



UNITED STATES
PATENT AND TRADEMARK OFFICE

Patent and Trial Appeal Board
(PTAB) Application Programming Interface (API)
User Manual

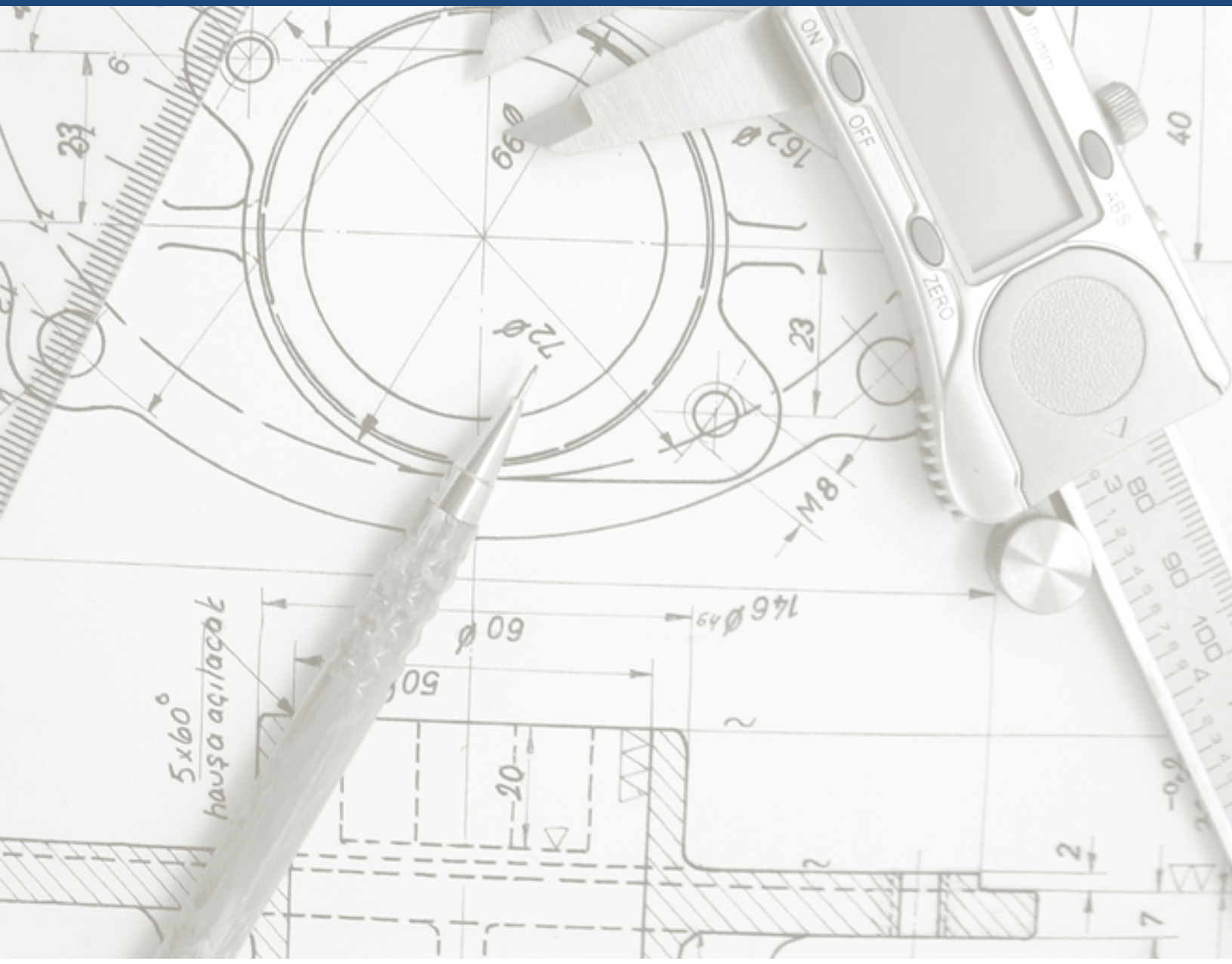


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Documents Hyperlink Example	Error! Bookmark not defined.

Documents Download Hyperlink **Error! Bookmark not defined.**

PTAB SERVICES OVERVIEW

BACKGROUND

PTAB Services is a RESTful API that will provide a client user interface for browsing the USPTO Patent Trial and Appeal Board publicly available documents data, formulating queries, and requesting one-time bulk downloads. Furthermore, it will allow developers to take advantage of custom search syntax to develop their own applications.

WHO IS PTAB SERVICES FOR?

PTAB Services is designed for developers and technical users worldwide to publish their inventions for international use and adoption. It is open to third party developers inside and outside of government, so that they can directly benefit from this data, by making and using their own apps. PTAB is a publicly accessible system that requires no identification or authentication by the end users prior to gaining access to the services. API keys are also not required to use this service.

This document provides an overview of the features of PTAB Services and how it can be used to access patent products.

GETTING STARTED

WHAT IS SWAGGER GET METHOD?

GET is an HTTP request method that reads and retrieves data. Multiple requests will have the same result as a single request. This means that GET cannot modify any USPTO bulk data products.

PTAB Services has eight GETs as defined below. These GETs are from the PTAB API Swagger documentation at <https://ptabdata.uspto.gov/ptab-api/swagger/index.html>. A client application using the PTAB API has also been developed and is available at <https://ptabdataui.uspto.gov/#/introduction>.

PTAB AIA Trials REST API

Public information regarding the Patent Trial and Appeal Board's (PTAB) America Invents Act (AIA) Trials and associated documents.

documents : AIA Trial Documents

List Operations | Expand Operations

GET	/documents	Provides access to public AIA Trial Documents
GET	/documents.zip	Download all documents in one zip file
GET	/documents/{id}	Search certain document
GET	/documents/{id}/native	Download single document
GET	/trials/{trialNumber}/documents	Trial Documents by Trial Number
GET	/trials/{trialNumber}/documents.zip	Download certain trial all documents in one zip file

trials : AIA Trials

List Operations | Expand Operations

GET	/trials	Search all trials
GET	/trials/{trialNumber}	Trial by Trial Number

Figure 1: PTAB API Swagger Documentation

SWAGGER GET INSTRUCTIONS

First, click *GET* button to view *Implementation Notes*. This will allow you to search and retrieve trials and associated documents. Second, enter value input into *parameter* field if applicable. Third, click *Try it Out* button for a return response.

RESPONSE FORMAT

All API inputs and outputs are in JavaScript Object Notation (JSON) format. JSON is an open standard format that uses human-readable text to transmit data objects consisting of attribute–value pairs.

HTTP RESPONSE STATUS CODES

- 200 – Success. The API call was successful.
- 400 – Bad Request. The API was not able to process request due to user error.
- 401- Unauthorized. Authentication is required and has not been provided. This could mean that you may not have necessary credentials.
- 403 – Forbidden. The request was valid, but the server is refusing to respond.
- 404 – Not Found. The requested resource could not be found, but could be available in the future.
- 500 – Failure. Internal server error is given when an unexpected condition is encountered.

GET INPUT PARAMETERS MAPPING

The table below includes the available input parameters fields with descriptions and examples for PTAB API GETs. Note that the string data type includes various words or characters.

AIA TRIAL DOCUMENTS INPUT PARAMETERS TABLE

Parameter	Required /Optional	Data Type	Example	Description
id	Optional	Integer	1	Document number is a unique numeric identifier.
title	Optional	String	Power of Attorney	Document title.
filingDateTime	Optional	String	2016-01-01T22:00:14	Date when document was filed.

Parameter	Required /Optional	Data Type	Example	Description
filingDateTimeFrom	Optional	String	2016-01-04	Date document was filed on or after given date.
filingDateTimeTo	Optional	String	2016-02-04	Date document was filed on or before given date.
filingParty	Optional	String	Petitioner	Party who filed the document: Petitioner, Patent Owner, or Potential Patent Owner
documentNumber	Optional	Integer	17	Filters documents by page number sequence or exhibit numbers. Certain trials have unique document numbers. Paper numbers are sequential and begin with 1. Exhibit numbers are four digits. Petitioners file exhibits using 1000s. Patent Owners file exhibits using 2000s. PTAB file exhibits using 3000s.
sizeInBytes	Optional	Integer	350686	Document size in bytes.
trialNumber	Optional	String	IPR2015-00158	Trial number format is TTTYYY-XXXX. TTT represents the type of trial: <ul style="list-style-type: none"> • Inter Partes Review (IPR) • Covered Business Method (CBM) • Post Grant Review (PGR) • Derivation Proceeding (DER) YYYY represents the year and XXXX are sequence numbers.

Parameter	Required /Optional	Data Type	Example	Description
mediaType	Optional	String	Application/Pdf	Type of media.
type	Optional	String	Notice	Document type.
lastModifiedDateTime	Optional	String	2016-01-01T22:00:18	Filters by last modified date in YYYY-MM-DD format. The output of this field is collected from parameter values in lastModifiedDateFrom and lastModifiedDateto fields.
lastModifiedDateFrom	Optional	String		Filters by last modified date on or after YYYY MM-DD format.
lastModifiedDateto	Optional	String		Filters by last modified date on or before YYYY-MM-DD format.
limit	Optional	Integer	25	Maximum number of returned results on a page.
offset	Optional	Integer		The index of the first item of the result set to be returned. Offset default is zero.
sort	Optional	String		Sorts the results in ascending or (parameter value a -. Descending order or parameter value a +. Results default to ascending order if value is not entered.

AIA TRIAL INPUT PARAMETERS TABLE

Parameter	Required/Optional	Data Type	Example	Description
trialNumber	Optional	String	IPR2016-00037	See AIA Trial Documents Input Parameters Table

Parameter	Required/ Optional	Data Type	Example	Description
prosecutionStatus	Optional	String	Trial Certificate, Incomplete, Terminated- Settled, Withdrawn	Status of prosecution.
applicationNumber	Optional	String	A) 01/ - 14/ - or nonprovisional applications (utility, plant, and reissue) B) 60/ and 61/ - for provisional applications; C) 90/ - for ex parte reexamination proceedings; D) 95/ - for inter partes reexamination proceedings; and E) 96/ - for supplemental examination proceedings and resulting <i>ex parte</i> reexamin ation proceedings.	Application number for trials. An application number includes a two digit series code followed by a six digit serial number which is assigned by the USPTO.
patentNumber	Optional	String	8,960,210 Flexible umbrella systems 8,939,163 Umbrella anti- inversion apparatus	Patent number for trials. All patent number numbers must be seven characters in length.

Parameter	Required/ Optional	Data Type	Example	Description
			8,783,275 Bottom- triggering wind safety umbrella	
filingDate	See AIA Trial Documents Input Parameters Table			
filingDateFrom				
filingDateTo				
accordedFilingDate	Optional	Date		Date trial filing is accorded (in yyyy-mm-dd format). The output of this field is collected from parameter values in accordedFilingDateFrom and accordedFilingDateTo fields.
accordedFilingDateFrom	Optional	Date		Date that trial filing is accorded on or after in yyyy-mm-dd format.
accordedFilingDateTo	Optional	Date		Date that trial filing is accorded on or before in yyyy-mm-dd format.
institutionDecisionDate	Optional	Date		Date that trial's institution decision is made in yyyy-mm-dd format. The output of this field is collected from parameter values in institutionDecisionDateFrom and institutionDecisionDateTo fields.

Parameter	Required/ Optional	Data Type	Example	Description
institutionDecisionDateFrom	Optional	Date		Date that a trial's institution decision is made on and after in yyyy-mm-dd format.
institutionDecisionDateTo	Optional	Date		Date that a trial's institution decision is made on and before in yyyy-mm-dd format.
finalDecisionDate	Optional	Date		Date that a trial's final decision is made in yyyy-mm-dd format. The output of this field is collected from parameter values in finalDecisionDateFrom and finalDecisionDateTo fields
finalDecisionDateFrom	Optional	Date		Date that a trial's final decision is made on and after in yyyy-mm-dd format.
finalDecisionDateTo	Optional	Date		Date that a trial's final decision is made on and before in yyyy-mm-dd format.
lastModifiedDateTime	See AIA Trial Documents Input Parameters Table.			
lastModifiedDateFrom				
lastModifiedDateTo				
limit				
offset				
sort				

GET DEFINITIONS: DOCUMENTS

RETRIEVE ALL AIA TRIAL DOCUMENTS – GET /DOCUMENTS

Use this GET to retrieve all PTAB trial documents metadata. Inputting values in parameter fields is optional because document metadata will be returned by default. However, parameters fields are useful for limiting results. Below example illustrates the default JSON output for this GET.

```
{
  "metadata" : {
    "limit" : 25,
    "offset" : 0,
    "count" : 342361,
    "links" : [ {
      "rel" : "self",
      "href" : "https://ptabdata.uspto.gov/ptab-api/documents"
    }, {
      "rel" : "download",
      "href" : "https://ptabdata.uspto.gov/ptab-api/documents.zip"
    } ]
  },
  "results" : [ {
    "documentNumber" : "69",
    "title" : "Patent Owner's Notice of Appeal",
    "filingDatetime" : "2014-03-26T14:20:37",
    "lastModifiedDatetime" : "2014-03-26T14:20:37",
    "filingParty" : "patent_owner",
    "sizeInBytes" : 85960,
    "trialNumber" : "CBM2012-00002",
    "mediaType" : "application/pdf",
    "id" : 1,
    "type" : "notice of appeal",
    "links" : [ {
      "rel" : "self",
      "href" : "https://ptabdata.uspto.gov/ptab-api/documents/1"
    }, {
      "rel" : "download",
      "href" : "https://ptabdata.uspto.gov/ptab-api/documents/1/native"
    }, {
      "rel" : "trial",
      "href" : "https://ptabdata.uspto.gov/ptab-api/trials/CBM2012-00002"
    } ]
  } ]
}
```

Figure 2: JSON Output Example

As you can see the returned metadata contains parameters: *limit*, *offset*, *count*, and *links*. Limit parameter represents the number of results displayed on a page, the default is 25. Offset parameter specifies the first entry to return from a collection. The offset parameter is most

often used in conjunction with limit parameter to page through a dataset. It's the number of records into a dataset that you want to start, indexed at 0.

The count parameter reflects what is satisfied from URL. Let's see this in action.

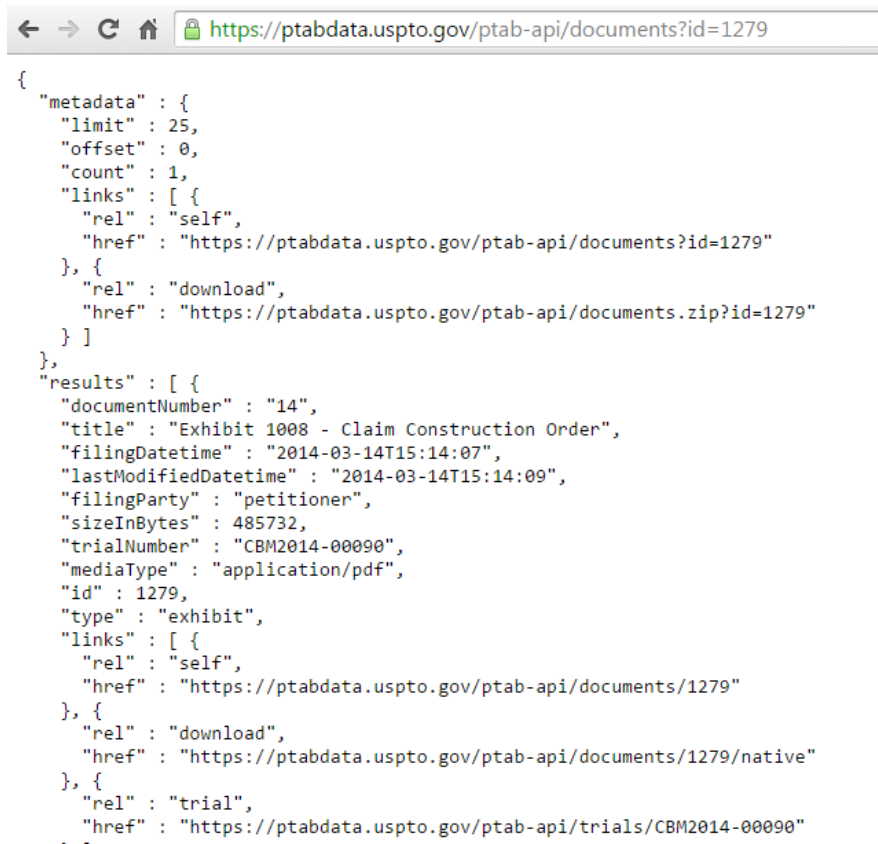
First, enter value 1279 in the *id* field. Second click the *Try it Out* button.

Parameters

Parameter	Value	Description	Parameter Type	Data Type
id	<input type="text" value="1279"/>	Filters by the unique numeric (BigInt) identifier for the document of the whole dataset. For example, 14.	query	integer

Figure 3: Input Value

The browser's URL returns the count for the entered value along with metadata results.



```

{
  "metadata" : {
    "limit" : 25,
    "offset" : 0,
    "count" : 1,
    "links" : [ {
      "rel" : "self",
      "href" : "https://ptabdata.uspto.gov/ptab-api/documents?id=1279"
    }, {
      "rel" : "download",
      "href" : "https://ptabdata.uspto.gov/ptab-api/documents.zip?id=1279"
    } ]
  },
  "results" : [ {
    "documentNumber" : "14",
    "title" : "Exhibit 1008 - Claim Construction Order",
    "filingDatetime" : "2014-03-14T15:14:07",
    "lastModifiedDatetime" : "2014-03-14T15:14:09",
    "filingParty" : "petitioner",
    "sizeInBytes" : 485732,
    "trialNumber" : "CBM2014-00090",
    "mediaType" : "application/pdf",
    "id" : 1279,
    "type" : "exhibit",
    "links" : [ {
      "rel" : "self",
      "href" : "https://ptabdata.uspto.gov/ptab-api/documents/1279"
    }, {
      "rel" : "download",
      "href" : "https://ptabdata.uspto.gov/ptab-api/documents/1279/native"
    }, {
      "rel" : "trial",
      "href" : "https://ptabdata.uspto.gov/ptab-api/trials/CBM2014-00090"
    } ]
  } ]
}

```

Figure 4: id 1279 Metadata and Results

The links parameter contains the self-linking URL for GET and download link. Below terms are integral to understanding PTAB API GETs outputs. Note id 1279 refers to example above.

- **rel: self** – means relationship. In this case, it's a self-referencing hyperlink.

- **rel: download** – hyperlink to download id 1279 (title: Exhibit 1008 - Claim Construction Order) document to your computer.
- **rel: trial** – trial information associated with id 1279 (trial number: CBM2014-00090).
- **href** – is a complete URL that uniquely defines the resource.

DOWNLOAD DOCUMENTS ZIP FILE – GET /DOCUMENTS.ZIP

Use this GET to download hundreds of documents into one zip file. Currently there is a maximum of 100 documents available for download. Parameters fields are optional, but are useful for limiting results. The zip file will include documents displayed in current page.

Let's use the trial number CBM2014-00090 associated with document id 1279 as an example.

The screenshot shows a REST client interface with the following details:

- trialNumber**:
- query**: string
- Response Code**: 200

Request URL
`https://ptabdata.uspto.gov/ptab-api/documents.zip?trialNumber=CBM2014-00090`

Response Body
[Download documents.zip?trialNumber=CBM2014-00090](#)

Additional Information: Trial Number has 13 characters and format as "TTTTYYYY-#####" where TTT is the type of trial (IPR, CBM, PGR, or DER), YYYY is the fiscal year, and "#####" is a sequence number. For example, IPR2016-00037, CBM2014-22245.

Figure 5: Returned Response

Now unzip files to download documents for this id. In the example below there are 25 documents downloaded from the zip file.

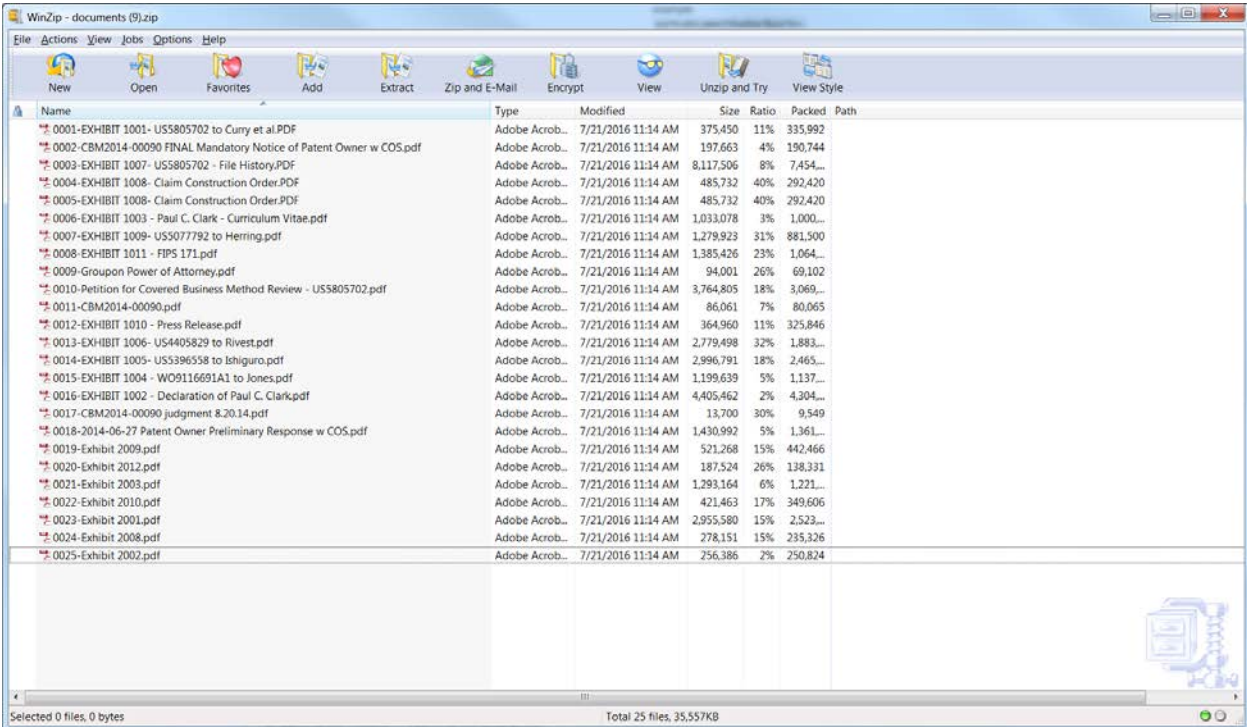


Figure 6: Unzipped Documents

SEARCH CERTAIN TRIAL DOCUMENTS – GET /DOCUMENTS/{ID}

Use this GET to search for documents pertaining to certain trials. An *id* value is required for a return response. An error message will be returned if the value cannot be found. You can extract this value from GET/documents. The returned response is similar to GET/documents. The difference is that it returns subtree data starting from a particular tree node.



```

{
  "documentNumber" : "14",
  "title" : "Exhibit 1008 - Claim Construction Order",
  "lastModifiedDatetime" : "2014-03-14T15:14:09",
  "filingParty" : "petitioner",
  "filingDatetime" : "2014-03-14T15:14:07",
  "trialNumber" : "CBM2014-00090",
  "sizeInBytes" : 485732,
  "mediaType" : "application/pdf",
  "id" : 1279,
  "type" : "exhibit",
  "links" : [ {
    "rel" : "self",
    "href" : "https://ptabdata.uspto.gov/ptab-api/documents/1279"
  }, {
    "rel" : "download",
    "href" : "https://ptabdata.uspto.gov/ptab-api/documents/1279/native"
  }, {
    "rel" : "trial",
    "href" : "https://ptabdata.uspto.gov/ptab-api/trials/CBM2014-00090"
  } ]
}

```

Figure 7: Return Response Example

DOWNLOAD SINGLE ZIP FILE – GET /DOCUMENTS/{ID}/NATIVE

Use this GET to download documents into one zip file as specified by the parameters. An *id* value is required to download file. See return response example below. You can also extract this request URL from GET/documents.

Request URL

<https://ptabdata.uspto.gov/ptab-api/documents/1279/native>

Response Body

[Download native](#)

Response Code

200

Figure 8: id 1279 Native

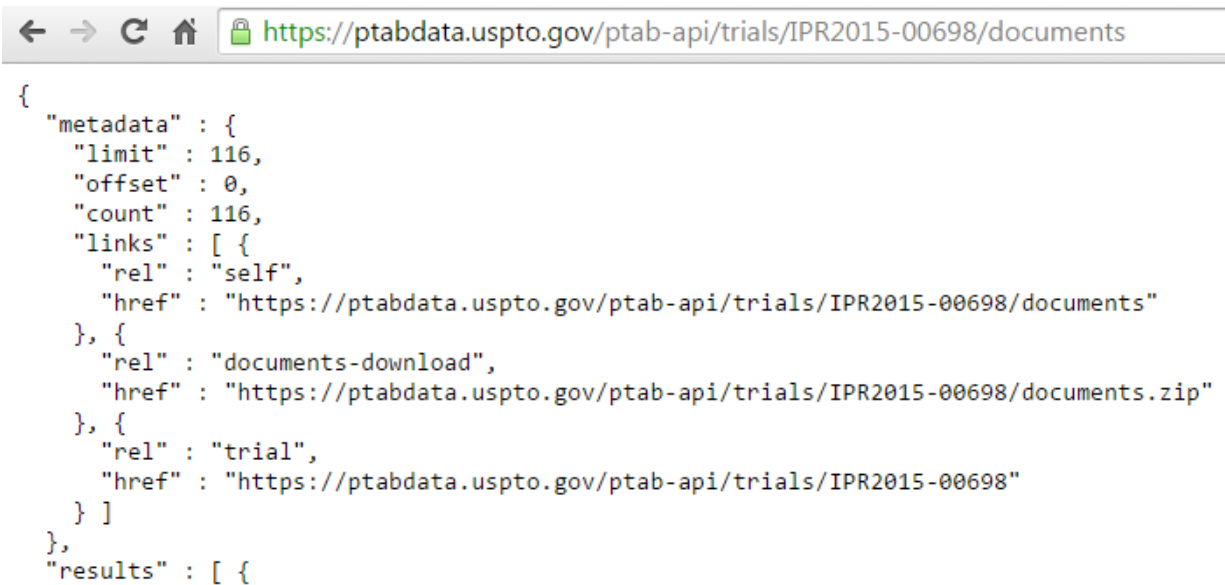
SEARCH TRIALS BY TRIAL NUMBER – GET /TRIALS/{TRIALNUMBER}/DOCUMENTS

Use this GET to search for trials by their trial numbers. A *trial number* value is required to retrieve trial information. Parameters fields are optional.

However, they are useful for selecting a subset of documents. For example, documents filed within a particular timeframe or those filed by Petitioner only. Let's use trial number IPR2015-00698 as an example

trialNumber	<input type="text" value="IPR2015-00698"/>	Trial Number - of format	path	string
		"TTTTYYY-#####" where TTT is the type of trial (IPR, CBM, PGR, or DER), YYYY is the fiscal year, and "#####" is a sequence number. For example, IPR2016-00037, CBM2014-22245.		

Figure 9: trialNumber Value



```

{
  "metadata" : {
    "limit" : 116,
    "offset" : 0,
    "count" : 116,
    "links" : [ {
      "rel" : "self",
      "href" : "https://ptabdata.uspto.gov/ptab-api/trials/IPR2015-00698/documents"
    }, {
      "rel" : "documents-download",
      "href" : "https://ptabdata.uspto.gov/ptab-api/trials/IPR2015-00698/documents.zip"
    }, {
      "rel" : "trial",
      "href" : "https://ptabdata.uspto.gov/ptab-api/trials/IPR2015-00698"
    } ]
  },
  "results" : [ {

```

Figure 10: Return Response

DOWNLOAD CERTAIN TRIAL DOCUMENTS IN ZIP FILE – GET/TRIALS/{TRIALNUMBER}/DOCUMENTS.ZIP

Use this GET to download certain trial all documents in one zip file. A *trial id* value is required to download file. See return response example below.

Note that files are downloaded to the browser's default location in its settings.

trialNumber	<input type="text" value="IPR2015-00698"/>	Trial Number - of format "TTYYYY-#####" where TTT is the type of trial (IPR, CBM, PGR, or DER), YYYY is the fiscal year, and "#####" is a sequence number. For example, IPR2016-00037 , CBM2014-22245 .	path	string
--------------------	--	---	------	--------

Response Body
[Download documents.zip](#)

Figure 11: Input Value and Return Response Example

GET DEFINITIONS: TRIALS

SEARCH TRIALS – GET/TRIALS

Use this GET to retrieve trials metadata by default. Parameter fields are optional. However, they are useful for limiting results.

Request URL

```
https://ptabdata.uspto.gov/ptab-api/trials
```

Figure 122: URL to Retrieve Trial Metadata



Figure 3: Metadata and Results

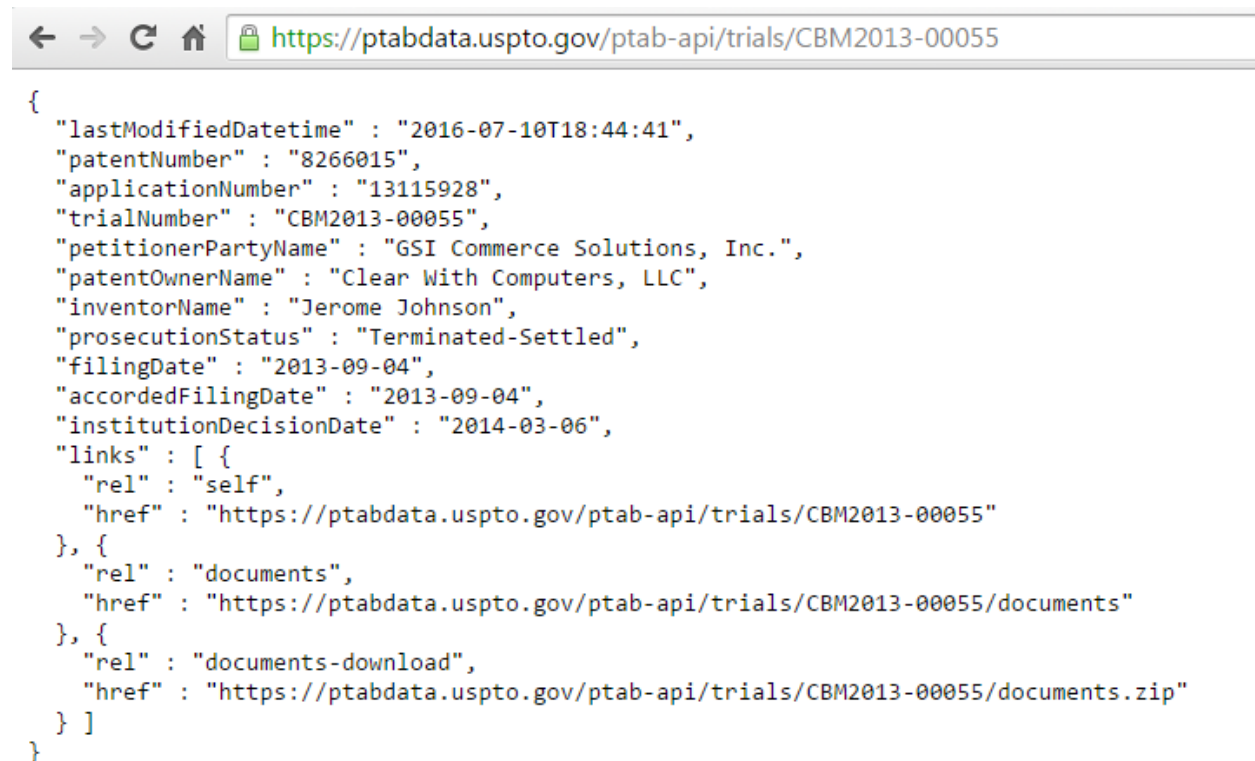
SEARCH TRIALS BY TRIAL NUMBER – GET/TRIALS/{TRIALNUMBER}

Use this GET to search by a trial number. A *trial number* value is required for return response. This value can be extracted from GET/trials.

trialNumber	[required]	Trial Number - of format	path	string
		"TTYYYY-#####" where TTT is the type of trial (IPR, CBM, PGR, or DER), YYYY is the fiscal year, and "#####" is a sequence number.		

|

Figure 134: Trial Number Parameter Example



The screenshot shows a web browser address bar with the URL <https://ptabdata.uspto.gov/ptab-api/trials/CBM2013-00055>. Below the browser, a JSON response is displayed:

```
{
  "lastModifiedDatetime" : "2016-07-10T18:44:41",
  "patentNumber" : "8266015",
  "applicationNumber" : "13115928",
  "trialNumber" : "CBM2013-00055",
  "petitionerPartyName" : "GSI Commerce Solutions, Inc.",
  "patentOwnerName" : "Clear With Computers, LLC",
  "inventorName" : "Jerome Johnson",
  "prosecutionStatus" : "Terminated-Settled",
  "filingDate" : "2013-09-04",
  "accordedFilingDate" : "2013-09-04",
  "institutionDecisionDate" : "2014-03-06",
  "links" : [ {
    "rel" : "self",
    "href" : "https://ptabdata.uspto.gov/ptab-api/trials/CBM2013-00055"
  }, {
    "rel" : "documents",
    "href" : "https://ptabdata.uspto.gov/ptab-api/trials/CBM2013-00055/documents"
  }, {
    "rel" : "documents-download",
    "href" : "https://ptabdata.uspto.gov/ptab-api/trials/CBM2013-00055/documents.zip"
  } ]
}
```

Figure 145: Return Response Example

To view trial CBM2013-00055 documents, enter *documents* hyperlink to browser (<https://ptabdata.uspto.gov/ptab-api/trials/CBM2013-00055/documents.zip>).