UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

MICROSOFT CORPORATION and HP INC., Petitioner,

v.

SYNKLOUD TECHNOLOGIES, LLC, Patent Owner.

Case No. IPR2020-01032 U.S. Patent No. 10,015,254

PETITIONERS' DEMONSTRATIVE EXHIBITS



September 2, 2021

Microsoft Corp. and HP Inc. v. Synkloud Technologies, LLC

IPR2020-01031 IPR2020-01032 U.S. Patent No. 10,015,254

SIDLEY

Grounds

| Claim(s) Challenged | 35 U.S.C § | Reference(s)/Basis |
|---------------------|--------------|-----------------------------------------|
| 1-5, 8, 16-18 | $103(a)^{1}$ | McCown, ² Dutta ³ |
| 6, 7, 19, 20 | 103(a) | McCown, Dutta, Coates ⁴ |

1031 Institution Decision, 6

| Claim(s) Challenged | 35 U.S.C § | Reference(s)/Basis |
|---------------------|------------|-----------------------------------------|
| 9–13, 15 | $103(a)^1$ | McCown, ² Dutta ³ |
| 9–15 | 103(a) | McCown, Dutta, Coates ⁴ |

1032 Institution Decision, 6



Prior Art Overview

Patentability Issues



Prior Art Overview

Patentability Issues

4

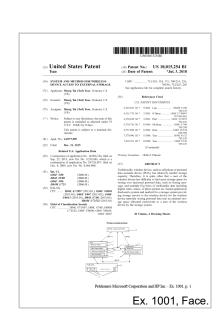
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|------|--------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| (12) | Unite ^{Tsao} | ed States Patent | (10) Patent No.: US 10,015,254 B1 (45) Date of Patent: *Jul. 3, 2018 |
| (54) | | AND METHOD FOR WIRELESS ACCESS TO EXTERNAL STORAGE | USPC |
| (71) | Applicant | Sheng Tai (Ted) Tsan, Fremout, CA (US) | |
| (72) | Inventor. | Sheng Tai (Ted) Teas, Fremont, CA (US) | (56) References Cited U.S. PATENT DOCUMENTS |
| (73) | Assignee | Sheng Toi (Ted) Toos, Fremont, CA (US) | 6.292.833 B1* 9/2001 Liao |
| (*) | Notice: | Subject to any disclaimer, the term of this | 4 325 838 101° 3 2007 Pad (2007 21 345) |
| | | patent is estanded or adjusted under 35 U.S.C. 154(b) by 0 days. | 6,756,710 B1* 6/2004 MicAlear |
| | | This patent is subject to a terminal dis- claimer. | 6.757,898 B1* 6/2004 Data |
| | Aread Mar | 14977,509 | 7,379,990 B2* 52006 Tate |
| | Filet | Dec. 21, 2015 | 7,418,702 R2* 8/2008 Tato GBE 9/326 709/229 |
| (44) | | lated U.S. Application Data | (Continued) |
| (63) | Centinual Sep. 25, continued | ion of application No. 14036(744, filed on 2013, now Pat. No. 9,239,686, which is a ion of application No. 10726,887, filed on 003, now Pat. No. 8,066,580. | Primary Economic Raba I Elecore (57) ABSTRACT |
| (52) | Int. Cl. GMSF 30 HB4D 28 GMSF 30 HB4DF JU U.S. Cl. CPC | 67 (2005.01) 6 (2005.01) 725 (2005.01) | The function of the start of th |
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| | | Petitioners | Microsoft Corporation and HP Inc Ex. 1001, p. 1 |

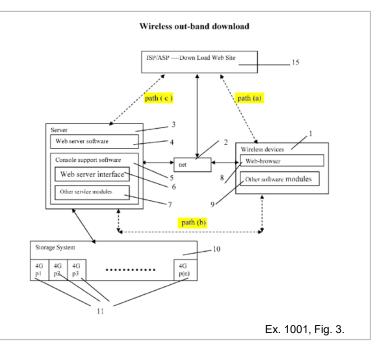
| | Unite ^{Tsao} | d States Patent | (10) Patent No.: US 10,015,254 BI (45) Date of Patent: *Jul. 3, 2018 |
|------|---------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| (54) | | AND METHOD FOR WIRELESS ACCESS TO EXTERNAL STORAGE | USPC |
| (71) | Applicant | Sheng Tai (Ted) Tsao, Fremont, CA (US) | See application file for complete search history. |
| (==) | | | (56) References Cited |
| (72) | Inventor: | Sheng Tai (Ted) Tsao , Fremont, CA (US) | U.S. PATENT DOCUMENTS |
| (73) | Assignee: | Sheng Tai (Ted) Tsao, Fremont, CA | 6,292,833 B1* 9/2001 Liao H04W 12/0 |
| (13) | Assignee. | (US) | 709/21 6,351,776 B1 * 2/2002 O'Brien |
| (*) | Notice: | Subject to any disclaimer, the term of this patent is extended or adjusted under 35 | 6,356,838 B1* 3/2002 Paul G01C 21/345 701/41 |
| | | U.S.C. 154(b) by 0 days. | 6,754,710 B1* 6/2004 McAlear G08C 17/0 |
| | | This patent is subject to a terminal dis- claimer. | 709/20 6,757,898 B1* 6/2004 Ilsen |
| | | | 7,379,990 B2* 5/2008 Tsao H04L 41/1 |
| (21) | Appl. No. | : 14/977,509 | 709/22 7,418,702 B2* 8/2008 Tsao G06F 9/52 |
| (22) | Filed: | Dec. 21, 2015 | (Continued) 709/22 |
| | Do | lated U.S. Application Data | (Continued) |
| | | | Primary Examiner — Reba I Elmore |
| (63) | Sep. 25, 2013, now Pat. No. 9,239,686, which is a | | r mury Examiner — Reca I Elliore |
| | | nuation of application No. 10/726,897, filed on 4, 2003, now Pat. No. 8,606,880. | (57) ABSTRACT |
| | | | The distance in the second sec |
| | | | Ex. 1001, Face |

Petitioner's Demonstrative - Not Evidence

*In these demonstratives, citations are to the record in IPR2020-01031, unless indicated otherwise.

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1. A wireless device accessing a remote storage space, the wireless device comprising:

at least one cache storage for caching data received from the Internet, and

one computer-readable storage device comprising program instructions which, when executed by the wireless device, configure the wireless device accessing the remote storage space, wherein the program instructions comprise:

program instructions for the wireless device establishing a communication link for accessing the remote storage space served by a first server;

program instructions for the wireless device displaying the remote storage space upon receiving information of the remote storage space from the first server; and

program instructions for the wireless device coupling with the first server to carry out a requested operation for accessing the remote storage space in response to a user, through the remote storage space displayed on the wireless device, performing the operation,

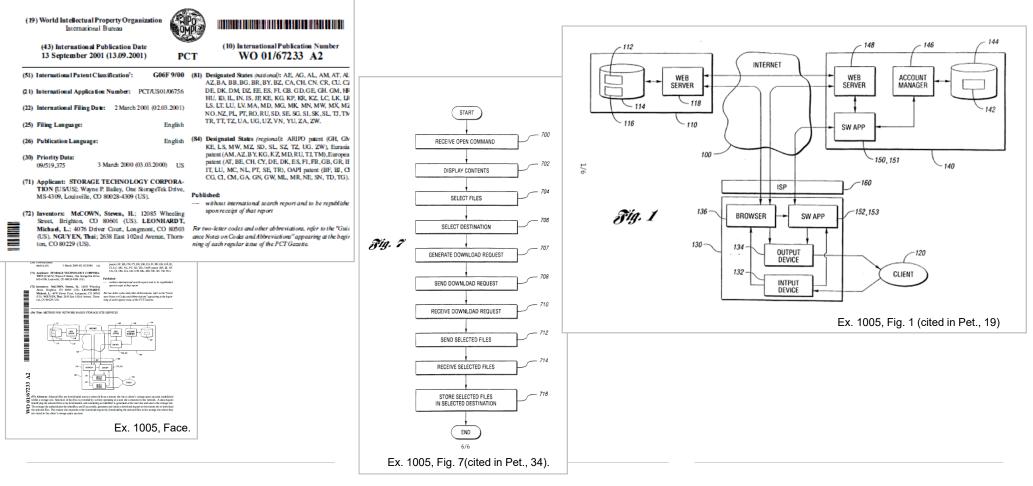
wherein the operation being carried out for accessing the remote storage space comprises from the wireless device storing data therein or retrieving data therefrom, the storing data comprising to download a file from a second server across a network into the remote storage space through utilizing information for the file cached in the cache storage in the wireless device.

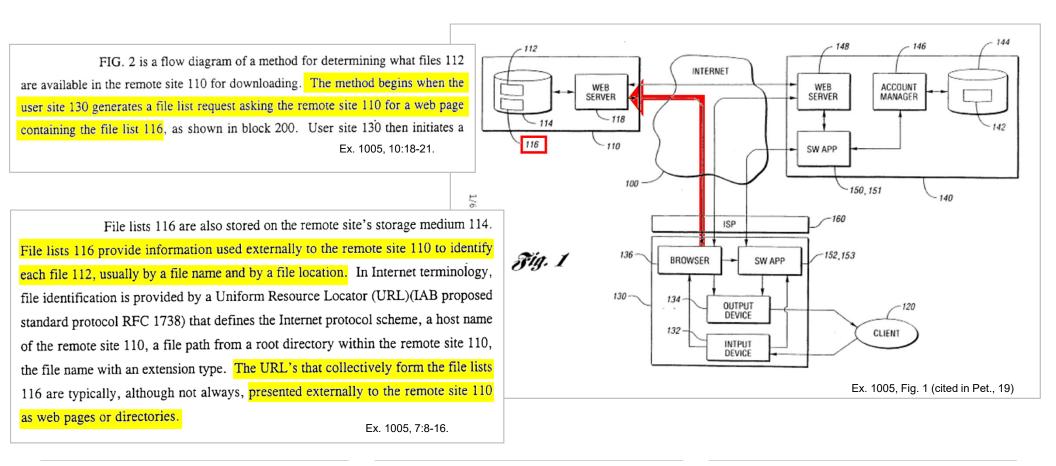
Ex. 1001, Claim 1.

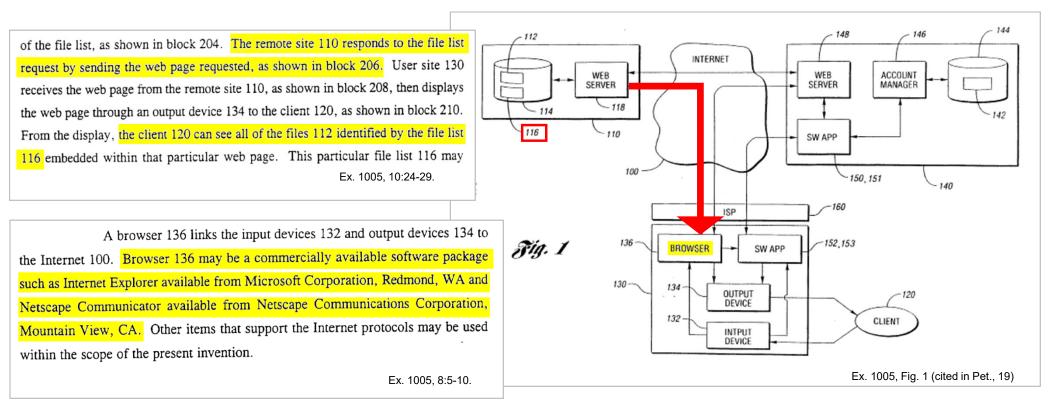


Prior Art Overview

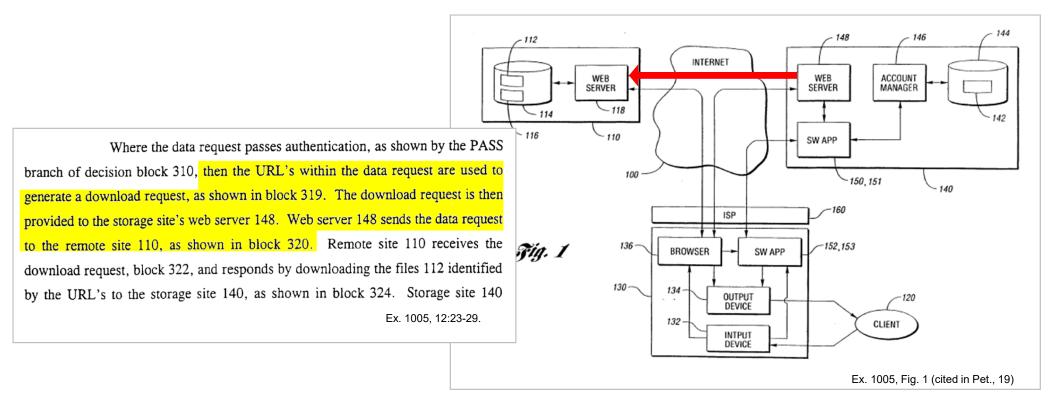
Patentability Issues



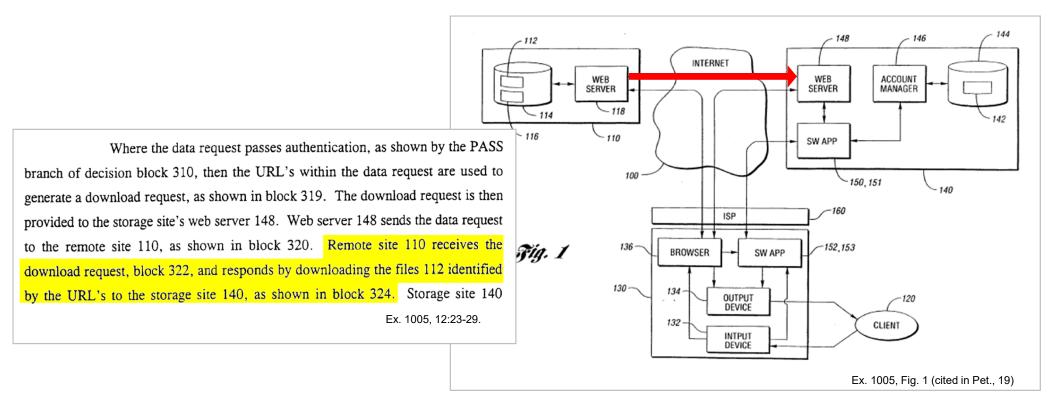




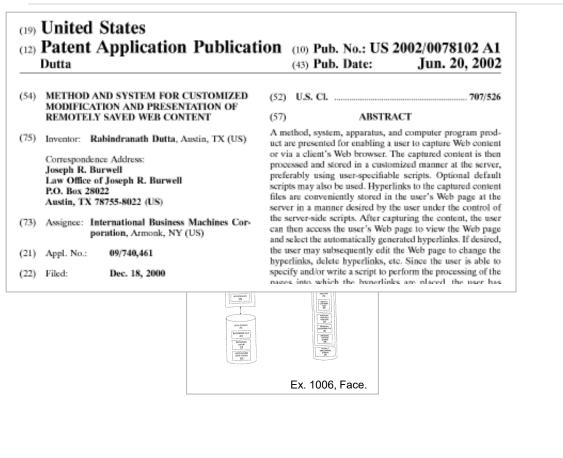
144 148 146 112 INTERNET WEB SERVER ACCOUNT MANAGER WEB SERVER 118 114 116 110 The client 120 now selects files 112 for downloading. Referring to SW APP FIG. 3, selection may be accomplished using an input device 132, such as a mouse, 100 150, 151 to graphically choose one or more files from the displayed web page, as shown in 140 block 300. Additionally, the client 120 may enter the URL's of selected files ISP * * 136 152,153 Rig. 1 BROWSER SW APP The user site software application 152 uses the URL's to generate a data request, as shown in block 305. The data request is then sent across the Internet 130-134 OUTPUT 120 100 to the storage site software application 150, as shown in block 306. Each data DEVICE 132 CLIENT request contains the URL's of the selected files 112. An identifier may be included INTPUT DEVICE Ex. 1005. 11:4-23. Ex. 1005, Fig. 1 (cited in Pet., 19)

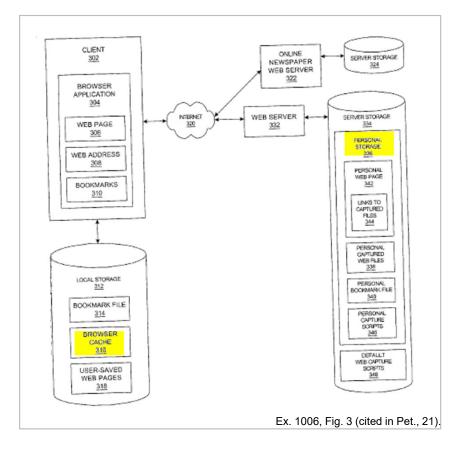


Ex. 1005, Fig. 7 (cited in Pet., 14, 38).



U.S. Patent Application Pub. No. 2002/0078102 A1 to Dutta ("Dutta")





The Obvious Combination of McCown and Dutta

McCown does not explicitly disclose that the URLs identifying files available for download from the remote site ("information") are "cached in [the/a] cache storage in the wireless device," but it would have been obvious to include that functionality in the system of McCown in view of Dutta. As demonstrated above, it would have been obvious to include a browser cache in the system of McCown to implement a "*cache storage*" as claimed, based on McCown alone, or McCown in view of Dutta. See §VI.A.1.b, above; EX1003, ¶182. It would have been further obvious to use that "*cache storage*" to store, within the user site, the URLs identifying files available for download from the remote site. As demonstrated above, a "*cache storage*" is storage that is more Pet., 40-41.

The Obvious Combination of McCown and Dutta

| (12) INTERNATIONAL APPLICATION PUBLISHED U | NEER THE PATENT COOPERATION TREATS (PCT) |
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| (19) World Intellectual Property Organization International Datum | |
| (43) International Publication Date 13 September 2001 (13.09.2001) PC | (10) International Publication Number |
| C1 International Application Number: PCT/CS10102554 C32 International Filing Date: 2 March 2008 (22012) C49 Filing Language: English C40 Filing Language: English C40 Filing Language: English C41 March 2004 (25012) C41 Filing Language: English C41 Filing Language: C41 C41 Filing Language: C41 </th <td>Bit Register Baters starters() Li, S. M. S. B. S. S.</td> | Bit Register Baters starters() Li, S. M. S. B. S. |
| (2) Investore MaCORN, Storas, H. (2010 Flucing Struct, J. Lylanc, O. Storas, H. (2010 Flucing Struct, J. Lylanc, O. Storas, C.S., LUDNERD T, G.S. (2012 NR) Hask 100x4 Array, There ins, CO 80229 (20). | Be hus dette vodes and other abbreviations, refer to the "Oaid- arez Nora on Codes and Etherstations" argumening at the bagin- ning of ande regular kanse of the PCT Gaussia |
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| TO STORY ADDRESS STATUS OF THE | |
| | EX. 1005, Face. |
| Million AN WITHIN (FOR CISTON/L/D) BARENTS VOID 98 (20 CMPS) (19) France: Relational Plan, Annie, FC (20) Frank R. Relational Plan, Annie, FC (20) Frank R. Relational Plan, Annie, FC (20) Anni, R. 1995 Senz, Sci Annie, R. 1995 Senz, Sci Annie Sci Annie | (c) U.S.C. <u>MULTICUT MUST</u> (c) <u>MULTICUT MULTICUT</u> (c) <u>MULTICUT MULTICUT</u> (c) <u>MULTICUT MULTICUT</u> (c) <u>MULTICUT</u> (c) <u>MU</u> |
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- Reasons to Combine
 - -Analogous art. Pet. 22.
 - -Arrangement of old elements; predictable results. Pet. 22-23.
 - -<u>Dutta</u>'s techniques were well known in the prior art. Pet., 23.
 - <u>Dutta</u>'s caching technique would "provide the user with a faster and more convenient storage for the user site program application data." Pet., 23-24
 - <u>Dutta</u>'s allocation technique would "would allow the user site application to access the user site's data more quickly so that it can be transmitted, e.g., to the storage site more quickly without having to make another request to the web server." Pet., 24.

U.S. Patent No. 7,266,555 B1 to Coates et al. ("Coates")

If the operational code in a directory request is for a "move folder" operation, then a database operation is performed to revise the entries in the file and folder tables to reflect the new location of the folder. The "move folder" operation includes, as an argument, the new destination for the folder. Using the example of FIG. **12**, if the "move

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| | ed States Patent | file t |
| Coates | | and |
| ACCESS | IDS AND APPARATUS FOR SING REMOTE STORAGE GII USE OF A LOCAL DEVICE | and |
| (75) Inventors | Joshua L, Coates, Orinda, CA (US). Patrick E, Bozeman, Son Francisco, CA (US) | new |
| (73) Assignce | : Intel Corporation, Santa Class, CA (US) | |
| (*) Notice: | Subject to my disclaimer, the term of patent is extended or adjusted under U.S.C. 154(b) by 0 days. | requ |
| (21) Appl. No (22) Filed: | .: 09/733,314 Dec. 8, 2000 | " |
| | clated U.S. Application Data | mo |
| (60) Provision | al application No. 60/186,603, filed on 8 provisional application No. 60/186,774, 1 | |
| on Mar. 3 | 3, 2000. | folde |
| (51) Int. Cl. GW6F 17 (52) U.S. CL | 239 (2006.01) | 10100 |
| (58) Field of | Classification Search | ID C |
| See appli (56) | ication file for complete search history. References Cited | ПΟП |
| | U.S. PATENT DOCUMENTS | |
| 5,497,422 / 5,586,984 / 5,590,986 / 5,590,155 / 5,798,832 / 5,797,920 / 5,794,972 / | A 4/2996 Miller A 8/2996 DoLac A 11/2997 Iskyn et al. A * 1/2998 Iskyn et al. A 5/2998 Minus et al. | "166 |
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| | Net and the second seco | With the second |
| | | Ex. 10 |
| | | |

If the directory operation is a "move file" operation, then a database operation is performed to revise an entry in the file table to reflect the new location of the file (blocks 1370 and 1375, FIG. 13A). The "move file" operation includes a new destination for the file as an argument in the directory request. For the example database tables in FIG. 12, if the "move file" operation specified moving file "52.MD5" from folder 100 to folder 166, then the folder ID and folder parent ID fields for the first entry of file table 1220 are revised to "166" and "251", respectively.

FIG. 13B is a continuation of the flow diagram of FIG. 13A illustrating additional file system operations in the VFS. If the operational code is a "delete folder" operation, then the corresponding folder entry is deleted from the folder table (blocks 1372 and 1374, FIG. 13B). If the operational code designates a "delete file" operation, then the file entry, identified in the operation, is deleted from its file table (blocks 1376 and 1378, FIG. 13B). For a "create file" operation, the VFS adds an entry for a new file in the file table (blocks 1386 and 1388, FIG. 13B). If the operational code specifies an "update folder" operation, then the client metadata in the corresponding folder table for the folder entry is updated (blocks 1386 and 1388, FIG. 13B). For an "update file" operation, the VFS updates client metadata in the table for the corresponding file entry (blocks 1392 and 1394, FIG. 13B). After executing the appropriate database operation, the arguments for the operation are returned to the requester (blocks 1396, FIG. 13B).

Ex. 1007, columns 15-16 (cited in Pet., 70).

. 1007, Face.

U.S. Patent No. 7,266,555 B1 to Coates et al. ("Coates")

| (12) United States Patent Coates et al. | "move fo formed to reflect the operation | r. 13 A illustrating additional file system operations in the VFS. If the operational code is a "delete folder" operation, then the corresponding folder entry is deleted from the folder re revised to |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| (54) METHODS AND APPARATUS FOR ACCESSING REMOTE STORAGE THROUGH USE OF A LOCAL DEVICE | 5,796,952 A 8/1998 Davis et al. 5,805,699 A 9/1998 Akiyama et al. 5,870,537 A 2/1999 Kaze et al. 5,923,846 A 7/1990 Gaze et al. | table (blocks 1372 and 1374, FIG. 13B). If the operational code designates a "delete file" operation, then the file entry, |
| (75) Inventors: Joshua L. Coates, Orinda, CA (US); Patrick E. Bozeman, San Francisco, CA (US) | 5,933,834 A 8/1999 Aichelen 5,937,406 A * 8/1999 Balabine et al | identified in the operation, is deleted from its file table |
| (73) Assignce: Intel Corporation, Santa Clara, CA (US) | (Continued) FOREIGN PATENT DOCUMENTS | (blocks 1376 and 1378 , FIG. 13 B). For a "create file" operation, the VFS adds an entry for a new file in the file |
| (*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days. | EP 0646858 A1 8/1994 (Continued) OTHER PUBLICATIONS | table (blocks 1386 and 1388, FIG. 13B). If the operational |
| (21) Appl. No.: 09/733,314 | MOGUL, RFC0917: Internet Subnets, 1984, ACM, pp. 1-17. | code specifies an "update folder" operation, then the client |
| (22) Filed: Dec. 8, 2000 | (Continued) | metadata in the corresponding folder table for the folder |
| (5) UK-CL | | entry is updated (blocks 1386 and 1388, FIG. 13B). For an |
| See application for for complex stanch known (8) Bit for complex stanch known (9) Bit foreverse Cheal (15) A stance of the st | | "update file" operation, the VFS updates client metadata in |
| Control A 1999 Mare information in the DOSM coupling the second in the OVER 100 N 1999 Mare at information of the overall of the second in the protect of the overall of the ov | | the table for the corresponding file entry (blocks 1392 and |
| - | | 1394, FIG. 13B). After executing the appropriate database |
| | | operation, the arguments for the operation are returned to the |
| | | requester (blocks 1396, FIG. 13B). |
| Ex. 1007, Face. | | Ex. 1007, columns 15-16 (cited in Pet., 70). |

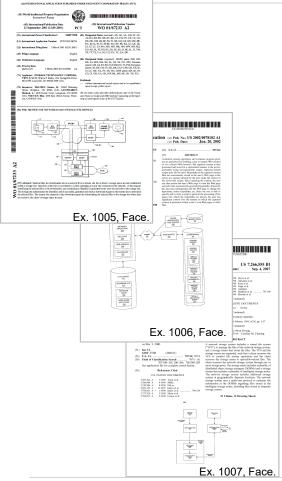
The Obvious Combination of McCown, Dutta, and Coates

It would have been obvious to combine the remote file manipulation techniques of <u>Coates</u> with the combined system of <u>McCown</u> and <u>Dutta</u>. EX1003,¶249.

In such a combination, the remote file manipulation techniques of <u>Coates</u> would be made available to the client of <u>McCown</u> by including program code to implement those manipulation techniques in the user site of <u>McCown</u>. More specifically, in this combination all of the remote file manipulation techniques of <u>Coates</u> would be available to the client of <u>McCown</u>, so that the user could manipulate folders and files in that user's exclusive storage account at the storage site, per the functionality of <u>Coates</u>. EX1003,¶250.

Pet., 66-67.

The Obvious Combination of McCown, Dutta, and Coates



- Reasons to Combine
 - -Analogous art. Pet., 67.
 - Arrangement of old elements; predictable results. Pet., 68.
 - <u>Coates</u>' file and folder manipulation techniques provide increased usability to <u>McCown</u>'s virtual storage system. Pet., 69.



Prior Art Overview

Patentability Issues

Claim Construction – utilizing download information

| Petitioners' Proposed Construction | Patent Owner's Proposed Construction | |
|-----------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| "using information in the cache storage of the wireless device to stored download a file from a remote server." | "This claim limitation requires information needed to download a file from a remote server to be (i) stored in a cache storage of a wireless device and (ii) utilized to download the file across a network into an assigned storage space for the user of the wireless device" | |

Reply, 3-5 (quoting Inst. Dec., 11); POR, 10.

Institution Decision (at 11)

storage in the wireless device" at this time. Prelim. Resp. 10. At this juncture of the proceeding and based on the current record, we adopt Petitioner's construction of "utilizing information for the file cached in the cache storage in the wireless device" to mean "using information stored in the cache storage of the wireless device to download a file from a remote server" to clarify that it is the download information that is stored in cache storage, not the file itself.

Claim Construction – utilizing download information

| Petitioners' Proposed Construction | | Pate | Patent Owner's Proposed Construction | | |
|------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------|------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|
| e e | reless device to download a file from a | | claim limitation requires information ed to download a file from a remote server (i) stored in a cache storage of a wireless | | |
| Petitioner's Argument The main difference between the Board's interpretation and | l Patent Owner's | devic acros spac | Patent Owner Argument | | |
| is that Patent Owner changes the claim phrase "download informat" "information needed to download a file from a remote server." | | | claim construction (Reply, 4) is meant to detract from the important point that the claimed "download information" is required to download a file from a remote server into | | |
| are not the same thing, as nothing in the words "download inform claim to information "needed" to perform a download (as opposed | | | the assigned storage space. Indeed, the "download information" is required or needed because it identifies the file that is to be downloaded from the remote server to the | | |
| simply " <i>utiliz[ed]</i> " to perform such a download), and "information download a file" could include all kinds of information never hint | | | assigned storage space. The Specification explicitly states that the download information in the wireless device's cache is, in fact, needed and used to download the file: | | |
| patent, <i>e.g.</i> , checksum information, decryption codes, account nur Owner does not attempt to justify switching in its "needed to dow | | | The other software modules (9) of the wireless device (1) send the obtained downloading information to other service modules (7) of the storage server | | |
| or explain why its interpretation should be used instead of the Boa interpretation should be rejected. ² | <mark>ırd`s</mark> . Its Reply, 4. | | the other service module (7) of the storage server (3) sends a web download request to the web-site (15) based on download information obtained. and receives the downloading data streams from the web server of the web-site (15). | | |
| | | | EX1001, 5:16-27. Sur-Reply, 3. | | |

URLs Come From The Cache, Not The Display

Patent Owner Argument

quoting Pet. 19–20. But as explained by Mr. Jawadi, "the Decision appears to overlook the fact that McCown teaches obtaining the URL(s) (download information) from the wireless device <u>web page display</u>, which is s different from and opposite to obtaining the download informatior wireless device <u>cache storage</u>, as recited in the limitations of the in claims of the '254 Patent." EX2003, ¶ 34. Moreover, "Dutta discle POR, 16

Petitioner's Argument

that functionality in the system of McCown in view of Dutta. As demonstrated

above, it would have been obvious to include a browser cache in the system of

McCown to implement a "cache storage" as claimed, based on McCown alone, or

McCown in view of Dutta. See §VI.A.1.b, above; EX1003,¶182.

It would have been further obvious to use that "cache storage" to store,

within the user site, the URLs identifying files available for download from the

remote site. As demonstrated above, a "cache storage" is storage that is more

Reasons To Combine Need Not Be Found In Combo References

Patent Owner Argument

claims of the '254 Patent." EX2003, ¶ 34. Moreover, "Dutta discloses a generic browser cache. Dutta does not disclose or imply download information, does not disclose or imply any purpose for the Dutta browser cache, and does not disclose or imply storing download information in the Dutta browser cache." *Id.* at ¶ 37. POR, 16

Petitioner's Argument

This argument also ignores the analysis in the petition. As the petition demonstrated, it was known that browser caches, such as that of Dutta, were used to store web pages for faster retrieval. See Pet., 42-43, citing EX1010, [[0002]] ("Caching is a process that web browsers typically use that provides for faster retrieval of web page content"); EX1011, 1:66-2:1 ("it is common practice for contemporary Web browsers to cache pages accessed by the user"); see also EX1006, ¶[0029]. Thus, a Skilled Artisan would have understood that the purpose of Dutta's browser cache was to cache web pages, such as the web page of URLs disclosed in McCown. The petition was not required to show that Dutta itself stated as much or provided a reason to use the cache in the system of McCown for that purpose, as ample evidence of those facts from other sources was identified in the petition. See Pet., 19-24, 40-44. Reply, 6.

McCown Users Can Select One or More URLs

Patent Owner Argument

Rather, "McCown retrieves the download information all at once and sends

it to the storage server to use for downloading, which negates the nee purported subsequent retrieval of the download information at the wi In other words, there is no need or reason to store the download infor wireless device (whether in cache or elsewhere), since there is no sub or reason to retrieve the download information from cache (or elsewh POR, 26-27

Petitioner's Argument

The assertion that "McCown retrieves the download information all at once and sends <u>it</u> to the storage server to use for downloading," is <u>misleading</u>, <u>McCown</u> discloses retrieving the download information (a web page of URLs) into the user site and then, after the user selects at least some of the URLs listed on the

page, sending *the selected URLs* to the storage server to initiate download of the

In the preferred embodiment, the client 120 selects one file 112 at a time by moving a cursor over the desired file 112 using a mouse, as shown in block 300. The client 120 then presses a right button on the mouse causing a pop-up window to appear on the display adjacent to the cursor. From the pop-up window, the client 120 selects a command titled "Save to Soft-Drive" with a left button on the mouse, as shown in block 304. User site software application 152 is operational to accept the URL of the selected file 112 from the browser 136 through the operating system. EX1005, 11:12-20 (cited in Reply, 13).

ose URLs. EX1005, 11:17-20. While a user could certainly Reply, 13.

Obvious To Cache URLs for Subsequent Retrieval

|--|

of McCown itself. As explained by Mr. Jawadi, the universal resource locators

(URLs) in McCown "are used only once by the user (negating the need to

store the URLs in cache)," and thus, there would not have been any

motivation to store the URLs "at the wireless device (whether in ca otherwise)." *Id.* at ¶ 42. As further explained by Mr. Jawadi, "the f

POR, 16-17

Petitioner's Argument

Patent Owner's conclusion does not flow from its premise. Just because <u>McCown</u> may disclose the user accessing the URL's only once does not mean that it would have been non-obvious to access them more than once. Nor is it required that <u>McCown</u> *itself* provide a reason why a user might access the list of URLs a second time. Any need or problem in the field and addressed by the patent can provide such a reason. *KSR*, 127 S.Ct. at 1742. Indeed, an obviousness analysis Reply, 7-8.

Obvious To Cache URLs for Subsequent Retrieval

Petitioner's Argument

11:12-23. A Skilled Artisan would have been motivated to store those URLs in storage that is more readily accessible by the user or user application, or "*cache storage*," of the combined system of <u>McCown</u> and <u>Dutta</u>, so that those <u>URLs could</u> be quickly retrieved and used to generate the data request of <u>McCown</u>. EX1003,¶183.

Indeed, for the same reasons, it would have been obvious to maintain the URLs in such a "*cache storage*," at least for some period of time, in case the user re-opened the webpage listing the URLs for purposes of making another selection. Pet., 41.

Here, there is nothing in <u>McCown</u> that would preclude a user from accessing the web page of URLs more than once, and the prior art cited in the Petition discloses that browser caches are used precisely because a user might access the same web page more than once. EX1010,¶[0002]-[0003]; EX1011, 1:66-2:9; EX1030, 72; EX1008, 114. Further, it is simply common sense that such multiple accesses could happen in a system such as <u>McCown</u>'s. People change their minds, or forget what they meant to do. A user, after downloading one or more files using <u>McCown</u>'s system, may later choose to download another, or later remember that she meant to download others. That <u>McCown</u> does not explicitly disclose a user doing so is beside the point. A Skilled Artisan would have understood that some users would seek to access that web page of URLs more than once, and therefore be motivated to cache it and thereby improve the efficiency of the system.

EX1003,¶184. That is the very purpose of a cache. EX1010, ¶[0002].

Reply, 8.

Petition Identified Combo With Particularity

Petitioner's Argument Patent Owner Argument As demonstrated there, McCown discloses the "download information" (a Here, Petitioners have done exactly that which the Board has found to be webpage of URLs) received by the user site, Pet., 39-40, citing EX1005, 10:18-27, insufficient to meet their burden: they have presented mere attorney argument which would necessarily mean it is stored at the user site in some manner. and conclusory statements from their expert to support their position that the McCown further states that "the functionality of the user site software application limitations that are wholly absent from the prior art would have been obvious. may be implemented as part of a browser," EX1005, 9:22-23; Pet., 19. Dutta POR, 18 discloses a browser cache, Pet., 20, citing EX1006, ¶[0029], which a Skilled Artisan would understand to be a storage device for caching (*i.e.*, storing) web pages, Pet., 41-43, citing EX1010, ¶[0002]; EX1011, 1:66-2:1; EX1003, ¶¶182-Reply, 9.

Institution Decision (at 17)

Fig. 1; Ex. 1010 ¶ 2; Ex. 1011, 1:66–2:1). Moreover, we disagree that Dutta does not teach storing download information in cache storage. Dutta explicitly describes a "browser cache." Ex. 1006 ¶ 29. Patent Owner does

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Patent Owner Argument

As explained by Mr. Jawadi, "a POSITA would have understood that combining McCown and Dutta would have required major architectural changes in McCown and Dutta." EX2003, ¶ 46. "For example, McCown requires software on the client wireless device to emulate a hard disk drive that is actually located on a storage server (e.g., McCown at 9:14-18, 15:27-16:4) and requires the software to communicate with the web browser to support the operations of drag-and-drop and copy-and-paste. However, in the purported combined system of McCown and Dutta, all these functions would need to be modified and adapted." *Id.* at ¶ 47. The POR, 24

Petitioner's Argument

But the expert never explains why merely adding a browser cache to <u>McCown</u> and storing a web page in it would require that functionality to be changed in such a substantial way as to discourage a Skilled Artisan from making the combination. Nor does the expert explain what specific changes would need to be made—such *ipse dixit* expert testimony is entitled to no weight. *See Ericsson*, 890 F.3d 1346; 37 C.F.R. §42.65(a). Reply, 11.

Patent Owner Argument

As explained by Mr. Jawadi, "a POSITA would have understood that combining McCown and Dutta would have required major architectural changes in McCown and Dutta." EX2003, ¶ 46. "For example, McCown requires software on the client wireless device to emulate a hard disk drive that is actually located on a storage server (e.g., McCown at 9:14-18, 15:27-16:4) and requires the software to communicate with the web browser to support the operations of drag-and-drop and copy-and-paste. However, in the purported combined system of McCown and Dutta, all these functions would need to be modified and adapted." *Id.* at ¶ 47. The POR, 24

Petitioner's Argument McCown discloses the use of "[a] browser" such as "Internet Explorer" from Microsoft Corporation and "Netscape Communicator" from Netscape Communications Corporation. EX1005, 8:5-10. As Dr. Houh explains, EX1003,¶127, each of these browsers would have been understood to have included "at least one cache storage for caching data received from the Internet." EX1024, 7:8-10 ("Both Netscape Navigator and Microsoft Internet Explorer have cache memories where HTML, GIFs, MP3, etc. files are cached in a hard disk directory); EX1025, 3:3-8 ("[T]he Netscape Communicator browser application caches web pages on the client. Each cached web page is associated with a URL. Thus, when the client requests a web page, the Netscape Communicator browser attempts to use previously cached web pages before downloading the pages from the web site"). Pet., 18.

| | | Petitioner's Argument | | | |
|----------------------------------------------------------------------------------------------------|------|-----------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|---------------------------------------|--|
| Patent Owner Argument | (12) | United States Patent | (10) Patent No.: US | 7,266,555 B1 | |
| As explained by Mr. Jawadi, "a POSITA would have understood that | | Coates et al. | (45) Date of Patent: | Sep. 4, 2007 | |
| combining McCown and Dutta would have required major architectural changes in | (54) |) METHODS AND APPARATUS FOR ACCESSING REMOTE STORAGE | 5,796,952 A 8/1998 Davis et a 5,805,699 A 9/1998 Akiyama | et al. | |
| McCown and Dutta." EX2003, ¶ 46. "For example, McCown requires software on | (75) | THROUGH USE OF A LOCAL DEVICE Inventors: Joshua L. Coates, Orinda, CA (US); | 5,870,537 A 2/1999 Kern et a 5,923,846 A 7/1999 Gage et a 5,933,834 A 8/1999 Aichelen | d. | |
| the client wireless device to <mark>emulate a hard disk drive</mark> that is actually located on a | г | Patrick E. Bozeman, San Francisco, CA (US) | 5,937,406 A * 8/1999 Balabine 5,978,577 A 11/1999 Rierden e | et al 707/100 et al. | |
| storage server (e.g., McCown at 9:14-18, 15:27-16:4) and requires the software to | (73 | As shown in FIG. 6, the DO | SM also includes a d | ata cache | |
| communicate with the web browser to support the operations of drag-and-drop and | (* | 620. In general, the data cache data) to permit the DOSM to s | · · · · · · | · · · · · · · · · · · · · · · · · · · | |
| copy-and-paste. However, in the purported combined system of McCown and | (21 | recipient in response to a c | | | |
| Dutta, all these functions would need to be modified and adapted." <i>Id.</i> at ¶ 47. The | (22 | download request, in the even | - | | |
| POR, 24 | | object is transferred from the | e e | | |
| | _ | recipient, the object is also s | | | |
| | | Similar to the DOSM file lool | kup table, the data c | ache 620 | |
| | | | EX1007, 10:60-66 (cited | in Reply, 12) | |

Patent Owner Argument

As explained by Mr. Jawadi, "a POSITA would have understood that combining McCown and Dutta would have required major architectural changes in McCown and Dutta." EX2003, ¶ 46. "For example, McCown requires software on the client wireless device to emulate a hard disk drive that is actually located on a storage server (e.g., McCown at 9:14-18, 15:27-16:4) and requires the software to communicate with the web browser to support the operations of drag-and-drop and copy-and-paste. However, in the purported combined system of McCown and Dutta, all these functions would need to be modified and adapted." *Id.* at ¶ 47. The POR, 24

Petitioner's Argument quick access to data). The combination could therefore have been readily made without undue experimentation. 138. The use of a browser cache was well-known in the prior art. EX1010, ¶[0002] ("Caching is a process that web browsers typically use that provides for faster retrieval of web page content"); EX1011, 1:66-2:1 ("it is common practice for contemporary web browsers to cache pages accessed by the user"). A Skilled Artisan could therefore have readily made this combination without undue effort or experimentation. See, e.g., EX1012, 14:30-33 ("a mobile device that is used primarily for messaging may include a relatively large message store and a smaller browser cache, whereas a mobile device that is used primarily for browsing may contain a larger browser cache and smaller message store"). EX1003, ¶¶137-138 (cited in Reply, 12)

No Hindsight or Conclusory Arguments

Petitioner's Argument

TES PATENT AND TRADEMARK OFFICE 02/0078102 A1 Jun. 20, 2002 E PATENT TRIAL AND APPEAL BOARD Patent Owner Argument SOFT CORPORATION and HP INC 0028673 A1 Feb. 6, 2003 192,398 B1 Feb. 20, 2001 with Dutta. Petition, p. 16. But the Petition's motivation to combine is rooted LOUD TECHNOLOGIES LLC Patent No. 10,015,254 in forbidden hindsight analysis that is based on its incorrect assumption 3 196 Dr. Henry Houh Issued: July 3, 2018 Filed: December 21, 201: ATENT 076.500 B: Jul. 11, 200 regarding the level of ordinary skill in the art. The Petitioners failed to provide SYSTEM AND METHOD FOR WIRELESS DEVICE ACCESS T **DECLARATION OF HENRY HOUH** * **REGARDING U.S. PATENT NO. 10,015,254** Petitioners make only conclusory arguments that "it would have been obvious to include a browser cache in the system of McCown to implement a 'cache storage' as claimed, based on McCown alone, or McCown in view of Petitioners Microsoft Corporation and HP Inc. - Ex. 1003. Cover ~116 EX1003, ¶¶132-140 Dutta." Petition, 40-41, 60-61. In particular, Petitioners advance several EX1006 POR. 37-38 EX1010 mobile EX1011 EX1012 EX1013 (Cited in Pet., 20-24.) 34 Petitioner's Demonstrative - Not Evidence

No Secondary Considerations – Patent Owner's Burden

Patent Owner bears the burden "to show both commercial success and that a nexus exists between that success and the merits of the claimed invention." *Transocean Offshore Deepwater v. Maersk Drilling*, 699 F.3d 1340, 1350 (Fed. Cir. 2012). Moreover, "[i]f commercial success is due to an element in the prior art, no nexus exists." *Tokai Corp. v. Easton Enters., Inc.*, 632 F.3d 1358, 1369 (Fed. Cir. 2011).

Reply, 22

No Secondary Considerations – No Presumed Nexus

a. A response to the petition (37 C.F.R. § 42.120). If Patent Owner elects not to file a response, Patent Owner must arrange a conference call with the parties and the Board. Patent Owner is cautioned that any arguments not raised in the response may be deemed waived.

Paper 17, Scheduling Order, 8

⁶ Patent Owner does not attempt to show that the cited devices are "coextensive" with any claim of the 254 Patent. *Fox Factory, Inc. v. SRAM*, LLC, 944 F.3d 1366, 1373 (Fed. Cir. 2019). Nor could it, as those devices include multiple components never mentioned in any claim of the 254 patent, including operating systems, processors, displays, and cameras. EX1037, 1-2; EX1038, 1-5; *see generally*, EX1039; EX1040. Patent Owner is therefore not entitled to a presumption of nexus.

Reply, 22

No Secondary Considerations – No Presumed Nexus

As WBIP correctly argues, there is a presumption of nexus for objective considerations when the patentee shows that the asserted objective evidence is tied to a specific product and that product "is the invention disclosed and claimed in the patent."^[3] *J.T. Eaton & Co. v. Atl. Paste & Glue Co.*, 106 F.3d 1563, 1571 (Fed. Cir. 1997) (quoting *Demaco Corp. v. F. Von Langsdorff Licensing Ltd.*, 851 F.2d 1387, 1392 (Fed. Cir. 1988); *Crocs, Inc. v. Int'l Trade Comm'n,* 598 F.3d 1294, 1310-11 (Fed. Cir. 2010); *Brown & Williamson Tobacco Corp. v. Philip Morris, Inc.*, 229 F.3d 1120, 1130 (Fed. Cir. 2000); *Demaco*,851 F.2d at 1392-93.

As first recognized in *Demaco Corp. v. F. Von Langsdorff Licensing Ltd.*, a patentee is entitled to a rebuttable presumption of nexus between the asserted evidence of secondary considerations and a patent claim if the patentee shows that the asserted evidence is tied to a specific product and that the product "<u>is</u> the invention disclosed and claimed." 851 F.2d at 1392 (emphasis added). That is, presuming nexus is appropriate "when the patentee shows that the asserted objective evidence is tied to a specific product and that product `embodies the claimed features, and is coextensive with them.'" *Polaris Indus., Inc. v. Arctic Cat, Inc.*, 882 F.3d 1056, 1072 (Fed. Cir. 2018) (quoting *Brown & Williamson Tobacco Corp. v. Philip Morris Inc.*, 229 F.3d 1120, 1130 (Fed. Cir. 2000)). Conversely, "[w]hen the thing that is commercially successful is not coextensive with the patented invention—for example, if the patented invention is only a component of a commercially successful machine or process," the patentee is not entitled to a presumption of nexus. *Demaco*, 851 F.2d at 1392.

Fox Factory, Inc. v. SRAM, LLC, 944 F. 3d 1366, 1373 (Fed.Cir. 2019) (cited in Reply, 22).

No Secondary Considerations – WRONG Nexus

Patent Owner Argument

The strong nexus between the claimed invention of the '254 Patent and

wireless devices with Microsoft OneDrive is confirmed by the additional claim

charts below:

POR, 50.

Petitioner's Argument

invention, on the other. POR, 50, 71, 72, 75. But a nexus between a commercial

device and the claim is not relevant to the obviousness analysis. The law required

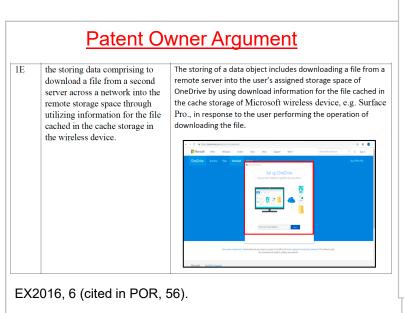
Patent Owner "to show both commercial success and that a nexus exists between

that success and the merits of the claimed invention." Transocean, 699 F.3d at

1350. Patent Owner has not attempted to make that showing.

Reply, 22-23.

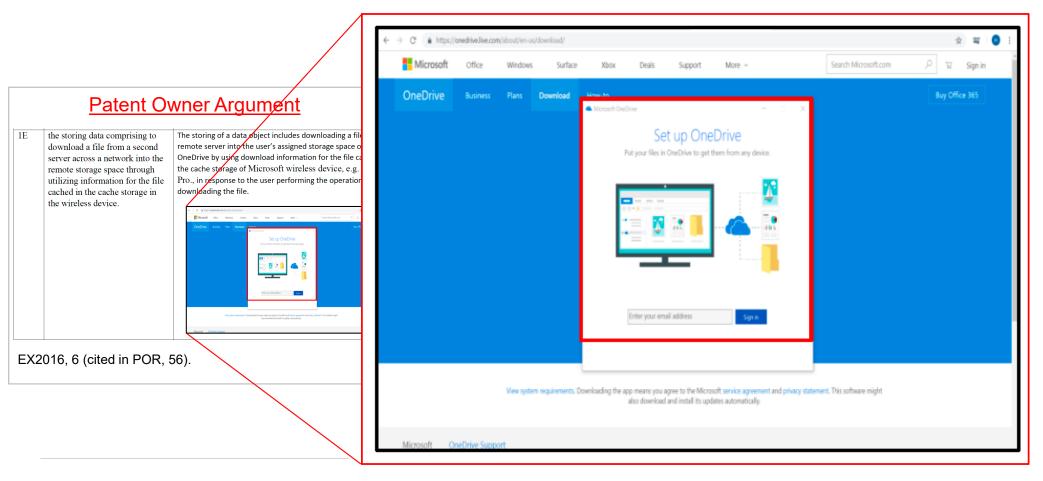
No Secondary Considerations – Cited Devices Do Not Practice Claims



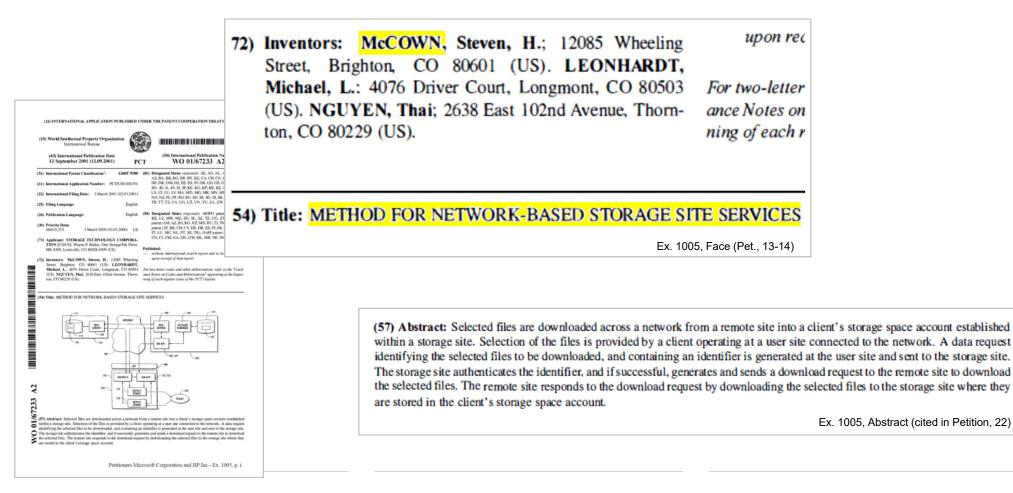
Petitioner's Argument

Nor has Patent Owner provided any evidence that the cited devices actually practice any claimed invention of the 254 Patent. For example, each independent claim requires the "*download information*" be stored in the cache. EX1001, 6:5-14, 7:1-10. The claim charts Patent Owner cites do not say anything about where the supposed download information of those systems is stored. EX2004, 7-25; EX2005, 21-32; EX2006, 18-24; EX2007, 7-20; EX2008, 6-10; EX2016, 6-19; EX2021, 5-6. Nor does Patent Owner submit or analyze any source code for those devices.

No Secondary Considerations – Cited Devices Do Not Practice Claims



No Secondary Considerations – Any Success Attributable to Prior Art Cloud Storage Techniques



No Secondary Considerations – Licensing

| Indeed, the license | covers various patents, and while Patent Owner baldly | | | |
|----------------------------|------------------------------------------------------------------------------|------------------------------------------------------------------------------------|--|--|
| characterizes them as "rel | ated," POR, 76, many bear no relationship to the 254 | | | |
| Patent whatsoever. See E | X2030, Exhibit A. Patent Owner does not even attempt | | | |
| to show that the license w | Patent Owner also seems to assert that the produc | ets of its licensee practice | | |
| Merck & Cie v. Gnosis S. | the claims of the 254 Patent, POR, 75, citing a claim cha | art submitted as EX2029. | | |
| | But that exhibit says nothing about whether those products actually store | | | |
| | "download information" in a cache, so there is no evidence that the licensee | | | |
| | practices the invention of the 254 Patent, and Patent Ow | oner has failed to carry its | | |
| | burden to show the license resulted from the non-prior a | Indeed, Patent Owner appears to misunderstand the use of licensing in the | | |
| | for this reason as well. | obviousness analysis. The relevant secondary consideration of non-obviousness is | | |
| | | licensing showing industry respect for the invention. In re Rouffet, 149 F.3d | | |
| | | 1350, 1355 (Fed. Cir. 1998). The license to a single member of the industry for a | | |
| | | relatively small amount of money does not show industry respect for the invention. | | |
| Reply, 24 | | Stratoflex, Inc. v. Aeroquip Corp., 713 F.2d 1530, 1539 (Fed. Cir. 1983). | | |



CERTIFICATE OF SERVICE

Pursuant to 37 C.F.R. § 42.6(e), I hereby certify that on this 26th day of

August, 2021, I caused to be served a true and correct copy of the foregoing on the

following counsel:

Dr. Gregory J. Gonsalves - <u>gonsalves@capitoliplaw.com</u> Yeasun Yoon - <u>yoon@capitoliplaw.com</u>

Dated: August 26, 2021

Respectfully Submitted,

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