



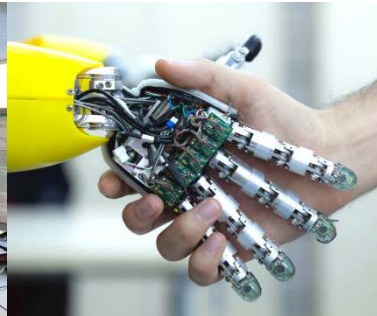
Europäisches  
Patentamt

European  
Patent Office

Office européen  
des brevets

# CPC Update - EPO

## CPC Annual Meeting for National Offices



# Agenda:

- CPC implementation at National Offices
- IT Matters
- CPC International project: impact on Epoque (Net)

# CPC Implementation at National Offices

# CPC Implementation at National Offices

- Training
- Quality measures
- IT Support

# CPC training

- CPC Scheme & Definitions
- See **e-learning modules** on the [cpcinfo.org](http://cpcinfo.org) website:
  - [Using CPC in classification](#)
  - [Practical and strategical aspects of the CPC](#)
- CPC General and Advanced training
- CPC Field-specific training material:

FST videos and training material on Epoxy:

<https://epoxy.epo.org/> (follow the path: CPC >> CPC Presentation Material)

# CPC Field-Specific Training 2018

## CPC Collective Field-Specific Training for National Offices

- **5-7 June 2018** at the EPO in The Hague
- **3 tracks** – M&M, ICT and HBC

<b>MM</b>	<b>Mechanics &amp; Mechatronics</b>
<b>ICT</b>	<b>Information and Communication Technology</b>
<b>HBC</b>	<b>Health, Biotechnology &amp; Chemistry</b>

- **4-5 fields / track**

Day	MM	ICT	HBC
<b>Tuesday 5 June 2018 am</b>	F01P1, F02F1	G01Q	A61N2, A61N5, A61N5 A61N6, A61N10
<b>Tuesday 5 June 2018 pm</b>	B63B, B63C, B63G, B63H, B63J	G01R31- G01R35	B01J3 - B01J19, B01J13, B01J19/0046
<b>Wednesday 6 June 2018 am</b>	F16K	H04L12	C10G1/00- C10G2300/00, C10G2400/30, C10L1/00- C10L1/08
<b>Wednesday 6 June 2018 pm</b>	B65G	H01J49, F03H1, H05K1	G06F19/10+, C40B30/02, C40B50/02, G16H (former G06F19/30+), B82Y10/00
<b>Thursday 7 June 2018 am</b>	B25C1/00- B25C13/00// B25F1/00- B25F5/029, B25G1/00- B25G3/38, B25H1/00- B25H7/045	B29C64/70, B33Y, B29D99/00- B29D99/0028, B29D99/0089	F16M11, F16M13, F16G1, F16G5
<b>Thursday 7 June 2018 pm</b>	Wrap up		

# CPC Training on [www.cpcinfo.org](http://www.cpcinfo.org)



## CPC Training

The EPO and the USPTO have jointly prepared CPC training material to support users in their learning process of the CPC classification system.

Use the links below to access the material

- [CPC Field Specific training](#)

Following [this link](#) you can access the EPO learning platform (registration required, free of charge) where you can consult some CPC Field Specific Training recorded lectures where CPC experts explain the classification practice in their respective fields of expertise.

- [Course "Using CPC in classification"](#)

- [CPC General course](#)
- [CPC Essentials](#)
  - [Part A - introduction to CPC Essentials and patent classification systems](#)
  - [Part B - CPC Scheme](#)
  - [Part C - CPC Scheme Definitions](#)

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[List of technical areas where Combination Sets are used.](#)

[General training on Combination Sets](#)

[Training material on Combination Sets in the Polymers area](#)

Search  Enter search term



The screenshot shows the 'e-learning centre' interface. At the top, there is a search bar with 'All courses' and a search icon. Below the search bar, a banner reads 'CPC field-specific training: recorded lectures' over an image of a person using a laptop. The main content area shows a breadcrumb trail: 'e-learning centre > Courses > Courses > CPC field-specific training'. There are two buttons: 'Information' and 'Feedback'. Below these, the 'INTRODUCTION' section states: 'This course consists of 24 recorded lectures in which expert examiners present their CPC technical fields. The presentations contain examples from most CPC classification sections.' The 'RECORDED LECTURES' section explains: 'Here you can access the recorded presentations on specific technical fields from the CPC sections. The presentations cover the rules and criteria of classification for each field, neighbouring fields, overall structure and examples. You can view each video in its entirety or simply watch those parts that interest you.' Below this, two sections are listed: 'SECTION A' with 'A61N2: Magnetotherapy, A61N5: Radiation Therapy (Ewa Beck)' and 'SECTION B' with 'B01J3-B01J19: Reactors (Philippe Thomasson)' and 'B25C: Hand-held nailing or stapling tools, Manually operated portable stapling tools (Radu David)'. On the right side, there is a 'Course Navigation' sidebar with a dropdown menu showing 'Course main page', 'Course content', 'INTRODUCTION', 'RECORDED LECTURES', and 'DOWNLOADS'. At the bottom of the sidebar, there are '+ open all' and '- close all' options.

# CPC Field-Specific Training 2019

## CPC Collective Field-Specific Training for National Offices

- **4-6 June 2019** at the EPO in **Munich**
- Input for technical fields to be covered?



# IT Matters

# IT Matters

- OPS RESTful web services
- How to send CPC data to the EPO?
  - bibliographic data stream
  - separate file
  - web services
- How to send reclassified data to the EPO?

# OPS RESTful web services

Open Patent Services (OPS) is a web service which provides access to the EPO's data via a standardised XML interface. It does this using RESTful architecture. Details at <http://ops.epo.org>

- Current version 3.2 (released November 2017)
- Next changes expected with CPC-INTL
- API specification, documentation, CPC schema, etc. accessible at <https://www.epo.org/searching-for-patents/data/web-services/ops.html#tab-3>

# Classification services under OPS

The classification web services focus on classification related to:

- CPC retrieval

e.g. GET [http://ops.epo.org/rest-services/classification/cpc/\[classificationsymbol\]?query-string](http://ops.epo.org/rest-services/classification/cpc/[classificationsymbol]?query-string)

- CPC media retrieval (gif, jpeg, png, tif, wav, mp3, etc...)

e.g. GET [http://ops.epo.org/rest-services/classification/cpc/media/\[image-name\]](http://ops.epo.org/rest-services/classification/cpc/media/[image-name])

- CPC symbol search

e.g. GET [http://ops.epo.org/restservices/classification/cpc/search/?q=\[QUERY STRING\]](http://ops.epo.org/restservices/classification/cpc/search/?q=[QUERY STRING])

- Classification mapping service

e.g. GET [http://ops.epo.org/rest-services/classification/map/\[inputformat\]/\[classification-symbol\]/\[output-format\]](http://ops.epo.org/rest-services/classification/map/[inputformat]/[classification-symbol]/[output-format])

# How to send CPC data to the EPO?

- CPC classification data from National Offices is submitted according to **ST.36 format** while considering the **ST.8-based CPC allocation standard**
- CPC symbols are subject to some **validation** before loading into DocDB
- Options for data submission by a National Office:
  1. Included in the **bibliographic data stream** (with IPC)
  2. **Separate file** for CPC classification data and limited bibliographic data
  3. **Web services** with feedback retrieval on batch status (accept/reject)

# How to send CPC data to EPO

- The current bibliographic data format is based on ST.36/CPC allocation standard (complementary with ST.8) and DocDB XML format.

Position(s)	Content	Values
1	Section	A,....., H,Y
2,3	Class	01,.....,99
4	Subclass	A,.....,Z
5 to 8	Main Group (right aligned)	1,.....,9999, blank
9	Separating character	/ ("Slash")
10 to 15	Subgroup (left aligned)	00,.....,999999, blank
16 to 19	For future use	4 blanks
20 to 27	Version indicator	YYYYMMDD date format
28	Classification level	blank
29	First or later position of symbol	F,L
30	Classification value (invention or additional)	I,A
31 to 38	Action date	YYYYMMDD date format
39	Original or reclassified data	B,R
40	Source of classification data	H,C,G
41-42	Generating office	AA,.....,ZZ (ST.3)
43-50	For future use	8 blanks

# CPC data submission in bibliographic data stream

- Front-file / Back-file using the simple-patent-document-v2-1-1 schema (DTD)
- DTD can be requested through [frontoffice@epo.org](mailto:frontoffice@epo.org) or accessible at <http://epoxy.epo.org/> (<https://epoextsa.epo.org/nos/>)

# CPC data submission as separate file

- With symbol formatting in
  - expanded tagged structure (no slash separator needed), e.g.

```
<section>H</section>  
<class>04</class>  
<subclass>L</subclass>  
<main-group>29</main-group>  
<subgroup>08585</subgroup>
```

- as string of characters with/without spaces, but mandatory slash separator
- CPC ST.8 validation rules apply for symbols, breakdown-symbols (“2000” symbols) and C-set symbols

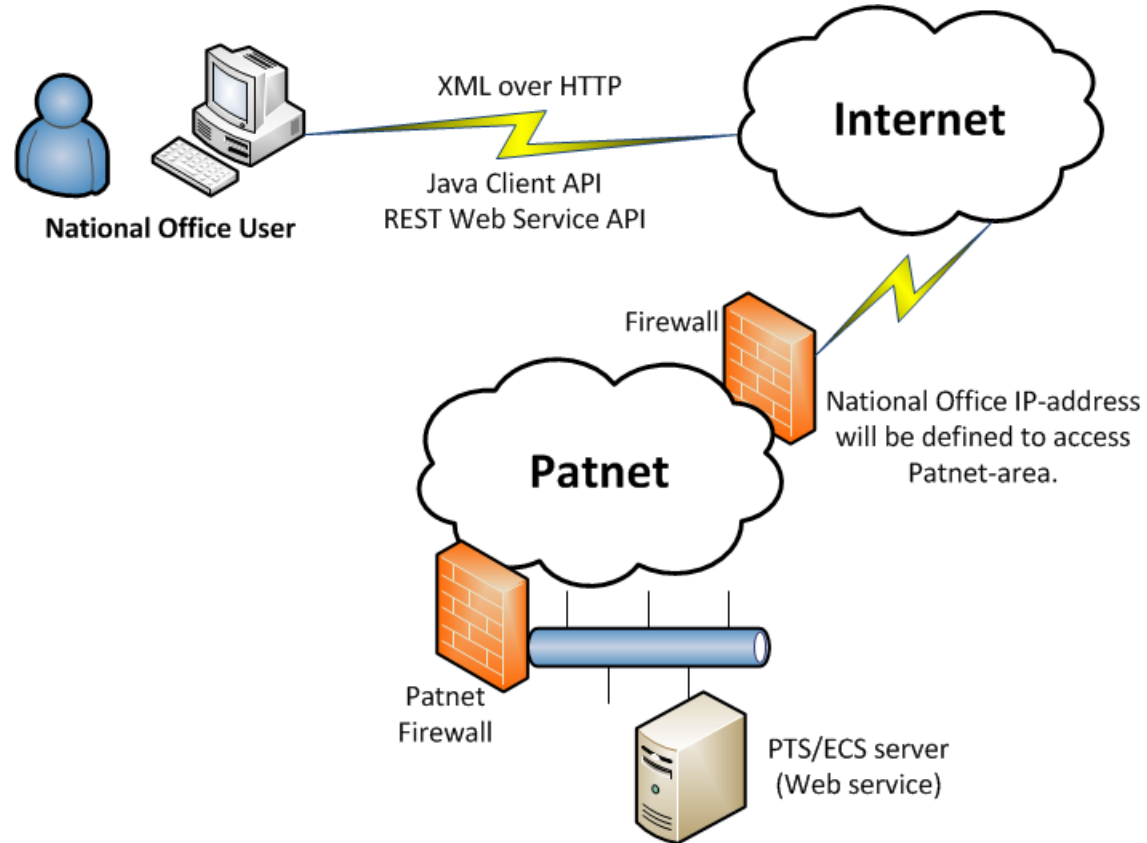


# CPC data submission through web services (1/7)

- Web services active through Patnet (Epoxy user-id/password).
- Web service provides a means for a National Office to submit collections of patent documents with CPC allocations (single symbols and C-sets).
- Current data loading processes in place do not support the update of only one symbol. Only replacement of full set of symbols.
- Web service allows the **update of a single symbol**.

# CPC data submission through web services (2/7)

- Web services



## CPC data submission through web services (3/7)

- To support single symbol update, the web service expects a so-called “**Optimised XML**” (OX) format, which will allow the possibility to modify a single allocation (reclassification).
- A separate **transformation service** is provided that allows a National Office to transform their ST.36 XML format to the OX format so that it can be processed by the web-service (JAVA-API).
- Every batch of submitted data (transaction) will be posted in a staging area at the EPO and processed in a nightly batch process, that will upload and validate the data.
- Validation of data (valid symbol, INV, ADD, etc.)

# CPC data submission through web services (4/7)

## Common errors

- No action date
- No First/Later indicator present
- Multiple First indicators present on one publication
- Date not in the correct format (YYYYMMDD)
- Missing tags from the standard
- Invention indicator on additional only symbol
- Combination set consisting of only one symbol

# CPC data submission through web services (5/7)

```
<further-cpc>
  <classification-cpc>
    <cpc-version-indicator>
      <date>20130101</date>
    </cpc-version-indicator>
    <section>G</section>
    <class>01</class>
    <subclass>N</subclass>
    <main-group>2800</main-group>
    <subgroup>52</subgroup>
    <symbol-position>L</symbol-position>
    <classification-value>I</classification-value>
    <generating-office>
      <country>EP</country>
    </generating-office>
    <action-date>
      <date>2018-10-05</date>
    </action-date>
    <classification-status>B</classification-status>
    <classification-data-source>H</classification-data-source>
  </classification-cpc>
```

“2000” symbol should be “A” = additional only

action-date not in correct YYYYMMDD format

# CPC data submission through web services (6/7)

```
<combination-set sequence="8">
<group-number>1</group-number>
<combination-rank>
  <rank-number>1</rank-number>
  <patent-classification>
    <classification-scheme office="EP" scheme="CPC">
      <date>20140201</date>
      </classification-scheme>
      <classification-symbol>
        <section>C</section>
        <class>08</class>
        <subclass>L</subclass>
        <main-group>23</main-group>
        <subgroup>06</subgroup>
      </classification-symbol>
      <symbol-position>L</symbol-position>
      <classification-value>I</classification-value>
      <classification-status>B</classification-status>
      <classification-data-source>H</classification-data-source>
      <generating-office>CN</generating-office>
      <action-date>
        <date>20140815</date>
      </action-date>
    </patent-classification>
  </combination-rank>
```



second and/or more combination sets need to be added

# CPC data submission through web services (7/7)

- The web service provides the means for a National Office to query their uploaded data, e.g. to query the status of a submitted batch or allocation therein.
- More details of the Classification data loading web services can be requested through [cpc@epo.org](mailto:cpc@epo.org).

# How to send reclassified data to the EPO?

- Submission through **classification data loading web service** indicating Add or Delete in the input.
- Submission as a **separate file in XML format**, with full classification picture for the reclassified publication (unload/reload).



# **CPC International Impact on DocDB XML**

# Impact of CPC International on DocDB XML

From the point of view of DocDB XML, the changes related to the **CPC International** project are **minor**:

- **No impact on schema definition**
- **No impact** on the content of element **<patent-classification>**
- **Minor change** in the content of element **<classification-scheme>**
  - currently: value “CPC” (EPO, USPTO) or “CPCNO” (other NO)
  - future: value “CPCI”
- **Minor change** for element **<generating-office>**
  - currently only populated when “scheme” = “CPCNO”
  - future: populated in all cases

# Impact of CPC International on DocDB XML

- **Notification** and **documentation** was **sent** in November 2018
- Included **sample files**
- Same package also loaded on the download area under 14.7  
DOCDB (notification folder)
- Will be published once CPC International goes live

# **CPC International Impact on Epoque (Net)**

# EPOQUE (Net) – old and new CPC fields in EPODOC

## Old

## New

Field	Index	Synonym	Type	Title
AB	BI	ABEN	TEXT	Abstract of the invention in English
ABDE	DE		TEXT	Abstract of the invention in German
ABFR	FR		TEXT	Abstract of the invention in French
ABOL	OLAN		TEXT	Abstract of the invention (other languages)
AN	AN		CODE	Accession number
AP	AP		KW	Application number
CCA	C		KW	CPC Single symbols Confirmed Additional Information
CCI	C		KW	CPC Single symbols Confirmed Invention Information
CLC	CL		KW	CPC Linked symbols Confirmed
CLQ	CL		KW	CPC Linked symbols Raise-Hand by EPO
CLU	CL		KW	CPC Linked symbols Unreviewed
CNOA	CNO		KW	CPC National Office Additional Information
CNOI	CNO		KW	CPC National Office Invention Information
CNOI	CNOI		KW	CPC National Office Linked symbols
CUA	C		KW	CPC Single symbols Raise-Hand by EPO Additional Information
CCI	C		KW	CPC Single symbols Raise-Hand by EPO Invention Information
CST	CST	ECST	TEXT	CPC Classification status
CT	CTP		KW	Patents cited in the search report
CTNP	CTL		TEXT	Literature cited in the search report
CTSI	CTSI		TEXT	Citation set Information
COA	C		KW	CPC Single symbols Unreviewed Additional Information
COI	C		KW	CPC Single symbols Unreviewed Invention Information
DPK	DPK		KW	DPK classification
DT	DT		KW	Document type
EX	CTP		KW	Patents cited during examination
EXNP	CTL		TEXT	Literature cited during examination
FAMN	FAMN		TEXT	EPO family number



Field	Index	Synonym	Type	Title
AB	BI	ABEN	TEXT	Abstract of the invention in English
ABDE	DE		TEXT	Abstract of the invention in German
ABFR	FR		TEXT	Abstract of the invention in French
ABOL	OLAN		TEXT	Abstract of the invention (other languages)
AN	AN		CODE	Accession number
AP	AP		KW	Application number
CA	C		KW	Single symbols, Additional information, All Offices
CCA	CC		KW	Single symbols, Additional information, Confirmed, EPO
CCI	CC		KW	Single symbols, Invention information, Confirmed, EPO
CI	C		KW	Single symbols, Invention information, All Offices
CL	CL		KW	Linked symbols, All Offices
CLC	CLC		KW	Linked symbols, Confirmed, EPO
CT	CTP		KW	Patents cited in the search report
CTNP	CTL		TEXT	Literature cited in the search report
CTSI	CTSI		TEXT	Citation set Information
DPK	DPK		KW	DPK classification
DT	DT		KW	Document type
EX	CTP		KW	Patents cited during examination
EXNP	CTL		TEXT	Literature cited during examination
FAMN	FAMN		TEXT	EPO family number

# EPODOC fields

<b>FIELD</b>	<b>Content</b>
<b>/CI</b>	Single symbols, Invention information, All Offices
<b>/CA</b>	Single symbols, Additional information, All Offices
<b>/CCI</b>	Single symbols, Invention information, Confirmed, EPO
<b>/CCA</b>	Single symbols, Additional information, Confirmed, EPO
<b>/CL</b>	Linked symbols, All Offices
<b>/CLC</b>	Linked symbols, Confirmed, EPO

# EPODOC - Display

[SS 6] ..li 1 clas



1/5.260 © EPOCPC / EPO

PN - [US2018337381](#) A1 20181122

TI - SEPARATOR FOR RECHARGEABLE BATTERY AND RECHARGEABLE LITHIUM BATTERY INCLUDING THE SAME

CCI - [H01M2/1653](#) ; [H01M2/166](#) ; [H01M2/1686](#)

CCA - [H01M10/052](#)

CI - C08F220/48 (CN)

- C08J7/047 (US)

- C08K3/22 (US)

- C09D5/18 (US)

- C09D7/61 (EP)

- C09D133/20 (US)

- H01M2/145 (CN)

- H01M2/1653 (EP)

- ~~H01M2/166 (EP, US)~~

- H01M2/1686 (EP, CN, US)

- H01M10/052 (CN)

- H01M10/0525 (US)

CA - C08J2323/06 (US)

- C08J2433/20 (US)

- C08K2003/2227 (US)

- H01M10/052 (EP)

CL - C08F220/48, C08F220/06, C08F2220/585, INV (CN)

ICAI - H01M2/16; H01M2/14; H01M4/131; H01M4/133; H01M4/505; H01M4/525; H01M4/62; H01M4/66; H01M10/0525

# EPODOC – Search

Symbol endorsed by an office, e.g. BR  
**/CI H04W 36/12 S BR**

Symbol potentially endorsed by  
certain offices, e.g. EP or BR or KR

**/CI H04W 36/12 S (EP OR BR OR KR)**

[SS 8] /ci H04W36/12 s (EP or BR or KR)

Results in EPOCPC 181

[SS 9] ..li 1-3 clas

<b>1/181</b>	© EPOCPC / EPO
PN	- JP2018182754 A 20181115
CCI	- H04W36/023 ; H04W36/12 ; H04W68/005
CCA	- H04W8/08
CI	- H04W36/02 (BR, KR) - H04W36/023 (EP, CN, US) - H04W36/12 (EP, BR, KR, US) - H04W36/32 (KR) - H04W68/005 (EP, US) - H04W68/02 (KR) - H04W68/04 (BR) - H04W88/16 (KR)
CA	- H04W8/08 (EP, US) - H04W36/12 (CN)
ICAI	- H04W36/02; H04W36/12; H04W88/14
<b>2/181</b>	© EPOCPC / EPO
PN	- MX355643 B 20180426
TI	- MOBILE COMMUNICATION SYSTEM, SGW, TERMINAL COMMUNICATION METHOD AND CONTROL METHOD.
CCI	- H04W36/023 ; H04W36/12 ; H04W68/005
CCA	- H04W8/08
CI	- H04W36/02 (BR, KR) - H04W36/023 (EP, CN, US) - H04W36/12 (EP, BR, KR, US) - H04W36/32 (KR) - H04W68/005 (EP, US) - H04W68/02 (KR) - H04W68/04 (BR) - H04W88/16 (KR)
CA	- H04W8/08 (EP, US) - H04W36/12 (CN)
ICAI	- H04W68/00
<b>3/181</b>	© EPOCPC / EPO
PN	- RU2671966 C1 20181108
TI	- COMMUNICATION SYSTEM, BASE STATION, COMMUNICATION METHOD AND ENERGY-DEPENDENT COMPUT



# EPODOC – Search (AND)

Search for symbol endorsed by certain offices, e.g. EP and US:

**/CI B07B 1/02 S EP S US**

[SS 10] /ci B07B1/02 S EP S US

Results in EPOCPC 3

[SS 11] ..LI CLAS



<b>1/3</b>	© EPOCPC / EPO
PN	- <a href="#">US10010910</a> B1 20180703
TI	- Portable prospecting and classifying self-contained apparatus
CCI	- <a href="#">B07B1/02</a>
CCA	- <a href="#">B07B2201/04</a>
CI	- <a href="#">B07B1/02</a> (EP, US)
CA	- B07B2201/04 (EP, US)
ICAI	- B07B1/04; B07B1/02
<b>2/3</b>	© EPOCPC / EPO
PN	- <a href="#">US2018169703</a> A1 20180621
TI	- SAND SIFTER APPARATUS AND METHOD
CCI	- <a href="#">B07B1/02</a>
CI	- <a href="#">A01B1/02</a> (EP)
	- <a href="#">B07B1/02</a> (EP, US)
	- <a href="#">E01H12/00</a> (EP)
ICAI	- B07B1/02
<b>3/3</b>	© EPOCPC / EPO
PN	- <a href="#">US2017282324</a> A1 20171005
TI	- Two Stage Stainless Steel Media Sifter
CCI	- <a href="#">B07B1/02</a> ; <a href="#">B08B3/044</a> ; <a href="#">B24B31/02</a> ; <a href="#">B24B31/14</a> ; <a href="#">B24B31/16</a>
CCA	- <a href="#">B07B2201/04</a>
CI	- <a href="#">B07B1/02</a> (EP, US)
	- <a href="#">B08B3/044</a> (EP, US)
	- B24B31/02 (EP, US)
	- B24B31/14 (EP, US)
	- B24B31/16 (EP, US)
CA	- B07B2201/04 (EP, US)
ICAI	- B24B31/16; B07B1/02; B08B3/04; B24B31/02; B24B31/14

**Cooperative  
Patent  
Classification**

European Patent Office  
United States Patent and Trademark Office



F16M11/2028	.....{around a horizontal axis} (—)
F16M11/2035	.....{for rolling, i.e. for creating a landscape-portrait rotation}
F16M11/2042	.....{in more than one direction}
F16M11/205	.....{constituted of several dependent joints}
	.....{the axis of rotation intersecting in a single point e.g. gimbal}

**Thank you for your attention!**