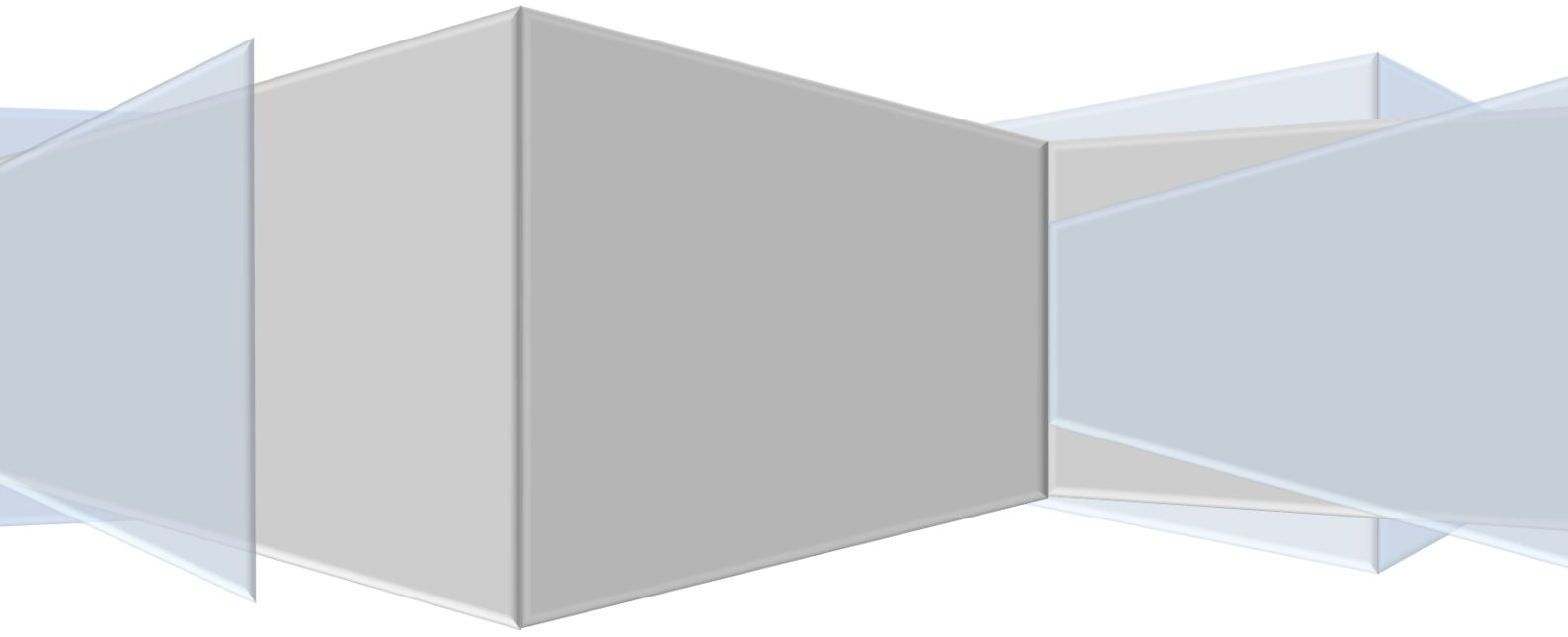
PatBase REST API 2.0



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Introduction

This document provides an overview of the basic methods and functions available in PatBase REST API which permits developed applications to search the entire range of PatBase patent data. Methods are supplied to search and retrieve the data, as well as access private folders stored within PatBase user accounts. PatBase API access is available via logins or API keys.

Versioning

The PatBase API calls a standard Base URL (https://www.patbase.com/rest/api.php) which will always be link to the current live version of the API. To see what version is currently live you can use the version call detailed below or visit https://www.patbase.com/rest/.

If you wish to use a specific version of the API you can do so by adding the version number to the Base URL as follows :

https://www.patbase.com/rest/[Version Number]/api.php

For example if you wish to access the 1.5 Version of the Patbase API you can use the follow URL:

https://www.patbase.com/rest/1.5/api.php

We recommend that you use the standard link in general, and only use the specific versions if you need a specific feature as older versions may be retired and taken offline in the future.

Getting the current version number

To check the current version of your PatBase API use the version method call.

URL

https://www.patbase.com/rest/api.php?method=version

Authentication & session management

PatBase API authentication can be handled in two ways:

1) Login process
2) API Key

For more information on API keys please refer to the API Key section of this document.

To authenticate, simply call the login method as described in the login method section of this document and store the `SessionFarm_GUID` that is included in the response. The `SessionFarm_GUID` can be used for multiple queries and query responses.

Methods

All data can be returned in either JSON or XML format. By default, the data is returned in JSON format. To convert the data into XML, simply add `&xml=1` to the end of the URL of any method call.

***Please note**: All example response output in this document will be in JSON format. For any method call `&xml=1` will be needed to be included to retrieve XML data.*

Login

This is the method used to obtain login credentials for the system. The login credentials obtained will be required for all PatBase API methods except those that do not require authorisation.

This login call method is not necessary for API key access. Simply attach the API key to any method request. This excludes methods that require or supply a `QueryKey`. A valid authentication code for these method calls are always compulsory.

To login, simply provide your username and password to the method in the URL format described below. As the username and password are provided in plain text, it is highly recommended to make the password unique to the PatBase API system. Once successfully logged in, extract the `SessionFarm_GUID` value from the response header - this is the value that controls access. Upon each login this value will change, so this login call method will need to be repeated whenever authorisation expires in order to retrieve a new value.

URL

https://www.patbase.com/rest/api.php?method=login&userid=[userid]&password=[password]

Example URL

https://www.patbase.com/rest/api.php?method=login&userid=user@example.com&password=mypassword

Successful login response

```
{"LOGIN_TO_API":"OK"}
```

In the response header, there should be a `Cookie` displayed. This is the value of the `SessionFarm_GUID` which will need to be saved and included in any further requests to obtain access to authorised features and methods.

Output Header Information:

```
Set-Cookie=SessionFarm_GUID=%7B03DCF4AC-235D-4773-B1A6-AE9499DDCDAF%7D
OGSession=1654816812; path=/
```

Unsuccessful login response

An unsuccessful login attempt may result in the following error messages:

1) Wrong user ID and/or password

   The username and/or password is incorrect. Please check the entered username and password to ensure any special characters are URI encoded.

```
{"ERROR":"Wrong userid and or password"}
```

2) Missing user ID and/or password

   One or more required pieces of information is missing. Please check the supplied query string to ensure both the username and password have been provided correctly.

```
{"ERROR":"Missing userid and or password"}
```

3) Access to API not allowed for account

   API access has not been enabled or API access has been revoked. If this response is received in error, please contact Minesoft customer support at support@minesoft.com

```
{"ERROR":"Access to the API is not allowed for your account"}
```

GetWeek

This method is used to obtain the last complete PatBase Week for the PatBase database. This method does not require authorisation.

The PatBase week is a special timestamp for records to indicate when they were added to the PatBase database. Once all records for a given week are added, the week value is updated to ensure that it always reflects the last fully completed week (no more records for that week will be added, but records may still be updated).

This method is useful to check for new data, see what was added in the previous week and to see how old a record is. The week value is usually updated on the weekend, but there is no set time when the value is updated.

URL

https://www.patbase.com/rest/api.php?method=getweek

Successful GetWeek response:

The response will be the week in the format: YYWW

YY represents the PatBase Year and WW represents the PatBase week. The returned value can be converted to an integer if required for comparison purposes.


```
{"Week":"2030"}
```

GetMonth

This method is used to obtain the last complete PatBase month for the PatBase Database. The PatBase month is a collection of weeks separated by the Boolean operator `OR` to make them easier to use in a search. This method does not require authorisation.

The PatBase week is a special timestamp for records to indicate when they were added to the PatBase database. Once all records for a given week are added, the week value is updated to ensure that it always reflects the last fully completed week (no more records for that week will be added, but records may still be updated).

This method is useful to check for new data, see what was added in the previous week and to see how old a record is. The week value is usually updated on the weekend and the month value on the first Monday of the month, but there is no set time when the values are updated, so this may change from week to week.

URL

https://www.patbase.com/rest/api.php?method=getmonth

Successful GetMonth response

The response will be the week in the format of multiple PatBase weeks separated by `OR`: YYWW OR YYWW OR YYWW OR YYWW

YY represents the PatBase Year and WW represents the PatBase week. The returned value can be converted to an integer if required for comparison purposes.

```
{"Month":"2023 OR 2024 OR 2025 OR 2026 OR 2027"}
```

Query

This method is used to run a query on the PatBase database. All PatBase command language can be used to construct the query although there may be restrictions on the number of wildcards used and the total length of the query string.

The query will run on the entirety of the PatBase database. The `QueryKey` supplied can then be used in various ways to view the results. The maximum number of results returned is 100,000. Results larger than this amount are ignored, so the search query may need to be refined to retrieve relevant data.

Query keys are only valid for the current session, so a new query key may be required. This can be done by re-running the query.

Please note: *The PatBase database is constantly being updated, so a query run one day may retrieve a different response to a previously run query due to the addition of new data. Additionally, complicated queries can take a longer time to complete, please set timeout values appropriately.*

URL

https://www.patbase.com/rest/api.php?method=query&query=[PatBaseQuery]

Example URL

Search query: FT=(space shuttle)

https://www.patbase.com/rest/api.php?method=query&query=FT%3D%28Space%20Shuttle%29

Successful Query response

A successful response will display two pieces of information - The number of results the query obtained and a query key. The query key can then be used to view the returned results using methods such as `SearchResults` Method.


```
{
  "Results": "4054",
  "QueryKey": "{4727075C-30A5-438E-93AA-
2640EE4B5F4A}Api_3024913442287271338412342690 7"
}
```

Unsuccessful Query response

An unsuccessful query may result in the following error messages:

1) Missing PatBase query

The PatBase query string is missing, please check the query string has been entered and ensure that it is properly URI encoded.

```
{"ERROR":"Missing PatBase query"}
```

If the same error message is received multiple times, please contact customer services at support@minesoft.com for further assistance.

2) Syntax error

There is likely an error in the query string. In the example below, there is a missing end bracket.

```
{"ERROR":"SYNTAX_ERROR_MISSING_CLOSE_PARENTHESIS"}
```

UpdateQuery

This method retrieves information on updated publications of a PatBase query for a given index date. This could include additional publications, legal status updates, priority data updates etc. To get further information on the update query results, additional methods can be used such as `GetMember`.

This method can be run on a daily, weekly or monthly basis in order to retrieve the latest updates for a PatBase query. Simply switch the index date to the current date and time (According to UTC) to receive the most up-to-date information that has been indexed for the PatBase query.

Please note: *This method is not to be used for a bulk update. The maximum response output is 50,000 publications. For large query updates, please contact support@minesoft.com.*

URL

https://www.patbase.com/rest/api.php?method=queryupdate&query=[PatBasequery]&indexdate=[YYY-MM-DDT00:00:00Z]&rows=[rows*]&from=[from*]

Any values marked with a * are optional.

Index date format: YYYY-MM-DDT00:00:00Z

Example URL

PatBase query: FT=(space shuttle)

Index date: 29th November 2019 12:00 UTC

https://www.patbase.com/rest/api.php?method=queryupdate&query=%28space%20shuttle%29&indexdate= 2020-07-28T09:00:00Z

Successful UpdateQuery response

If successful, a list of publication numbers that have been updated will be displayed.


```
{
  "Results": 16,
  "Returned": 16,
  "Publications": [
    {
      "id": "EP2965112_A1"
    },
    {
      "id": "US2013197860_AA"
    },
    {
      "id": "WO14137546_A1"
    },
    {
      "id": "CA2896816_AA"
    },
    {
      "id": "US10088312_BB"
    },
    {
      "id": "US2011248887_AA"
    },
    {
      "id": "US9625573_BB"
    },
    {
      "id": "EP2556603_A2"
    },
    {
      "id": "WO11127450_A2"
    },
    {
      "id": "EP2556603_B1"
    },
    {
      "id": "US2018089213_AA"
    },
    {
      "id": "US2017103571_AA"
    },
    {
      "id": "US10724874_BB"
    },
    {
      "id": "AU2018290499_AA"
    },
    {
      "id": "US2020143415_AA"
    },
    {
      "id": "WO19001349_A1"
    }
  ]
}
```

Unsuccessful UpdateQuery response

An unsuccessful retrieval of update query information may result in the following error messages:

1) Missing PatBase query or index date

The PatBase query and/or index date could not be detected. Please check a valid PatBase query and/or index date has been supplied in the query string.

```
{"ERROR":"Missing PatBase query Or Index Date"}
```

2) PatBase query syntax error

There is likely an error in the query string. In the example below, there is a missing end bracket.

```
{"ERROR":"SYNTAX_ERROR_MISSING_CLOSE_PARENTHESIS"}
```

SearchResults

The search results method is used to retrieve a subset of the data for a given search query result. This method provides an overview of the result family information.

URL

https://www.patbase.com/rest/api.php?method=searchresults&querykey=[querykey]&sortorder=[sortorder*]&from=[from*]&to=[to*]

All values marked with * are optional fields.

The sort order field corresponds with an integer:

```
1 : Priority Date Ascending
2 : Priority Date Descending
3 : Assignee
4 : Inventor
5 : Publication Date Ascending
6 : Publication Date Descending
7 : Patent number
8 : Most Cited
9 : Relevance
10 : Family Number Ascending
11 : Family Number Descending
```

Please note: *If no sort order is provided, the records will be returned on a first come first served format, meaning the results order may change. To avoid missing or duplicating families, please provide a sort order preference.*

The "To" and "From" values can be used to tabulate the data in order to avoid overloading the screen and any programs with data. "To" and "From" values that are set too high or too low will be automatically adjusted to reflect the actual number of results.

Example URL

https://www.patbase.com/rest/api.php?method=searchresults&querykey={3DEC8B63-F17E-44B6-8338-55539E0FE4A5}Api_240162585527409222522620060 33&sortorder=6&from=1&to=20

Successful SearchResults response

If successful, the returned JSON or XML response will consist of a list of PatBase families and a small subset of the families' data. If a sort order is specified, the data will be in the order requested.


```
{
  "Families": [
    {
      "Record": "1",
      "Family": "61123660",
      "PatentNumber": "US2015363471 AA",
      "ProbableAssignee": "BOUKARI MOROU",
      "FirstInventor": "BOUKARI MOROU",
      "EarliestPubDate": 20151217,
      "ForwardCitations": 3,
      "BackCitations": 52,
      "MemberCount": 5,
      "Title": "PROCESS AND DEVICE FOR SEARCHING FOR A PLACE",
      "Abstract": "<div lang=\"en\"><p>Process for searching for a place on
the basis of a free request (in natural language).</p></div>"
    }
  ]
}
```


All data is returned as strings for simplicity, but some can be safely converted to integers. The fields that can be safely converted to integers are underlined below. The results are provided as arrays of PatBase Families with the following data included:

- Record – The record number of the record in relation to your search.
- Family – The PatBase Family number.
- PatentNumber – The Master Patent Number for the family, the primary patent according to the PatBase family
- ProbableAssignee – The assignee PatBase believes to be the current owner of the patent family based on reassignment information and the most recent publications appearing in the family.
- FirstInventor – The first assigned inventor for the family.
- EarliestPubDate – The earliest publication of a patent within the PatBase family.
- ForwardCitations – The number of publications that have cited this document.
- BackCitations – The number of publications this family cites.
- MemberCount – The number of publications that make up this family.

- Title – The most relevant publication title for the family, this is normally an English language title where possible but may also be other languages including Non-Latin languages.
- Abstract – The representative publication abstract for the family, this is normally an English language abstract where possible but it may be other languages including Non-Latin languages. The abstract information usually includes the publication number of the publication it is extracted from.

Unsuccessful SearchResults response

An unsuccessful retrieval of bibliographic information from search results may result in the following error messages:

1) Invalid or expired key

The query key supplied may be invalid or not properly formatted. Please ensure the key has been URI encoded. If this error message persists, then it is likely that the query key has expired, the `Query` method will need to be run again to obtain a new query key.

```
{"ERROR":"Invalid query key or key has expired"}
```

2) Missing query key

The query key has not been detected. Please ensure the correct URL is being used and the values added have been properly URI encoded.

```
{"ERROR":"Missing query key"}
```

SearchResultsBIB

This method is used to retrieve the bibliographic information of a search result. This shows the publications in the family, information on priorities and more detailed information on what publications make up the family. Also included are the classification codes that link together to help classify the data.

URL

https://www.patbase.com/rest/api.php?method=searchresultsbib&querykey=[QueryKey]&sortorder=[sortorder*]&from=[from*]&to=[to*]

All values marked with * are optional fields.

The sort order field corresponds with an integer:

```
1 : Priority Date Ascending
2 : Priority Date Descending
3 : Assignee
4 : Inventor
5 : Publication Date Ascending
6 : Publication Date Descending
7 : Patent number
8 : Most Cited
9 : Relevance
10 : Family Number Ascending
11 : Family Number Descending
```

Please note: *If no sort order is provided, the records will be returned on a first come first served format, meaning the results order may change. To avoid missing or duplicating families, please provide a sort order preference.*

The “To” and “From” values can be used to tabulate the data to avoid overloading the screen and any programs with data. Values that are set too high or too low will be automatically adjusted to reflect the actual number of results.

Example URL

https://www.patbase.com/rest/api.php?method=searchresultsbib&querykey={3DEC8B63-F17E-44B6-8338-55539E0FE4A5}Api_240162585527409222522620060 33&sortorder=6&from=1&to=50

Successful SearchResultsBIB response

If successful, the returned JSON or XML response will consist of a list of PatBase families and their bibliographic information. If a sort order is specified, the data will be in the order requested.


```
{
  "Families": [
    {
      "Record": "1",
      "Family": "61123660",
      "PatentNumber": "US2015363471 AA",
      "ProbableAssignee": "BOUKARI MOROU",
      "FirstInventor": "BOUKARI MOROU",
      "Publications": [
        {
          "PN": "US10552424",
          "KD": "BB",
          "CC": "US",
          "PD": "20200204",
          "AN": "US20150739426",
          "AD": "20150615",
          "UE": "2006",
          "DEAD": false,
          "GRANT": true,
          "IMG": 4
        },
        {
          "PN": "US10728365",
          "KD": "BB",
          "CC": "US",
          "PD": "20200728",
          "AN": "US20160181674",
          "AD": "20160614",
          "UE": "2031",
          "DEAD": false,
          "GRANT": true,
          "IMG": 4
        },
        {
          "PN": "US2015363471",
          "KD": "AA",
          "CC": "US",
          "PD": "20151217",
          "AN": "US20150739426",
          "AD": "20150615",
          "UE": "1551",
          "DEAD": false,
          "GRANT": false,
          "IMG": 4
        },
        {
          "PN": "US2017004214",
          "KD": "AA",
          "CC": "US",
          "PD": "20170105",
          "AN": "US20160181674",
          "AD": "20160614",
          "UE": "1701",
```

```
      "DEAD": false,
      "GRANT": false,
      "IMG": 4
    },
    {
      "PN": "US2018089213",
      "KD": "AA",
      "CC": "US",
      "PD": "20180329",
      "AN": "US20170783962",
      "AD": "20171013",
      "UE": "1813",
      "DEAD": false,
      "GRANT": false,
      "IMG": 12
    }
  ],
  "Priorities": [
    {
      "PR": "US20140012437P",
      "PRD": "20140616"
    },
    {
      "PR": "US20150739426",
      "PRD": "20150615"
    },
    {
      "PR": "US20160181674",
      "PRD": "20160614"
    },
    {
      "PR": "US20170783962",
      "PRD": "20171013"
    },
    {
      "PR": "US20160410506P",
      "PRD": "20161020"
    },
    {
      "PR": "US20160414294P",
      "PRD": "20161028"
    }
  ],
  "IPC": [
    "G06F16/2457",
    "G06F16/29",
    "G06F17/00",
    "G06F16/00",
    "G06N5/04",
    "H04L29/06",
    "G06F17/30"
  ],
  "CPC": [
    "G06F16/24575",
    "G06F16/29",
    "G06N5/04",
    "H04L67/42",
    "G06F16/00",
    "G06F16/90324",
    "G06F16/9038",
```

```
        "G06F16/9535"
      ],
      "USC": [
        "1/1",
        "707/722"
      ],
      "Assignees": [
        {
          "PA": "BOUKARI MOROU",
          "STD": true,
          "CCOR": "FR"
        }
      ],
      "Inventors": [
        {
          "INV": "BOUKARI MOROU",
          "STD": true,
          "CCOR": "FR"
        }
      ],
      "Title": "PROCESS AND DEVICE FOR SEARCHING FOR A PLACE",
      "Abstract": "<div lang=\"en\"><p>Process for searching for a place on
the basis of a free request (in natural language).</p></div>"
    }
  ]
}
```


All data is returned as strings for simplicity, but some can be safely converted to integers. The fields that can be safely converted to integers are underlined below. The results are provided as arrays of PatBase Families with the following data included:

- Record – The record number of the record in relation to your search.
- Family – The PatBase Family number for the family.
- PatentNumber – The Master Patent Number for the family, the primary patent according to the PatBase family.
- ProbableAssignee – The assignee PatBase believes to be the current owner of the patent family based on reassignment information and the most recent publications appearing in the family.
- FirstInventor – The first assigned inventor for the family.
- Publications – An array of publications containing:
    - PN – Publication number
    - KD – Kind Code
    - CC – Country Code
    - PD – Publication Date.

    - AN – Application Number
    - AD – Application Date.
    - UE – PatBase Week the publication was added.
    - IMG – Number of images related to this publication.
- Priorities – An array containing a list of priority information for each country, each array entry has 2 values, PR which is the priority number and PRD which is the priority date. The priority date can be safely converted to an integer.
- CPC – An array of CPC Codes, if none exist for this family then this entry will not be in the returned data.
- IPC – An array of IPC Codes, the codes will be for IPC8. If none exist for this family then this entry will not be in the returned data.
- USC – An array of US classification codes. If none exist for the family then this entry will not be in the returned data.
- Assignees – An array of assignee information for the family, contains the following information:
    - PA – Assignee Name
    - STD – Whether the assignee name has been standardised or not
    - CCOR – Country of origin for the assignee
- Inventor – An Array of inventor information containing the following information:
    - INV – Inventor name.
    - STD – Shows `true` if the inventor name has been standardised, `false` if not standardised.
    - CCOR – Country of origin for the inventor
- Title – The most relevant publication title for the family, this is normally an English language title where possible but may also be other languages including Non-Latin languages.
- Abstract – The most relevant publication abstract for the family, this is normally an English language abstract where possible but it may be other languages including Non-Latin languages. The abstract information usually includes the publication number of the publication it is extracted from.

Unsuccessful SearchResultsBIB response

An unsuccessful retrieval of bibliographic information from search results may result in the following error messages:

1) Invalid or expired key

The query key supplied may be invalid or not properly formatted. Please ensure the key has been URI encoded. If this error message persists, then it is likely that the query key has expired, and the `Query` method will need to be run again to obtain a new query key.

```
{"ERROR":"Invalid query key or key has expired"}
```

2) Missing query key

The query key has not been detected. Please ensure the correct URL is being used and the values added have been properly URI encoded.

```
{"ERROR":"Missing query key"}
```

SearchResultsFN

This method is used to retrieve a list of PatBase family numbers. This is a simple list that will require splitting to attain individual numbers. These numbers can be used in conjunction with other methods to retrieve further information and data on the families.

URL

https://www.patbase.com/rest/api.php?method=searchresultsFN&querykey=[QueryKey]&sortorder=[sortorder*]&from=[from*]&to=[to*]

All values marked with * are optional.

The sort order field corresponds with an integer:

```
1 : Priority Date Ascending
2 : Priority Date Descending
3 : Assignee
4 : Inventor
5 : Publication Date Ascending
6 : Publication Date Descending
7 : Patent number
8 : Most Cited
9 : Relevance
10 : Family Number Ascending
11 : Family Number Descending
```

Please note: *If no sort order is provided, the records will be returned on a first come first served format, meaning the results order may change. To avoid missing or duplicating families, please provide a sort order preference.*

The "To" and "From" values can be used to tabulate the data to avoid overloading the screen and any programs with data. Values that are set too high or too low will be automatically adjusted to reflect the actual number of results.

Example URL

https://www.patbase.com/rest/api.php?method=searchresultsFN&querykey={732DAF15-D76F-4FA6-82BC-0048EA3CAEED}Api_2508050742907615307149412047O&sortorder=8&from=1&to=10

Successful SearchResultsFN response

If successful, the returned JSON or XML response will consist of a string with a list of PatBase family numbers. The family numbers will be separated by a comma (",").


```
{"Families":"61123660,72664939,65394167,49728512,80060405"}
```

Unsuccessful SearchResultsFN response

An unsuccessful retrieval of family numbers from search results may result in the following error messages:

1) Invalid or expired key

   The query key supplied may be invalid or not properly formatted. Please ensure the key has been URI encoded. If this error message persists, then it is likely that the query key has expired, the `Query` method will need to be run again to obtain a new query key.

   ```
   {"ERROR":"Invalid query key or key has expired"}
   ```

2) Missing query key

   The query key has not been detected. Please ensure the correct URL is being used and the values added have been properly URI encoded.

   ```
   {"ERROR":"Missing query key"}
   ```

For information on PatBase family numbers please refer to the PatBase Help files.

SearchResultsStats

This method is used to retrieve statistical information on a specific search set. It returns the count of the number of families in your results broken down by a specific field.

URL

https://www.patbase.com/rest/api.php?method=searchresultsstats&querykey=[QueryKey]&field=[field]&limit=[limit*]

All values marked with * are optional.

The available fields are:

```
cc : Country code
ppa : Probably Patent Assignee
inv : Inventor Name
epdyear : Earliest Publication Year
lpdyear : Latest Publication Year
cpc : CPC Class
ipc : IPC Class
cpcgroup : CPC Class Group only
ipcgroup : IPC Class Group only
prc : Priority Countries
epryear : Earliest Priority Year
lpryear : Latest Priority Year
ag : Agent Name
```

The “Limit” value can be used number of families analysed from you results set. This should be between 1 and 5000. The default is 100

Example URL

https://www.patbase.com/rest/api.php?method=searchresultsstats&querykey={732DAF15-D76F-4FA6-82BC-0048EA3CAEED}Api_25080507429076153071494120470&field=cc&limit=500

Successful SearchResultsFN response

If successful, the returned JSON or XML response will consist of a string with the requested fields and the number of families associated with said field. The fields will be separated by a comma (“,”).


```
{
    "stats": [
        {
            "US": 15768,
            "WO": 2662,
            "EP": 2555,
            "JP": 1706,
```

```
            "CN": 1444,
            "AU": 1258,
            "DE": 1182,
            "IN": 553,
            "CA": 416,
            "GB": 326,
            "KR": 274,
            "AT": 207,
            "HK": 203,
            "TW": 127,
            "SG": 40,
            "NZ": 31,
            "BR": 28,
            "ES": 28,
            "IL": 25,
            "RU": 20,
            "MX": 15,
            "SE": 12,
            "DK": 9,
            "ZA": 5,
            "FR": 4,
            "PL": 4,
            "TH": 4,
            "PT": 3,
            "EA": 2,
            "IT": 2,
            "MA": 2,
            "MY": 2,
            "NO": 2,
            "BE": 1,
            "CH": 1,
            "CL": 1,
            "GR": 1,
            "LU": 1,
            "NL": 1,
        }
    ]
}
```


Unsuccessful SearchResultsStats response

An unsuccessful retrieval of stats from search results may result in the following error messages:

1) Invalid or expired key

   The query key supplied may be invalid or not properly formatted. Please ensure the key has been URI encoded. If this error message persists, then it is likely that the query key has expired, the `Query` method will need to be run again to obtain a new query key.


```
{"ERROR":"Invalid query key or key has expired"}
```


2) Missing query key or field

The query key has not been detected or the field parameter is misting. Please ensure the correct URL is being used and the values added have been properly URI encoded.

```
{"ERROR":" Missing query key or field"}
```

GetRecord

The method is used to retrieve details on a single family. The basic details are returned so that the user can drill down further as needed. The PatBase family number that is supplied is unique to that family, but the underlying data may change as the PatBase database is updated, so it is recommend to always check for new data on a regular basis if the data needs to be stored locally for caching purposes

URL

https://www.patbase.com/rest/api.php?method=getrecord&family=[Family Number]
&extended=[0*]&ft=[1*]

All values marked as * are optional.

- The **`extended=[0*]`** parameter can be used to return only the specific family number requested and not all families in the extended family. This is useful when an extended family is particularly large.
- The **`ft=[1*]`** parameter can be used to return the full text and machine translation of the master patent number (representative member of the family).

Example URL

https://www.patbase.com/rest/api.php?method=getrecord&family=19524483

Successful GetRecord response

If successful, the returned JSON or XML response will display the family information for the requested family number.


```
{
  "Family": [
    {
      "Family": "19524483",
      "PatentNumber": "GB789474 A",
      "ProbableAssignee": "EXXON MOBIL CORP",
      "FirstInventor": "",
      "Publications": [
        {
          "PN": "GB789474",
          "KD": "A",
          "CC": "GB",
          "PD": "19580122",
          "AN": "GB19550023942",
          "AD": "19550819",
          "UE": "",
          "IMG": 0,
          "DA": "DEAD",
          "Family": 19524483
        }
      ],
```

```
"Priorities": [
  {
    "PR": "GB19550023942",
    "PRD": "19550819"
  }
],
"IPC": [
  "C07F9/00",
  "C07F9/04",
  "C10M159/00",
  "C10M159/12"
],
"CPC": [
  "C07F9/04",
  "C10M159/123",
  "C10M2201/041",
  "C10M2201/042",
  "C10M2203/10",
  "C10M2203/102",
  "C10M2203/104",
  "C10M2203/106",
  "C10M2203/108",
  "C10M2205/20",
  "C10M2207/04",
  "C10M2207/08",
  "C10M2207/281",
  "C10M2207/282",
  "C10M2207/283",
  "C10M2207/286",
  "C10M2207/32",
  "C10M2207/34",
  "C10M2207/40",
  "C10M2207/404",
  "C10M2209/082",
  "C10M2209/11",
  "C10M2209/111",
  "C10M2209/112",
  "C10M2211/06",
  "C10M2213/02",
  "C10M2213/062",
  "C10M2215/202",
  "C10M2219/00",
  "C10M2219/024",
  "C10M2219/082",
  "C10M2223/04",
  "C10M2223/042",
  "C10M2223/12",
  "C10M2225/04",
  "C10M2225/041",
  "C10N2010/04",
  "C10N2010/06",
  "C10N2010/08",
  "C10N2010/12",
  "C10N2010/14",
  "C10N2040/02",
  "C10N2040/08",
  "C10N2040/135",
  "C10N2040/16",
  "C10N2040/17",
  "C10N2040/22",
```

```
        "C10N2050/10",
        "C10N2070/02"
      ],
      "USC": [],
      "Assignees": [
        {
          "PA": "EXXON RESEARCH ENGINEERING CO",
          "STD": "Y",
          "CCOR": ""
        },
        {
          "PA": "ESSO RESEARCH AND ENGINEERING COMPANY",
          "STD": "N",
          "CCOR": ""
        },
        {
          "PA": "ESSO RESEARCH AND ENGINEERING CO",
          "STD": "N",
          "CCOR": ""
        },
        {
          "PA": "EXXON MOBIL CORP",
          "STD": "Y",
          "CCOR": ""
        }
      ],
      "Inventors": [],
      "Title": "IMPROVEMENTS…",
      "Abstract": "A metal …"
    }
  ]
}
```


All data is returned as strings for simplicity, but some can be safely converted to integers. The fields that can be safely converted to integers are underlined below. The response will consist of a list of the following data from the PatBase Family:

- Family – The PatBase Family number for the family.
- PatentNumber – The Master Patent Number for the family, the primary patent according to the PatBase family.
- ProbableAssignee – The assignee PatBase believes to be the current owner of the patent family based on reassignment information and the most recent publications appearing in the family.
- FirstInventor – The first assigned inventor for the family.
- Publications – An array of publications containing:
    - PN – Publication number
    - KD – Kind Code
    - CC – Country Code

    - PD – Publication Date.
    - AN – Application Number
    - AD – Application Date.
    - UE – PatBase Week the publication was added
    - IMG – Number of images related to this publication.
    - DA – Dead or Alive (see 'Dead or Alive' section at the end of this document)
- Priorities – A JSON array containing a list of priorities information for each country, each array entry has 2 values, PR which is the priority number and PRD which is the priority date. The priority date can be safely converted to an integer.
- Assignees – A JSON array of assignee information for the family, contains the following information:
    - PA – Assignee Name
    - STD – Whether the assignee name has been standardised or not
    - CCOR – Country of origin for the assignee
- Inventor – A JSON Array of inventor information, contains the following information:
    - INV – Inventor name
    - STD – Whether the inventor name has been standardised or not
    - CCOR – Country of origin for the inventor
- Title – The most relevant publication title for the family, this is normally an English language title where possible but may also be other languages including Non-Latin languages.
- Abstract – The most relevant publication abstract for the family, this is normally an English language abstract where possible but it may be other languages including Non-Latin languages. The abstract information usually includes the publication number of the publication it is extracted from.
- FullText – An array containing the full text for the master patent (representative family member), the array may contain non-Latin characters if there are is any non-Latin information in the PatBase database. If the full text is not available or

was not requested this will be an empty array. The information provided is as follows:

- Title – Title of the family member, may also contain a tag showing what language the title is in
- Abstract – The Abstract of the publication, may also contain a tag showing which language the abstract is in.
- Claims – The claims of the patent, may also contain a tag showing which language the claims are in, there are also tags in the claims containing claim numbers for reference purposes.
- Description – The description of the patent, may also contain a tag showing which language the description is in.

Unsuccessful GetRecord response

An unsuccessful retrieval of family information may result in the following error message:

1) Missing family number

The family number has not been detected. Please ensure the URL is correct and ensure the values added have been properly URI encoded.

```
{"ERROR":"Missing family number"}
```

GetMember

This method is used to retrieve the full details of a specific family member. The data provided includes the full claims of the publication so it may be large in size. This should be accounted for with regards to timeout settings and temporary storage.

The intent of this method is to gain access to as much data as possible about a single publication that makes up the family, in order to analyse the claims of the record.

This method is used to get more information on a single member of a family, be it a publication or an application document.

URL

https://www.patbase.com/rest/api.php?method=getmember&pn=[Patent Number]&kd=[Kind Code*]&ft=[True/False*]&legal=[True/False*]

All values marked with * are optional.

- The supplied Patent Number should be formatted to the PatBase formatting standard. For more information regarding the PatBase patent number formats, please refer to the PatBase Help files.
- `FT` stands for Full Text. To receive the Full Text data of the family member set `FT=true` within the query string.

Please note: *The full text of some family members may be extremely large so please be prepared to handle a large amount of data.*

- `Legal` stands for the legal status of the family member, to receive this data set `legal=True` within the query string.

Please note: *The legal status information is derived from PatBase and the INPADOC database produced by the European Patent Office. Minesoft and RWS Group does not warrant or assume any legal liability or responsibility for the accuracy or completeness of the data. A qualified attorney should be consulted for advice on patent legal status. US Reassignment information is derived from USPTO.*

Example URL

https://www.patbase.com/rest/api.php?method=getmember&pn=US4500000&ft=true&legal=true

Successful GetMember response

A JSON or XML response based on the requested format will be displayed.


```
{
  "Family": 28543211,
  "PubId": "US4500000_A",
  "IndexDate": "2021-11-04T23:04:52.522Z",
  "Modified": "2021-09-29T13:17:00Z",
  "Publications": [
    {
      "PN": "US4500000",
      "KD": "A",
      "CC": "US",
      "PD": "19850219",
      "AN": "US19840588567",
      "AD": "19840312",
      "UE": "",
      "IMG": 1,
      "DA": "DEAD",
      "PN_DOCDB": "US4500000",
      "KD_DOCDB": "A",
      "AN_DOCDB": "US58856784",
      "PN_ORIGINAL": "US04500000",
      "KD_ORIGINAL": "A",
      "AN_ORIGINAL": "US06588567"
    }
  ],
  "Priorities": [
    {
      "PR": "US19840588567",
      "PRD": "19840312"
    }
  ],
  "IPC": [
    "B65D30/00",
    "B65D33/00"
  ],
  "CPC": [
    "B65D31/00",
    "B65D33/001",
    "Y10S206/806"
  ],
  "USC": [
    "206/526",
    "206/554",
    "206/806"
  ],
  "Assignees": [
    {
      "PA": "MEMBRINO HERCULES",
      "CCOR": "",
      "STD": "Y"
    }
  ],
  "Inventors": [
    {
      "INV": "MEMBRINO HERCULES",
      "CCOR": "US",
      "STD": "Y"
```

```
    }
  ],
  "Agent": [],
  "ForwardCitations": [
    {
      "PN": "US4560068",
      "KD": "A",
      "Year": "1985",
      "RefCode": ""
    },
    {
      "PN": "USD509728",
      "KD": "S1",
      "Year": "2005",
      "RefCode": "C,I,T"
    },
    {
      "PN": "US4688676",
      "KD": "A",
      "Year": "1987",
      "RefCode": ""
    },
    {
      "PN": "USD580781",
      "KD": "S1",
      "Year": "2008",
      "RefCode": ""
    },
    {
      "PN": "EP0267706",
      "KD": "A1",
      "Year": "1988",
      "RefCode": "A"
    },
    {
      "PN": "EP0360925",
      "KD": "A1",
      "Year": "1990",
      "RefCode": "Y"
    },
    {
      "PN": "US5125885",
      "KD": "A",
      "Year": "1992",
      "RefCode": ""
    },
    {
      "PN": "US2002151842",
      "KD": "AA",
      "Year": "2002",
      "RefCode": ""
    },
    {
      "PN": "US2003090487",
      "KD": "AA",
      "Year": "2003",
      "RefCode": ""
    },
    {
      "PN": "US2003149397",
```

```
      "KD": "A9",
      "Year": "2003",
      "RefCode": ""
    },
    {
      "PN": "US2003200103",
      "KD": "AA",
      "Year": "2003",
      "RefCode": ""
    },
    {
      "PN": "US2007267319",
      "KD": "AA",
      "Year": "2007",
      "RefCode": ""
    },
    {
      "PN": "US2017305606",
      "KD": "AA",
      "Year": "2017",
      "RefCode": "A"
    },
    {
      "PN": "US4557384",
      "KD": "A",
      "Year": "1985",
      "RefCode": ""
    },
    {
      "PN": "US4690280",
      "KD": "A",
      "Year": "1987",
      "RefCode": ""
    },
    {
      "PN": "US4734148",
      "KD": "A",
      "Year": "1988",
      "RefCode": ""
    }
  ],
  "BackwardCitations": [
    {
      "PN": "US401233",
      "KD": "A",
      "Year": "1889",
      "RefCode": ""
    },
    {
      "PN": "US2982398",
      "KD": "A",
      "Year": "1961",
      "RefCode": ""
    },
    {
      "PN": "US3285407",
      "KD": "A",
      "Year": "1966",
      "RefCode": ""
    },
```

```
    {
      "PN": "US3862687",
      "KD": "A",
      "Year": "1975",
      "RefCode": ""
    },
    {
      "PN": "US4406371",
      "KD": "A",
      "Year": "1983",
      "RefCode": ""
    },
    {
      "PN": "US4420082",
      "KD": "A",
      "Year": "1983",
      "RefCode": ""
    },
    {
      "PN": "DE2657395",
      "KD": "A1",
      "Year": "1978",
      "RefCode": ""
    },
    {
      "PN": "GB1008293",
      "KD": "A",
      "Year": "1965",
      "RefCode": ""
    }
  ],
  "NPLCitations": [],
  "LegalStatus": [
    {
      "PRSDate": "19841217",
      "Event": "PAT1",
      "Benefit": "",
      "PatBaseGroup": "LSGT",
      "Description": "<![CDATA[Patented Case]]>",
      "Details": "<![CDATA[<attributes></attributes>]]>"
    },
    {
      "PRSDate": "19850219",
      "Event": "",
      "Benefit": "+",
      "PatBaseGroup": "LSGT",
      "Description": "<![CDATA[granted / extensions (spc, cpc, pte)]]>",
      "Details": "<![CDATA[<attributes></attributes>]]>"
    },
    {
      "PRSDate": "19880225",
      "Event": "FPAY",
      "Benefit": "+",
      "PatBaseGroup": "LSFE",
      "Description": "<![CDATA[FEE PAYMENT]]>",
      "Details": "<![CDATA[<attributes><attribute><Name>Year of fee
payment</Name><Value>4 </Value></attribute></attributes>]]>"
    },
    {
      "PRSDate": "19920713",
```

```
      "Event": "FPAY",
      "Benefit": "+",
      "PatBaseGroup": "LSFE",
      "Description": "<![CDATA[FEE PAYMENT]]>",
      "Details": "<![CDATA[<attributes><attribute><Name>Year of fee
payment</Name><Value>8 </Value></attribute></attributes>]]>"
    },
    {
      "PRSDate": "19960924",
      "Event": "REMI",
      "Benefit": "",
      "PatBaseGroup": "",
      "Description": "<![CDATA[MAINTENANCE FEE REMINDER MAILED]]>",
      "Details": "<![CDATA[<attributes></attributes>]]>"
    },
    {
      "PRSDate": "19970216",
      "Event": "LAPS",
      "Benefit": "-",
      "PatBaseGroup": "LSLE",
      "Description": "<![CDATA[LAPSE FOR FAILURE TO PAY MAINTENANCE
FEES]]>",
      "Details": "<![CDATA[<attributes></attributes>]]>"
    },
    {
      "PRSDate": "19970429",
      "Event": "FP",
      "Benefit": "-",
      "PatBaseGroup": "LSLE",
      "Description": "<![CDATA[LAPSED DUE TO FAILURE TO PAY MAINTENANCE
FEE]]>",
      "Details": "<![CDATA[<attributes><attribute><Name>Effective
date</Name><Value>19970219</Value></attribute></attributes>]]>"
    },
    {
      "PRSDate": "20040312",
      "Event": "",
      "Benefit": "",
      "PatBaseGroup": "PD20",
      "Description": "<![CDATA[20 year period]]>",
      "Details": "<![CDATA[<attributes></attributes>]]>"
    },
    {
      "PRSDate": "20040312",
      "Event": "",
      "Benefit": "",
      "PatBaseGroup": "PEXP",
      "Description": "<![CDATA[Calculated Patent Term Expiry]]>",
      "Details": "<![CDATA[<attributes></attributes>]]>"
    },
    {
      "PRSDate": "20090312",
      "Event": "",
      "Benefit": "",
      "PatBaseGroup": "PD25",
      "Description": "<![CDATA[25 year period]]>",
      "Details": "<![CDATA[<attributes></attributes>]]>"
    },
    {
      "PRSDate": "20180122",
```

```
      "Event": "PEX1",
      "Benefit": "",
      "PatBaseGroup": "LSLE",
      "Description": "<![CDATA[Patent Expired Due to NonPayment of
Maintenance Fees Under 37 CFR 1.362]]>",
      "Details": "<![CDATA[<attributes></attributes>]]>"
    },
    {
      "PRSDate": "20180123",
      "Event": "PEX1",
      "Benefit": "",
      "PatBaseGroup": "LSLE",
      "Description": "<![CDATA[Patent Expired Due to NonPayment of
Maintenance Fees Under 37 CFR 1.362]]>",
      "Details": "<![CDATA[<attributes></attributes>]]>"
    },
    {
      "PRSDate": "20180123",
      "Event": "STCH",
      "Benefit": "-",
      "PatBaseGroup": "LSLE",
      "Description": "<![CDATA[INFORMATION ON STATUS: PATENT
DISCONTINUATION]]>",
      "Details":
"<![CDATA[<attributes><attribute><Name>Text</Name><Value>PATENT EXPIRED DUE
TO NONPAYMENT OF MAINTENANCE FEES UNDER 37 CFR 1.362
</Value></attribute></attributes>]]>"
    }
  ],
  "DesignatedStates": [],
  "ProbableAssignee": "BRICMONT INC",
  "Title": "PAD OF PLASTIC BAGS WITH SUPPORT MEANS",
  "Abstract": "A pad of plastic open-mouthed pockets overlying each other
and separably connected by a common base portion, the base portion being
formed of selvage portions extending from the open mouth of the pockets and
being secured together at the sides thereof and at spaced connections at
the free edges thereof, and a support hanger secured to the base portion
and having an extension extending beyond the base portion in a position to
be secured to a surface, the pockets being individually separable from said
base portion to form individual bags.",
  "FullText": [
    {
      "Titles": [
        "<div lang=\"en\">PAD OF PLASTIC BAGS WITH SUPPORT MEANS </div>"
      ],
      "Abstracts": [
        "<div lang=\"en\"><p>A pad of plastic open-mouthed pockets
overlying each other and separably connected by a common base portion, the
base portion being formed of selvage portions extending from the open mouth
of the pockets and being secured together at the sides thereof and at
spaced connections at the free edges thereof, and a support hanger secured
to the base portion and having an extension extending beyond the base
portion in a position to be secured to a surface, the pockets being
individually separable from said base portion to form individual
bags.</p></div>"
      ],
      "Claims": [
        "<div lang=\"en\">The invention claimed is:  <XXC1><x-claim
claimid=\"1\" independent=\"yes\" first=\"first\"><p>1. A pad of plastic
open-mouthed pockets overlying each other and separably connected by a
```

common base portion, said base portion being formed of selvage portions extending from the mouths of said pockets, said selvage portions having free edges in spaced parallel relation to the mouths of their respective pockets and side edges in common with the side edges of said pockets, said selvage portions being secured together by common side securing means at the side edges thereof and by common free edge securing means at the free edges thereof, a support hanger having a substantially longitudinal section and an extension projecting transversely therefrom, said longitudinal section being positioned to abut said free edge securing means to prevent movement thereof in a direction toward said free edges, said side edge securing means preventing lateral movement of said longitudinal section when it is so positioned, and said extension being positioned to by-pass said free edge securing means to project beyond said free edges when said longitudinal section is in abutment with said free edge securing means. </x-claim></XXC1><XXC2><x-claim claimid=\"2\" independent=\"no\" parents=\"1\"> 2. The pad of claim 1 wherein said extension is substantially rigid. </x-claim></XXC2><XXC3><x-claim claimid=\"3\" independent=\"no\" parents=\"1\"> 3. The pad of claim 1 wherein said extension is substantially flexible. </x-claim></XXC3><XXC4><x-claim claimid=\"4\" independent=\"no\" parents=\"1\"> 4. The pad of claim 1 wherein said extension is provided with adhesive to make it self-adhering to a support surface. </x-claim></XXC4><XXC5><x-claim claimid=\"5\" independent=\"no\" parents=\"1\"> 5. The pad of claim 1 wherein said extension is integral with said longitudinal section. </x-claim></XXC5><XXC6><x-claim claimid=\"6\" independent=\"no\" parents=\"1\"> 6. The pad of claim 1 wherein sid longitudinal section and said extension are made of dissimilar materials. </x-claim></XXC6><XXC7><x-claim claimid=\"7\" independent=\"no\" parents=\"1\"> 7. The pad of claim 1 wherein said longitudinal section is substantially rigid and said extension is substantially flexible. </x-claim></XXC7><XXC8><x-claim claimid=\"8\" independent=\"no\" parents=\"1\"> 8. The pad of claim 1 wherein said longitudinal section is positioned between a selected pair of said pockets and abuts said spaced connection to hold said longitudinal section in place. </x-claim></XXC8><XXC9><x-claim claimid=\"9\" independent=\"no\" parents=\"1\"> 9. The pad of claim 1 wherein said side securing means are welds. </x-claim></XXC9><XXC10><x-claim claimid=\"10\" independent=\"no\" parents=\"1\"> 10. The pad of claim 1 wherein said free edge securing means are welds. </x-claim></XXC10> "
      ],
      "Descriptions": [
        "<div lang=\"en\"><x-description> This invention relates to plastic bags, and it particularly relates to packs or pads comprising a plurality of plastic bags having support means to permit individual bags to be removed from the pad while retaining the pad in fully supported position. The pad of bags utilized in the present invention is similar to that disclosed in applicant's prior U.S. Pat. No. 4,406,371, issued Sept. 27, 1983, and comprises layers of individual bags which are welded or otherwise secured together at a selvage portion, the bags being individually separable from the salvage portions. The pad of bags disclosed in the aforesaid U.S. Pat. No. 4,406,371 was constructed to be held by the fingers or on a flat base plate while the bags were separated. However, it has been found that when held by the fingers, it is somewhat difficult to get a clean easy breaking away of the individual bags because of a lack of adequate support to serve as a counterforce. The flat bed, while serving as a support, not only limited the manner in which the pad could be used but did not provide the sort of internal support for the pad which, it has been found, is required for the most efficient utilization of the pad. Furthermore, not only was it difficult to load or fill a bag without first removing it from the pad, but if it was not removed, the

connecting lug would tend to interfere with both the opening and the loading of the bag. It was also found that when using either the fingers or the flat bed with its upstanding connecting lug, there was no support for the ends of the selvage portion so that when a bag was pulled, it often did not break away cleanly. It is, therefore, an object of the present invention to overcome the above and other disadvantages by providing a pad of bags with a support means that permits the pad to be used either vertically or horizontally, which provides a firm and secure internal support for the pad throughout the selvage portion, and which permits easy loading of an individual bag while it is still held in position by the support means. Another object of the present invention is to provide a pad of bags with a support means that is either self-supporting or attachable to a surface by external means. Another object of the present invention invention is to provide a pad of bags with a support means that is extremely simple in construction, inexpensive to make and easily used. Other objects and many of the attendant advantages of this invention will be readily appreciated as the same becomes better understood by reference to the following description when read in conjunction with the accompanying drawings wherein: Fig. 1 is a perspective view of a bag pad and support assembly embodying the present invention. Fig. 2 is a sectional view of the assembly of Fig. 1 taken on line 2--2 of Fig. 1. Fig. 3 is a fragmentary perspective view showing a modified form of the invention. Fig. 4 is a perspective view showing a modified form of support means. Referring in greater detail to the drawings wherein similar reference characters refer to similar parts, there is shown in Fig. 1 a bag pad assembly, generally designated 10, comprising a series of plastic bag pockets 12, each of which has an open mouth 14 defined at its front by a free edge 16 forming the upper edge of the front wall of the pocket--which becomes an individual bag when separated from the pad. The rear wall 18 of the pocket extends beyond the edge 16 of the front wall and has an upper edge 19. A score line 20 extends from edge to edge of the rear wall and defines the upper edge of the rear wall of the bag which is formed by the pocket after it is torn away from the pad along the score line. The area between the score line 20 and the upper edge of the wall 18 constitutes a selvage portion 22. All of the selvage portions 22 are welded together at their opposite ends, as shown at 24 and are also provided with oppositely positioned welds 26 at their upper edges. The welded-together selvage portions combine to form a base portion for the pad. Other connecting means may be used but the welds are preferred. The above-described construction is like that shown in the aforesaid U.S. Pat. No. 4,406,371. However, whereas the base portion in the pad of that patent is provided with a slit to receive the fingers of a hand or a lug on a flat bed, the base portion of the present invention is devoid of such slit which, in itself, forms a weakness in the base. Instead, there is provided a hanger support, generally designated 28. The hanger 28 may be made of any desired relatively rigid material such as cardboard, metal, wood, plastic, or the like. It comprises a straight, longitudinal section 30 having an upstanding central flange 32. The central flange may be integral with the straight section or it may be made of any other desired material, flexible or rigid. The hanger 28 shown in FIGS. 1 and 2 is provided with an aperture 34 for receiving a hook, nail, screw or any other corresponding hanging means. The hanger 28 is inserted between any pair of pockets 12, but preferably in the central portion of the pad for best support. When so inserted, the flange 28 is positioned between the welds 26 so that the flange extends, between a pair of pockets, upwardly of the base portion of the pad while the welds 26 bear against the upper edge of the straight section 30. The welds 26 thereby perform several functions, namely they serve as stop means for the hanger when the device is hung in a vertical position, they serve to align the hanger in a straight horizontal position

```
when the device is hung up, and they serve as horizontal stops to prevent
the flange 32 from moving out of position. The welds 24 at the sides act as
stops to prevent undue movement of the straight section in the horizontal
plane.</p><p>In addition to being capable of hanging in the vertical
position, the device may also be placed in a horizontal position if so
desired.</p><p>Fig. 3 shows a modified form of the device wherein the
hanger 40 is secured to the base portion 42 by a staple 44, the staple
going through all the selvage portions forming the base. A similar staple
is provided for the opposite end of the hanger (not shown). Any number of
staples can be used. It is also possible to substitute any other type of
feasible securing means such as adhesives, clips, screws, rivets, etc.,
depending on the material of which the hanger is made. This type of
fastening means is especially desirable where the hanger is heavy, such as
where it is made of metal or the like.</p><p>It is further possible,, when
using such staples or other securing means, to attach the straight,
longitudinal section of the hanger to one of the outer surfaces of the base
portion, instead of between a pair of pockets.</p><p>The modification in
Fig. 4 is a hanger, generally designated 50, which is similar to hanger 28
in that it has a straight section 52 of the same type of relatively rigid
material. However, instead of an integral rigid flange, it is provided with
a flexible tab 54 which is provided with an adhesive face 56 having a
removable covering 58 that is removable by tearing away on a score line 60.
Above the score line 60 the tab is provided with an aperture 62. In this
manner, the hanger can either be self-adhered to a supporting surface by
the adhesive 56 or it can be connected by a nail, hook, screw, or the like
extending through aperture 52.</p><p>In essence, the elimination of the
slit makes the device more sturdy while the construction of the hanger
permits it to coact with the welds not only to perform the function of the
fingers or the lug on the flat bed as a supporting means, but to permit it
so accomplish such support in a vertial direction--which could not be
accomplished by the lug on the flat bed. In addition, the hanger of the
present invention, especially in its rigid straight section, serves as an
internal support for the base portion somewhat in the fashion of a wire
frame for an umbrella.</p></x-description></div>"
      ]
    }
  ]
}
```


The fields that can be safely converted to integers are underlined below. The response will consist of a list of the follow data about the family member:

- Family – The PatBase Family number for the family.
- Publications – An array of publication information containing:
    - PN – Publication number
    - KD – Kind Code
    - CC – Country Code
    - PD – Publication Date
    - AN – Application Number

- AD – Application Date
- UE – PatBase Week the publication was added.
- IMG – Number of images related to this publication.
- DA – Dead or Alive (see 'Dead or Alive' section at the end of this document)

- Priorities – An array containing a list of priorities information for each country, each array entry has 2 values, PR which is the priority number and PRD which is the priority date. The priority date can be safely converted to an integer.
- CPC – An array of CPC Codes, if none exist for this family then this entry will not be in the returned data.
- IPC – An array of IPC Codes, the codes will be for IPC8. If none exist for this family then this entry will not be in the returned data.
- Assignees – An array of assignee information for the family, contains the following information:
  - PA – Assignee Name
  - CCOR – Country of origin for the assignee
  - STD – Y/N, Y if this is a Standard Assignee
- Inventor – An array of inventor information, contains the following information:
  - INV – Inventor name
  - CCOR – Country of origin for the inventor
  - STD – Y/N, Y if this is a Standard Inventor
- Agent – An array of information on the agent responsible for filing the patent, containing the agents name, address and type. This information is for informative use only.
- ForwardCitations – An array of the documents that cite this documentation, contains the following information:
  - PN – Patent number of the document
  - KD – Kind Code of the document
  - Year – Publication year of the citing document

    - RefCode – The citation's reference code (Examiner reference code), where available

- BackwardCitations – A JSON array of the documents that are cited by this family member:
    - PN – Patent number of the document
    - KD – Kind Code of the document
    - Year – Publication year of the cited document
    - RefCode – The citation's reference code (Examiner reference code), where available
- LegalStatus – An array of legal status events, for descriptions of what the codes mean please refer to the PatBase Help files. If the legal status was not requested or not available this will be an empty array. The events are in the format below:
    - PRSDate – date of the legal status event. This can be safely converted to integer.
    - Event – The event code of the event
    - Benefit – a plus or minus sign to signify if the event was positive or negative to the family member's health as a patent.
    - PatBaseGroup – PatBase Event Group code
    - Description – Description of event
    - Details – Details of event
- Designated States – A list of member states (countries) in which the family member is designated.
- Title – The most relevant publication title for the family, this is normally an English language title where possible but may also be other languages including Non-Latin languages.
- Abstract – The most relevant publication abstract for the family, this is normally an English language abstract where possible but it may be other languages including Non-Latin languages. The abstract information usually includes the publication number of the publication it is extracted from.

- FullText – An array containing the full text for the family member, the array may contain non-Latin characters if there are is any non-Latin information in the PatBase database. If the full text is not available or was not requested this will be an empty array. The information provided is as follows:
    - Title – An array of titles of the family member, may also contain a tag showing what language the title is in and if there is a machine translation (MT).
    - Abstract – An array of abstracts of the family member, may also contain a tag showing which language the abstracts are in and if there is a machine translation (MT).
    - Claims – An array of claims of the family member, may also contain a tag showing which language the claims are in and if there is a machine translation (MT). There are also tags in the claims containing claim numbers for reference purposes.
    - Description – An array of descriptions of the family member, may also contain a tag showing which language the descriptions are in and if there is a machine translation (MT).

Unsuccessful GetMember response

An unsuccessful retrieval of family member information may result in the following error messages:

1) Publication number not found

   The publication number could not be detected. This could be due to an incorrectly supplied kind code or an incorrectly formatted patent number, or the patent number may simply not exist. Please check the format of the patent number and try searching the number on PatBase to see if it can be found.

```
{"ERROR":"Publication number not found"}
```

2) Missing publication number

   The patent number could not be detected. Please check the query string to ensure it is correct and the patent number has been provided.

```
{"ERROR":"Missing publication number"}
```

GetFamily

This method is used to get information on a single PatBase family. If the family is a very large family, all parts of the family will be returned.

This method enables users to download a list of basic information about a PatBase family, based on which family the supplied patent is a member of, or the supplied family number itself. All basic information is available and more detailed information can be obtained via the `GetMember` method. Some of the information here is mirrored by other call methods, such as `SearchResults`, but this method enables direct retrieval of family data without needing to query the database first.

Please note: *API key users will not have to log in to get data via this method.*

URL

https://www.patbase.com/rest/api.php?method=getfamily&family=[Family Number]

OR

https://www.patbase.com/rest/api.php?method=getfamily&pn=[Patent Number]&kd=[Kind Code*]&extended=[0*]

All values marked as * are optional.

- If a family number is supplied, any additional patent numbers supplied will be ignored. Please only supply either the family number or patent number.
- The supplied Patent Number should be formatted to the PatBase formatting standard, for more information about this please refer to the PatBase Help files.
- The `extended=[0*]` parameter can be used to return only the specific family number requested and not all families in the extended family. This is useful when an extended family is particularly large.

Example URL

https://www.patbase.com/rest/api.php?method=getfamily&pn=GB918768

Successful GetFamily response

If successful, a JSON or XML response will be displayed based on the requested format.


```
{
  "Family": [
    {
      "Family": "21026004",
      "PN": "GB918768",
      "KD": "A",
      "PD": "19630220",
      "CC": "GB",
      "AN": "GB19590005356",
      "AD": "19590216",
      "Grant": "YES",
      "DA": "DEAD",
      "ProbableAssignee": "STRACHAN AND HENSHAW LTD",
      "Agent": "",
      "TI": "Improvements in or relating to travelling cranes, transporters
and the like ",
      "AB": "<p>918,768. Assembling…",
      "Priorities": [
        {
          "PR": "GB19590005356",
          "PRD": "19590216"
        }
      ],
      "IPC": [
        "B66C19/00",
        "B66C19/02"
      ],
      "CPC": [
        "B66C19/02"
      ],
      "Assignees": [
        {
          "PA": "STRACHAN AND HENSHAW LIMITED",
          "CCOR": ""
        },
        {
          "PA": "STRACHAN AND HENSHAW LTD",
          "CCOR": ""
        }
      ],
      "Inventors": [
        {
          "INV": "GROSSMITH GEORGE WILFRED",
          "CCOR": ""
        }
      ]
    }
  ]
}
```


The fields that can be safely converted to integers are underlined below. The response will consist of a list of family members, each family member will contain the following information:

- Family – The PatBase Family number for the family.
- PN – Publication number
- KD – Kind Code
- PD – Publication Date.
- CC – Country Code
- AN – Application Number
- AD – Application Date
- Grant – Whether the family member is a granted publication or not
- DA – Dead or Alive (see 'Dead or Alive' section at the end of this document)
- ProbableAssignee – The assignee PatBase believes to be the current owner of the patent family based on reassignment information and the most recent publications appearing in the family.
- Agent – Name of the agent for this family member
- TI – Title of the publication
- AB – Abstract of the publication
- Priorities – An array containing a list of priorities information for each country, each array entry has 2 values, PR which is the priority number and PRD which is the priority date. The priority date can be safely converted to an integer.
- CPC – An array of CPC Codes, if none exist for this family then this entry will not be in the returned data.
- IPC – An array of IPC Codes, the codes will be for IPC8. If none exist for this family, then this entry will not be in the returned data.
- Assignees – An array of assignee information for the family, contains the following information:
    - PA – Assignee Name
    - CCOR – Country of origin for the assignee
- Inventor – An array of inventor information, contains the following information:
    - INV – Inventor name

- CCOR – Country of origin for the inventor

Unsuccessful GetFamily response

An unsuccessful retrieval of family or patent number information may result in the following error messages:

1) No information found for family

PatBase was unable to find any information for the supplied family number. Please check the supplied family number and ensure it is both valid and in the format expected by PatBase.

```
{"ERROR":"No Information found for family: [family number]"}
```

2) Patent number not found

The patent number provided could not be found and so no family information could be found. Please check the patent number is both valid and in the PatBase format.

```
{"ERROR":"Patent number not found"}
```

3) Missing family information

The family number or patent number could be detected. Please check the supplied query string is valid.

```
{"ERROR":"Missing family number"}
```

For information on PatBase family numbers and other patent related terms please refer to the PatBase Help files.

ListPrivateFolders

This method is used to retrieve a list of all currently set up private folders of the logged in user in PatBase. If using an API key, then the folders of the associated PatBase user will be displayed instead.

Shared folders are not accessible via the API, only private folders will be displayed in a list. The folder names provided here can then be used in other API methods to obtain saved lists of families.

URL

https://www.patbase.com/rest/api.php?method=listprivatefolders

Example URL

https://www.patbase.com/rest/api.php?method=listprivatefolders

Successful ListPrivateFolders response

If successful, the response will be a string which contains the names of all the private folders the user has set up in PatBase separated by commas “,”.

```
{"Folders":["Folder 1","Folder 2","Folder 3","Folder 4”]}
```

GetPrivateFolder

This method retrieves the contents of a private PatBase Folder.

The method provided allows the user to get the family numbers of the families that were added to the named folder. The family numbers can then be used alongside other methods to retrieve the details as required.

Please note: *There is no way to edit folders via PatBase API. All folder management must be done via PatBase.*

URL

https://www.patbase.com/rest/api.php?method=getprivatefolder&foldername=[Folder Name]

Example URL

https://www.patbase.com/rest/api.php?method=getprivatefolder&foldername=Pedrick

Successful GetPrivateFolder response

If successful, this method will output a comma separated string, which will contain a list of the families that the user has added to the named folder.

```
{"Families":"4311582,30889029,37951029,22812042"}
```

Unsuccessful GetPrivateFolder response

An unsuccessful retrieval of folder content information may result in the following error messages:

1) Folder not found

   The folder name provided could not be detected. Please ensure the name was properly URI encoded and is a valid folder name for the currently logged in user account.

   ```
   {"ERROR":"Folder not found"}
   ```

2) Missing folder name

   The folder name could not be detected. Please check the query string to ensure the folder name has been added and is properly URI encoded.

   ```
   {"ERROR":"Missing folder name"}
   ```

GetPNLegalStatus

This method retrieves the legal status information for a single member of the family. There is no need to parse the information out of other calls if this is the only information required.

The format of the legal status output is the same format that is provided by the `GetFamilyLegalStatus` and `GetMember` methods. It should be noted that the data provided is for information only and is not guaranteed to be accurate and up to date.

URL

https://www.patbase.com/rest/api.php?method=getpnlegalstatus&pn=[Patent Number]&kd=[Kind Code*]

Any values marked with a * are optional.

Example URL

https://www.patbase.com/rest/api.php?method=getpnlegalstatus&pn=US4500000

Successful GetPNLegalStatus response

This method will output a list of legal status events.


```
{
  "LegalStatus": [
    {
      "PRSDate": "19841217",
      "Event": "PAT1",
      "Benefit": "",
      "PatBaseGroup": "LSGT",
      "Description": "Patented Case",
      "Details": ""
    },
    {
      "PRSDate": "19880225",
      "Event": "FPAY",
      "Benefit": "+",
      "PatBaseGroup": "LSFE",
      "Description": "FEE PAYMENT",
      "Details": null
    },
    {
      "PRSDate": "19920713",
      "Event": "FPAY",
      "Benefit": "+",
      "PatBaseGroup": "LSFE",
      "Description": "FEE PAYMENT",
      "Details": null
    },
    {
      "PRSDate": "19960924",
      "Event": "REMI",
```

```
      "Benefit": "",
      "PatBaseGroup": "",
      "Description": "MAINTENANCE FEE REMINDER MAILED",
      "Details": ""
    },
    {
      "PRSDate": "19970216",
      "Event": "LAPS",
      "Benefit": "-",
      "PatBaseGroup": "LSLE",
      "Description": "LAPSE FOR FAILURE TO PAY MAINTENANCE FEES",
      "Details": ""
    },
    {
      "PRSDate": "19970429",
      "Event": "FP",
      "Benefit": "-",
      "PatBaseGroup": "LSLE",
      "Description": "EXPIRED DUE TO FAILURE TO PAY MAINTENANCE FEE",
      "Details": null
    },
    {
      "PRSDate": "20180123",
      "Event": "PEX1",
      "Benefit": "-",
      "PatBaseGroup": "LSLE",
      "Description": "Patent Expired Due to NonPayment of Maintenance Fees
Under 37 CFR 1.362",
      "Details": ""
    },
    {
      "PRSDate": "20180123",
      "Event": "STCH",
      "Benefit": "-",
      "PatBaseGroup": "LSLE",
      "Description": "INFORMATION ON STATUS: PATENT DISCONTINUATION",
      "Details": null
    }
  ]
}
```


The fields that can be safely converted to integers are underlined below. The events will be in an array, and each event will have the following information:

- PRSDate – The date of the legal status event
- Event – The event code of the event
- Benefit – A plus or minus sign to signify if the event was positive or negative towards the family member's patent life
- PatBaseGroup – PatBase Event Group code
- Description – Description of event
- Details – Details of event

Unsuccessful GetPNLegalStatus response

An unsuccessful retrieval of publication legal status information may result in the following error messages:

1) No legal status found

No legal status information was found for the supplied patent number or patent number and kind code combination. This could mean that the patent number is not in the correct format or there is no legal status information for this family. Please check the patent number to ensure it is in the PatBase patent format.

```
{"ERROR":"No legal status found for: [patent number] [kind code]"}
```

2) Missing publication number

The patent number could not be detected in the supplied query string. Please check the query string to ensure the publication number is present and that the value is properly URI encoded.

```
{"ERROR":"Missing publication number"}
```

GetFamilyLegalStatus

This method is intended for us to get the legal status information for a full PatBase family, the returned dataset will contain all legal status codes for all publications within the family. The format of the legal status output is the same as provided by the `GetFamilyLegalStatus` and the `GetMember` methods.

It should be noted that the data provided is for information only and is not guaranteed to be accurate and up to date.

URL

https://www.patbase.com/rest/api.php?method=getfamilyLegalStatus&family=[Family Number]&extended=[0*]

OR

https://www.patbase.com/rest/api.php?method=getfamilyLegalStatus&pn=[Patent Number]&kd=[Kind Code*]&extended=[0*]

Any values marked with a * are optional.

- If a family number is supplied, any patent numbers supplied will be ignored. Please supply either the family number or patent number only in the query string.
- The **`extended=[0*]`** parameter can be used to return only the specific family number requested and not all families in the extended family. This is useful when an extended family is particularly large.

Example URL

https://www.patbase.com/rest/api.php?method=getfamilyLegalStatus&family=23111000

Successful GetFamilyLegalStatus response

This method will output a list of legal status events, including all the events for each member publication of the family.


```
{
  "LegalStatus": [
    {
      "Family": "23111000",
      "PN": "DE1406678",
      "KD": "A1",
      "AN": "DE19631406678",
      "AD": "19631008",
      "PRSDate": "19690424",
      "Event": "",
      "Benefit": "+",
      "PatBaseGroup": "LSPB",
      "Description": "published / reissued",
      "Details": ""
    },
    {
      "Family": "23111000",
      "PN": "DE1406678",
      "KD": "A1",
      "AN": "DE19631406678",
      "AD": "19631008",
      "PRSDate": "19710422",
      "Event": "SH",
      "Benefit": "+",
      "PatBaseGroup": "",
      "Description": "REQUEST FOR EXAMINATION BETWEEN 03.10.1968 AND
22.04.1971",
      "Details": ""
    },
    {
      "Family": "23111000",
      "PN": "DE1406678",
      "KD": "A1",
      "AN": "DE19631406678",
      "AD": "19631008",
      "PRSDate": "19831008",
      "Event": "",
      "Benefit": "",
      "PatBaseGroup": "PD20",
      "Description": "20 year period",
      "Details": ""
    },
    {
      "Family": "23111000",
      "PN": "DE1406678",
      "KD": "A1",
      "AN": "DE19631406678",
      "AD": "19631008",
      "PRSDate": "19881008",
      "Event": "",
      "Benefit": "",
      "PatBaseGroup": "PD25",
      "Description": "25 year period",
      "Details": ""
```

```
},
{
  "Family": "23111000",
  "PN": "GB1058935",
  "KD": "A",
  "AN": "GB19630039444",
  "AD": "19631007",
  "PRSDate": "19670215",
  "Event": "",
  "Benefit": "+",
  "PatBaseGroup": "LSGT",
  "Description": "granted / extensions (spc, cpc, pte)",
  "Details": ""
},
{
  "Family": "23111000",
  "PN": "GB1058935",
  "KD": "A",
  "AN": "GB19630039444",
  "AD": "19631007",
  "PRSDate": "19831007",
  "Event": "",
  "Benefit": "",
  "PatBaseGroup": "PD20",
  "Description": "20 year period",
  "Details": ""
},
{
  "Family": "23111000",
  "PN": "GB1058935",
  "KD": "A",
  "AN": "GB19630039444",
  "AD": "19631007",
  "PRSDate": "19881007",
  "Event": "",
  "Benefit": "",
  "PatBaseGroup": "PD25",
  "Description": "25 year period",
  "Details": ""
},
{
  "Family": "23111000",
  "PN": "GB1058935",
  "KD": "A",
  "AN": "GB19630039444",
  "AD": "19631007",
  "PRSDate": "19831007",
  "Event": "",
  "Benefit": "",
  "PatBaseGroup": "PEXP",
  "Description": "Calculated Patent Term Expiry",
  "Details": ""
},
{
  "Family": "23111000",
  "PN": "US3149733",
  "KD": "A",
  "AN": "US19620229783",
  "AD": "19621009",
  "PRSDate": "19640922",
```

```
      "Event": "",
      "Benefit": "+",
      "PatBaseGroup": "LSGT",
      "Description": "granted / extensions (spc, cpc, pte)",
      "Details": ""
    },
    {
      "Family": "23111000",
      "PN": "US3149733",
      "KD": "A",
      "AN": "US19620229783",
      "AD": "19621009",
      "PRSDate": "19821009",
      "Event": "",
      "Benefit": "",
      "PatBaseGroup": "PD20",
      "Description": "20 year period",
      "Details": ""
    },
    {
      "Family": "23111000",
      "PN": "US3149733",
      "KD": "A",
      "AN": "US19620229783",
      "AD": "19621009",
      "PRSDate": "19871009",
      "Event": "",
      "Benefit": "",
      "PatBaseGroup": "PD25",
      "Description": "25 year period",
      "Details": ""
    }
  ]
}
```


The fields that can be safely converted to integers are underlined below. The returned data includes the following:

- Family – The PatBase Family number for the family.
- PN – Publication number
- KD – Kind code
- PD – Publication date
- CC – Country code
- AN – Application number
- AD – Application date.
- PRSDate – The date of the legal status event
- Event – The event code of the event

- Benefit – a plus or minus sign to signify if the event was positive or negative to the family member's health as a patent.
- PatBaseGroup – PatBase Event Group code
- Description – Description of event
- Details – Details of event

Unsuccessful GetFamilyLegalStatus response

An unsuccessful retrieval of legal status information for a PatBase family may result in the following error messages:

1) No legal status found for family

   No legal status information was found for the supplied family number. This could mean that the family number is not in the correct format or simply there is no legal status information for this family. Please check the family number to ensure it is correct.

```
{"ERROR":"No legal status found for family: [family number]"}
```

2) Patent number not found

   The patent number provided could not be found and so no family information could be found. Please check the patent number is both valid and in the correct PatBase format.

```
{"ERROR":"Patent number not found"}
```

3) Missing family number

   No family number or patent number could be detected in the query string. Please check the query string to ensure the family number or publication number is present and that the value is properly URI encoded.

```
{"ERROR":"Missing family number"}
```

GetFamilyBackCitations

This method retrieves all families that the documents within the provided family cite.

The backwards citations are the documents that the members within the provided family have cited. To retrieve citations on a publication level, please see `GetPNBackCitations` and `GetPNForwardCitations` methods.

URL

https://www.patbase.com/rest/api.php?method=getfamilyBackCitations&family=[Family Number]&extended=[0*]

OR

https://www.patbase.com/rest/api.php?method= getfamilyBackCitations&pn=[Patent Number]&kd=[Kind Code*]&extended=[0*]

Any values marked with a * are optional.

- If a family number is supplied, any patent numbers supplied will be ignored. Please supply either the family number or patent number only in the query string.
- The **`extended=[0*]`** parameter can be used to return only the specific family number requested and not all families in the extended family. This is useful when an extended family is particularly large.

Example URL

https://www.patbase.com/rest/api.php?method=getfamilyBackCitations&family=28929000

Successful GetFamilyBackCitations response

If successful, a list of the members within the current family will be displayed along with the information on which families are cited by said members.


```
{
  "BackwardCitations": [
    {
      "Family": "28929000",
      "PN": "US2603470",
      "KD": "A",
      "Year": "1952",
      "CitedFamily": "22682820"
    },
    {
      "Family": "28929000",
      "PN": "US3982888",
      "KD": "A",
      "Year": "1976",
      "CitedFamily": "1325951"
    },
    {
      "Family": "28929000",
      "PN": "US4032365",
      "KD": "A",
      "Year": "1977",
      "CitedFamily": "1411030"
    },
    {
      "Family": "28929000",
      "PN": "US4111644",
      "KD": "A",
      "Year": "1978",
      "CitedFamily": "6930919"
    },
    {
      "Family": "28929000",
      "PN": "US4362505",
      "KD": "A",
      "Year": "1982",
      "CitedFamily": "4453935"
    },
    {
      "Family": "28929000",
      "PN": "US4627814",
      "KD": "A",
      "Year": "1986",
      "CitedFamily": "5162043"
    },
    {
      "Family": "28929000",
      "PN": "US5939144",
      "KD": "A",
      "Year": "1999",
      "CitedFamily": "11675925"
    },
    {
      "Family": "28929000",
      "PN": "US6132562",
```

```
      "KD": "A",
      "Year": "2000",
      "CitedFamily": "17952408"
    },
    {
      "Family": "28929000",
      "PN": "US6197436",
      "KD": "BA",
      "Year": "2001",
      "CitedFamily": "20652942"
    },
    {
      "Family": "28929000",
      "PN": "WO0028105",
      "KD": "A1",
      "Year": "2000",
      "CitedFamily": "20671047"
    }
  ]
}
```


A description of the information provided is below:

- Family – PatBase family number of the current family
- PN – Patent number of the document
- KD – Kind Code of the document
- Year – Year the document was cited
- CitedFamily – PatBase family number of the family that was cited

Unsuccessful GetFamilyBackCitations response

An unsuccessful retrieval of family citation information may result in the following error messages:

1) No citations found for family

No backward citation information was found for the supplied family number. This could mean that the family number is not correct or there are simply no citations available for this family. If receiving this error incorrectly then please contact Minesoft customer service at support@minesoft.com.

```
{"ERROR":"No Citations found for family: [family number]"}
```

2) Patent number not found

The patent number provided could not be found and so no family information could be found. Please check the patent number is both valid and in the correct PatBase number format.

```
{"ERROR":"Patent number not found"}
```

3) Missing family number

No family number or patent number could be detected. Please check the family number or family number is both valid and supplied in the query string.

```
{"ERROR":"Missing family number"}
```

GetFamilyForwardCitations

This method retrieves all the families that cite the documents within the provided family.

The forward citations are the documents from other families that have cited documents within the provided family. To retrieve citations on a publication level, please see `GetPNBackCitations` and `GetPNForwardCitations` methods.

URL

https://www.patbase.com/rest/api.php?method=getfamilyForwardCitations&family=[Family Number]&extended=[0*]

OR

https://www.patbase.com/rest/api.php?method=getfamilyForwardCitations&pn=[Patent Number]&kd=[Kind Code*]&extended=[0*]

Any values marked with a * are optional.

- If a family number is supplied, any patent numbers supplied will be ignored. Please supply either the family number or patent number only in the query string.
- The **`extended=[0*]`** parameter can be used to return only the specific family number requested and not all families in the extended family. This is useful when an extended family is particularly large.

Example URL

https://www.patbase.com/rest/api.php?method=getfamilyforwardCitations&family=11400000

The supplied Patent Number should be formatted to the PatBase formatting standard, for more information about this please refer to the PatBase Help files.

Successful GetFamilyForwardCitations response

If successful, a list of the members within the current family will be displayed along with the information on which families are cited by said members.


```
{
  "ForwardCitations": [
    {
      "Family": "11400000",
      "PN": "CN103754619",
      "KD": "A",
      "Year": "2014",
      "CitingFamily": "56305632"
    },
    {
      "Family": "11400000",
      "PN": "CN103754619",
      "KD": "B",
      "Year": "2016",
      "CitingFamily": "56305632"
    },
    {
      "Family": "11400000",
      "PN": "CN105712027",
      "KD": "A",
      "Year": "2016",
      "CitingFamily": "62768224"
    },
    {
      "Family": "11400000",
      "PN": "CN109018854",
      "KD": "A",
      "Year": "2018",
      "CitingFamily": "72425322"
    },
    {
      "Family": "11400000",
      "PN": "EP1063448",
      "KD": "A2",
      "Year": "2000",
      "CitingFamily": "28611690"
    },
    {
      "Family": "11400000",
      "PN": "EP1063448",
      "KD": "A3",
      "Year": "2003",
      "CitingFamily": "28611690"
    },
    {
      "Family": "11400000",
      "PN": "EP1877328",
      "KD": "B1",
      "Year": "2008",
      "CitingFamily": "33452052"
    },
    {
      "Family": "11400000",
      "PN": "FR2804671",
```

```
      "KD": "A1",
      "Year": "2001",
      "CitingFamily": "20773388"
    },
    {
      "Family": "11400000",
      "PN": "FR2883853",
      "KD": "A1",
      "Year": "2006",
      "CitingFamily": "33452052"
    },
    {
      "Family": "11400000",
      "PN": "GB2338945",
      "KD": "B2",
      "Year": "2002",
      "CitingFamily": "11479480"
    },
    {
      "Family": "11400000",
      "PN": "US2006126772",
      "KD": "AA",
      "Year": "2006",
      "CitingFamily": "32595410"
    },
    {
      "Family": "11400000",
      "PN": "US6810926",
      "KD": "BB",
      "Year": "2004",
      "CitingFamily": "20773388"
    },
    {
      "Family": "11400000",
      "PN": "WO0159354",
      "KD": "A1",
      "Year": "2001",
      "CitingFamily": "20773388"
    },
    {
      "Family": "11400000",
      "PN": "WO02090218",
      "KD": "A1",
      "Year": "2002",
      "CitingFamily": "24129373"
    },
    {
      "Family": "11400000",
      "PN": "WO06103348",
      "KD": "A1",
      "Year": "2006",
      "CitingFamily": "33452052"
    }
  ]
}
```

This includes the following information:

- Family – PatBase family number of the current family
- PN – Patent number of the document
- KD – Kind Code of the document
- Year – Year the document was cited
- CitedFamily – PatBase family number of the family that was cited

Unsuccessful GetFamilyFowardCitations response

An unsuccessful retrieval of family citation information may result in the following error messages:

1) No citations found for family

No forward citation information was found for the supplied family number. This could mean that the family number is not correct or there are simply no citations available for this family.

If receiving this error incorrectly then please contact Minesoft customer service at support@minesoft.com.

```
{"ERROR":"No Citations found for family: [family number]"}
```

2) Patent number not found

The patent number provided could not be found and so no family information could be found. Please check the patent number is both valid and in the correct PatBase number format.

```
{"ERROR":"Patent number not found"}
```

3) Missing family number

No family number or patent number could be detected. Please check the family number or family number is both valid and supplied in the query string.

```
{"ERROR":"Missing family number"}
```

GetPNBackCitations

This method retrieves all publications that the documents within the provided family cite.

This method is used to retrieve a list of documents that the current document cites, it does so at a publication level and as such family information is ignored. To get citations on a family level please see `GetFamilyBackCitations` and `GetFamilyForwardCitations` methods.

URL

https://www.patbase.com/rest/api.php?method=getpnbackcitations&pn=[Patent Number]&kd=[Kind Code*]

Any values marked with a * are optional.

- If a family number is supplied, any patent numbers supplied will be ignored. Please supply either the family number or patent number only in the query string.

Example URL

https://dev.patbase.com/rest/api.php?method=getpnbackcitations&pn=EP123123

The supplied Patent Number should be formatted to the PatBase formatting standard, for more information about this please refer to the PatBase Help files.

Successful GetPNBackCitations response

If successful, an array list of the documents that the supplied patent cites will be displayed.


```
{
  "BackwardCitations": [
    {
      "PN": "US3741961",
      "KD": "A",
      "Year": "1973",
      "RefCode": "X"
    },
    {
      "PN": "FR2141718",
      "KD": "A1",
      "Year": "1973",
      "RefCode": "Y"
    },
    {
      "PN": "US2402198",
      "KD": "A",
      "Year": "1946",
      "RefCode": "Y"
    },
    {
```

```
      "PN": "DE2160070",
      "KD": "A1",
      "Year": "1972",
      "RefCode": "A"
    }
  ]
}
```


This includes the following information:

- PN – Patent number of the document
- KD – Kind Code of the document
- Year – Year the document was cited
- RefCode – The citation's reference code (Examiner reference code), where available

Unsuccessful GetPNBackCitations response

An unsuccessful retrieval of publication citation information may result in the following error messages:

1) No citations found

No citation information was found for the supplied patent number or patent number and kind code combination. This could mean that the patent number is not in the correct format, or it could simply mean there is no citation information for this family. Please check the patent number to ensure it is in correct PatBase number format.

```
{"ERROR":"No Citations found for: [patent number] [kind code]"}
```

2) Missing publication number

The patent number could not be detected. Please check the query string to ensure the patent number is supplied and that the value is properly URI encoded.

```
{"ERROR":"Missing publication number"}
```

GetPNForwardCitations

This method retrieves all publications that cite the documents within the provided family.

This method is used to get the list of documents that the current document cites. This is does at a publication level and as such family information is ignored. To retrieve citations on a family level use `GetFamilyBackCitations` and `GetFamilyForwardCitations` methods.

URL

https://www.patbase.com/rest/api.php?method=getpnforwardcitations&pn=[Patent Number]&kd=[Kind Code*]

Any values marked with a * are optional.

If a family number is supplied, any patent numbers supplied will be ignored. Please supply either the family number or patent number only in the query string.

Example URL

https://www.patbase.com/rest/api.php?method=getpnforwardcitations&pn=EP123123

The supplied Patent Number should be formatted to the PatBase formatting standard, for more information about this please refer to the PatBase Help files.

Successful GetPNForwardCitations response

If successful, an array list of the documents that cite the supplied document will be displayed.


```
{
  "ForwardCitations": [
    {
      "PN": "WO9002738",
      "KD": "A1",
      "Year": "1990",
      "RefCode": ""
    },
    {
      "PN": "EP0359516",
      "KD": "A1",
      "Year": "1990",
      "RefCode": "A,D"
    }
  ]
}
```


This includes the following information:

- PN – The patent number of the document

- KD – The kind code of the document
- Year – The year the document was cited
- RefCode – The citation's reference code (Examiner reference code), where available

Unsuccessful GetPNForwardCitations response

An unsuccessful retrieval of publication citation information may result in the following error messages:

1) No citations found

No citation information was found for the supplied patent number or patent number and kind code combination. This could mean that the patent number is not in the correct format, or it could simply mean there is no citation information for this family. Please check the patent number to ensure it is in correct PatBase number format.

```
{"ERROR":"No Citations found for: [patent number] [kind code]"}
```

2) Missing publication number

The patent number could not be detected. Please check the query string to ensure the patent number is supplied and that the value is properly URI encoded.

```
{"ERROR":"Missing publication number"}
```

GetPNNPLCitations

This method retrieves any non-patent literature documents that the supplied document cites.

This method is used to retrieve information on any documents that have been cited that are not regular patent documents, this could include information from magazines, scientific journals, books and websites or simply links to other patent documents NPL citations. To get further information additional tools may be required to access the NPL citations data as this will not always be available in PatBase.

URL

https://www.patbase.com/rest/api.php?method=getpnnplcitations&pn=[Patent Number]&kd=[Kind Code*]

Any values marked with a * are optional.

The supplied Patent Number should be formatted to the PatBase formatting standard, for more information about this please refer to the PatBase Help files.

Example URL

https://www.patbase.com/rest/api.php?method=getpnnplcitations&pn=EP1062092

Successful GetPNNPLCitations response

If successful, an array list of the non-patent literature citations will be displayed including links to the relevant documents or web sites.


```
{
  "NPLCitations": [
    {
      "NPLID": "SEEREFERENCESOFWO0023272A1",
      "Citation": "See references of WO     0023272A1",
      "XP": ""
    }
  ]
}
```


This includes the following information:

- NPLID - Unique ID for the NPL document
- Citation – The citation, including website links or information such as magazine issues and when they were published, or ISDN number in the case of a book.
- XP – This is the EPO XP number, an EPO specific ISDN.

Unsuccessful GetPNNPLCitations response

An unsuccessful retrieval of publication citation information may result in the following error messages:

1) No citations found

No citation information was found for the supplied patent number or patent number and kind code combination. This could mean that the patent number is not in the correct format, or it could simply mean there is no citation information for this family. Please check the patent number to ensure it is in correct PatBase number format.

```
{"ERROR":"No Citations found for: [patent number] [kind code]"}
```

2) Missing publication number

The patent number could not be detected. Please check the query string to ensure the patent number is supplied and that the value is properly URI encoded.

```
{"ERROR":"Missing publication number"}
```

GetNonLatinMT

This method retrieves the machine translation to English of any Non-Latin text from a PatBase family. This could be a Japanese document, a Chinese document, a Russian document or any of the other non-Latin texts within the PatBase database.

Please note: *The returned documents are full text documents and can be large in size. Please account for this with regards to timeouts and temporary storage space.*

The machine translation is useful to identify the patent documents, however it should not be a complete replacement for human translation.

URL

https://www.patbase.com/rest/api.php?method=getNonLatinMT&pn=[Patent Number]&kd=[Kind Code*]

Any values marked with a * are optional.

If a family number is supplied, any patent numbers supplied will be ignored. Please supply either the family number or patent number only in the query string.

Example URL

https://www.patbase.com/rest/api.php?method=getNonLatinMT&pn=JP5408797

The supplied Patent Number should be formatted to the PatBase formatting standard, for more information about this please refer to the PatBase Help files.

Successful GetNonLatinMT response

If a machine translated document is available, it will be provided in an array.


```
{
  "MTNonLatinText": [
    {
      "PN": "JP5408797",
      "KD": "B2",
      "FullText": [
        {
          "Title": "<TI LA=\"EN\"><TI_MT nlcode=\"1516.01399\">Pouring
equipment </TI_MT></TI>",
          "Abstract": "",
          "Claims": "<CLA LA=\"EN\"><CLA_MT nlcode=\"1529.55652\">The <u>
continuously </u> …",
          "Description": "<DESC LA=\"EN\"><DESC_MT
nlcode=\"1529.55652\"><p> <b><p> [0001] </p> <u> Pouring of pouring …"
        }
      ]
    }
  ]
}
```

This includes the following information:

- PN – The patent number of the document
- KD – The kind code of the document
- FullText – The full text machine translation. This array has the following information:
    - Title – The title of the publication
    - Description – The assigned description of the publication
    - Claims – The claims of the document

Unsuccessful GetNonLatinMT response

An unsuccessful retrieval of machine translated non-Latin text may result in the following error messages:

1) No MT found

   No machine translation found for the supplied patent number or patent number and kind code combination. This could mean that the patent number is not in the correct format, or it could also mean no machine translation available for this publication. Please check the patent number to ensure it is in the format that PatBase requires.

```
{"ERROR":"No MT found for: [patent number] [kind code]"}
```

2) Missing publication numbers

   The patent number could not be detected. Please check the query string to ensure it is correct and the patent number has been supplied.

```
{"ERROR":"Missing publication number"}
```

Images

It is possible in PatBase to link directly to the stored images where required. When calling methods such as `GetRecord` one of the pieces of information retrieved is labelled `IMG`. This indicates how many pages of images are related to the document. Calling the following method with a page number, patent number and kind code (all can be gathered from the data returned by `GetRecord`) will display the relevant images.

To retrieve additional pages, simply change the page number up to the maximum number specified in the `IMG` tag.

URL

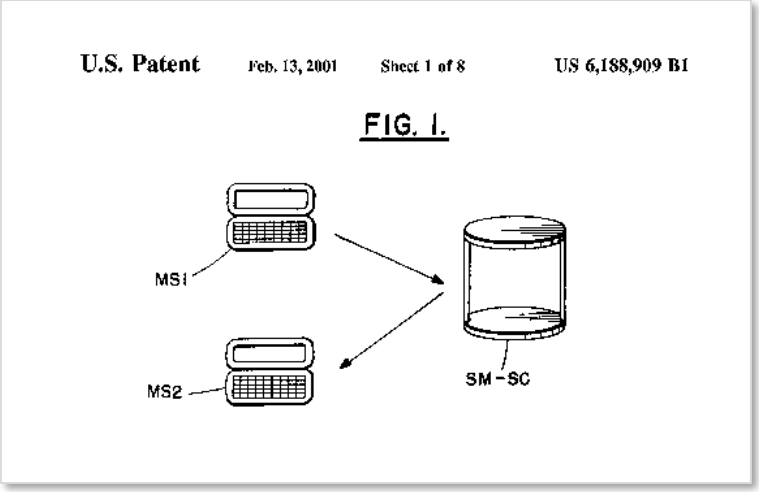
https://www.patbase.com/phpmosaic/getone.php?pn=[Patent Number]&kd=[Kind Code]&pg=[Page Number]

Example URL

https://www.patbase.com/phpmosaic/getone.php?pn=US6188909&kd=BA&pg=1

It is also possible to rotate the images by adding to the end of the URL `&rot=[rotation degree]`

https://www.patbase.com/phpmosaic/getone.php?pn=US6188909&kd=BA&pg=1&rot=270



PatBase Links

Link to family

Link format: https://www.patbase.com/login.asp?viewfamd=[FamilyNumber]

Example link: https://www.patbase.com/login.asp?viewfamd=42268090

Link to patent

Link format: https://www.patbase.com/getimg/searchpn.asp?pn=[PatentNumber]

Example link: https://www.patbase.com/getimg/searchpn.asp?pn=US4500000

PatBase PDF page by page view

For PDF linking please contact support@minesoft.com

Please note: *For the best results when embedding links in MS Office documents change https://www.patbase.com/login.asp to https://www.patbase.com/link.asp.*

PatBase Express Links

Jump to advanced search screen

Link: https://www.patbase.com/express/default.asp?saction=A

Jump to Boolean search screen

Link: https://www.patbase.com/express/default.asp?saction=B

Jump to number search screen

Link: https://www.patbase.com/express/default.asp?saction=N

Jump to number search screen and with patent number

Link format: https://www.patbase.com/express/default.asp?saction=N-[PatentNumber]

Example link: https://www.patbase.com/express/default.asp?saction=N-WO2008119362

Jump to the help

Link: https://www.patbase.com/express/default.asp?saction=H

Search for a patent number and jump straight to the result

Link format: https://www.patbase.com/express/default.asp?saction=P-[PatentNumber]

Example link: https://www.patbase.com/express/default.asp?saction=P-WO2008119362

Search for an application number and jump straight to the result

Link format: https://www.patbase.com/express/default.asp?saction=A-[ApplicationNumber]

Example link: https://www.patbase.com/express/default.asp?saction=A-WO2007EP02910

Search for a family number and jump straight to the result

Link format: https://www.patbase.com/express/default.asp?saction=F-[FamilyNumber]

Example link: https://www.patbase.com/express/default.asp?saction=F-42268090

Perform the given query and jump straight to the result

Link format: https://www.patbase.com/express/default.asp?saction=Q-[URLEncodedQuery]

Example link: https://www.patbase.com/express/default.asp?saction=Q-TI%3D(space+and+shuttle+and+docking)

Please Note: *For the best results when embedding links in MS Office documents change https://www.patbase.com/express/default.asp to https://www.patbase.com/express/link.asp*

Dead or Alive

Dead or Alive information is included in the response for some methods. The Dead or Alive tags are derived from the INPADOC database produced by the European Patent Office. Minesoft and RWS Group does not warrant or assume any legal liability or responsibility for the accuracy or completeness of the data. A qualified attorney should be consulted for advice on patent legal status. For more information about Dead or Alive please contact Minesoft customer service at support@minesoft.com.

API Key

API keys may be issued by Minesoft for specific uses (additional charges may apply). Once equipped with an API key, simply include it in all method requests.

Example URL:

https://www.patbase.com/rest/api.php?method=getfamilylegalstatus&family=30123124&apikey=[MYAPIKEY]

This will enable access to the PatBase data without having to call the login page to retrieve an authorisation code.

Please note: *The square brackets are not required and are included in the example to make it easier to identify where an API Key should be entered within the URL.*

Contact us

For all queries related to PatBase REST API 2.0, please contact support@minesoft.com or call us on +44 (0)20 8404 0651.