The REG203_PROC_STEP_DATE: Date of procedural step Table

Welcome to the `REG203_PROC_STEP_DATE` table overview. This table contains important date information related to procedural steps in the European Patent (EP) process. Specifically, it stores the dates of each procedural step, providing essential temporal data such as when certain actions within the patent process took place. Each record links a procedural step to its respective date, which helps track the timeline of the patent application process. This table is crucial for understanding the sequence of events and deadlines, adding another layer of detail to the procedural steps. Let's explore the attributes that capture the timing of patent processes in the EP system.

In [1]:
```
from epo.tipdata.patstat import PatstatClient
from epo.tipdata.patstat.database.models import REG201_PROC_STEP,
REG101_APPLN, REG202_PROC_STEP_TEXT, REG203_PROC_STEP_DATE
from sqlalchemy import select, func, case, select, and_

patstat = PatstatClient(env='PROD')

db = patstat.orm()
```

Key Fields in the REG203_PROC_STEP_DATE Table

ID (Primary Key)

The ID field serves as a technical identifier that uniquely connects patent applications across various tables.

In [2]:
```
q = db.query(
    REG203_PROC_STEP_DATE.id
).limit(100)

res = patstat.df(q)
res
```

Out[2]:

	id
0	9153352
1	4714728
2	15717341
3	8163658
4	17724028
...	...
95	3291000
96	926325
97	89903318
98	10793396
99	5796129

100 rows × 1 columns

STEP_ID (Primary Key)

The `STEP_ID` is a unique identifier assigned to each procedural step within the patent application process. It is present in multiple tables, including `REG201_PROC_STEP`, `REG202_PROC_STEP_TEXT`, `REG203_PROC_STEP_DATE`, `REG721_PROC_STEP`, `REG722_PROC_STEP_TEXT`, and `REG723_PROC_STEP_DATE`. This attribute serves as a key reference for identifying and linking procedural steps across various datasets. With a domain of up to 30 characters, it ensures precise tracking and organization of procedural events associated with patent applications.

STEP_DATE (Primary Key)

The `STEP_DATE` attribute represents the date associated with a procedural step in the patent process. It captures the specific date when a particular procedural step occurred, providing essential temporal information for each step's timeline. This attribute helps to track the progression of a patent through the various procedural phases. It does not have a default value, as each procedural step must be linked to an actual date. The date format follows standard conventions, ensuring consistency in documenting and analyzing the chronological sequence of patent steps.

STEP_DATE_TYPE (Primary Key)

The STEP_DATE_TYPE attribute describes the specific type of date related to a procedural step in the patent process. It identifies the role or event associated with the date, providing a deeper understanding of the timing and context of the step:

- CANCT Date of cancellation
- DISPA Date of dispatch
- DRAEX Decision date of Request for Accelerated Examination (RAEX)
- EFFEC Date effective
- GRNTF Grant fee paid
- LAPPR Date of later approval
- PAYM1 Date of payment 1
- PAYMN Date of payment
- PRNTF Print fee paid
- RAEXA Date of Request for Accelerated Examination (RAEX)
- RECPT Date of receipt
- REPLY Date of reply
- REQST Date of request
- RESLT Result date
- TCLMS Translation of claims
- WV713 Waiver agreement, according to Rule 71(3)
- DTREG Date of registration
- DTDEC Date of decision
- DTNOT Date of notification
- LCNSC Date of license commitment
- DTREC Date of receipt
- WDRWL Date of withdrawal
- FIACT Date of filing action
- FIDEC Date of filing decision
- FIAPP Date of filing appea

In [3]:
```
q = db.query(
    REG203_PROC_STEP_DATE.id,
    REG203_PROC_STEP_DATE.step_id,
    REG203_PROC_STEP_DATE.step_date,
    REG203_PROC_STEP_DATE.step_date_type,
    REG201_PROC_STEP.step_phase,
    REG201_PROC_STEP.step_result
).join(
    REG203_PROC_STEP_DATE, REG201_PROC_STEP.id == REG203_PROC_STE
P_DATE.id
).limit(100)

res = patstat.df(q)
res
```

Out[3]:

	id	step_id	step_date	step_date_type	step_phase	step_result
0	8733883	STEP_ABEX_7764411	2013-11-13	REQST	UNDEF	
1	8733883	STEP_EXRE_1176950	2014-04-22	REPLY	UNDEF	
2	8733883	STEP_2005621	2010-11-02	PAYMN	UNDEF	
3	8733883	STEP_EXRE_1176951	2014-12-09	REPLY	UNDEF	
4	8733883	STEP_IGRA_603056	2015-12-08	GRNTF	UNDEF	
...	...	...	...	...	...	...
95	4291956	STEP_LOPR_585708	2005-11-21	DISPA	EXAMN	
96	4291956	STEP_LOPR_585688	2005-11-21	DISPA	EXAMN	
97	4291956	STEP_LOPR_585696	2005-08-03	EFFEC	EXAMN	
98	4291956	STEP_PFEE_1492550	2005-09-07	DISPA	EXAMN	
99	4291956	STEP_LOPR_585691	2005-11-21	DISPA	EXAMN	

100 rows × 6 columns

Let's see the distinct types of step date.

In [5]:
```
q = db.query(
    REG203_PROC_STEP_DATE.step_date_type
).distinct()

res = patstat.df(q)
res
```

Out[5]:

	step_date_type
0	GRNTF
1	PRNTF
2	RESLT
3	RAEXA
4	PAYMN
5	EFFEC
6	CANCT
7	REQST
8	REPLY
9	PAYM1
10	DISPA
11	LAPPR
12	RECPT
13	TCLMS
14	DRAEX
15	WV713

In [ ]:
```

```