

2 Various Issues Regarding the Information on Advanced Technology Stored in a Web Archive Such as “Publicly Known”

The JPO plans to create a searchable Web archive, “Advanced Technology Information Archive,” as an in-house database. The archive system will collect online information by crawling through websites. While Web archive services similar to this Advanced Technology Information Archive have already been provided by some private organizations, it is needed to discuss various issues in a comprehensive manner in anticipation of the creation of the Advanced Technology Information Archive. Such issues would include how patent examiners would use the Archive, whether the archived information is “publicly known,” and how to prove that the archived information has not been falsified.

In this study, research was conducted on the use of Web archive services by intellectual property offices in other countries, and also on the patent offices’ trial decisions and court judgments regarding the reliability of information stored in Web archives. Furthermore, domestic surveys were conducted with regard to the usability, necessity, and problems of the information stored in a Web archive from the perspective of patent examination. Based on the results of the surveys, relevant issues and points of concern have been addressed in this paper.

I Introduction

1 Background and Purpose of this study

With regard to the JPO’s new search system, the JPO publicized the “JPO Services and System Optimization Plan (to supplement the search system).” According to the Plan, the JPO will create the Advanced Technology Information Archive as an in-house database by collecting online information by crawling through websites. While Web archive services similar to this Advanced Technology Information Archive have already been provided by some private organizations, it is needed to discuss various issues in a comprehensive manner, in anticipation of the creation of the Advanced Technology Information Archive. Such issues would include how patent examiners would use the Archive, whether the archived information is “publicly known,” and how to prove that the archived information has not been falsified.

The purpose of this study is to provide a basis for further discussion on how the information on advanced technology stored in a Web archive should be used in the course of examination.

2 JPO’s planned Web archive system

Currently, the JPO plans to create a Web archive system that sets target URLs, automatically collects information available on those URLs (crawling), makes indexes, and uses a time stamp system to record the date of information storage and certify that the archived information has not been falsified after the time of storage. (Fig. 1)

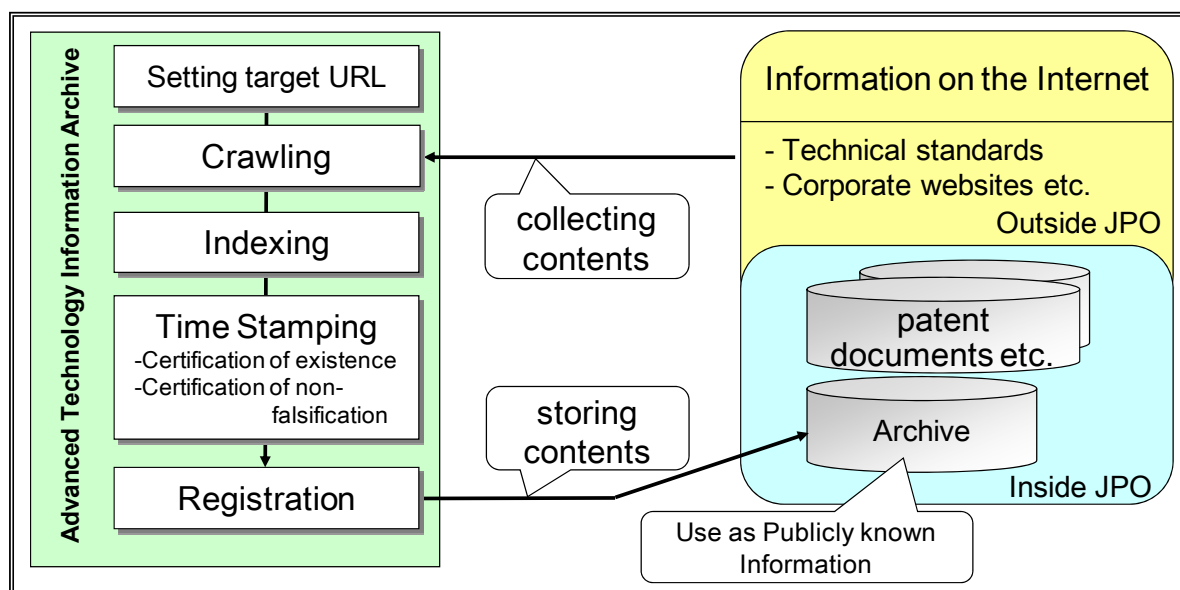


Fig. 1 Image of the planned Web archive system

The JPO also plans to allow patent examiners to use the information collected by this Web archive system, and it plans to not disclose it to third parties. Consequently, a patent applicant who receives a notice of reasons for refusal from a patent examiner may not be able to find the notified information on the Internet.

Furthermore, the JPO plans to collect online information that is made available in the form of a set of documents on specific topics such as technical standards and specifications. Such information will be stored in the PDF format, etc., which allows the preservation of data in a format similar to the printed-out version. The collected information will be archived in the HDD of the computers in the JPO. While the JPO will be the archiving agency, the operation itself might be outsourced (practice by non-public servants).

II Existing Web Archive Services

Internet Archive, which is an NPO in the U.S., was established in order to build a permanent library of digital contents in collaboration with the Library of Congress and the Smithsonian Museum. Internet Archive operates the Wayback Machine, which currently archives contents equivalent to about 150 billion pages of online data. The Wayback Machine allows users to see Web pages of the past by entering the URL of the website that they are interested in.

In Japan, there is a Web archiving project (WARP) carried out by the National Diet Library, and a Web archive available in the Agriculture, Forestry and Fisheries Research Information Portal Site, called AGROPEDIA operated by the Ministry of Agriculture, Forestry and Fisheries of Japan.

III Use of Web Archive Services in the Course of Examination

Research was conducted on the use of Web archive services by patent examiners of the JPO, the USPTO, the UK-IPO, the DPMA (German Patent and Trade Mark Office), and the EPO.

In the course of patent examination, JPO examiners sometimes use the Wayback Machine to search for referential materials about well-known technologies and cite the materials as prior art documents.

The USPTO is allowed to use Web archive services to ensure the reliability of the contents and publication date of the online materials that could be used as prior art documents if the online documents themselves do not provide sufficient verification for such reliability.

The UK-IPO uses the Wayback Machine to verify the date on which a particular web-page became available to the public. The date verified by this service is considered to be valid in general.

The DPMA uses the Wayback Machine for the purpose of patent examination. The service is

often used to verify the publication date of a particular piece of online information.

The EPO sometimes uses the Wayback Machine in order to verify or confirm the publication date of a particular web-page.

IV Patent Offices' Trial Decisions and Court Judgments etc. Concerning the Reliability of Information Stored in Web Archives

This Chapter examines the patent offices' trial decisions and court judgments etc. made in Japan, the U.S., the U.K., Germany, or by the EPO with regard to the reliability of information recorded by existing Web archive services.

In Japan, the information stored in the Wayback Machine was found to be reliable by the Tokyo District Court (2004(Wa)No.10431), but found to be unreliable by the Intellectual Property High Court (2006(Gyo-Ke)No.10358).

In the U.K., the UK-IPO found that the information stored in the Wayback Machine as reliable (BL 0/362/09).

Such information was found to be unreliable both in the judgment handed down by the German Federal Patent Court (17W(pat)1/02), and in the trial decision made by the Technical Board of Appeal of the EPO (T 1134/06).

V Domestic Surveys on the Publication of Information on the Internet

In order to grasp the current practice of publicizing information on the Internet, a domestic questionnaire survey and a domestic interview survey were conducted on quasi-public standard-setting organizations, which set technical standards and specifications, and companies that publicize various documents on the Internet such as technical standards, specifications, brochures, manuals, technical reports, and other technical documents.

According to the results of the survey, quasi-public standard-setting organizations publicize a variety of information on the Internet including standards, specifications, technical reports, and various reports. Since those organizations have adopted a paid-membership system, their websites contain information that is available only to those who have registered passwords or paid a fee.

The information that requires viewers to enter passwords may be divided into two types.

The first type is members-only information, which is not for public viewing. The second type is fee-based information that has been made available for viewing by a wide public including non-members of standard-setting organizations. On the other hand, some information that is sold in hard copy has been made read-only access available on the Internet without a password requirement.

Regarding standards and specifications, some quasi-public standard-setting organizations mentioned in the survey that a publication period of shorter than one month is rare due to the nature of those documents. The former versions of those documents are often preserved and stored in hard copy within the relevant organizations, even after such information is deleted from the Internet.

On the other hand, companies provide online access to their brochures, manuals, technical reports, technical references, technical descriptions, etc. Some of these documents such as technical reports are periodically updated, whereas technical references and other documents are updated from time to time. Some companies mentioned in the survey that a publication period of shorter than one month is not so rare. Some respondents stated that online information is modified when necessary.

Most companies answered that their online information is available for free without passwords. Some companies replied that users are required to agree to the "conditions for use" before downloading certain information, and that part of the online information is available for a fee. Some companies whose members-only websites require passwords mentioned that they offer membership without examination, and simply operate those sites as a part of their services. Some other companies whose members-only websites contain information protected by passwords stated that such information is available only to the users who have undertaken a secrecy obligation by agreeing to the terms of service or otherwise declaring compliance. Some of these companies said that publicizing information is not their purpose of using the Internet.

Regarding the preservation and storage of the former versions of online information after they are deleted from the Internet, companies replied that their technical reports tend to be stored in hard copy, whereas some other information is stored only in the form of digital data in recording media or servers.

VI Domestic Surveys on the Usability, Necessity, and Problems of the Information Stored in Web Archives from the Perspective of Patent Examination

In order to analyze and discuss the usability, necessity, and problems of the use of information stored in a Web archive from the perspective of patent examination, a domestic questionnaire survey and a domestic interview survey were conducted on quasi-public standard-setting organizations, which set technical standards and specifications, and companies that publicize various documents on the Internet such as technical standards, specifications, brochures, manuals, technical reports, and other technical documents.

In the survey, quasi-public standard-setting organizations were asked what kind of problems the JPO's creation of a Web archive could cause. They expressed various concerns that it would be undesirable to collect information without due authorization if the information is protected and available only to qualified viewers as is the case with a members-only website, that it would be undesirable for patent examiners to use online documents that are still in preparation, and that, if the JPO uses archived information for the purpose of patent examination, the organizations would be demanded verification of such information. Furthermore, quasi-public standard-setting organizations stated that, while standards and specifications are publicized for wide use, those documents and other information publicized on their websites are not prepared for crawling by a Web archive system for use by patent examiners.

On the other hand, companies were asked whether the JPO should take the initiative in creating a Web archive. They expressed various opinions: that the JPO should take such initiative, that the creation of a Web archive should be permitted only if there are legal grounds for archived information, that the Web archive creation should be permitted only if the archive will provide public access, that the archive creation should be permitted only after it is proved to be cost-effective, that the archive creation should be permitted only if the contents are appropriate, and that the archive creation should not be permitted.

Regarding the types of information to be archived, some companies stated that examiners would benefit from the archived information on

standards and specifications in the fields of information, telecommunications and electricity, and also from the information on business models and software-related matters. Other companies pointed out that the technical information is publicized on corporate websites only after the filing of a relevant patent application or the disclosure of said technical information in an academic meeting, an exhibition, or through the distribution of brochures or any other form of hard copy. Some companies mentioned that, as far as standards and specifications are concerned, it would be sufficient to request standard-setting organizations to preserve or submit necessary information.

To the question as to what kind of problems the JPO's creation of a Web archive could cause, companies pointed out various problems by saying that, if an online document is used by patent examiners, which date, the date of storage in the archive or the date stated on the archived document, should be regarded as the date on which the document becomes publicly known, that, since corporate websites are modified from time to time, whether different treatment should be given to the modified information before and after the modification and to the information deleted from the Internet for one reason or another, and that, if an archived online document is cited as a reason for refusal of a patent application filed in Japan, whether the effect of said document extends to a foreign application. With regard to public access, many companies expressed their concerns that a problem would occur when an archive containing information collected from corporate websites is made public, if the archive contains copyrighted works whose secondary use is prohibited by contract. With regard to the issue of whether the JPO is permitted to provide the public with online access to the archive containing information collected from corporate websites, some companies mentioned that the JPO would not be given such permission because it is too troublesome to check the contractual conditions of each document, whereas other companies replied that their stance toward this issue has not been decided at this point of time. In response to the question as to whether they would use the archived information if publicized by the JPO, many companies answered that they would use the information, indicating needs for public access.

If no public access is provided to the archived information, a company that receives a notice of reasons for refusal of a patent application may not

be able to confirm the information contained in the notice by conducting an online search. In this situation, the reliability of the publication date and the non-falsification of the information cannot be verified. In the survey, companies were asked what would be necessary to verify the information. Some companies answered that the information could be verified by the index information disclosed in advance and by a time stamp, while other companies replied that they could be convinced of the validity of the information if the time stamp is certain, or that they would find the information to be valid if the information consists of standards or technical reports and has been archived by a reliability system.

Furthermore, some companies pointed out that the JPO is expected to give a detailed explanation about its operation policy, and that it is desirable to discuss, in advance, various issues such as the treatment of information that has been publicized for a very short period of time and the conditions under which the archived information is made available to foreign patent offices. Other companies mentioned that the archive should be made available to the public.

On the other hand, some companies stated that they would not be convinced of the validity of the information contained in a notice of reasons for refusal, for such reasons that, before filing a patent application, they conduct a comprehensive prior art search at great expense in order to ensure the absence of prior arts, or that the nondisclosure of the archived information would violate the spirit of the patent system designed to promote disclosure of new technology. Some other companies pointed out that, if online information of another company is cited, it would be impossible to verify the status of the prior art document before filing an objection.

Some companies stated that, while each applicant is required to conduct a prior art search, even if the index information discloses which websites are subject to crawling, it would be too costly and unrealistic for a company to independently archive information collected from the sites from time to time and therefore that, if the archived information does not become available to the public, the JPO should explain why no public access is provided and why an applicant is given no means to learn, at the time of filing an application, that the prior art document is publicly known.

VII Issues and Points of Concern with Respect to the JPO's Planned Web Archive

1 Issues

(1) Weight of evidence of an archived online document

Unlike documents published in hard copy, archived online documents carry no information about their respective publication dates. Moreover, falsification is hard to detect due to the absence of a trace of falsification of analog information, such as a trace of overwriting by ink that would remain. For these reasons, opinions are divided over what kind of archive system is necessary to convince a judge to believe, with a reasonable level of certainty, that the publication date of an archived online document is reliable and that said document is not falsified. In other words, how to prove that the archived document really existed in the past and underwent no falsification so that a judge would be convinced of the reliability of the archived document.

Currently, the JPO plans to create a Web archive system described in Chapter I, Section 2 above, and to store the collected information in an electromagnetic recording medium (e.g., HDD).

Since human-beings can neither perceive, read, nor understand the contents of the information stored in an electromagnetic recording medium, opinions have been divided over how to treat such information under the Code of Civil Procedure. According to a stance adopted by a relatively large number of courts, a printed-out version of an online document is considered to be the original document. In a trial, the original document will be subject to examination of documentary evidence. The weight of evidence of the document should be examined from two perspectives. The first perspective is whether the content of the document is an expression of an idea of the author. This is called the weight of formal evidence. The second perspective is to what extent the content of the document contributes to proving the fact that constitutes a subject matter of substantiation. This is called the weight of substantial evidence. While some people might argue that further examination would be necessary, the recent trend in reality shows that courts consider the weight of formal evidence to be a nonissue in most cases. This is because the process of printing out an online document stored in an electromagnetic recording medium mostly consists of automated

information processing activity by a computer. Therefore, it is likely that the issue is considered to lie in the weight of substantial evidence.

When a Web archive system is utilized, a dispute could arise with regard to the content of an archived online document or the index or time stamp affixed to it, more specifically, with regard to (i) the accuracy of the information in the phase of collection and recording, (ii) the accuracy of the information in the phase of storage after the phases of collection and recording (non-falsification), (iii) the accuracy of the information in the phase of print-out after phases of collection, recording, and storage (Before being collected by a Web archive system, the information might have been falsified already. Such issue of falsification at source is not discussed in this paper because this issue is not unique to Web archives.).

When an archived document is used in a trial, the judge will examine the form of the document and take into consideration other factors not directly related to the document, and evaluate the weight of substantial evidence under the principle of free conviction (probative value). In a trial, the weight of evidence of an archived document might be questioned from the following perspectives. First, there is a possibility that the Web archive system itself contains an error or inaccuracy and causes a problem in any of the phases described in (i) to (iii) above. In other words, the issue lies in the reliability of the system itself. Second, there is also a possibility that a person involved in the project of a Web archive system makes an intentional alteration. This is the issue of the establishment of a system to prevent those involved in the project from making such an alteration. It is also an issue of personnel management such as the education of the people concerned. Third, there is a possibility that an outside third party makes an intentional alteration especially in the phase of storage mentioned in (ii) above. This is also the issue of the establishment of a security system to prevent an alteration to the archive system.

Based on the possibilities presumed above, it would be important to check (1) whether the Web archive system is automated and accurate in all the three phases (i) to (iii) described above and whether the system is functioning without errors in reality, (2) what is the level of security that the security system is designed to provide and actually provides in order to prevent falsification in any of the three phases (i) to (iii), especial in the phase of storage of information?, (3) whether

an appropriate system has been established to prevent those involved in the project of the Web archive system from committing an act of falsification by providing them with necessary education and whether such a system designed to avoid human-caused risks is actually functioning.

Generally speaking, if a Web archive system is designed to function automatically in the phases (i) to (iii), the possibility of intentional alteration of archived information would be small. This empirical rule would positively affect the formation of a court's determination. However if the design of the Web archive system contains an error or if an archived document comes with a false publication date, the reliability of said system would plummet as a whole and would negatively affect the formation of a court's determination. In addition to these factors, the court would take into consideration various factors disclosed in the trial before forming a determination with regard to the weight of evidence of the archived online document.

With the aforementioned points in mind, the JPO should design a Web archive system, operate it as designed, and try to avoid human-caused risks. An online document archived by such a system would be accepted as evidence by a court.

The discussion made in this section so far has focused on the current judicial practice in Japan. The practice could change if the Code of Civil Procedure is revised in the future. The judicial practices in other countries need to be discussed separately.

(2) “Publicly Known”

Since it is easy to post information on the Internet, a company sometimes mistakenly posts erroneous information or information not intended for online disclosure, and immediately deletes it afterward.

In this way, if information is publicized on the Internet for a very short period of time, an issue would arise as to whether it is reasonable for a Web archive system to fixate the information and provide the information for use by examiners.

In Chapter II, Section 5 of the Examination Guidelines for Patent and Utility Model in Japan, it is stated that, even if the electronic technical information appears on the Internet, information would not be considered to be available to the public “if the information is not published long enough to be accessed by the public (e.g. information published on the Internet for a short period of time).” While examination must be conducted in accordance with these Guidelines, a

dispute might arise as to what exactly a “short period of time” means.

It would be meaningful to discuss this issue from the perspective of whether a Web archive system should be designed to collect information by crawling multiple times on a periodical basis. It should be noted that the Examination Guidelines for Patent and Utility Model in Japan mentions “information published on the Internet for a short period of time” merely as an example of “information that would not be considered to be available to the public.” In practice, examiners may use any information on the Internet as long as it is available as of the time of examination. The length of online presence of the information would be a nonissue in most cases. Therefore, the definition of a “short period of time” remains unclear. Further study would be necessary as to how to apply the guideline “information that is not published long enough to be accessed by the public” to cases where an examiner uses information that is not available on the Internet as of the time of examination but only stored in a Web archive.

Hence, this point would become a major issue if the information stored in the JPO’s planned Web archive is not available to third parties.

(3) Other issues (disclosure to third parties)

Other issues include the issue of whether to make the JPO’s planned Web archive available to third parties.

According to the results of the questionnaire survey and the interview survey, there are needs for the disclosure of the archived information to third parties. However, before the archived information is disclosed to third parties through the Internet, it would be necessary under Article 23 of the Copyright Act to obtain from the sender of the information (the copyright holder) a license of the right of public transmission. The JPO has faced the same hurdle in the course of building a design database and a computer software database (CSDB) containing publicly-known materials posted on the Internet. The JPO has experienced difficulty in obtaining such licenses for the disclosure of those databases to third parties. The difficulty would even increase in the case of information publicized on corporate websites because, in some cases, the secondary use of a work is prohibited by a contract concluded with the copyright holder. In view of these facts, some companies stated that the grant of a license of the right of public transmission would be difficult,

because it would be excessively burdensome to check the contractual conditions of each work.

If the information stored in the JPO’s planned Web archive is not disclosed to third parties, a patent applicant might find his/her application rejected by the JPO based on information unobtainable by a prior art search conducted before the filing of the patent application.

Patent applicants file their applications after conducting prior art searches at great expense, in order to ensure the absence of prior art documents. They make significant amounts of investments in research and development activities, on the presumption that they will be able to obtain necessary patent protection. The JPO also requires each applicant to conduct a prior art search before the filing of an application. For these reasons, many companies are requesting the disclosure of the JPO’s planned Web archive.

Therefore, as pointed out by some respondents of the interview survey mentioned above, it would be appropriate to make efforts to disclose the information archived by the JPO. Necessary legal reforms such as amendment of the Copyright Act should be made if necessary. If so, while part of the archived information should be made available to the public for free, it might be reasonable to charge users for access to all the information stored in the archive. In this regard, further study would be necessary.

2 Points of Concern

(1) Points of concern with respect to the phase of information collection

(i) Treatment of information protected by a password or provided for a fee

In some cases, password-protected information is posted on the Internet not for use by the general public but for use by certain members only. Some information is posted on the Internet for viewing by any person who pays a fee, including non-members. Other information is sold in the form of hard-copy booklets, but is read-only access available on the Internet for free without a password.

It is especially needed to consider how to treat information that is posted on the Internet not for viewing by the general public. Even if information is posted on the Internet for the purpose of public disclosure, the conditions for disclosure, i.e., whether it is protected by a password or whether it is provided for a fee, may differ depending on the sender of the information.

Therefore, in anticipation of the creation of a Web archive system, further study needs to be made in order to determine how to treat information protected by a password or provided for a fee.

(ii) Resistance to crawling

Some of the quasi-public standard-setting organizations and the companies participated in the interview survey and the questionnaire survey do not have websites in the anticipation that the information contained in a website would be subject to crawling carried out by a Web archive system. Some companies that have experience in filing patent applications are not fully aware of the existence of Web archive services (e.g., Wayback Machine). Some companies are not aware of the JPO's plan to create a Web archive system.

Neither the quasi-public standard-setting organizations nor the companies were given detailed explanation about the JPO's planned Web archive system with respect to the scope, principle, and grounds of crawling conducted by the archive system, nor about the use of the collected information by patent examiners. As a result, they are feeling various concerns and a sense of resistance to the JPO's plan to collect publicly-available information on the Internet by crawling through websites and to use it for patent examination. Appropriate measures should be taken to alleviate their concerns.

(2) Points of concern with respect to the phase of patent examination

(i) Date on which the document becomes publicly known

In Chapter II, Section 5 of the Examination Guidelines for Patent and Utility Model in Japan, it is specified "The question of whether or not the information was made available before the filing of the application is judged based on the time of publication indicated in the cited electronic technical information." In the case of an online document stored in the JPO's planned archive, it is necessary to clarify which date, whether the date on which the document is collected by the Web archive system or the publication date indicated on said document, should be regarded as the date on which the document becomes publicly known.

(ii) Treatment of information before and after a modification, and information deleted for some reason

Online information is modified from time to time. Therefore, it would be needed to discuss how patent examiners should treat information before and after a modification, and information deleted for some reason. The discussion should cover such issues as whether the sender of information should be given an opportunity to request the deletion or modification of the archived information. This issue should be discussed with special attention to the risk of providing the sender of information with the power to delete information at its own discretion.

(3) Necessity for harmonization with other patent offices regarding use of archived information

As pointed out in the interview survey, it would be necessary to examine, in detail, how patent offices in the U.S. and European countries use the documents stored in Web archives. In particular, it would be demanded to thoroughly discuss how patent offices in the U.S. and European countries and other countries should use the information stored in the JPO's planned Web archive. Such discussion should be held in forums such as the Annual Trilateral Conference of the patent offices of Europe, the U.S. and Japan, in order to seek harmonization of patent examination practices.

VIII Conclusion

The purpose of this study is to provide a basis for further discussion on how the information on advanced technology stored in a Web archive should be used in the course of examination.

Web archive services have been already provided by some private organizations. One such service is the Wayback Machine, which is operated by an NPO in the U.S. called Internet Archive. Information archived in the Wayback Machine has been used by examiners of the USPTO, the UK-IPO, the DPMA, and the EPO, for the purpose of verifying the date on which a certain web page became available to the public. There have been disputes over the reliability of information stored in the Wayback Machine. The patent offices' trial decisions and court judgments, etc., on the issue of reliability vary from one case to another.

The JPO will face various issues in the course of creating a Web archive containing information on advanced technology and using the archived information in the course of patent examination. For example, if an online document archived in the JPO's Web archive is submitted to a court, the weight of evidence of the document could be questioned by the court. In this paper, the issue of the weight of evidence has been discussed from the perspective of what kind of archive system is necessary to convince a judge to believe, with a reasonable level of certainty, that the publication date indicated on the archived document is reliable and that the document was not falsified, in other words, how to prove that the archived document really existed in the past and underwent no falsification so that a judge would be convinced of the reliability of the archived document.

Furthermore, with respect to "publicly known", it has been pointed out that the publication of information on the Internet for a very short period of time would raise an issue as to whether it is reasonable for a Web archive system to fixate the information and provide the information for use by examiners. This paper has examined this issue and identified other major issue and some points of concern.

With regard to the weight of evidence of an online document stored in a Web archive, a dispute could arise with regard to the content of the archived online document or the index or time stamp affixed to it, more specifically, with regard to (i) the accuracy of the information in the phase of collection and recording, (ii) the accuracy of the information in the phase of storage after the phases of collection and recording (non-falsification), (iii) the accuracy of the information in the phase of print-out after phases of collection, recording, and storage.

When an archived document is used in a trial, the judge will examine the form of the printed-out version of the document and take into consideration other factors not directly related to the document, and evaluate the weight of substantial evidence under the principle of free conviction (probative value). It would be important to check (1) whether the Web archive system is automated and accurate in all the three phases (i) to (iii) described above and whether the system is functioning without errors in reality; (2) what is the level of security that the security system is designed to provide and actually provides in order to prevent falsification in any of the three phases (i) to (iii), especially in the phase

of storage of information, etc.?; (3) whether an appropriate system has been established to prevent those involved in the project of the Web archive system from committing an act of falsification by providing them with necessary education and whether such a system designed to avoid human-caused risks is actually functioning.

Generally speaking, if a Web archive system is designed to function automatically in the phases (i) to (iii), the possibility of intentional alteration of archived information would be small. This empirical rule would positively affect the formation of a court's determination. However if the design of the Web archive system contains an error or if an archived document comes with a false publication date, the reliability of said system would plummet as a whole and would negatively affect the formation of a court's determination. In addition to these factors, the court would take into consideration various factors disclosed in the trial before forming a determination with regard to the weight of evidence of the archived online document.

With the aforementioned points in mind, the JPO should design a Web archive system, operate it as designed, and try to avoid human-caused risks. An online document archived by such a system would be accepted as evidence by a court.

The discussion made in this section so far has focused on the current judicial practice in Japan. The practice could change if the Code of Civil Procedure is amended in the future. The judicial practices in other countries need to be discussed separately.

With respect to "publicly known", if information is publicized on the Internet for a very short period of time, an issue would arise as to whether it is reasonable for a Web archive system to fixate the information and provide the information for use by examiners. With regard to the issue of whether the information that is publicized on the Internet for a very short period of time may be regarded as publicly-available information, the current Examination Guidelines for Patent and Utility Model in Japan simply mentions "the information that is not published long enough to be accessed by the public (e.g. information published on the Internet for a short period of time)." merely as an example of "information that would not be considered to be available to the public." Further study would be necessary as to how to apply the guideline "information that is not published long enough to be accessed by the public" to cases where an examiner uses information that is not available on

the Internet as of the time of examination but only stored in a Web archive.

Furthermore, with regard to an online document stored in the JPO's planned archive, it is necessary to clarify which date, whether the date on which the document is collected by the Web archive system or the publication date indicated on said document, should be regarded as the date on which the document becomes publicly known.

It is common that online information is modified from time to time. Therefore, it would be needed to discuss how patent examiners should treat information before and after a modification, and information deleted for some reason.

Moreover, as pointed out in the interview survey, it would be necessary to examine, in detail, how the patent offices in the U.S. and European countries use the documents stored in Web archives.

Both the senders of information and applicants should be given a detailed explanation about the JPO's planned Web archive system with respect to the purpose, subject matters, scope, method, grounds, etc., of crawling conducted by the archive system, and also about the use of the achieved information by patent examiners.

The senders of information mentioned that information on their websites are not prepared for crawling by a Web archive system for use by patent examiners. Since the conditions for disclosure, i.e., whether it is protected by a password or whether it is provided for a fee, may differ depending on the sender of the information, detailed discussion and advance notice would be necessary.

On the other hand, applicants should be given a detailed explanation in advance about the contents of the archive and the operation policy with respect to the use of the archived information by patent examiners. Web archives themselves are not widely known, but many applicants request the disclosure of the information collected by the JPO's planned Web archive system. As shown in the results of the interview survey, it would be appropriate to make efforts to disclose the information archived by the JPO. Necessary legal reforms such as the revision of the Copyright Act should be made if necessary.

In anticipation of the JPO's creation of a Web archive, further efforts should be made to discuss and contemplate relevant issues, points of concern, etc., so as to establish an archive system that will increase the accuracy of patent

examination and thereby contribute to industrial development.

(Researcher: Miki OBI)