

Publishing Process

How does our publishing process work?

By IP.com



Introduction

The mechanics of our publishing process (patents pending) are integral to why our publications are legally defensible as prior art. Although it is not essential that you understand the details of our process in order to use it, understanding it will give you confidence in relying on our service for critical disclosures and will make you more at ease in submitting and retrieving publications from our database.

Starting the Process

The IP.com publication processing begins when you upload the documents via the Publication Wizard at <http://priorart.ip.com/>. The rest of the publication process happens behind the scenes to create a nearly instantaneous publication with authenticable content that can be traced to an indisputable publication date, thus meeting the legal requirements of a publication.

Digital Fingerprinting for Authentication

First, each of the submitted files is digitally fingerprinted; using advanced cryptographic methodology developed at the Massachusetts Institute of Technology (the MD5 message-digest algorithm, RFC1321). During this step, unique digital fingerprints are made of your documents to enable future authentication proving that the document has never been modified since publication at IP.com. These digital fingerprints become a permanent part of your publication record, and can be found in the XML file that is included with your publication when it is downloaded from the IP.com database. (In the XML file these fingerprints are identified under the label "<FILE_SIGNATURE>".) Refer to our [Fingerprints](#) document to learn more about digital fingerprints.

Validation and Creation of an Internet-Viewable File of Searchable Text

Next, the main document is validated (e.g. to make sure it doesn't contain certain unacceptable content such as a computer virus, etc.). Then all searchable text is extracted from the main document and used to create an HTML file, which is used for display when someone selects to preview your document over the Internet. This HTML file is included with your publication when it is downloaded from our database over the Internet, and is best viewed with an Internet browser or a recent version of Microsoft Word.

Creation of the XML File

The bibliographic data is supplemented with the fingerprints and a submission timestamp (noting the date and time of submission) and is then stored in our database under a unique IP.com identifier. (This unique identifier is only used for internal tracking by our system during the publication process, and is different than the final publication ID.) All of this data is used to create an XML file that is stored with the primary document, the HTML file, and the attachment(s). This XML file and an accompanying DTD file are included with your publication when it is downloaded. Information about XML and DTD files can be found below.

Bundling of the Components and Email Notification

The document is then assigned a permanent publication ID. The primary document and attachment(s) (as submitted by you), the README.txt (see below), HTML, XML, and DTD files are bundled into a single downloadable zip file. (Zip files can be accessed using a variety of programs, some of which are available for free over the Internet. We recommend [WinZip](#).) Others can be found by going to [Download.com](#) and searching for "zip".) This zip file is the file that searchers download from the IP.com search site when they chose to download your publication. The title of the zip file will contain the permanent IP.com publication ID, with .zip appended (for example IPCOM000000591D.zip).

Note that during our publication process, the files you submitted are renamed by appending "1_" to the name of your primary document, "2_" to your first attachment, etc. For example, if you submit the document as widget.txt with an attachment called widgetpic.tiff, these files will be renamed to 1_widget.txt and 2_widgetpic.tiff, respectively. When you examine the contents of the zip files you will also notice files beginning with "0_". These are ancillary files created by IP.com as part of the publishing process, such as the XML and DTD files.

At this point in the process, the document is made available for searching and downloading via the IP.com site, and the submitter of the publication is sent an email confirming that the publication process was successfully completed. This email provides the publication ID, digital fingerprints, and a link to the publication in IP.com's database. See the "Fingerprints" document for advice on what you should do with the fingerprints.

Completion of the Process: Digital Notarization

IP.com validation servers continually monitor the publication servers, watching for new publications to appear. The validation servers are so called, since they validate the fact that the new publication is indeed publicly available and downloadable over the Internet prior to performing the notarization process. As soon as they detect a new publication, i.e. once the zip file containing the document becomes available for searching and downloading, the validation servers download the zip file, digitally notarize it via a third party using patented technology, and send the notarization seal back to the primary database, where it becomes part of the database record. The digital notarization provides an irrefutable means of verifying that your electronic publication and corresponding files were created at IP.com when claimed, and not altered since.

The README.txt File

The README.txt file, provided with each publication, contains some important material: legal information, including reference to our Terms of Use document; publication title; location of bibliographic information; a list of file names for the primary document and attachments; and a reference to where to find out additional information about IP.com publications.

XML and DTD Files

XML and DTD files can be identified by their file name extensions (suffixes): .xml and .dtd, respectively. The XML file contains much data that is relevant to your publication.

Keep in mind that if all you want to do is read a publication, you will not need to bother with the XML or DTD files. However, if you want to examine things like publication dates, or if you are responsible for maintaining records for your company, you may benefit from a basic understanding of how to use the XML file.

XML, which stands for Extensible Markup Language, is a language that provides a mechanism to communicate and identify structured information in a document. XML is an emerging standard in the computer industry. Although the details of XML are beyond the scope of this document, more information on XML can be found at XML.com.

DTD (Document Type Definition) files help define the components of XML documents, based on rules in the XML specification.

The XML and DTD files can be viewed individually with a text editor or word processor, such as Windows Notepad, Wordpad, or Microsoft Word. When viewed in this manner, the content of the XML file will be reasonably understandable. If the XML and DTD files are extracted from the zip file and placed in the same folder as each other, the XML file can be opened and viewed in a properly rendered format with Microsoft Internet Explorer (version 5).

The Final Publication Zip File

The final publication, as available for downloading at the IP.com web site, is a zip file. The title of the zip file is your final publication ID with the .zip suffix appended.

This zip file contains the primary document and attachment(s) (unaltered from what you uploaded), a README.txt file, an HTML file of searchable text, an XML file, and a DTD file.

Details on how to view the contents of zip files, and on the content of each of these files, are contained throughout this document.

The publication process is outlined in the accompanying conceptual diagram.

