The Internet has brought about a revolution in the way discovery is conducted. Informal discovery is now an indispensable part of the fact-development process and is dominated by web-based resources available to cunning litigators sleuthing the Internet. One resource that is particularly helpful in patent litigation is the Internet Archive’s Wayback Machine (WBM). Although its name suggests otherwise, WBM is not a DeLorean time machine, nor does it require a flux capacitor to function. Rather, WBM is an online service maintained by the Internet Archive, a nonprofit organization that allows users to visit archived versions of websites. WBM is useful in patent litigation because it enables attorneys to find prior art webpages that are no longer accessible on the Internet.

WBM is not limited to discovery. In recent years, attorneys have succeeded in having WBM webpages admitted into evidence. However, proponents of such evidence face authentication and hearsay issues. This article describes ways to overcome these evidentiary problems and further explores the utility of WBM in patent practice.

Introduction to WBM: What It Does and How It Works

In the transitory world of the Internet, information appears and vanishes regularly and with the click of a mouse. The Internet Archive’s mission is to preserve such information by “chang[ing] the content of the Internet from ephemera to enduring artifacts of our political and cultural lives.” WBM helps facilitate that mission.

Since 1996, WBM has archived more than 366 billion webpages and now contains almost two petabytes of data. This archival process is effectuated by WBM’s automated system, which regularly crawls the Web and stores information contained in webpages on the Internet Archive’s server. Users may access archived versions of a particular webpage, free of charge, by typing the URL into the WBM database. If records for the URL are available, the user will be presented with a list of dates on which the particular webpage was archived.

It is important to understand that there are limitations affecting WBM’s accuracy and reliability. For example, WBM is unable to process certain JavaScript elements and may produce archived pages that contain broken links, are missing graphics, or are otherwise incomplete. Also, a webpage is not archived every time that it is updated; rather, it is archived only when crawlers visit the page, which, in turn, depends on the webpage’s popularity. A website is more likely to be found by WBM’s crawlers if it is well linked from other sites, though website owners may opt out of the archival process altogether. Lastly, it takes between six and fourteen months for a website that was crawled to become accessible in the database. Given these limitations, attorneys should realize that the absence of a particular webpage in the WBM database does not necessarily imply that the webpage did not exist on the relevant date.

How Attorneys Use WBM and Applicable Legal Principles

WBM was not originally intended for legal use but has nevertheless found its way into the courtroom in many different contexts. WBM evidence is especially useful in patent litigation because prior art dates are important to validity challenges.

WBM’s Utility in the Patent Context

Under the 1952 Patent Act, an invention may not be patented if, prior to the invention date or the critical date, the invention was described in a printed publication. For patent applications having an effective filing date on or after March 16, 2013, the America Invents Act imposes a similar bar, requiring that the invention not be described in a printed publication before the effective filing date. A reference qualifies as a printed publication if it “has been disseminated or otherwise made available to the extent that persons interested and ordinarily skilled in the subject matter or art, exercising reasonable diligence, can locate it.”

Under this definition, a webpage may constitute a printed publication and qualifies as prior art as of the date that it was posted and made publicly available. The fleeting nature of Internet postings can make it virtually impossible to know when a disclosure became accessible to the public. Herein lies the utility of WBM; it allows an attorney to recover and use as prior art webpages that no longer exist. It is important to realize, however, that WBM cannot be relied upon to establish the date on which a webpage was created; it can only show when a webpage was first archived. Thus, WBM can determine when the webpage was accessible to the public, but not necessarily when the webpage was first accessible. A party wishing to show that a webpage was publicly available before it was archived must proffer additional competent evidence.

Although it is well-established that webpages generally constitute printed publications, the law is not sufficiently developed to satisfactorily deal with webpages that are posted online for only a short period of time. Indeed, an interesting question—and one that has received little attention in the case law—is how long
a webpage must be publicly accessible to qualify as a printed publication. The advent of WBM makes that issue especially salient. Courts may have to look beyond current case law for guidance on this issue. The America Invents Act expands the scope of prior art to encompass disclosures that are “otherwise available to the public” before a patent application’s filing date. Perhaps courts will use this catch-all provision to formulate a new standard for determining how long, and under what circumstances, a website must be accessible to qualify as prior art. Time will tell whether that hypothesis is correct.

WBM in Federal Court
The law has come a long way since the early days of the Internet, when judges perceived the Web as “voodoo information” that was “inherently untrustworthy.” Courts generally recognize WBM as having “sufficient indicia of reliability to support introduction of [its] contents into evidence,” subject to objections at trial. Nevertheless, some courts have expressed extreme caution in admitting such evidence, primarily because of potential authentication and hearsay problems.

Authentication Objections
Websites are generally not self-authenticating, and archived websites from WBM are no exception. A party seeking to admit a printout from WBM must produce extrinsic evidence “sufficient to support a finding that the [printout] is what the proponent claims it is.” As is true for any piece of evidence, the context in which the evidence is going to be used determines the level of authentication required.

In most of the reported cases, the proponent of WBM evidence seeks to have a court consider the webpage in deciding a motion for summary judgment or the like. Unsurprisingly, declarations from witnesses or attorneys are insufficient to authenticate printouts from WBM if the witnesses do not have personal knowledge of the archive’s contents. The majority of courts require instead that WBM webpages be authenticated by an affidavit from a WBM representative having personal knowledge of their contents and who can verify that they are true and accurate copies of WBM’s records. WBM has cooperated with requests for such affidavits, and therefore the majority standard is not difficult to satisfy, as discussed below.

A minority of courts take a slightly more demanding approach. In an opinion affirmed by the Second Circuit, the Eastern District of New York rejected an affidavit made by the plaintiff and required instead that the affidavit be submitted by a representative of the employer hosting the original website that WBM’s archived webpages purported to represent. The court reasoned that because “the information posted on the Wayback Machine is only as valid as the third-party donating the page decides to make it,” an affidavit from the original host was required to properly authenticate the evidence. This approach has been followed by another court in the Second Circuit, but recent cases have applied the standard inconsistently. Therefore, the state of the law is uncertain. Nevertheless, when the original website is hosted by a party-opponent, a litigant can comply with this standard by authenticating the webpage at the party’s deposition or through requests for admission or stipulation.

Hearsay Objections
WBM-archived evidence may also provoke hearsay objections. For purposes of the hearsay analysis, there are two statements involved. The first is the original website’s disclosure. If the website describes a product or concept sufficiently so that the description anticipates or renders obvious the claimed invention, it is admissible without regard to its truth, and therefore the website disclosure does not constitute hearsay. Otherwise, the proponent of such evidence must invoke an exception or exclusion to the hearsay rule.

The second statement is WBM’s representation of what the original website showed on a particular date. Generally, a WBM printout of a webpage offered solely to show that the information appeared on the archived website is offered for a nonhearsay purpose: to show that the statements were made. But such a showing alone is insufficient to establish that the underlying website constitutes prior art. Instead, a challenger must show that the disclosure was available to the public as of the invention date or critical date. This showing necessarily requires that the challenger prove the truth of the matter asserted—namely, that the WBM archive accurately represents the original website’s disclosure on a given date. When used for that purpose, WBM’s representation in an affidavit that the website was captured on a specific date constitutes hearsay, and a proponent of such evidence will need to assert a hearsay exception or exclusion to admit the date of capture into evidence. Of course, if the underlying webpage is posted by a party-opponent, traditional discovery tools such as a request for admission, interrogatory, or deposition can be used to establish the content of the website on a specific date.

It is important to remember that the authentication affidavit discussed above is itself an out-of-court statement offered to prove the truth of the matter asserted therein: that the underlying website was archived on a particular date. But those cases addressing the sufficiency of affidavits for purposes of authenticating WBM evidence do so primarily in the context of ruling on motions for summary judgment; in that context, a court may consider an affidavit to the extent it suggests that the WBM-captured webpage would be admissible. The affidavit serves only to demonstrate that the underlying facts would be admissible based on the affiant’s personal knowledge of those facts (or facts that make the underlying facts admissible despite the affiant’s lack of personal knowledge).

By contrast, at trial, authentication affidavits are not admissible absent a statute providing otherwise. Moreover, the Internet Archive will generally contest subpoenas requesting employees to testify at trial to the authenticity of WBM-archived webpages, and at least one court has found that subpoenaing the Internet Archive would cause “considerable burden, expense and disruption to its operations.”

However, that does not mean that a proponent of WBM evidence should give up trying to admit such evidence. A simple request for admission, for example, will force the opponent to determine whether contesting the issue is worth the risk of paying for the cost of the proponent’s proof. Moreover, if the contents of the webpage reveal facts that are particularly
important to the industry or the client, the proponent may be able to find someone to authenticate the webpage.

**WBM in Prosecution before the USPTO**

The United States Patent and Trademark Office (USPTO) does not apply the Federal Rules of Evidence during patent prosecution. Therefore, WBM webpages may be used—e.g., by a third party during ex parte reexamination—more liberally and without accompanying affidavits from WBM employees. In fact, patent examiners routinely use WBM “to help establish website posting dates in order to qualify the website as prior art,” and many patents issue with WBM webpages cited as prior art. It is unlikely that the USPTO would reject an attorney affidavit supplementing a WBM disclosure when USPTO examiners themselves use the database to find prior art.

By contrast, contested trial-like proceedings before the USPTO—e.g., inter partes reviews, post-grant reviews, and derivation proceedings—are governed by the Federal Rules of Evidence, and therefore many of the issues facing proponents of such evidence in the federal courts exist in proceedings before the USPTO. Although the Board of Patent Appeals and Interferences and its successor, the Patent Trial and Appeal Board (PTAB), have not squarely addressed the admissibility of WBM evidence, the Trademark Trial and Appeal Board (TTAB) has. In Paris Glove of Canada Ltd. v. SBC/Sporto Corp., the TTAB cited both the majority and minority views regarding the appropriate authentication standard and rejected the petitioner’s argument that WBM evidence is self-authenticating.

The Paris Glove decision and its progeny reveal a general mistrust of WBM evidence by the TTAB. It remains to be seen how the PTAB will handle such evidence in the newly created inter partes review proceedings.

**Best Practices for Using WBM in Patent Litigation**

In light of the legal principles described above, the following are best practices for using WBM in patent litigation.

**Examine the Opposing Party’s Website**

As an initial matter, it is important to spend time reviewing the opposing party’s website and becoming familiar with its structure and content. Determine whether there is enabling disclosure on the website that could qualify as prior art and whether the relevant documents themselves contain public disclosure on the website that could qualify as prior art.

**Try to Stipulate as to Admissibility**

Before seeking to admit WBM evidence, try getting the opposing party to: (1) stipulate to the webpage’s authenticity under Federal Rules of Civil Procedure 16(c)(2)(C) and 36(a)(1)(B), (2) admit to the webpage’s authenticity using a request for admission under Rule 36, or (3) seek judicial notice under the Federal Rules of Evidence. If successful, these tactics will dispense with the need for motions practice.

**Obtain a WBM Affidavit**

The Internet Archive now provides a procedure for obtaining an affidavit from a WBM employee. For $370, a party may request a notarized affidavit by submitting to the Internet Archive the URL for the sought-after webpage. The request takes approximately five business days to process, but can take as little as three days or as long as two weeks. Signed by the office manager of the Internet Archive, the affidavit describes the WBM database and summarizes how it works based upon the manager’s personal knowledge. The affidavit has been accepted in support of pretrial motions by courts adhering to the majority view of authentication described above.

**Be Aware of Technological Limitations of Collecting Archived Material**

All attorneys must understand and appreciate the technological limitations of WBM. Some webpages may not be archived, and some information on an archived webpage may be missing, as discussed above. Consider consulting a technology expert who can provide testimony regarding issues related to reliability and accuracy if necessary.

**Conclusion**

As demonstrated here, WBM is a useful tool for patent practitioners, and there are a variety of ways to use WBM-archived pages during patent prosecution and litigation. So think creatively when evaluating and using these sources, or as Doc Brown would say, think “fourth dimensionally!”

**Endnotes**


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6. Leahy-Smith America Invents Act § 3(b), § 102(a)(2), Pub. L. No. 112-29, 125 Stat. 284, 285–86 (2011). Note, however, that a disclosure made after the critical date does not constitute prior art if made by the inventor or one who obtained the information from the inventor. Id. § 3(b), § 102(b)(1), 125 Stat. at 286.
8. Compare Voter Verified, Inc. v. Premier Election Solutions, Inc., 698 F.3d 1374, 1379–81 (Fed. Cir. 2012) (rejecting argument that indexing is dispositive of whether a website qualifies as a printed publication), cert. denied, 133 S. Ct. 2804 (2013), with SRI Int’l, Inc. v. Internet Sec. Sys., Inc., 511 F.3d 1186, 1195–98 (Fed. Cir. 2008) (finding that a research paper was not catalogued or indexed in a meaningful way and was not intended for dissemination to the public when it was posted on an FTP server for seven days).
9. Under United States Patent and Trademark Office procedure, if the webpage itself does not include a publication date, it cannot be relied upon as prior art under § 102(a) or (b), absent extrinsic evidence that the webpage was accessible to the public. U.S. PATENT & TRADEMARK OFFICE, MANUAL OF PATENT EXAMINING PROCEDURE (MPEP) § 2128 (8th ed. Rev. 9, Aug. 2012). By contrast, in district court, where the Federal Rules of Evidence apply and the challenger bears a higher burden of proof for invalidating the patent, a webpage is not considered self-authenticating as to its publication date.
11. For guidance on this question in the non-Internet context, see In re Kloppenstein, 380 F.3d 1345, 1350, 1352 (Fed. Cir. 2004), where the Federal Circuit used “the length of time the display was exhibited” as a relevant factor in determining that posters displayed for three days at conferences constituted printed publications. For a summary of scholarly approaches for determining whether an Internet posting qualifies as a printed publication, see Eric W. Guttag, Applying the Printed Publication Bar in the Internet Age: Is It as Simple as Googling for Prior Art?, 16 VA. J.L. & Tech. 66 (2011), and Joanna Toke, Can an Internet Reference Be a “Printed Publication”? 2009 B.C. INT’L, PROP. & TECH. F. 12101.
20. Id. at *17.
22. See Mahmood v. Research in Motion Ltd., No. 11 Civ. 5345 (KBF), 2012 U.S. Dist. LEXIS 8673, at *11 n.2 (S.D.N.Y. Jan. 24, 2012) (rejecting plaintiff’s argument that an affidavit of a WBM employee was not properly authenticating); Audi AG v. Shokan Coachworks, Inc., 592 F. Supp. 2d 246, 278 (N.D.N.Y. 2008) (citing case law embodying the majority and minority approaches, and stating that the evidence “may only be authenticated by a knowledgable employee of the website,” but failing to specify which website).
23. Courts generally conflate the two levels, perhaps because they consider WBM’s representation of the archived webpage not to constitute a statement at all for purposes of hearsay. Under this interpretation, WBM’s archival process is thought of as a “duplication” process—analogous to photocopying a document—rather than a “recording” process. But under that analysis, the best evidence rule would absolve the need to consider hearsay objections altogether, and yet courts do not consider this possibility. See Eltgroth, supra note 2, at 210–13.
24. Telewizja Polska USA, Inc. v. Echostar Satellite Corp., No. 02 C 3293, 2004 U.S. Dist. LEXIS 20845, at *16 (N.D. Ill. Oct. 15, 2004) (recognizing that, to the extent that WBM printouts are “being introduced to show the images and text found on the websites, they are not statements at all—and thus fall outside the ambit of the hearsay rule” (internal quotation marks omitted)).
25. For example, the business record exception or the residual
exception might apply, given that the Internet Archive’s entire business is predicated on regularly caching webpages using technology that is generally regarded as reliable and trustworthy. See Matthew Fagan, Note, “Can You Do a Wayback on That?” The Legal Community’s Use of Cached Web Pages In and Out of Trial, 13 B.U. J. Sci. & Tech. L. 46 (2007).

26. As explained on its website, “[t]he Internet Archive is a small non-profit, and taking a member of the team for even a few days significantly affects what the Archive is trying to accomplish. Please consider alternatives to subpoenaing someone from the Internet Archive, including using the standard affidavit or judicial notice.” About the Affidavit, Internet Archive, http://archive.org/legal/faq.php#aff (last visited Nov. 10, 2013).


31. See Ex Parte Rana, No. 2010-009532, 2013 WL 5350950, at *1 (P.T.A.B. Mar. 27, 2013) (refusing to find that examiner’s reliance on Wayback machine evidence in rejecting patent claims was improper).


33. See Hiraga v. Arena, No. 92047976, 2009 TTAB LEXIS 129, at *10 (T.T.A.B. Mar. 18, 2009) (citing Paris Glove and noting the “general unacceptability” of WBM evidence). Recent TTAB decisions have been somewhat more accepting of WBM evidence and dismissive of Paris Glove. See Safer Inc. v. OMS Invs. Inc., 94 U.S.P.Q.2d (BNA) 1031, 2010 TTAB LEXIS 51, at *22 (T.T.A.B. Feb. 23, 2010) (“[I]f a document obtained from the Internet identifies its date of publication or date that it was accessed and printed, and its source (e.g., the URL), it may be admitted into evidence under a notice of reliance . . . .”).

