

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

PATENT NO.: 5,579,517
ISSUED: NOVEMBER 26, 1996
FOR: COMMON NAME SPACE FOR
LONG AND SHORT FILENAMES

ATTACHMENT TO FORM PTO-1465,
REQUEST FOR *EX PARTE* REEXAMINATION

SIR:

The Public Patent Foundation (“PUBPAT”), a not-for-profit public service organization that aims to protect the public from the harms caused by wrongly issued patents and unsound patent policy, respectfully requests *ex parte* reexamination under 35 U.S.C. §§ 302 – 307 and 37 C.F.R. § 1.510 of every claim of United States Patent No. 5,579,517 issued November 26, 1996 to Reynolds et al. (“517 patent”) and assigned to Microsoft Corporation (“Microsoft”) because they are all invalid under 35 U.S.C. § 103 and their existence is causing significant public harm.¹

THE ‘517 PATENT IS CAUSING SIGNIFICANT PUBLIC HARM

The ‘517 patent claims methods implemented by computer systems for storing both long and short filenames for a file and then accessing the short file name. These methods are incorporated into Microsoft’s FAT file system, originally created in the mid-1970’s, which is used to interchange media amongst the vast majority of computers and digital devices in use

¹ Appendix A contains a copy of the ‘517 patent.

today.² Unfortunately, Microsoft is using its control over the interchange of digital media to aid its ongoing effort to deter competition from Free and Open Source Software (“Free Software”).³ Specifically, Microsoft does not offer licenses to the ‘517 patent for use in Free Software. As such, the ‘517 patent stands as a potential impediment to the development and use of Free Software because Free Software users are denied the ability to interchange media with machines or devices running Microsoft owned or licensed software.

Since Microsoft is a monopolist in the software industry, this exclusion of Free Software users forces them to either switch from Free Software to Microsoft software or suffer from an inability to interchange media with most other machines or devices. Such forced switching exacerbates the public harm caused by Microsoft’s monopoly and inhibits competition in many computer software and hardware markets from Free Software. In this manner, the ‘517 patent is causing immeasurable injury to the public by serving as a tool to enlarge Microsoft’s monopoly while also preventing competition from Free Software. Although these issues are not grounds to grant this request for reexamination, PUBPAT respectfully requests that they be considered in determining whether or not a substantial new question of patentability exists and, ultimately, whether the ‘517 patent should be revoked in its entirety.

THE SUBSTANTIAL NEW QUESTIONS OF PATENTABILITY

The substantial new questions of patentability raised by this request are (1) whether claims 1 and 4 of the ‘517 patent would have been obvious over U.S. Patent No.

² See *FAT File System Technology and Patent License*, <http://www.microsoft.com/mscorp/ip/tech/fat.asp> (The ... FAT file system was developed by Microsoft in 1976 [and] ... has become the ubiquitous format used for interchange of media between computers, and, since the advent of inexpensive, removable flash memory, also between digital devices).

³ See Peter Judge, *Microsoft Aims to Beat Linux Through Community Spirit*, <http://news.zdnet.co.uk/software/developer/0,39020387,2122720,00.htm> (quoting Microsoft’s Chief Executive, Steve Ballmer, as saying "Linux is a serious competitor"); Omar J. Pahati, *Microsoft Goes McCarthy in War Against Linux*, <http://www.alternet.org/story.html?StoryID=11321> (quoting Ballmer as calling the Free Software development model a “cancer” and Microsoft Operating System Chief, Jim Allchin, as calling Free Software “an intellectual-property destroyer” and a “threat”).

5,307,494 to Yasumatsu et al. (“Yasumatsu”) in light of U.S. Patent No. 5,367,671 to Feigenbaum et al. (“Feigenbaum”) and (2) whether claims 2 and 3 of the ‘517 patent would have been obvious over Yasumatsu in light of U.S. Patent No. 5,083,264 to Platteter et al. (“Platteter”) (Yasumatsu, Feigenbaum, and Platteter are, collectively, “the Cited Prior Art”).⁴ These are substantial new questions of patentability because neither Feigenbaum nor Platteter were of record in the file of the ‘517 patent and they each teach elements of the ‘517 patent more expressly than any of the prior art cited during the prosecution of the ‘517 patent. A detailed explanation of the pertinency and manner of applying the Cited Prior Art to each of claims 1 – 4 of the ‘517 patent is set forth below.

THE CITED PRIOR ART RENDERS THE ‘517 PATENT OBVIOUS

The ‘517 patent application date is April 1, 1993. As such, since Yasumatsu’s application date is August 5, 1988, Feigenbaum’s application date is September 25, 1990, and Platteter’s application date is April 24, 1989, they are each prior art to the ‘517 patent under 35 U.S.C. § 102(e). And, since Platteter’s issue date is January 21, 1992, it is also prior art to the ‘517 patent under 35 U.S.C. § 102(b). Further, since each of the Cited Prior Art are directed towards the art of computer file storing, naming, identifying, and accessing, one of ordinary skill in the art would have been motivated to combine their teachings. In fact, each of the Cited Prior Art references deal explicitly with the art of file naming and identification, to which the ‘517 patent’s claims are specifically directed. Therefore, the combined teachings of the Cited Prior Art form a proper basis for an obviousness determination under 35 U.S.C. § 103.

The chart below sets forth an element-by-element comparison of each claim of the ‘517 patent to the Cited Prior Art. In essence, every element of each claim of the ‘517 patent was expressly taught by Yasumatsu, except one. The only elements of claim 1 and claim 4 not

⁴ Appendix B contains a copy of the Cited Prior Art.

taught by Yasumatsu were expressly taught by Feigenbaum, while the only elements of claims 2 and 3 not taught by Yasumatsu were expressly taught by Platteter. As such, each claim of the ‘517 patent is invalid as obvious over the Cited Prior Art.

<u>‘517 PATENT</u>	<u>CITED PRIOR ART</u>
<p>1. In a computer system having a processor running an operating system and a memory means storing the operating system, a method comprising the computer-implemented steps of:</p>	<p>Yasumatsu: col. 2, lines 52-53 (“a program ... operates on a computer system”); col. 3, line 17-18 (“stored in a memory or the like”). Feigenbaum: col. 17, lines 49-50 (“a computer system containing an operating system and a memory subsystem”).</p>
<p>(a) storing in the memory means a first directory entry for a file wherein the first directory entry holds a short filename for the file,</p>	<p>Yasumatsu: Fig. 2, element 4 (“actual file name”).</p>
<p>said short filename including at most a maximum number of characters that is permissible by the operating system;</p>	<p>Yasumatsu: col. 3, lines 21-23 (“the limit to the length of the characters of the actual name of the file is 14 characters”); col. 6, lines 21-24 (“the limit to the length of the name of each file in the computer system is 14 characters”).</p>
<p>(b) storing in the memory means a second directory entry for a the file wherein the second directory entry holds a long filename for the file and</p>	<p>Yasumatsu: Fig. 2, element 2 (“provisional file name”).</p>
<p>wherein the second directory entry includes an attributes field which may be set to make the second directory entry invisible to the operating system and the step of storing the second directory entry further comprises the step of setting the attributes field so that the second directory entry is invisible to the operating system,</p>	<p>Yasumatsu Feigenbaum taught that setting an attributes field so that an object, be it a file or a directory entry, is hidden to an operating system was well known prior to the application of the ‘517 patent. Feigenbaum: col. 1, lines 21-26; col. 6, lines 14-18. Thus, it would have been obvious to one of ordinary skill in the art that, in order to make a directory entry invisible to an operating system, one need only set the attribute field accordingly.</p>

<u>'517 PATENT</u>	<u>CITED PRIOR ART</u>
said long filename including more than the maximum number of characters that is permissible by the operating system; and	Yasumatsu: col. 1, lines 44-49 (“the ... computer system recognize[es] only file names having a length less than a predetermined length, ... a provisional file name ha[s] a length of at least the predetermined length”); col. 6, lines 21-24 (“the limit to the length of the name of each file in the computer system is 14 characters”) and lines 29-31 (“a provisional name of a file ... has a length of more than 14 characters”).
(c) accessing the first directory entry with the operating system.	Yasumatsu: col. 4, lines 38-41 (“The input or output data of the file can be requested from the computer system through the use of the actual name of the file”); Fig. 8.
2. In a computer system having a processor running an operating system and a memory means storing the operating system, a method, comprising the computer-implemented steps of:	Yasumatsu: col. 2, lines 52-53 (“a program ... operates on a computer system”); col. 3, line 17-18 (“stored in a memory or the like”). Platteter: col. 4, lines 3-18 (“On machine power up, the Operating System is loaded from disk to memory of controller”).
(a) storing in the memory means a first directory entry for a file wherein the first directory entry holds a short filename for the file,	Yasumatsu: Fig. 2, element 4 (“actual file name”).
said short filename including at most a maximum number of characters that is permissible by the operating system;	Yasumatsu: col. 3, lines 21-23 (“the limit to the length of the characters of the actual name of the file is 14 characters”); col. 6, lines 21-24 (“the limit to the length of the name of each file in the computer system is 14 characters”).
(b) storing in the memory means a second directory entry for the file wherein the second directory entry holds a long filename for the file and	Yasumatsu: Fig. 2, element 2 (“provisional file name”).

<u>'517 PATENT</u>	<u>CITED PRIOR ART</u>
storing a checksum of the short filename in the second directory entry,	<p>Platteter taught storing a checksum of an object (“file”) in a directory entry (“header sector”) associated with that object. Platteter: Fig. 5, element 252; col. 4, lines 48–49; col. 5, lines 16–20.</p> <p>Thus, it would have been obvious to one of ordinary skill in the art that, in order to associate one object to another, such as a first directory entry to a second directory entry, one could store a checksum of the first object, the first directory entry, in the second object, the second directory entry.</p>
said long filename including more than the maximum number of characters that is permissible by the operating system; and	Yasumatsu: col. 1, lines 44-49 (“the ... computer system recognize[es] only file names having a length less than a predetermined length, ... a provisional file name ha[s] a length of at least the predetermined length”); col. 6, lines 21-24 (“the limit to the length of the name of each file in the computer system is 14 characters”) and lines 29-31 (“a provisional name of a file ... has a length of more than 14 characters”).
(c) accessing the first directory entry with the operating system.	Yasumatsu: col. 4, lines 38-41 (“The input or output data of the file can be requested from the computer system through the use of the actual name of the file”); Fig. 8.
3. In a computer system having a processor running an operating system and a memory means storing the operating system, a method, comprising the computer-implemented steps of:	<p>Yasumatsu: col. 2, lines 52-53 (“a program ... operates on a computer system”); col. 3, lines 17-18 (“stored in a memory or the like”).</p> <p>Platteter: col. 4, lines 3-18 (“On machine power up, the Operating System is loaded from disk to memory of controller”).</p>
(a) storing in the memory means a first directory entry for a file wherein the first directory entry holds a short filename for the file,	Yasumatsu: Fig. 2, element 4 (“actual file name”).

<u>'517 PATENT</u>	<u>CITED PRIOR ART</u>
said short filename including at most a maximum number of characters that is permissible by the operating system;	Yasumatsu: col. 3, lines 21-23 (“the limit to the length of the characters of the actual name of the file is 14 characters”); col. 6, lines 21-24 (“the limit to the length of the name of each file in the computer system is 14 characters”).
(b) storing in the memory means a second directory entry for the file wherein the second directory entry holds a long filename for the file,	Yasumatsu: Fig. 2, element 2 (“provisional file name”).
said long filename including more than the maximum number of characters that is permissible by the operating system;	Yasumatsu: col. 1, lines 44-49 (“the ... computer system recognize[es] only file names having a length less than a predetermined length, ... a provisional file name ha[s] a length of at least the predetermined length”); col. 6, lines 21-24 (“the limit to the length of the name of each file in the computer system is 14 characters”) and lines 29-31 (“a provisional name of a file ... has a length of more than 14 characters”).
(c) accessing the first directory entry with the operating system;	Yasumatsu: col. 4, lines 38-41 (“The input or output data of the file can be requested from the computer system through the use of the actual name of the file”); Fig. 8.

<u>'517 PATENT</u>	<u>CITED PRIOR ART</u>
<p>(d) storing in the memory means at least one additional directory entry holding a next portion of the long filename and a checksum of the short filename.</p>	<p>Yasumatsu taught the step of creating and storing in memory a sequence of at least one additional directory entry (“extension”) for holding a next sequential portion of the long name. Yasumatsu: Fig. 2, element “Reserved” between “118” and “128”; Fig. 3, element “Reserved”; col. 3, lines 40-43 and 59-62.</p> <p>Platteter taught storing a checksum of an object (“file”) in a directory entry (“header sector”) associated with that object. Platteter: Fig. 5, element 252; col. 4, lines 48-49; col. 5, lines 16-20.</p> <p>Thus, it would have been obvious to one of ordinary skill in the art that, in order to associate one object to another, such as a first directory entry to an additional directory entry, one could store a checksum of the first object, the first directory entry, in the second object, the additional directory entry.</p>
<p>4. In a computer system having a processor running an operating system and a memory means storing the operating system, a method, comprising the computer-implemented steps of:</p>	<p>Yasumatsu: col. 2, lines 52-53 (“a program ... operates on a computer system”); col. 3, line 17-18 (“stored in a memory or the like”).</p> <p>Feigenbaum: col. 17, lines 49-50 (“a computer system containing an operating system and a memory subsystem”).</p>
<p>(a) storing in the memory means a first directory entry for a file wherein the first directory entry holds a short filename for the file,</p>	<p>Yasumatsu: Fig. 2, element 4 (“actual file name”).</p>
<p>said short filename including at most a maximum number of characters that is permissible by the operating system;</p>	<p>Yasumatsu: col. 3, lines 21-23 (“the limit to the length of the characters of the actual name of the file is 14 characters”); col. 6, lines 21-24 (“the limit to the length of the name of each file in the computer system is 14 characters”).</p>
<p>(b) storing in the memory means a second directory entry for the file wherein the second directory entry holds a long filename for the file,</p>	<p>Yasumatsu: Fig. 2, element 2 (“provisional file name”).</p>

<u>'517 PATENT</u>	<u>CITED PRIOR ART</u>
said long filename including more than the maximum number of characters that is permissible by the operating system;	Yasumatsu: col. 1, lines 44-49 (“the ... computer system recognize[es] only file names having a length less than a predetermined length, ... a provisional file name ha[s] a length of at least the predetermined length”); col. 6, lines 21-24 (“the limit to the length of the name of each file in the computer system is 14 characters”) and lines 29-31 (“a provisional name of a file ... has a length of more than 14 characters”).
(c) accessing the first directory entry with the operating system;	Yasumatsu: col. 4, lines 38-41 (“The input or output data of the file can be requested from the computer system through the use of the actual name of the file”); Fig. 8.
(d) storing in the memory means at least one additional directory entry holding a next portion of the long filename and a signature that uniquely identifies which portion of the long filename.	<p>Yasumatsu taught the step of creating and storing in memory a sequence of at least one additional directory entry (“extension”) for holding a next sequential portion of the long name. Yasumatsu: Fig. 2, element “Reserved” between “118” and “128”; Fig. 3, element “Reserved”; col. 3, lines 40-43 and 59-62.</p> <p>Feigenbaum taught that if the data of an object (“file”) occupies more than one entry (“cluster”), the additional entry can contain a signature (“value”) indicating which portion of the data it contains. Feigenbaum: col. 7, line 57 – col. 8, line 18 (“The last [entry] in the chain contains a value designating it to be the last [entry] in the chain”)</p> <p>Thus, it would have been obvious to one of ordinary skill in the art that, in order to associate and properly sequence multiple entries holding portions of an object, one could store within each such entry a signature (or value) identifying its position relative to the other entries in the sequence.</p>

CONCLUSION

For the reasons set forth above, each claim of the '517 patent is invalid in light of the Cited Prior Art. PUBPAT respectfully requests that they be reexamined ex parte.

Date

Daniel B. Ravicher, Esq.
U.S.P.T.O. Reg. No. 47,015

PUBLIC PATENT FOUNDATION, INC.
1375 Broadway, Suite 600
New York, NY 10018
Tel: (212) 545-5337
Fax: (212) 591-6038
www.pubpat.org