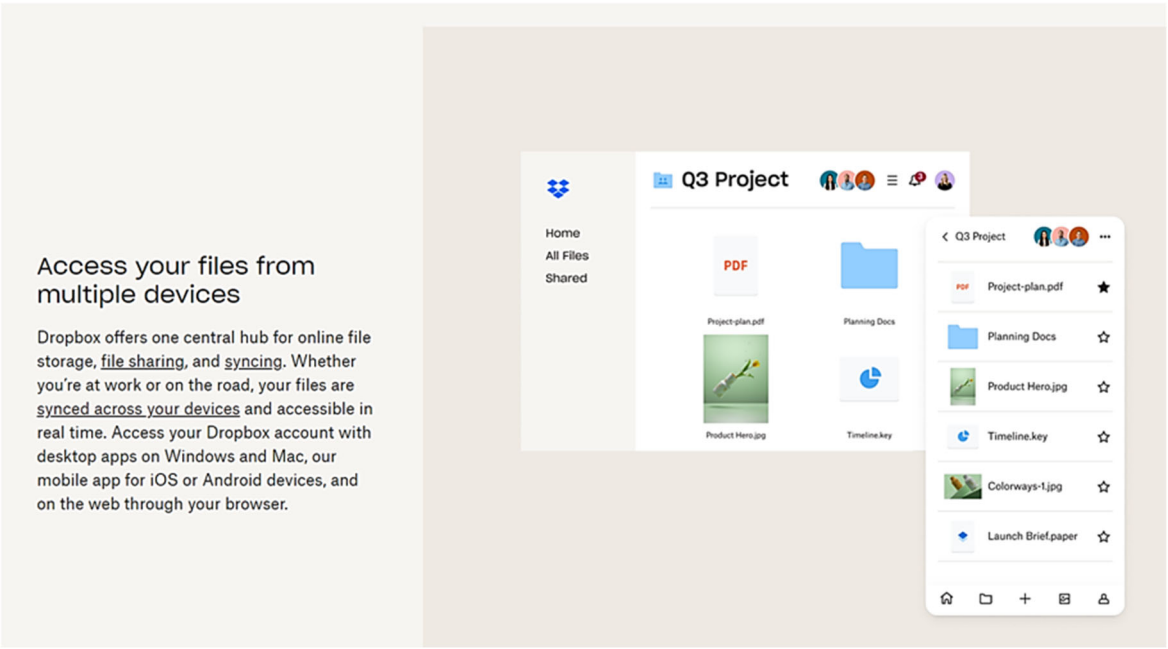


See https://assets.dropbox.com/www/en-us/business/solutions/solutions/dfb_security_whitepaper.pdf.

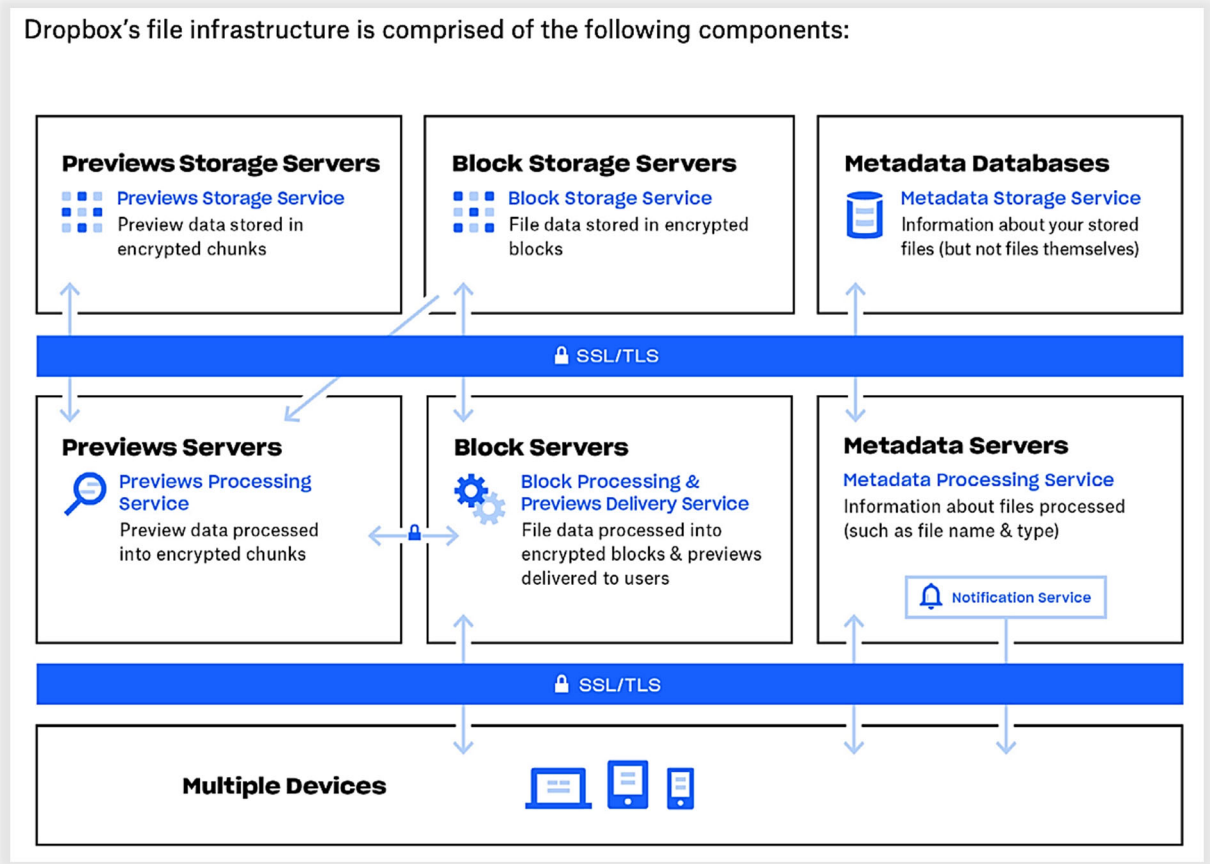


See https://www.dropbox.com/features/cloud-storage/file-recovery-and-history. (last visited 1/8/2024)

68. Dropbox performs the process of *integrating by the at least one server the individual meta-indices to create a single master meta-index.* The Dropbox server integrates all individual meta-indices into a master index of metadata.



See https://www.dropbox.com/features/cloud-storage (last visited 1/8/2024).



See https://assets.dropbox.com/www/en-us/business/solutions/solutions/dfb_security_whitepaper.pdf.

69. Dropbox performs the process of *providing by the at least one server the single master meta-index and meta-indices for each of the other multiple devices to each of the multiple devices via the individual software clients.* The Dropbox server provides the master index of metadata and meta-indices for each of the other multiple devices to each of the corresponding registered devices.

- ***Metadata Servers***

  Certain basic information about user data, called metadata, is kept in its own discrete storage service and acts as an index for the data in users' accounts. Metadata includes basic account and user information, like email address, name, and device names. Metadata also includes basic information about files, including file names and types, that helps support features like version history, recovery, and sync.

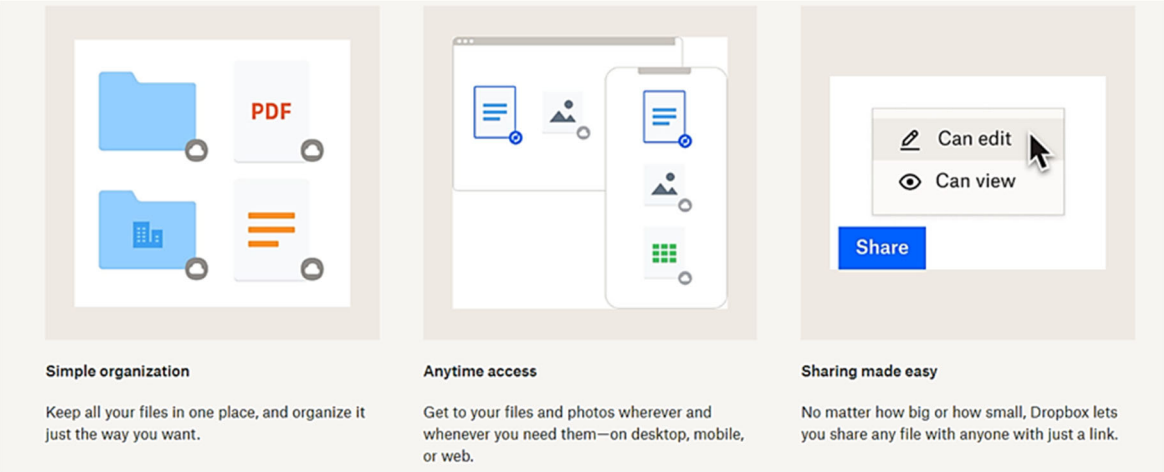
- ***Metadata Databases***

  File metadata is stored in a MySQL-backed database service, and is sharded and replicated as needed to meet performance and high availability requirements.

- ***Block Servers***

  By design, Dropbox provides a unique security mechanism that goes beyond traditional encryption to protect user data. Block Servers process files from the Dropbox applications by splitting each into blocks, encrypting each file block using a strong cipher, and synchronizing only blocks that have been modified between revisions. When a Dropbox application detects a new file or changes to an existing file, the application notifies the Block Servers of the change, and new or modified file blocks are processed and transferred to the Block Storage Servers. In addition, Block Servers are used to deliver files and previews to users. For detailed information on the encryption used by these services both in transit and at rest, please see the Encryption section below.

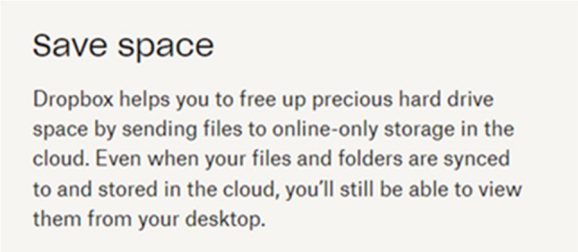
See https://assets.dropbox.com/www/en-us/business/solutions/solutions/dfb_security_whitepaper.pdf.



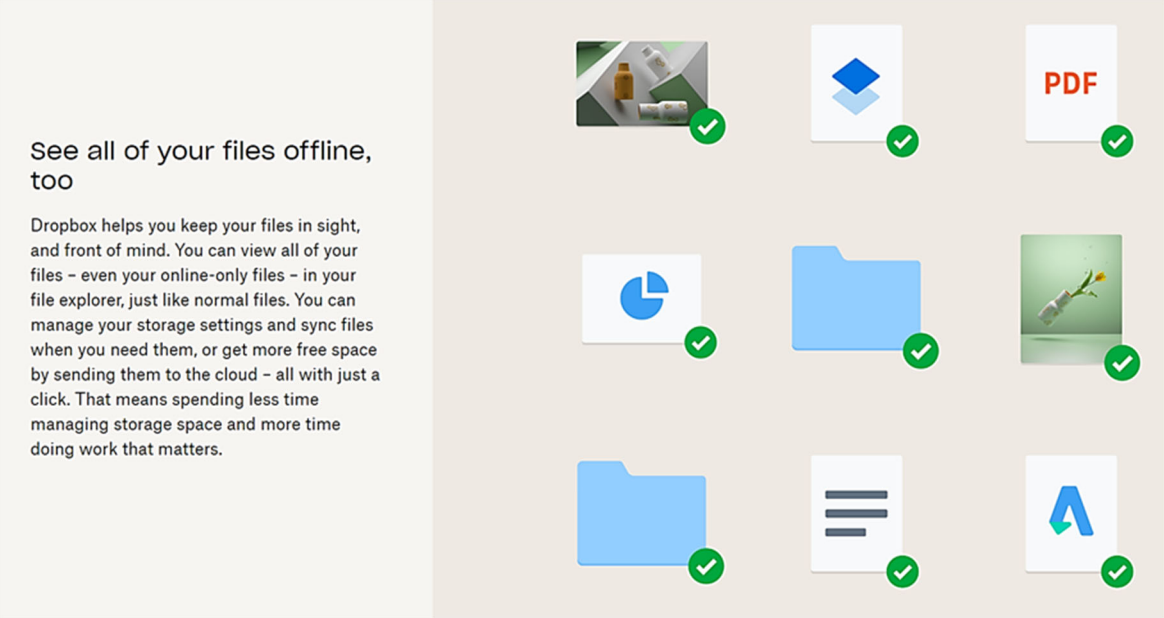
See https://www.dropbox.com/dropbox. (last visited 1/8/2024).

70. Dropbox performs the process of *integrating metadata from the meta-indices of each of the other multiple devices into a local file system of each of the multiple devices to generate virtual files stored in the same locations as local files of the local file system, the virtual files indistinguishable from the local files by the local file system at each of the multiple devices.* The Dropbox software client integrates metadata from remote device indices into the local device file system. For example, Dropbox Smart Sync shows virtual files along with physical files. As another

example, Dropbox supports LAN Sync, which will transfer the file peer-to-peer, but if LAN Sync is off (user option), or unavailable, and as an alternative, Dropbox can transfer the file from the Dropbox server instead. The Dropbox virtual files are indistinguishable in terms of their operation and are indistinguishable from the local files by the local file system, but they are visually distinguishable to the user via a decorator icon on the file in Finder or Windows Explorer.



See https://www.dropbox.com/features/sync. (last visited 1/8/2024)



See https://www.dropbox.com/features/sync/save-space (last visited 1/8/2024).

71. Dropbox performs the process of *continually updating the single master metaindex on the at least one server and each of* the *multiple devices in response to changes to the data indexed thereon.* Updates regarding an operation performed on a local file by the local client device are reflected in an updated meta-index of the local device located on the server.

File infrastructure

Dropbox users can access files and folders at any time from the desktop, web, and mobile clients, or through third-party applications connected to Dropbox. All of these clients connect to secure servers to provide access to files, allow file sharing with others, and update linked devices when files are added, changed, or deleted.

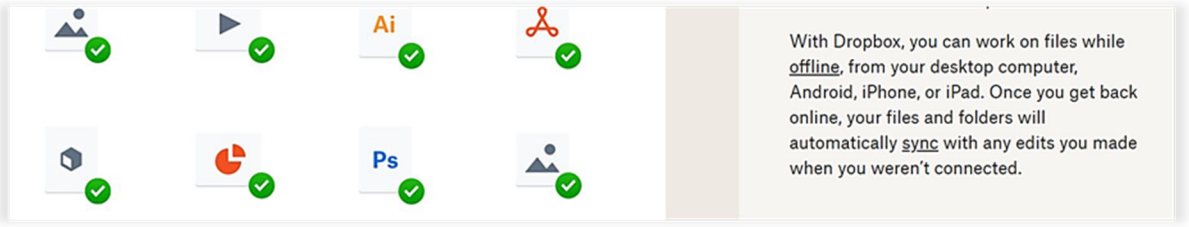
See https://assets.dropbox.com/www/en-us/business/solutions/solutions/dfb_security_whitepaper.pdf.

Sync files across devices and platforms

It's easy to make your files accessible on your daily commute to work or on vacation. Save a file to the Dropbox folder on your computer, and it will synchronize automatically to your mobile device. Cloud file sync is available on multiple devices and platforms, from Windows and Mac to mobile devices like iPhone, iPad and Android via the Dropbox mobile app.

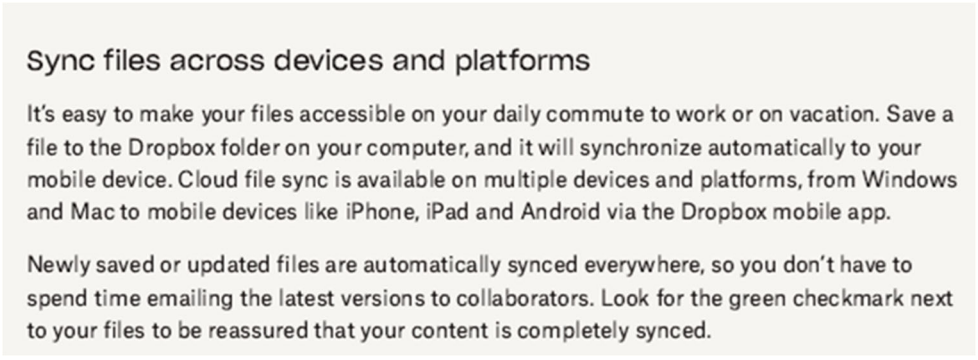
Newly saved or updated files are automatically synced everywhere, so you don't have to spend time emailing the latest versions to collaborators. Look for the green checkmark next to your files to be reassured that your content is completely synced.

See https://www.dropbox.com/features/sync. (last visited 1/8/2024)

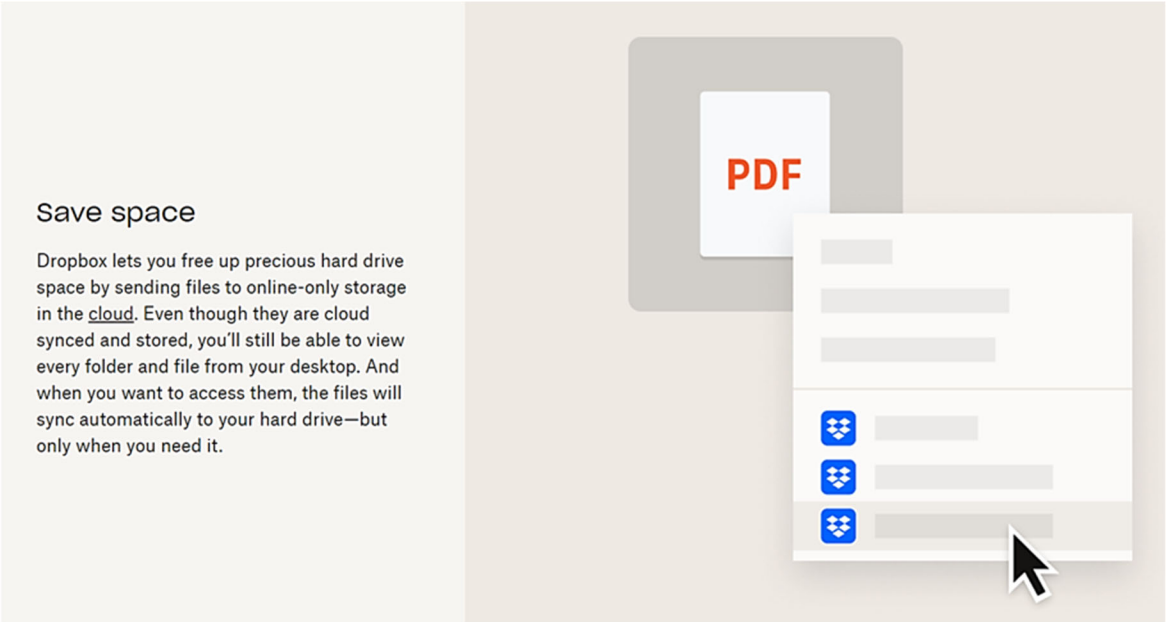


See https://www.dropbox.com/features/cloud-storage/file-backup. (last visited 1/8/2024).

72. Dropbox performs the claimed method to establish a single file system across multiple devices *wherein the individual software clients facilitate storage of the data within each of the multiple devices in accordance with the single meta-data index by modifying file systems of each of the multiple devices to include virtual files for data from the single meta-data index that is not local to a multiple device.* The Dropbox client devices receive updates from the server with remote changes. Changes are sent back to the remote client device.



See https://www.dropbox.com/features/sync. (last visited 1/8/2024)



See https://www.dropbox.com/features/sync. (last visited 1/8/2024).

73. In the event Dropbox itself does not perform the entire process, the infringement of the '338 Patent is attributable to Dropbox, because Dropbox directs and controls the users of the Accused Products to perform acts that result in infringement of claim 1, and Dropbox receives benefit from its infringement.

74. Dropbox has actively induced infringement of Claims 1-6 of the '338 Patent since at least March 2017, in violation of 35 U.S.C. § 271(b). Dropbox's customers, distributors, vendors, and end-users of the Accused Products directly infringe Claims 1-6 of the '338 Patent, at least by using the Accused Products, as described above. Since at least March 2017, Dropbox knowingly induces infringement of Claims 1-6 of the '338 Patent by its customers, distributors, vendors, and end-users

of the Accused Products with specific intent to induce infringement, and/or with willful blindness to the possibility that its acts induce infringement, through activities relating to selling, marketing, advertising, promotion, support, and distribution of the Accused Products in the United States. Dropbox instructs its customers, distributors, vendors and end-users, at least through its marketing, promotional, and instructional materials, to use the infringing Accused Products, as described in detail above. Dropbox creates and distributes promotional and product literature for the Accused Products that is designed to instruct, encourage, enable, and facilitate the user of the Accused Products to use the Accused Products in a manner that directly infringes the Asserted Patents. Non-limiting examples of such are found above in the various screen shots that instruct performance of the infringing use of the technology. Dropbox is aware and/or willfully blind that these affirmative acts infringe and/or would induce infringement of the '338 Patent, of which it had knowledge.

75. Dropbox has willfully infringed the '338 Patent in that Dropbox had actual notice of the Entangled Media Patents-in-Suit since at least March 2017 when Mr. Caso communicated with Morgan Kyauk, a senior executive on the Dropbox corporate development team. Over the course of several discussions, Mr. Caso disclosed the Entangled Media Patents-in-Suit to Dropbox and explained that Dropbox's core technology infringed the claims of the Entangled Media Patents-in-Suit. Dropbox introduced Smart Sync, which incorporated the claimed technology. Dropbox knew or should have known that its actions would cause direct and indirect infringement of the '338 Patent. On information and belief, Dropbox acted with objective recklessness by proceeding despite a high likelihood that its actions constituted infringement of a valid patent, where such action constitutes egregious misconduct.

76. Dropbox will continue to infringe unless this Court enjoins Dropbox and its agents, servants, employees, representatives and all others acting in active concert with it from infringing the '338 Patent.

77. Entangled Media has been damaged from Dropbox's infringing conduct. Dropbox is liable to Entangled Media in an amount that adequately compensates Entangled Media for Dropbox's infringement, which, by law, cannot be less than a reasonable royalty, together with interest and costs as fixed by this Court under 35 U.S.C. § 284.

COUNT II: INFRINGEMENT OF U.S. PATENT NO. 8,484,260

78. Entangled Media reasserts and incorporates herein by reference the allegations of all preceding paragraphs of this Complaint as if fully set forth herein.

79. Dropbox has infringed and continues to infringe claims 1-6 of the ’260 Patent under 35 U.S.C. § 271(a) and § 271(b), literally or under the doctrine of equivalents, by making, using, selling, and/or offering for sale in the United States, and/or importing into the United States, the Accused Products.

80. Set forth below with claim language in italics is a description of infringement of claim 1 of the ’260 Patent (Entangled Media reserves the right to modify this description, including based on information it obtains during discovery): Dropbox performs *a process for operating on files located on multiple devices using a singular file system comprising*:. To the extent the preamble is limiting, Dropbox Smart Sync, as one example, operates on files located on multiple devices using a single file system.

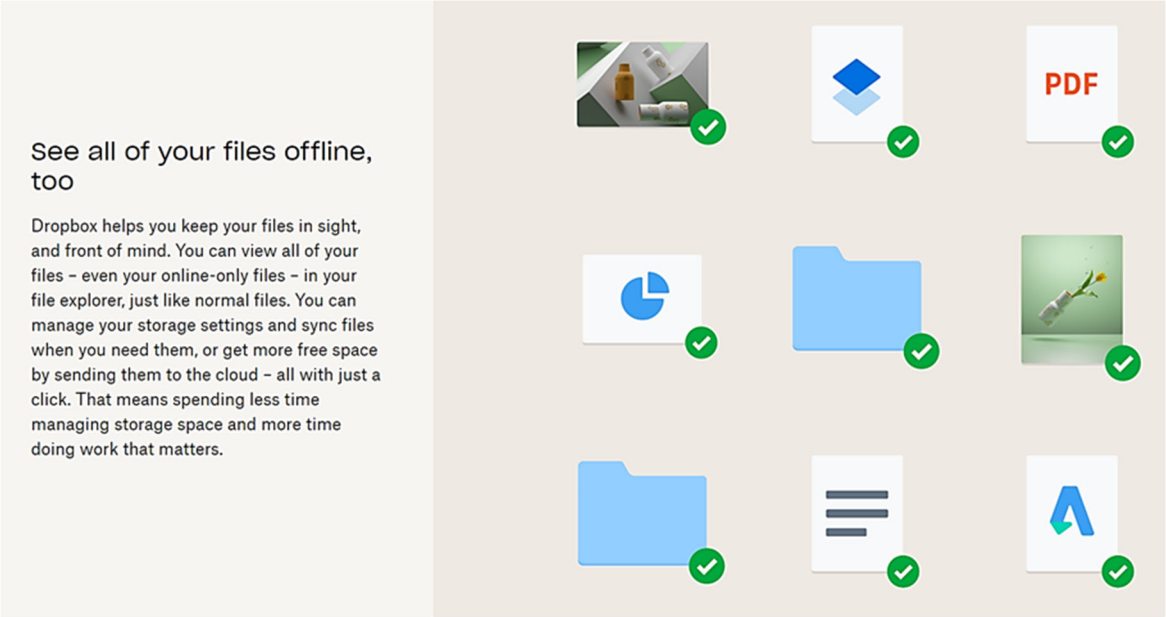
> Sync files across devices and platforms
>
> It’s easy to make your files accessible on your daily commute to work or on vacation. Save a file to the Dropbox folder on your computer, and it will synchronize automatically to your mobile device. Cloud file sync is available on multiple devices and platforms, from Windows and Mac to mobile devices like iPhone, iPad and Android via the Dropbox mobile app.
>
> Newly saved or updated files are automatically synced everywhere, so you don’t have to spend time emailing the latest versions to collaborators. Look for the green checkmark next to your files to be reassured that your content is completely synced.

See https://www.dropbox.com/features/sync. (last visited 1/8/2024)

81. Dropbox performs the process of *accepting a request to operate on a file at a first device, wherein the file is selected from the singular file system on the first device.* Dropbox Smart Sync accepts a request to operate on a file selected from the client device. Rather than opening it the normal way where the file resides on the client device, the file can be opened through the single file system from Dropbox. Dropbox Smart Sync establishes a single file system across multiple devices.

See https://www.dropbox.com/features/sync. (last visited 1/8/2024)

82. Dropbox performs the process of *modifying the singular file* system *on* the *first device to make local files and virtual files appear indistinguishable to the singular file system, the local files and virtual files sharing a same location on the first device.* The Dropbox software client integrates metadata from remote device indices into the local device file system. For example, Dropbox Smart Sync shows virtual files along with physical files. The Dropbox virtual files are indistinguishable in terms of their operation, and appear indistinguishable with the local files to the file system, but they are visually distinguishable to the user via a decorator icon on the file in Finder or Windows Explorer.



See https://www.dropbox.com/features/sync/save-space (last visited 1/8/2024).

83. As another example, Dropbox supports LAN Sync, which will transfer the file peer to peer, but if LAN Sync is off (user option), or unavailable, and as an alternative, Dropbox can transfer the file from the Dropbox server instead.

File sync

Dropbox offers industry-recognized, best-in-class file sync. Our sync mechanisms ensure fast, responsive file transfers and enable anywhere access to data across devices. Dropbox sync is also resilient. In the event of a failed connection to the Dropbox service, a client will gracefully resume operation when a connection is reestablished. Files will only be updated on the local client if they have synchronized completely and successfully validated with the Dropbox service. Load balancing across multiple servers ensures redundancy and a consistent synchronization experience for the end user.

Delta sync

Using this sync method, only modified portions of files are downloaded/uploaded. Dropbox stores each uploaded file in discrete, encrypted blocks and only updates the blocks that have changed.

Streaming sync

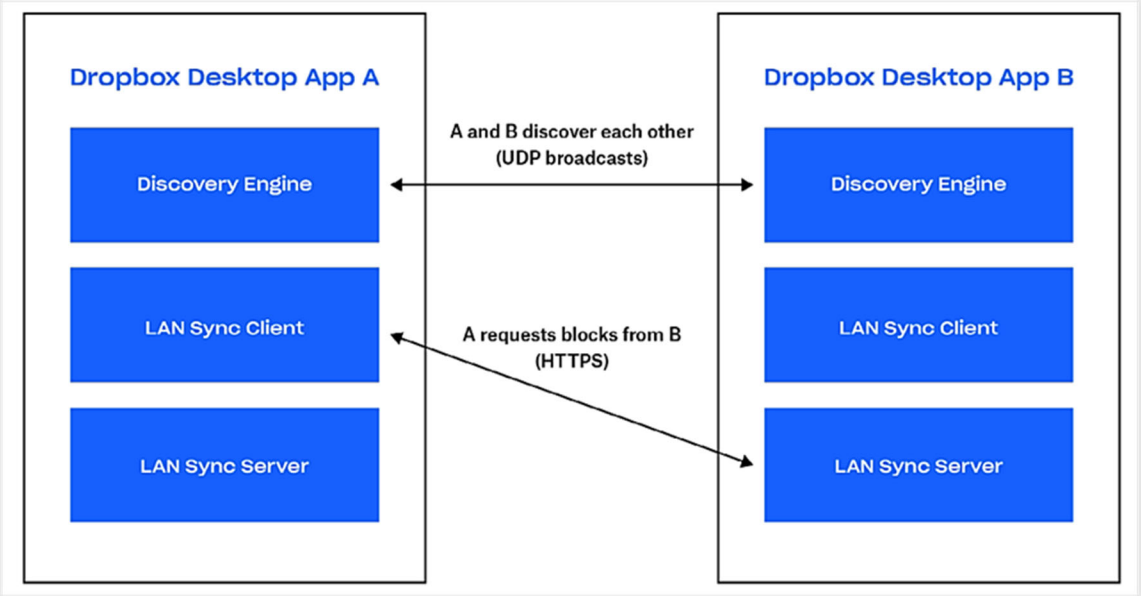
Instead of waiting for a file upload to complete, streaming sync will begin downloading synced blocks to a second device before all of the blocks have finished uploading from the first device. This is automatically employed when separate computers are linked to the same Dropbox account or when different Dropbox accounts share a folder.

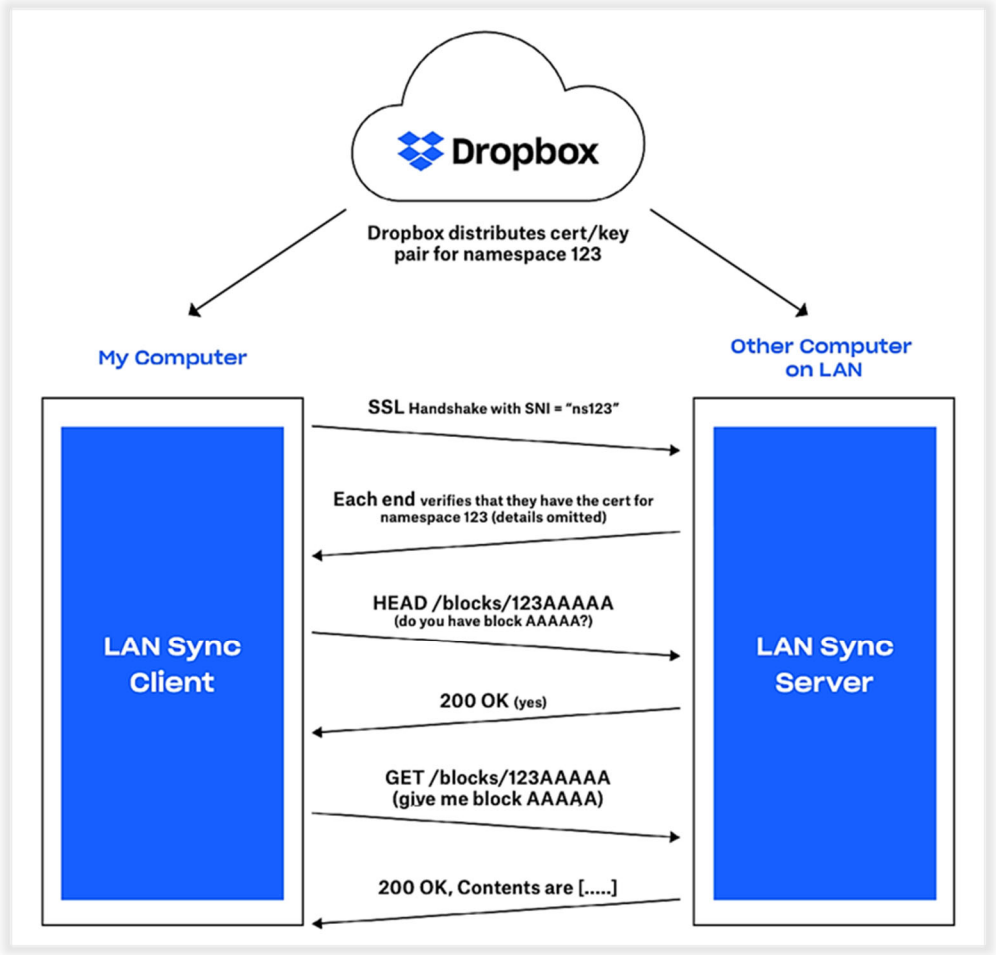
Smart Sync

This feature can free up storage space on a user's computer by syncing only the files they want to their hard drives. Smart Sync frees up computer space by moving files and folders off the local hard drive while keeping everything in the cloud in the user's dropbox.com account. Smart Sync also moves files and folders that haven't been accessed in a while off the user's hard drive automatically to free up additional storage space.

LAN sync

When enabled, this feature downloads new and updated files from other computers on the same Local Area Network (LAN), saving time and bandwidth compared to downloading the files from Dropbox servers.



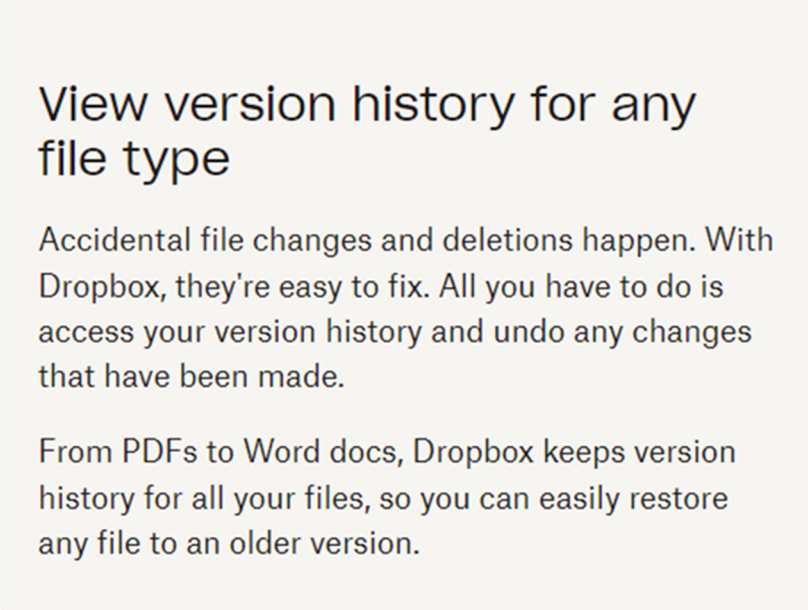


See https://assets.dropbox.com/www/en-us/business/solutions/solutions/dfb_security_whitepaper.pdf.

84. Dropbox performs the process of *intercepting the request by a software client on the first device.* Dropbox intercepts the request by a client. The Dropbox software client scans and inventories the data available on each user device. Dropbox collects and stores the inventories.

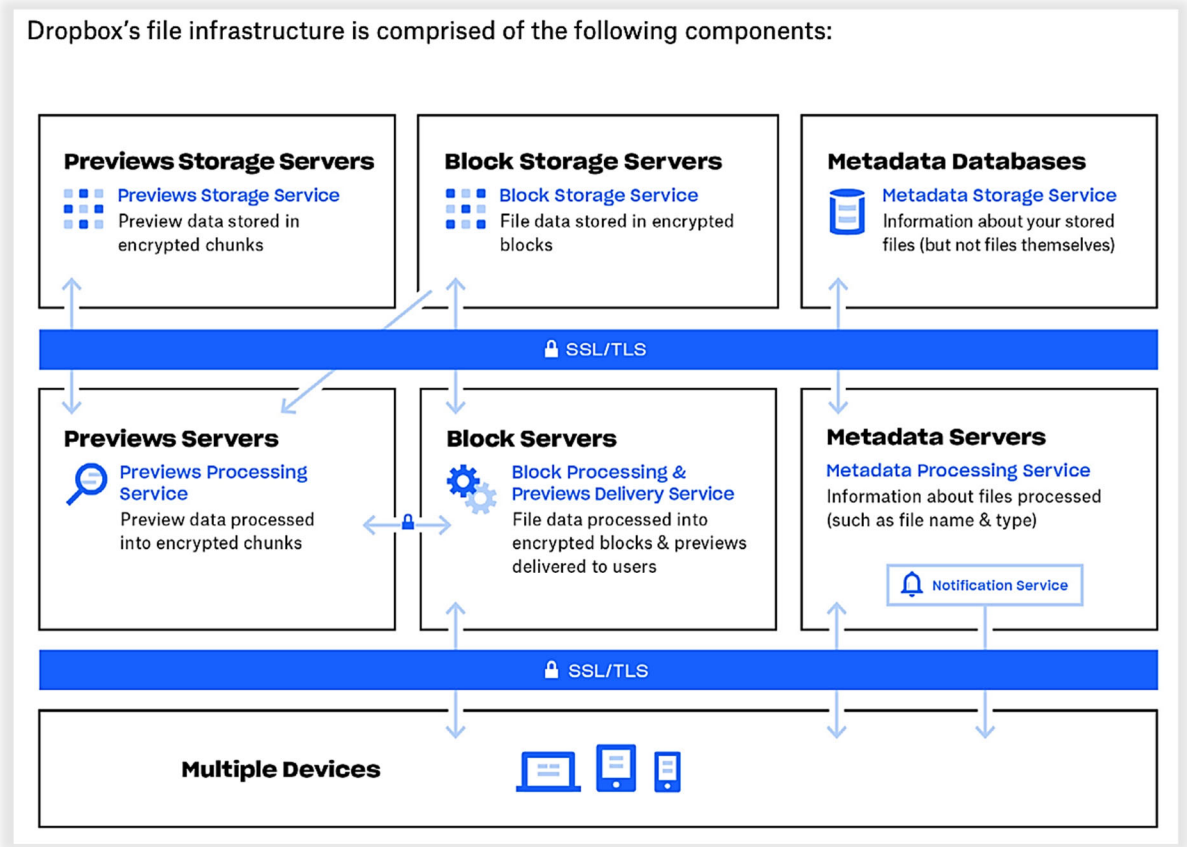
> **Sync files across devices and platforms**
>
> It's easy to make your files accessible on your daily commute to work or on vacation. Save a file to the Dropbox folder on your computer, and it will synchronize automatically to your mobile device. Cloud file sync is available on multiple devices and platforms, from Windows and Mac to mobile devices like iPhone, iPad and Android via the Dropbox mobile app.
>
> Newly saved or updated files are automatically synced everywhere, so you don't have to spend time emailing the latest versions to collaborators. Look for the green checkmark next to your files to be reassured that your content is completely synced.

See https://www.dropbox.com/features/sync. (last visited 1/8/2024)



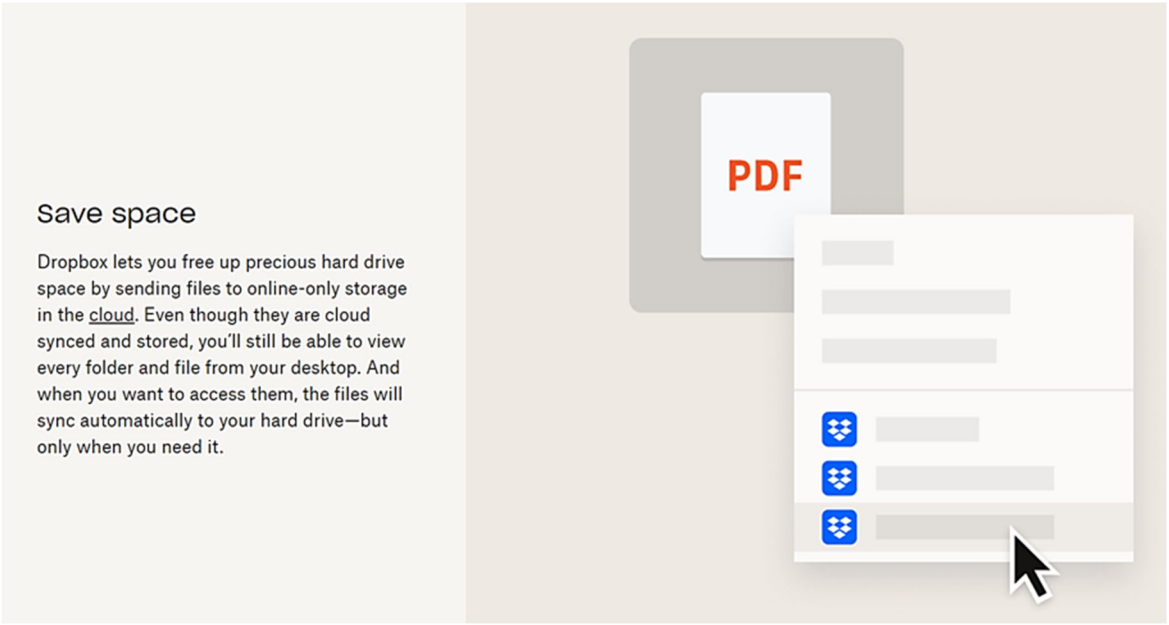
See https://www.dropbox.com/features/cloud-storage/file-recovery-and-history. (last visited 1/8/2024)

85. Dropbox performs the process of *determining by the software client if the file is physically located on the first device or if the file is a virtual file of a corresponding file physically stored on a second device by* reviewing *file metadata, wherein a visual representation of the singular file system on the first device is identical to a visual representation of the singular file system on the second device.* Dropbox Smart Sync determines whether the file is physically located on the client device or is a virtual file of a corresponding file physically stored on the second device by reviewing the file metadata.



See https://assets.dropbox.com/www/en-us/business/solutions/solutions/dfb_security_whitepaper.pdf.

86. Dropbox performs the process *if the file is the virtual file of the corresponding file physically located on the second device, requesting by the software client on the first device that a peer-to-peer connection be brokered by a server-based web service between the first device and the second device.* For example, Dropbox Smart Sync will automatically sync a virtual file to a device when needed.



See https://www.dropbox.com/features/sync. (last visited 1/8/2024).

87. As another example, Dropbox supports LAN Sync, which will transfer the file peer-to-peer, but if LAN Sync is off (user option), or unavailable, and as an alternative, Dropbox can transfer the file from the Dropbox server instead.

File sync

Dropbox offers industry-recognized, best-in-class file sync. Our sync mechanisms ensure fast, responsive file transfers and enable anywhere access to data across devices. Dropbox sync is also resilient. In the event of a failed connection to the Dropbox service, a client will gracefully resume operation when a connection is reestablished. Files will only be updated on the local client if they have synchronized completely and successfully validated with the Dropbox service. Load balancing across multiple servers ensures redundancy and a consistent synchronization experience for the end user.

Delta sync

Using this sync method, only modified portions of files are downloaded/uploaded. Dropbox stores each uploaded file in discrete, encrypted blocks and only updates the blocks that have changed.

Streaming sync

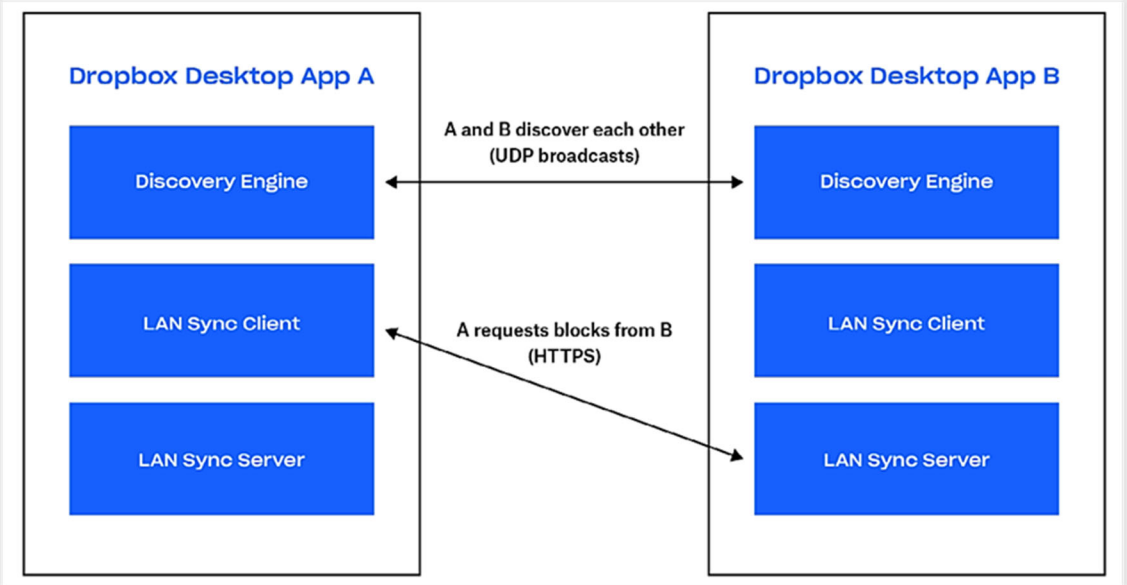
Instead of waiting for a file upload to complete, streaming sync will begin downloading synced blocks to a second device before all of the blocks have finished uploading from the first device. This is automatically employed when separate computers are linked to the same Dropbox account or when different Dropbox accounts share a folder.

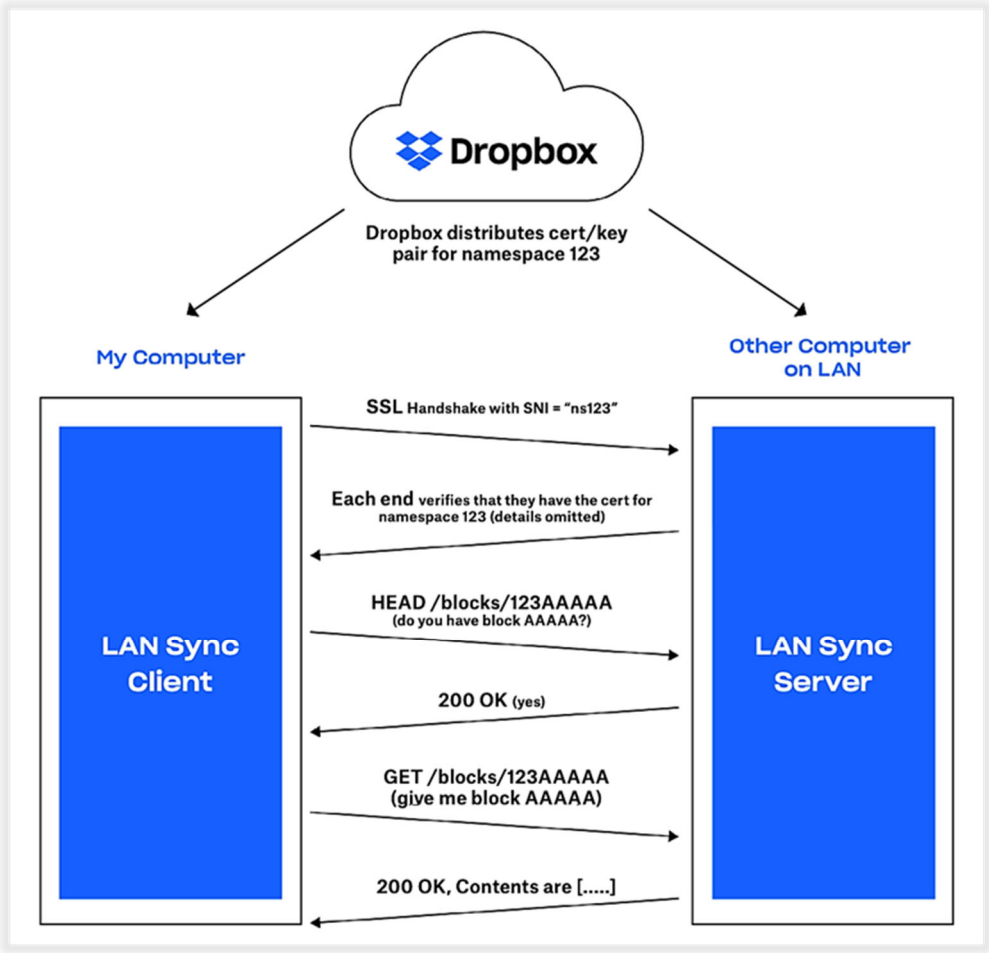
Smart Sync

This feature can free up storage space on a user's computer by syncing only the files they want to their hard drives. Smart Sync frees up computer space by moving files and folders off the local hard drive while keeping everything in the cloud in the user's dropbox.com account. Smart Sync also moves files and folders that haven't been accessed in a while off the user's hard drive automatically to free up additional storage space.

LAN sync

When enabled, this feature downloads new and updated files from other computers on the same Local Area Network (LAN), saving time and bandwidth compared to downloading the files from Dropbox servers.

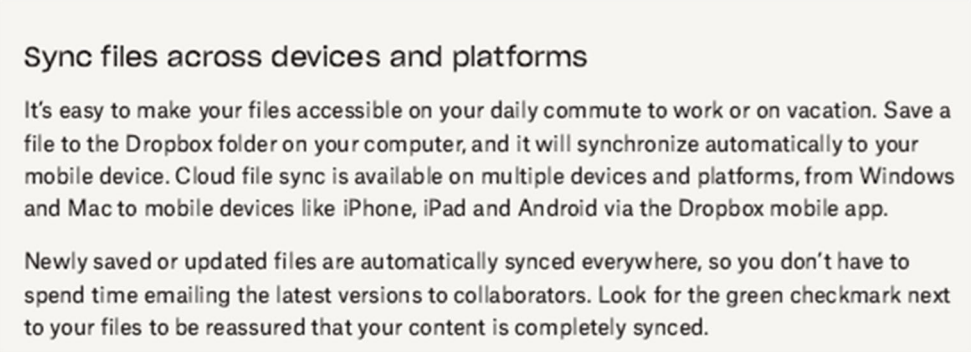




See https://assets.dropbox.com/www/en-us/business/solutions/solutions/dfb_security_whitepaper.pdf.

88. Dropbox performs the process if the *peer-to-*peer *connection is brokered, transferring the corresponding physical file from the second device to the first device. See* paragraphs 41-45 above.

89. Dropbox performs the process of *performing the operation on the transferred corresponding physical file at the first device.* Dropbox Smart Sync will operate on the newly-transferred remote file as if it were local.



See https://www.dropbox.com/features/sync. (last visited 1/8/2024)

90. In the event Dropbox itself does not perform the entire process, the infringement of the '260 Patent is attributable to Dropbox, because Dropbox directs and controls the users of the Accused Products to perform acts that result in infringement of claim 1, and Dropbox receives benefit from its infringement.

91. Dropbox has actively induced infringement of Claims 1-6 of the '260 Patent since at least March 2017, in violation of 35 U.S.C. § 271(b). Dropbox's customers, distributors, vendors, and end-users of the Accused Products directly infringe Claims 1-6 of the '260 Patent, at least by using the Accused Products, as described above. Since at least March 2017, Dropbox knowingly induces infringement of Claims 1-6 of the '260 Patent by its customers, distributors, vendors, and end-users of the Accused Products with specific intent to induce infringement, and/or with willful blindness to the possibility that its acts induce infringement, through activities relating to selling, marketing, advertising, promotion, support, and distribution of the Accused Products in the United States. Dropbox instructs its customers, distributors, vendors and end-users, at least through its marketing, promotional, and instructional materials, to use the infringing Accused Products, as described in detail above. Dropbox creates and distributes promotional and product literature for the Accused Products that is designed to instruct, encourage, enable, and facilitate the user of the Accused Products to use the Accused Products in a manner that directly infringes the Asserted Patents. Non-limiting examples of such are found above in the various screen shots that instruct performance of the infringing use of the technology. Dropbox is aware and/or willfully blind that these affirmative acts infringe and/or would induce infringement of the '260 Patent, of which it had knowledge.

92. Dropbox has willfully infringed the ’260 Patent in that Dropbox had actual notice of the Entangled Media Patents-in-Suit since at least March 2017 when Mr. Caso communicated with Morgan Kyauk, a senior executive on the Dropbox corporate development team. Over the course of several discussions, Mr. Caso disclosed the Entangled Media Patents-in-Suit to Dropbox and explained that Dropbox’s core technology infringed the claims of the Entangled Media Patents-in-Suit. Dropbox knew or should have known that its actions would cause direct and indirect infringement of the ’260 Patent. On information and belief, Dropbox acted with objective recklessness by proceeding despite a high likelihood that its actions constituted infringement of a valid patent, where such action constitutes egregious misconduct.

93. Dropbox will continue to infringe unless this Court enjoins Dropbox and its agents, servants, employees, representatives and all others acting in active concert with it from infringing the ’260 Patent.

94. Entangled Media has been damaged due to Dropbox’s infringing conduct. Dropbox is liable to Entangled Media in an amount that adequately compensates Entangled Media for Dropbox’s infringement, which, by law, cannot be less than a reasonable royalty, together with interest and costs as fixed by this Court under 35 U.S.C. § 284.

PRAYER FOR RELIEF

WHEREFORE, Plaintiff respectfully requests the following relief:

a) A judgment that Defendant has willfully infringed the Entangled Media Patents-in-Suit;

b) An injunction barring Defendant and its officers, directors, agents, servants, employees, affiliates, attorneys, and all others acting in privity or in concert with them, and their parents, subsidiaries, divisions, successors and assigns, from further acts of infringement of the Entangled Media Patents-in-Suit; alternatively, a judicial decree that Defendant pay an ongoing royalty in an amount to be determined for continued infringement after the date of judgment;

c) An award of damages adequate to compensate for Defendant's infringement of the Entangled Media Patents-in-Suit, and in no event less than a reasonable royalty for Defendant's acts of infringement, including all pre-judgment and post-judgment interest at the maximum rate permitted by law;

d) An award of trebled damages under 35 U.S.C. § 284;

e) A declaration that this case is exceptional under 35 U.S.C. § 285;

f) An award of Plaintiff's costs and attorney's fees under 35 U.S.C. § 285 and other applicable law; and

g) Any other remedy to which Plaintiff may be entitled.

DEMAND FOR JURY TRIAL

Pursuant to Fed. R. Civ. P. 38(b), Plaintiff hereby demands trial by jury on all issues raised by the Complaint.

Dated: March 28, 2024

/s/ John E. Lord
John E. Lord (SBN 216111)
SKIERMONT DERBY LLP
633 W. Fifth Street, Suite 5800
Los Angeles, CA 90071
Phone: (213) 788-4500
Fax: (213)788-4545
jlord@skiermontderby.com

Paul J. Skiermont (*pro hac vice*)
(TX Bar No. 24033073)
Jaime K. Olin (SBN 243139)
Ryan A. Hargrave (*pro hac vice*)
(TX Bar No. 24071516)
Alexander E. Gasser (*pro hac vice*)
(WI Bar 1022659)
SKIERMONT DERBY LLP
1601 Elm Street, Suite 5800
Dallas, TX 75201
Phone: (214) 978-6600
Fax: (214) 978-6601
pskiermont@skiermontderby.com
jolin@skiermontderby.com
rhargrave@skiermontderby.com
agasser@skiermontderby.com

Attorneys for Plaintiff
ENTANGLED MEDIA, LLC