



# 12<sup>th</sup> CPC ANNUAL MEETING

## EPO SPECIFIC NEWS: CPC AND ARTIFICIAL INTELLIGENCE

PIERRE HELD | CPC CO-OPERATION MANAGER, EUROPEAN AND INTERNATIONAL AFFAIRS | FEBRUARY 2025

## AI FOR PRECLASSIFICATION



Internal AI engine in production for all patent applications



AI is used for the routing of all search files



90% accuracy in sending file to appropriate directorate



Intellectually by paratechnical unit for re-routing or complex cases

## AI FOR TAGGING: THE Y02/Y04 SCHEMES

Since August 2022, CPC groups in Y02/Y04 are populated with the use of AI:

Classification symbol	Title and description
<b>Y</b>	GENERAL TAGGING OF NEW TECHNOLOGICAL DEVELOPMENTS; GENERAL TAGGING OF CROSS-SECTIONAL TECHNOLOGIES SPANNING OVER SEVERAL SECTIONS OF THE IPC; TECHNICAL SUBJECTS COVERED BY FORMER USPC CROSS-REFERENCE ART COLLECTIONS [XRACs] AND DIGESTS [2013-01]
<b>Y02</b>	TECHNOLOGIES OR APPLICATIONS FOR MITIGATION OR ADAPTATION AGAINST CLIMATE CHANGE [2018-01]
<b>Y02A</b>	TECHNOLOGIES FOR ADAPTATION TO CLIMATE CHANGE [2018-01]
<b>Y02B</b>	CLIMATE CHANGE MITIGATION TECHNOLOGIES RELATED TO BUILDINGS, e.g. HOUSING, HOUSE APPLIANCES OR RELATED END-USER APPLICATIONS [2018-05]
<b>Y02C</b>	CAPTURE, STORAGE, SEQUESTRATION OR DISPOSAL OF GREENHOUSE GASES [GHG] [2013-01]
<b>Y02D</b>	CLIMATE CHANGE MITIGATION TECHNOLOGIES IN INFORMATION AND COMMUNICATION TECHNOLOGIES [ICT], I.E. INFORMATION AND COMMUNICATION TECHNOLOGIES AIMING AT THE REDUCTION OF THEIR OWN ENERGY USE [2020-08]
<b>Y02E</b>	REDUCTION OF GREENHOUSE GAS [GHG] EMISSIONS, RELATED TO ENERGY GENERATION, TRANSMISSION OR DISTRIBUTION [2018-05]
<b>Y02P</b>	CLIMATE CHANGE MITIGATION TECHNOLOGIES IN THE PRODUCTION OR PROCESSING OF GOODS [2015-11]
<b>Y02T</b>	CLIMATE CHANGE MITIGATION TECHNOLOGIES RELATED TO TRANSPORTATION [2017-05]
<b>Y02W</b>	CLIMATE CHANGE MITIGATION TECHNOLOGIES RELATED TO WASTEWATER TREATMENT OR WASTE MANAGEMENT [2015-05]

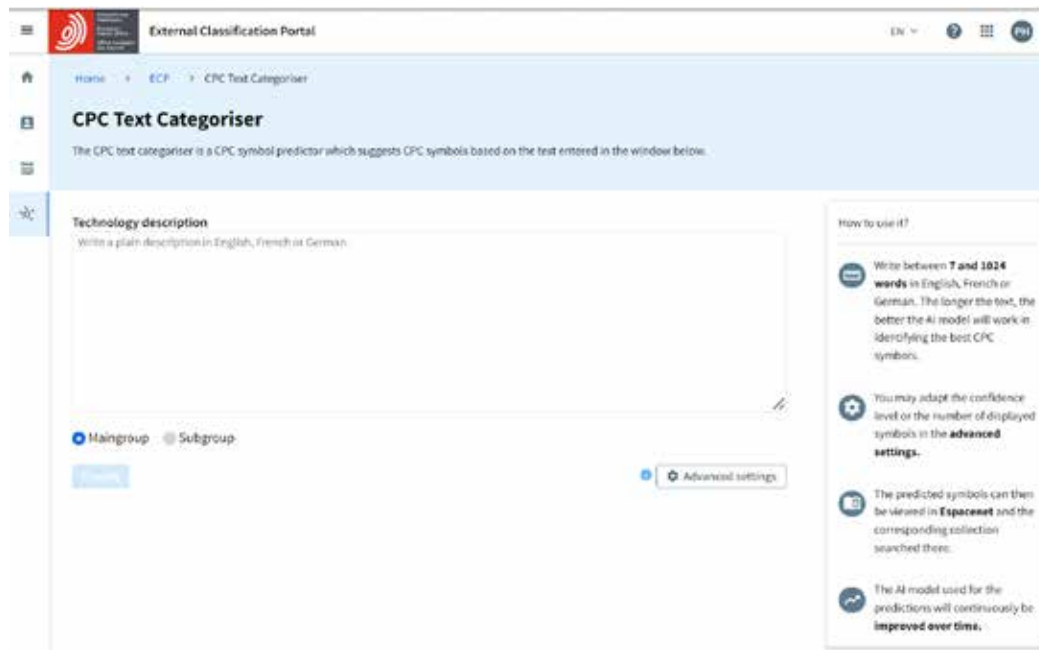
<https://worldwide.espacenet.com/patent/cpc-browser#!/CPC=Y02>

- 372 entries
- Easier maintenance than with preparations
- Tagging on the fly

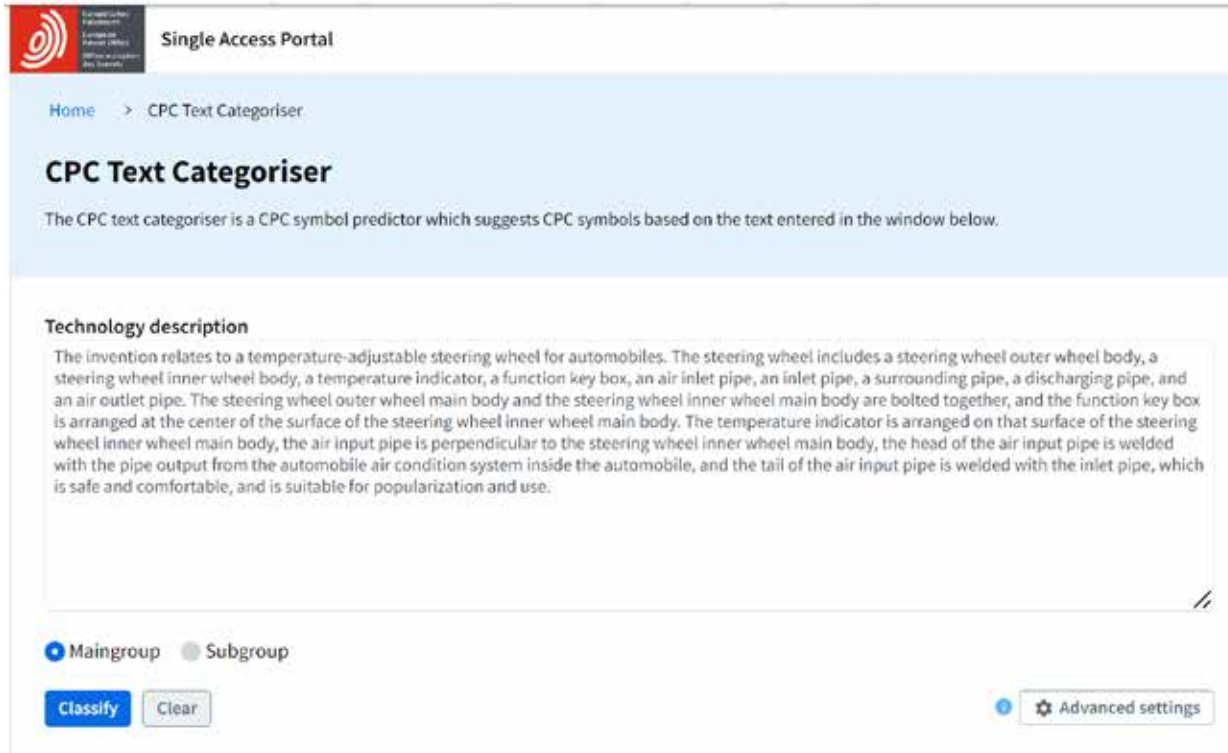
## AI FOR CLASSIFICATION

### CPC text categoriser: a CPC symbol predictor

- n AI-based CPC symbol predictor
- n Text input in English, French or German (at least 8 words)
- n CPC predictions are returned within a fraction of a second
- n AI model continuously updated
- n Launched to CPC offices in March 2023
- n Available to the public since November 2023



# AI-POWERED CPC TEXT CATEGORISER



The screenshot shows the 'Single Access Portal' for the 'CPC Text Categoriser'. The page title is 'CPC Text Categoriser'. Below the title, there is a description: 'The CPC text categoriser is a CPC symbol predictor which suggests CPC symbols based on the text entered in the window below.' A section titled 'Technology description' contains a paragraph of text: 'The invention relates to a temperature-adjustable steering wheel for automobiles. The steering wheel includes a steering wheel outer wheel body, a steering wheel inner wheel body, a temperature indicator, a function key box, an air inlet pipe, an inlet pipe, a surrounding pipe, a discharging pipe, and an air outlet pipe. The steering wheel outer wheel main body and the steering wheel inner wheel main body are bolted together, and the function key box is arranged at the center of the surface of the steering wheel inner wheel main body. The temperature indicator is arranged on that surface of the steering wheel inner wheel main body, the air input pipe is perpendicular to the steering wheel inner wheel main body, the head of the air input pipe is welded with the pipe output from the automobile air condition system inside the automobile, and the tail of the air input pipe is welded with the inlet pipe, which is safe and comfortable, and is suitable for popularization and use.' At the bottom of the page, there are radio buttons for 'Maingroup' (selected) and 'Subgroup', a 'Classify' button, a 'Clear' button, and an 'Advanced settings' button with a gear icon.



CPC symbol  
predictions with AI:

[CPC Text Categoriser |  
SAP \(epo.org\)](#)

# AI POWERED CPC TEXT CATEGORISER – VIEW RESULTS

**Top 10 results at Subgroup level**

**1** Confidence level: 0.9

B	PERFORMING OPERATIONS; TRANSPORTING	2013-01	
	<b>TRANSPORTING</b>		
B62	LAND VEHICLES FOR TRAVELLING OTHERWISE THAN ON RAILS	2013-01	
B62D	MOTOR VEHICLES; TRAILERS (steering, or guiding on a desired track, of agricultural machines or implements A01B69/00; wheels, castors, axles, increasing wheel adhesion B60B; vehicle tyres, tyre inflat...	2013-01	
B62D 1/00	Steering controls, i.e. means for initiating a change of direction of the vehicle	2013-01	
B62D 1/02	▪ vehicle-mounted	2013-01	
B62D 1/04	•• Hand wheels	2013-01	
B62D 1/06	••• Rims, e.g. with heating means; Rim covers (B62D1/11 takes precedence)	2013-01	
<b>B62D 1/065</b>	<b>•••• Steering wheels with heating and ventilating means (heating and ventilating arrangements for spaces of vehicles B60H)</b>	2013-01	

**2** Confidence level: 0.2

B	PERFORMING OPERATIONS; TRANSPORTING	2013-01	
	<b>TRANSPORTING</b>		

**Subclass definition (PDF)**

**Link to Espacenet browser**

# CPC TEXT CATEGORISER FROM ESPACENET




**Espacenet**  
 Patent search

Enter your search terms

Office/Language ▼

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[Classification search](#)
[Results](#)
[Feedback](#)

## Classification search

Use this page to find CPC symbol meanings or search relevant symbols by keyword in the worldwide bibliographic database. Espacenet will list the most frequent ones at main group level.


Enter a keyword or a classification symbol

Symbol	Classification and description	
<input type="checkbox"/> A	HUMAN NECESSITIES [2013-01]	<input type="button" value="S"/>
<input type="checkbox"/> B	PERFORMING OPERATIONS; TRANSPORTING [2016-05]	<input type="button" value="S"/> <input type="button" value="I"/>
<input type="checkbox"/> C	CHEMISTRY; METALLURGY [2024-05]	<input type="button" value="S"/> <input type="button" value="I"/>
<input type="checkbox"/> D	TEXTILES; PAPER [2013-01]	<input type="button" value="S"/>
<input type="checkbox"/> E	FIXED CONSTRUCTIONS [2013-01]	<input type="button" value="S"/>
<input type="checkbox"/> F	MECHANICAL ENGINEERING; LIGHTING; HEATING; WEAPONS; BLASTING [2019-02]	<input type="button" value="S"/> <input type="button" value="I"/>
<input type="checkbox"/> G	PHYSICS [2017-05]	<input type="button" value="S"/> <input type="button" value="I"/>
<input type="checkbox"/> H	ELECTRICITY [2020-01]	<input type="button" value="S"/> <input type="button" value="I"/>
<input type="checkbox"/> Y	GENERAL TAGGING OF NEW TECHNOLOGICAL DEVELOPMENTS; GENERAL TAGGING OF CROSS-SECTIONAL TECHNOLOGIES SPANNING OVER SEVERAL SECTIONS OF THE IPC; TECHNICAL SUBJECTS COVERED BY FORMER USPC CROSS-REFERENCE ART COLLECTIONS [XRACs] AND DIGESTS [2013-01]	<input type="button" value="S"/> <input type="button" value="I"/>

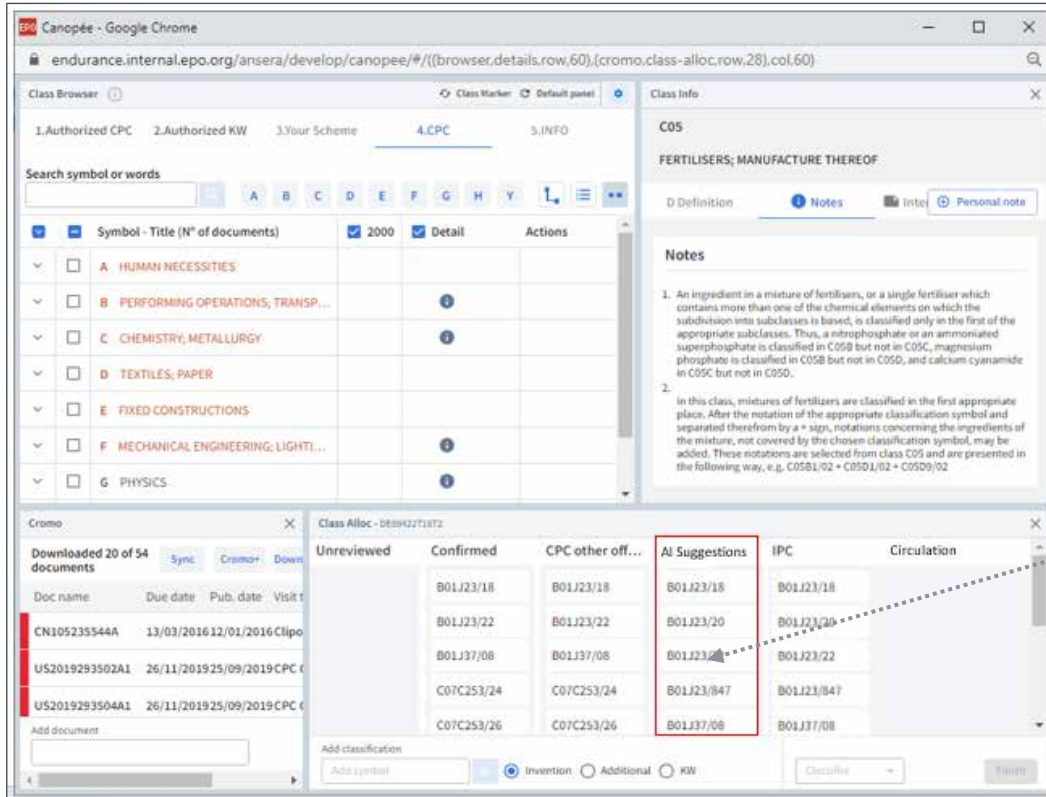
Selected classifications

Find patents

Try also the AI-based CPC Text Categoriser



# AI CPC SUGGESTIONS IN EPO INTERNAL TOOLS



The screenshot shows the 'Class Alloc' window in the EPO internal tool. It features a table with columns for document status and AI suggestions. The 'AI Suggestions' column is highlighted with a red box, and the entry 'B01J23/08' is selected with a mouse cursor.

Unreviewed	Confirmed	CPC other off...	AI Suggestions	IPC	Circulation
	B01J23/18	B01J23/18	B01J23/18	B01J23/18	
	B01J23/22	B01J23/22	B01J23/20	B01J23/20	
	B01J37/08	B01J37/08	B01J23/08	B01J23/22	
	C07C253/24	C07C253/24	B01J23/847	B01J23/847	
	C07C253/26	C07C253/26	B01J37/08	B01J37/08	

Allocate symbol as Invention or Additional information




The 'AI Suggestions' panel displays a list of classification codes: B01J23/18, B01J, B01J23/22, B01J23/847, and B01J37/08. The 'B01J' entry is highlighted with a box containing an 'i' icon and an 'A' icon. A dashed arrow points from this box to the 'Allocate symbol as Invention or Additional information' text.

Delete



# AI FOR RECLASSIFICATION

Project: RP0676\_SA32

**RP0676\_SA32** 

EPUS HPL IRWL - Created on 20/12/2021 10:42:31 Download report Finish Reclassification

Project progress

Overview at Project Level - EPUS IRWL Help on AI assistant Intellectual recl. at project level

Required Quality Level:

Total number of documents: 2094

Documents fully reclassified (for all source groups): 18







Docs. reclassified by exa. for at least one source group: 18

Docs. reclassified by AI for at least one source group: 3

Supported by AI: 824

Not supported by AI: 215

Overview per source group of RCL

Source group	Type	Transfer type	IBr. of RCL destination groups	AI stage	Total number of documents	Docs. not in status "recla. completed"	Reclassified by examiner	Reclassified by AI	Supported by AI	
R29C70700		C	INT	1	Not started	10	10	0	0	8
R29C70730		C	INT	1	Not started	10	10	0	0	9
R29C70740		C	INT	2	Not started	40	20	0	0	1
R29C70754		C	INT	3	QC 1 	3532	1004	18	0	294
R299990038		<a href="#">Intellectual recl. for this group</a>		All 8 searched		10	10	0	0	8

§ AI trained by examiner

§ AI makes suggestions and selects best batch of documents - examiner checks quality of test batch. If quality is good enough, best batch is automatically reclassified and allocations assigned

§ Following iterations incorporate all previous reclassification work (from AI and examiner) as training set 9

**THANK YOU!**

More information on the CPC? <https://cpcinfo.org>

Contact us at [cpc@epo.org](mailto:cpc@epo.org)