Case Management System's A2A API

How to interact with the CMS with APIs ?

A2A Public Version – V8 – Guide v2.8 – 17 May 2023

Unified Patent Court
Einheitliches Patentgericht
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The CMS' API allow the user's own software to interact directly with the CMS's backend for the creation of Opt-Out or Withdraw

There are two categories of APIs (Application Programming Interface):

- Application To Application (**A2A**): where the user's own program interacts and creates some entries in the CMS's database.
- Public API : where the user's program can retrieve some useful information regarding his cases, patents and related documents

This document focuses on the A2A API.

For the public API, we invite the reader to consult the dedicated documentation available on our corporate website (under the section "IT For developer") or click on the following link: UPC Case Management System | Unified Patent Court (unified-patent-court.org)

UPC's CMS is available for testing purpose on a dedicated environment. Within this environment, you are able to test your development before submitting your API call to the real production environment.

For each of API calls / functions available, we will provide you with:

- Type of request and a description
- The endpoint(s)
- The (main) input parameter(s)
- A sample of call (http request or json file)
- A sample of result (and depending on the result, the impact or visualization on the CMS frontend)
- A positive and negative result will be described also

This document is based on the last available SWAGGER / JSON file version 8 available on the UPC Corporate website under the section "For IT Developer".

PRE-CONDITION

The user must own one API Key. This API Key can be obtained when the user is registered CMS user (he must have a defined account on the CMS). Once connected on the CMS, the user can request his Developer API Key via the menu "Support Center" – Developers- "My Developer App".

This API key is valid for one specific environment (for example one API key for the testing environment, and one another for the production environment). **This API Key value must be added within the "header" section of each A2A API Call and it is identified as "X-API-KEY".**

Get Languages (used in the system)

Type	GET
Description	Get the languages available within CMS. Provides the list of all languages available within the CMS.
	The language "list" contains the language(s) expressed as ISO code, and separated by "," (a comma)
	The language(s) is (are) returned in "lower case"

Endpoints

- Prod Environment
  https://api-prod.unified-patent-court.org/upc/a2a/api/v8/**languages**

- Pre-Prod Environment
  https://api-pre-prod.unified-patent-court.org/upc/a2a/api/v8/**languages**

Input parameter(s):

> None

Sample of call

> https://api-pre-prod.unified-patent-court.org/upc/a2a/api/v8/languages

Sample of results

```
 1   [
 2       "bg",
 3       "cs",
 4       "da",
 5       "nl",
 6       "en",
 7       "et",
 8       "fi",
 9       "fr",
10       "de",
11       "el",
12       "hu",
13       "it",
14       "lv",
15       "lt",
16       "pt",
17       "ro",
18       "sk",
19       "sl",
20       "sv"
21   ]
```

Create one new OPT-Out

Type   POST

Description   Create one new OPT-OUT related to **one** provided Patent (*and related information*)

Change of behaviour compared to previous version

- Once you have submitted your opt-out / withdraw, you will get, as a result, a "technical" acknowledgement for the reception your "request" if this one is valid. The remaining internal processing of the request is now asynchronous.
- One new API request is available to get the status of your request : see detail in the next section

Endpoints

- Prod Environment
  https://api-prod.unified-patent-court.org/upc/a2a/api/v8/**optOut**

- Pre-Prod Environment
  https://api-pre-prod.unified-patent-court.org/upc/a2a/api/v8/**optOut**

Sample of JSON file used for the API call

Structure of this JSON file

- Applicant information
- Patent information
- Related document(s)

```
{
    "applicant": {
        "firstName": "myFirstName",
        "lastName" : "myLastName",
        "companyName": "myCompanyName",
        "email": "john.doe@myemail.com",
        "contactAddress": {
            "address": "myAddressStreet",
            "zipCode": "myZipCode",
            "city": "myCity",
            "state": "FR"
        },
        "registeredIsSameAsPostalAddress": true,
        "statusPersonLodgingApplication" "RegisteredRepresentativeBeforeTheUPC"
    },
    "patent": {
```

Data inserted in the "**Personal**" data on the CMS's front end

Available of the "**Overview**" tab on the CMS's front end

```
    "patentNumber": "EP0007605",
    "spcs": [
        {
            "idSPC": "MySPCId123",
            "nationalDesignation": "FR"
        },
        {
            "idSPC": "MySPCId456",
            "nationalDesignation": "BE"
        }
    ]
}
"documents": [
    {
        "documentType": "Application",
        "attachments": [
            {
                "data"                                          :                        JVBERi0xLjQiGe+/ve+/ve+/ve+/
+PgpzAovSURbPEJGMjkwQjlGNDY5NzkyNDY5N0M0N0U5OEYyQ0FBRjk5PjxCRjI5MEI5RjQ2OTc5MjQ2OTdD
NDdFOThGMkNBBQUY5OT5dCi9JbmZvIDEgMCBSCi9Sb290IDIgMCBSCi9TaXplIDQxCj4+CnN0YXJ0eHJlZgo4OD
UzNAolJUVPRgo=",
                "language": "en",
                "filename": "EP0007605.PDF",
                "mimeType": "application/pdf"
            }
        ],
        "documentTitle": "Opt-out EP0007605",
        "documentDescription": "Opt-out document for publication number EP0007605"
    }
],
}
```

Data inserted in the "**Patent**"tab on the CMS's front end

Data inserted in the "**Document(s)**" tab on the CMS's front end

It's a PDF/A document encoded in base64

IT MUST BE REPLACED BY YOUR DOCUMENT

In case you need to provide a **Registered Address** which is **different** from the Postal / Contact address, one additional section called "RegisteredAddress" must be added in you JSON

- after the item "RegistedIsSameAsPostalAddress"
- before item "statusPersonLodgingApplication"

such as

…

```
   "registeredIsSameAsPostalAddress":"false",
   "registeredAddress":
    {
   "address":"myRegistredSteetAddress",
   "zipCode":"5411",
   "city":"RegistredCityName",
   "state":"DE"
    },
….
```

Validation Rule(s) or Constraint(s)

The fields / items highlighted in **red-bold** here above are subject to validation rule(s)/ restriction(s)

Email : MUST contains the character "@".

Sample of valid data : first_name.last_name@myemailprovider.com

Sample of **Invalid** data : my_first_name.my_lastname

State : MUST be a valid ISO Country Code expressed as 2 UPPERCASE such as BE, IT, …

Sample of valid data : FR or IT or BE

Sample of **invalid** data : fr, France, …

registeredIsSameAsPostalAddress MUST contains **True** OR **False**

Sample of valid data : true or false

Sample of **Invalid** data : yes

If the value of this item is set to "FALSE" the section "registeredAddress" must be filled in. This registrered address must have the same structure as the section "contactAddress".

statusPersonLodgingApplication MUST contains one of the following value

- "RegisteredRepresentativeBeforeTheUPC",
- "NotARegisteredRepresentativeBeforeTheUPC",
- "ProprietorIsPerson"

Sample of valid data : RegisteredRepresentativeBeforeTheUPC

Sample of **Invalid** data : Registered

nationalDesignation MUST contains one ISO Country code expressed as 2 UPPERCASE characters such as FR, BE, IT

Sample of valid data : FR or IT or BE

Sample of **Invalid** data : fr or France

mimeType MUST contains one of the following values

- application/pdf

documentType MUST contains one of the following values

- "Application",
- "Mandate"

Sample of valid data   : Application

Sample of Invalid data   : myDocument

Language   **MUST** contains one ISO country code expressed as 2 lowercase characters such as fr, en, de (only these 3 values)

It is codified with country code ISO 3166 A2. The pattern is [a-z][a-z]

Sample of valid data   : fr or en or de

Sample of Invalid data   : FR or it

Some other "minor" rules such as field minimum / maximum length and value type are described in the swagger file available in the IT Developer section on our corporate website.

Sample of result

Positive result. When everything went ok,

1. One request is created and the corresponding number (request identification) is returned directly to the user
2. The information / data related to the opt-out, is stored internally and will be processed (checks of the documents, generation of receipt etc…)
3. One mail notification will be sent at the end of the process to
   o The applicant received one notification by email (email address mentioned under applicant json section)
   o The "owner" of the API-Key should be a representative or one proprietor

1. Your request has been properly received and will be submitted to a queue for processing

```
1 {
2   "message":" Subject only to a check that your application has been signed  electronically,
            your application has been accepted by the Registry and pursuant to Rule 5.12
            will be treated as entered on the register on the date the Court enters into
            force",
3   "requestID":"DSDF2474GE122",
4   "receptionTime" : "2023-01-30 14:15:21"
5 }
```

Id of the request, can be used within the API Request (**getRequestStatus**) to get additional information about your request – *See here after* --

2. "During" the process of your request, you can ask for a status of this one. For that, you need to use the API Request **getRequestStatus** described in the next section of this guide.

3. <u>Sample of email (received at the end of the complete process)</u>

Dear Applicant

Your Application for an opt-out was received and was registered under the number 13522/2022.

A formal receipt is available to download in your case file.
Your case may be accessed on the UPC CMS site https://cms.unified-patent-court.org.

Best regards
UPC Staff

<u>Note</u> such mail will be sent to the applicant (mentioned in the json file) and to the user (registered) owning the API-Key used to perform the API call

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4. The Opt-out is available on the CMS's front end
    - On the dashboard
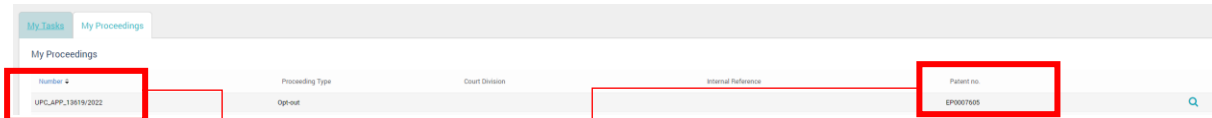
Figure 1 -Dashboard - My proceeding tab
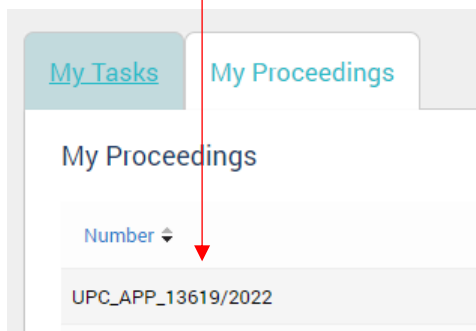
Figure 2 - Zoom on my proceeding number
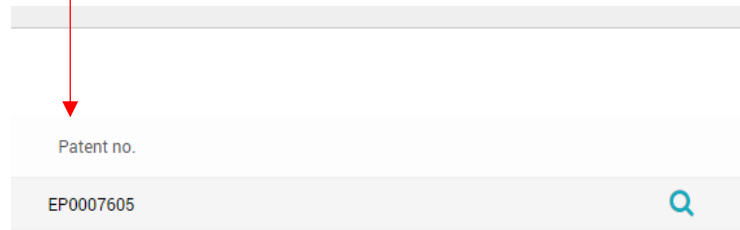
Figure 3 - Zoom on the patent(s) concerned by this opt-out

- A **double click** on this line will open the detail.

Figure 4- Detailed sections of the opt-out

- Patent details

Figure 5 -Information related the patent(s) and SPC(s)
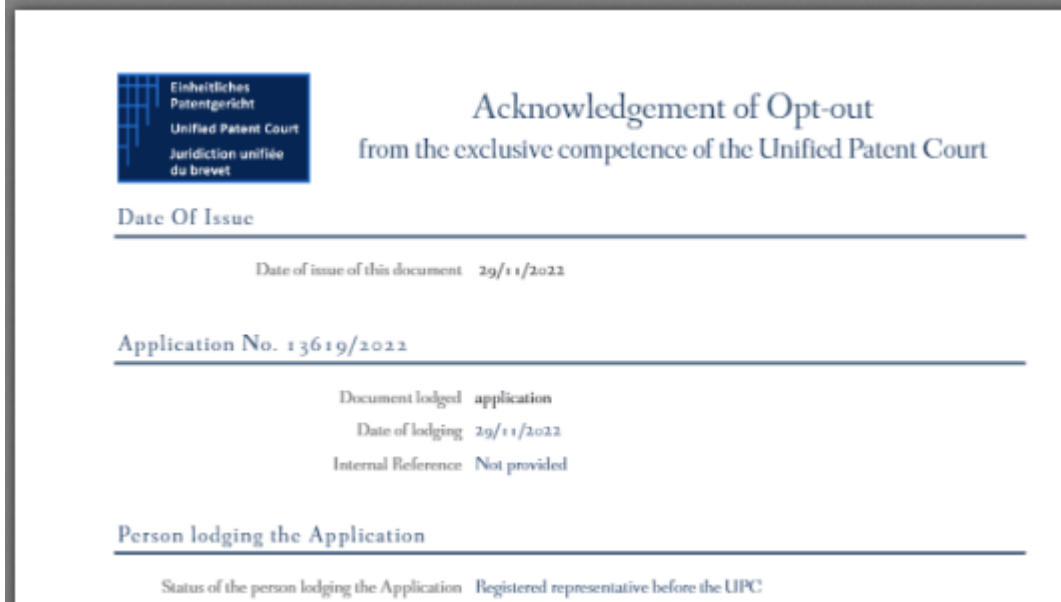
- Personal details

Figure 6 - Information concerning the applicant

- Document(s)

Figure 7 - Uploaded document(s)

1. Uploaded document(s)
2. Output – the receipt generated by the CMS

- Sample of receipt (a pdf file – here an extract)

Figure 8 "Part" of the receipt document generated by the system and notified to the applicant

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Negative result

There are two categories of Error Code

- Error-Code 400 : When the "input" /provided value(s) is (are) not correct
- Error-Code 500 : when there is an "internal error" such as time-out

Samples of Error-Code 400 occurring during the validation / recording process

1. The patent mentioned in the call has already been processed (and opted out)

```
{
    "code": 400,
    "caseResult": null,
    "errorMessageList": [
        "Unable to opt out patent EP0007600. Patent is already opted out"
    ]
}
```

2. Error during the processing of the JSON file
   a. When one item doesn't match the expected type of data / length of data

```
1  {
2      "code": 400,
3      "caseResult": null,
4      "errorMessageList": [
5          "Constraint violations for property OptOutCreateDto.patent.spcs[1].nationalDesignation. size must be between 0 and 16",
6          "Constraint violations for property OptOutCreateDto.patent.spcs[0].nationalDesignation. size must be between 0 and 16"
7      ]
8  }
```

getRequestStatus : Know the status of Opt-Out / Withdraw request(s)

Type   GET

Description   Gets the status of opt-out / withdraw request(s) previously entered.

Endpoints:

- Prod Environment
  https://api-prod.unified-patent-court.org/upc/a2a/api/v8/request/**status**

- Pre-Prod Environment
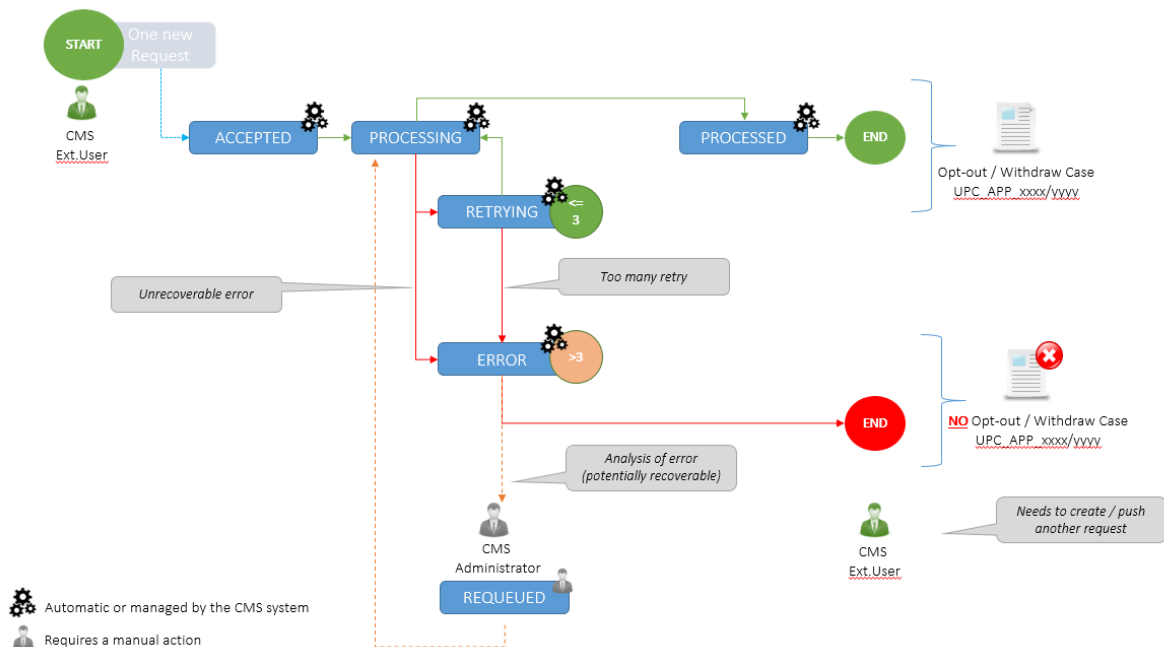 https://api-pre-prod.unified-patent-court.org/upc/a2a/api/v8/request/**status**

Status:

- *Accepted*   : The request has been accepted
- *Processing* : The request is being processed
- *Processed* : The request has been processed properly
- *Retrying*   : The request has not been properly processed and it is being retried
- *Requeued*   : The request has been manually requeued – by technical support
- *Error*   : An unrecoverable error has occurred

Sample of the enum "status" as it is wrote in the API JSON/Swagger file:

```
"status" : {
     "type" : "string",
     "enum" : [ "ACCEPTED", "PROCESSED", "PROCESSING", "ERROR", "RETRYING", "REQUEUED" ]
   },
```

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Description of this request lifecycle

One user pushes one new request via corresponding API (to create one opt-out or one withdraw- *refer to the corresponding dedicated section*). As soon as the system detects this request and recognizes as a valid request type, the request is then considered as **ACCEPTED**.

The system is, then, **PROCESSING** the request. If everything works fine, the request is marked as **PROCESSED** and the underlying case is fully created (receipt and notification included) and available within the system

If for any reason, an error (different from unrecoverable error) occurred during the process, the system will marked the request for a **RETRY**. The system will retry three times to process this request.

If this retry does not success, the request will be marked as in **ERROR** and this underlying case will not be created at all.

The CMS administrator can analyze the request(s) and, depending on the outcome of this analysis, can **REQUEUED** (resubmit) this request to the processing

Sample of call*: Get a the status of my (previous) request id*

https://api-pre-prod.unified-patent-court.org/upc/a2a/api/v8/request/status?requestId=
DSDF2474GE122

You can also query with status, requestType and internalReference

Samples

- https://api-pre-prod.unified-patent-court.org/upc/a2a/api/v8/request/status?status="PROCESSED"
- https://api-pre-prod.unified-patent-court.org/upc/a2a/api/v8/request/status?requestType="OPTOUT"
- https://api-pre-prod.unified-patent-court.org/upc/a2a/api/v8/request/status?internalReference="TEST1"

Sample of result (where the request has been properly processed and the corresponding case has been created). It returns one <u>array</u> of one or several requests depending on the criteria you used

```
[
  {
    "id": " DSDF2474GE122",
    "status": "PROCESSED",
    "type": "OPTOUT",
    "officialCaseNumber": "UPC_APP_67/2023",
    "internalReference": "TEST1",
    "patentNumber": "EP0012350",
    "receptionDate": 2023-02-06 14:18:23,
    "lastStatusUpdateDate": 2023-02-06 14:35:00,
    "userId": "john.doe@mycompany.com"
  }
]
```

If your request is in ERROR status, an error description/ reason will be part of the result set. One request falling in "ERROR" status remains in this status (a new call to the optOut / withdraw API with corrected data must be initiated). You need to "re-push" one another OptOut Request but with corrected data.

Withdraw one opt-out (previously added)

Type   POST

Description   This allow to enter one withdraw of one previously added opt-out.

Endpoints

- Prod Environment
  https://api-prod.unified-patent-court.org/upc/a2a/api/v8/**withdraw**

- Pre-Prod Environment
  https://api-pre-prod.unified-patent-court.org/upc/a2a/api/v8/**withdraw**

Sample of this JSON file used for the API call

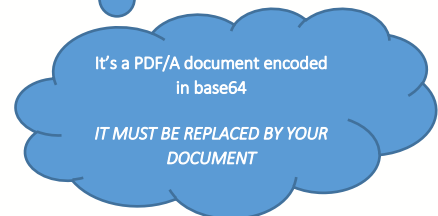Structure of the file

- Applicant information
- Patent information
- Related document(s)

```
{
  "applicant": {
    "firstName": "My First Name",
    "lastName": "My Last Name",
    "contactAddress": {
      "address": "My address",
      "city": "My City Address",
      "state": "FR",
      "zipCode": "12345"
    },
    "email": "myemailaddress@email.com",
    "statusPersonLodgingApplication": "RegisteredRepresentativeBeforeTheUPC",
    "companyName": "MyCompany Name",
    "registeredIsSameAsPostalAddress": true,
    "registeredAddress": {
      "address": "My Company Address",
      "city": "MyCompany City Address",
      "state": "JD",
      "zipCode": "12345"
```

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```json
      },
      "internalReference": "My Internal Reference"
    },
    "patent": {
      "patentNumber": "EPxxxxx",
      "spcs": [
        {
          "idSPC": "MySPC_Id_1",
          "nationalDesignation": "FR"
        },
        {
          "idSPC": "MySPC_Id_2",
          "nationalDesignation": "BE"
        }
      ]
    }
    "documents": [
      {
        "attachments": [
          {
            "data": "JVBERi0xLjQKJe+/ve+/ve+/ve+/
+PgpzAovSURbPEJGMjkwQjlGNDY5NzkyNDY5N0M0N0U5OEYyQ0FBRjk5PjxCRjI5MEI5RjQ2OTc5MjQ2OTddD
NDdFOThGMkkNBQUY5OT5dCi9JbmZvIDEgMCBSCi9Sb290IDIgMCBSCi9TaXplIDQxDQxCj4+CnN0YXJeHJlZgo4OD
UzNAolJUVQRgo=",
            "filename": "myfilename.pdf",
            "language": "fr",
            "mimeType": "application/pdf"
          }
        ],
        "documentTitle": "MyDocument title",
        "documentType": "Application",
        "documentDescription": "Description of my document"
      }
    ],

}
```

It's a PDF/A document encoded in base64

IT MUST BE REPLACED BY YOUR DOCUMENT

Validation Rule(s) or Constraint(s)

The fields / items highlighted in red-bold here above are subject to validation rule(s)/ restriction(s)

Email :　　　　　　　　　　**MUST** contains the character "@".

　　　　　　　　　　　　　　Sample of valid data　　: first_name.last_name@myemailprovider.com

　　　　　　　　　　　　　　Sample of **Invalid** data　: my_first_name.my_lastname

State :　　　　　　　　　　**MUST** be a valid ISO Country Code expressed as 2 UPPERCASE such as BE, IT, …

　　　　　　　　　　　　　　Sample of valid data　　: FR or IT or BE

　　　　　　　　　　　　　　Sample of **invalid** data　: fr, France, …

registeredIsSameAsPostalAddress MUST contains **True** OR **False**

　　　　　　　　　　　　　　Sample of valid data　　: true or false

　　　　　　　　　　　　　　Sample of **Invalid** data　: yes

　　　　　　　　　　If the value of this item is set to "FALSE" the section "registeredAddress" must be filled in. This registrered address must have the same structure as the section "contactAddress".

statusPersonLodgingApplication　**MUST** contains one of the following value

- "RegisteredRepresentativeBeforeTheUPC",
- "NotARegisteredRepresentativeBeforeTheUPC",
- "ProprietorIsPerson"

　　　　　　　　　　　　　　Sample of valid data　　: RegisteredRepresentativeBeforeTheUPC

　　　　　　　　　　　　　　Sample of **Invalid** data　: Registered

nationalDesignation　　　**MUST** contains one ISO Country code expressed as 2 UPPERCASE characters such as FR, BE, IT

　　　　　　　　　　　　　　Sample of valid data　　: FR or IT or BE

　　　　　　　　　　　　　　Sample of **Invalid** data　: fr or France

　　　　　　　　　　　　　　<u>NOTE</u>: A maximum of 50 SPC (id + nationalDesignation) per patent can be mentioned

mimeType　　　　　　　　**MUST** contains one of the following values

- application/pdf

<table>
<tr><td>documentType</td><td>MUST contains one of the following values</td></tr>
</table>

- "Application",
- "Mandate"

       Sample of valid data   : Application

       Sample of Invalid data   : myDocument

Language   **MUST** contains one ISO country code expressed as 2 lowercase characters such as fr, en, de (only these 3 values)

It is codified with country code ISO 3166 A2. The pattern is [a-z][a-z]

Sample of valid data   : fr or en or de

Sample of Invalid data   : FR, it

Some other "minor" rules such as field minimum / maximum length and value type are described in the swagger file available in the IT Developer section on our corporate website.

Sample of result

Positive result

1. Request Id corresponding to your application. To get the status of your request, you need to call the API "getRequestStatus" with the corresponding id

```
1 {
2    "message":" Subject only to a check that your application has been signed  electronically, your
              application has been accepted by the Registry and pursuant to Rule 5.12 will be
              treated as entered on the register on the date the Court enters into force",
3    "requestID": "DSDF247X47JK42",
4    "receptionTime" : "2023-01-30 14:15:21"
5 }
```

2. Email notification

Dear Applicant

Your Application for the withdrawal of an opt-out was received and was registered under the number 13750/2022.

A receipt is available to download in your case file.
Your case may be accessed on the UPC CMS site https://cms.unified-patent-court.org.

Best regards
UPC Staff

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- The detail(s) available on the CMS's frontend

No. UPC_APP_13750/2022

Withdrawal of an opt-out

⚙

👤	Personal Details	✓
👤	Upload Documents	✓
👤	Declarations	✓
👤	Review and Lodge	✓

- Information about the patent

| Overview | Patents | Personal details | Documents | Activities Log | Opt-out status |

List of patents

1 results

No.	Patent Number	Title	Outcome of the decision
1	EP0984111	Partition assembly	

Data retrieved from the EPO on 30.11.2022

Patent Number	EP0984111
Title	Partition assembly
Applicant	Käuferle GmbH & Co. KG
Application reference	EP19980116438
Filing date	31.08.1998
Priority claim date	
Date of publication of the grant	17.12.2003
Designated States	AT, CH, DE, FR, IT, LI, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE
Classifications	IPCR: 2000/09
	id: CLASSIFICATION_16580365
	E04B2/78

SPC list

No details of SPCs have been added, yet.

- Personal details

- Uploaded documents

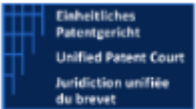|	Stage	VER	Documents
📂	Withdrawal of an opt-out	1	withdrawOptOutEP0984111 - Application - French Withdrawal-of-an-Opt-Out-Receipt - receipt - English

|◄ ◄◄ Page 1 of 1 ►► ►| 20 ▼

- Extract of the receipt

Acknowledgement of
Withdrawal of an Opt-out
from the exclusive competence of the Unified Patent Court

Date Of Issue

Date of issue of this document 30/11/2022

Application No. 13750/2022

Document lodged application
Date of lodging 30/11/2022
Internal Reference Not provided

Person lodging the Application

Status of the person lodging the Application Registered representative before the UPC

Negative result

Here after, as sample, the error message when you try to withdraw one opt-out while the related patent was not opted-out.

```
1  {
2      "code": 400,
3      "caseResult": null,
4      "errorMessageList": [
5          "Unable to do withdraw for patent EP0007688. Patent is not opted out."
6      ]
7  }
```

download-receipt (related to one Opt-Out or Withdraw)

(Available as of 17/03/2023 on PRE-PROD and as of 23/03/2023 on PROD)

Type   GET

Description   Get the document corresponding to the receipt, generated by the CMS, at the end of the processing of one Opt-Out or Withdraw.

It's restricted to the opt-out or withdraw you have created in the previous step (either via the API optOut – withdraw or via the CMS front end).

Only the receipts related to opt-out and withdraw are available for download. Any other receipts for other action / proceeding types are not returned.

Endpoints

- Prod Environment
  https://api-prod.unified-patent-court.org/upc/a2a/api/**v8/download-receipt**

- Pre-Prod Environment
  https://api-pre-prod.unified-patent-court.org/upc/a2a/api/**v8/download-receipt**

Input parameter(s):

officialCaseNumber :   the identifier of the case (opt-out or withdraw).

The format of this id is the following:
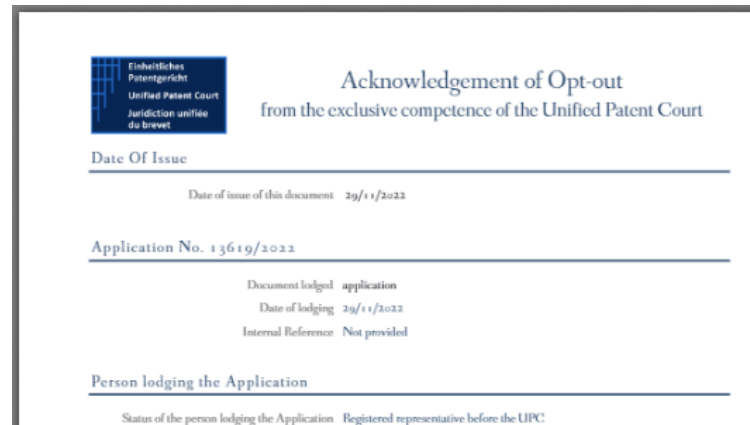
UPC_APP_XXXX/YYYY

Where

- UPC_APP_ is a "fixed" – prefix value (*you need to provide this*)
- XXXX is one number such as 1255, 5885
- YYYY is the year when the case has been introduced / created such as 2022, 2023.

Sample: UPC_APP_1255/2023

Sample of calls

https://api-pre-prod.unified-patent-court.org/upc/a2a/api/**v8/ download-receipt**?officialCaseNumber= UPC_APP_1255/2023

Positive result: a PDF document similar to this

Negative results

- **Error 400** – No input is passed or the case is not of type OPT_OUT or WITHDRAW
  Only receipt for OptOut or Withdraw can be downloaded

- **Error 403** - If the case is not visible to the user or the user cannot access the RECEIPT
  Only the "owner" of the document can download the receipt(s)

- **Error 404** – If no case exists with official case number or the case does not have a RECEIPT
  When the system doesn't find any case corresponding to the provided caseNumber or when there is no receipt found for this case

- **Error 500** - Internal Error during RECEIPT retrieval
  An error occurred during the generation / download of the receipt