

CPC AND ARTIFICIAL INTELLIGENCE AT THE EPO

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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
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]
Y02	TECHNOLOGIES OR APPLICATIONS FOR MITIGATION OR ADAPTATION AGAINST CLIMATE CHANGE [2018-01]
Y02A	TECHNOLOGIES FOR ADAPTATION TO CLIMATE CHANGE [2018-01]
Y02B	CLIMATE CHANGE MITIGATION TECHNOLOGIES RELATED TO BUILDINGS, e.g. HOUSING, HOUSE APPLIANCES OR RELATED END-USER APPLICATIONS [2018-05]
Y02C	CAPTURE, STORAGE, SEQUESTRATION OR DISPOSAL OF GREENHOUSE GASES [GHG] [2013-01]
Y02D	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]
Y02E	REDUCTION OF GREENHOUSE GAS [GHG] EMISSIONS, RELATED TO ENERGY GENERATION, TRANSMISSION OR DISTRIBUTION [2018-05]
Y02P	CLIMATE CHANGE MITIGATION TECHNOLOGIES IN THE PRODUCTION OR PROCESSING OF GOODS [2015-11]
Y02T	CLIMATE CHANGE MITIGATION TECHNOLOGIES RELATED TO TRANSPORTATION [2017-05]
Y02W	CLIMATE CHANGE MITIGATION TECHNOLOGIES RELATED TO WASTEWATER TREATMENT OR WASTE MANAGEMENT [2015-05]

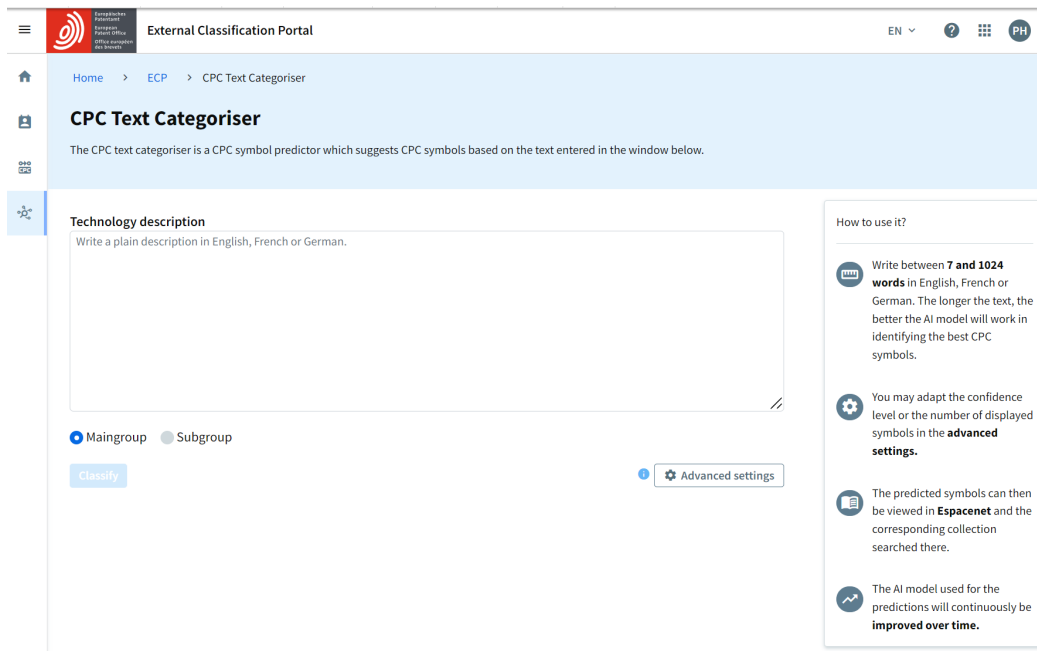
[https://worldwide.es
pacenet.com/patent/
cpc-
browser#!/CPC=Y0
2](https://worldwide.espacenet.com/patent/cpc-browser#!/CPC=Y02)

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

AI FOR CLASSIFICATION

CPC text categoriser: a CPC symbol predictor

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



The screenshot shows the 'External Classification Portal' interface. At the top, there is a navigation bar with the EPO logo and the text 'External Classification Portal'. Below this, a breadcrumb trail reads 'Home > ECP > CPC Text Categoriser'. The main heading is 'CPC Text Categoriser', followed by a sub-heading: 'The CPC text categoriser is a CPC symbol predictor which suggests CPC symbols based on the text entered in the window below.' The central part of the interface is a 'Technology description' section with a text input area containing the placeholder text 'Write a plain description in English, French or German.' Below the input area are radio buttons for 'Maingroup' (selected) and 'Subgroup', and a 'Classify' button. To the right of the input area is an 'Advanced settings' button. On the far right, there is a 'How to use it?' sidebar with three items: 1. 'Write between 7 and 1024 words in English, French or German. The longer the text, the better the AI model will work in identifying the best CPC symbols.' 2. 'You may adapt the confidence level or the number of displayed symbols in the advanced settings.' 3. 'The predicted symbols can then be viewed in Espacenet and the corresponding collection searched there.' 4. 'The AI model used for the predictions will continuously be improved over time.'

AI-POWERED CPC TEXT CATEGORISER



Single Access Portal

[Home](#) > [CPC Text Categoriser](#)

CPC Text Categoriser

The CPC text categoriser is a CPC symbol predictor which suggests CPC symbols based on the text entered in the window below.

Technology description

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.

Maingroup Subgroup

Classify

Clear



Advanced settings



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	
	TRANSPORTING		
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 inflati...	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	
B62D 1/065	•••• Steering wheels with heating and ventilating means (heating and ventilating arrangements for spaces of vehicles B60H)	2013-01	

Subclass definition (PDF)

Link to Espacenet browser

2 Confidence level: 0.2

B	PERFORMING OPERATIONS; TRANSPORTING	2013-01	
	TRANSPORTING		

CPC TEXT CATEGORISER FROM ESPACENET



Espacenet
Patent search

Office/Language ▾

My Espacenet
Help
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.

Search

Index

|

A

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B

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C

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D

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E

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F

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G

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H

|


Y

Symbol	Classification and description	
<input type="checkbox"/> A	HUMAN NECESSITIES [2013-01]	S
<input type="checkbox"/> B	PERFORMING OPERATIONS; TRANSPORTING [2016-05]	S i
<input type="checkbox"/> C	CHEMISTRY; METALLURGY [2024-05]	S i
<input type="checkbox"/> D	TEXTILES; PAPER [2013-01]	S
<input type="checkbox"/> E	FIXED CONSTRUCTIONS [2013-01]	S
<input type="checkbox"/> F	MECHANICAL ENGINEERING; LIGHTING; HEATING; WEAPONS; BLASTING [2019-02]	S i
<input type="checkbox"/> G	PHYSICS [2017-05]	S i
<input type="checkbox"/> H	ELECTRICITY [2020-01]	S 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]	S i

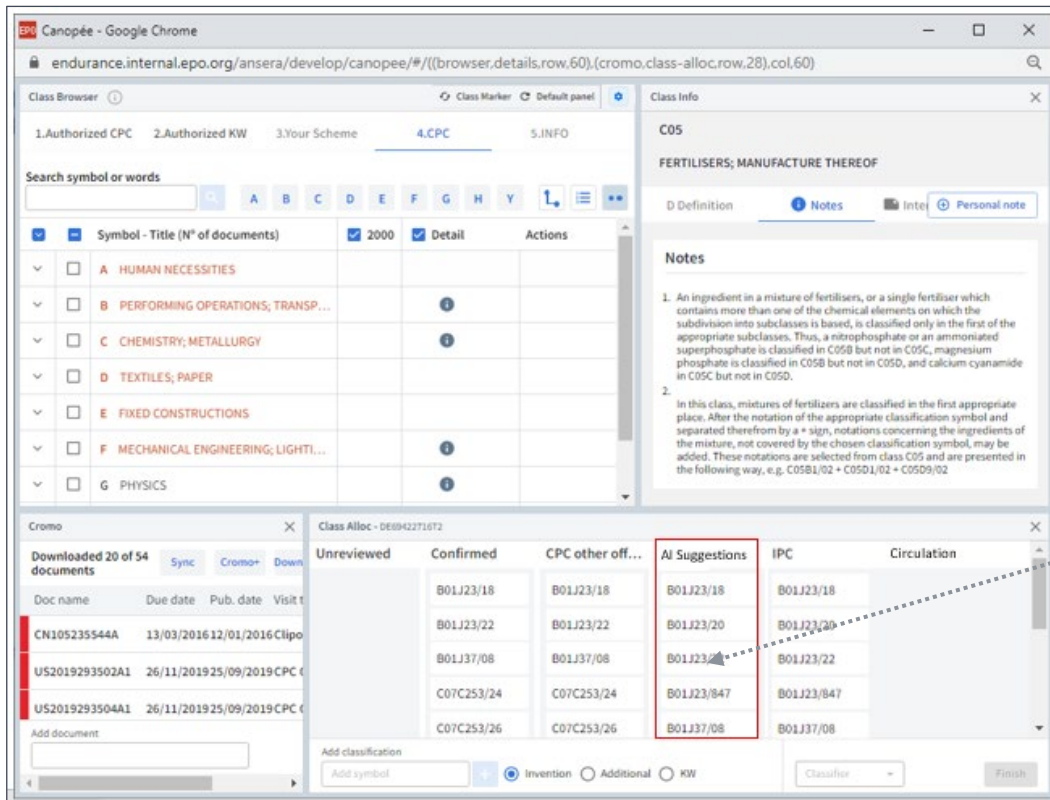
Selected classifications

Find patents

Try also the AI-based CPC Text Categoriser



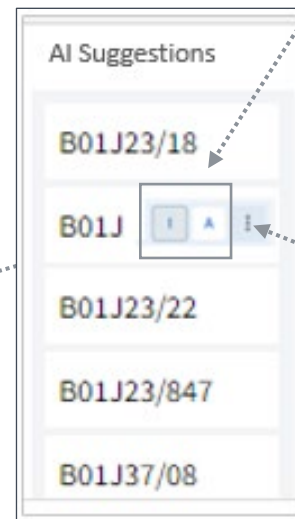
AI CPC SUGGESTIONS IN EPO INTERNAL TOOLS



The screenshot shows the Canopée interface with the following components:

- Class Browser:** Shows a tree view of CPC classes from A to G.
- Class Info:** Displays details for class C05, including its definition and notes.
- Notes:** Contains two paragraphs explaining classification rules for mixtures of fertilizers.
- Cromo Class Alloc:** A table showing document classification across different categories. The 'AI Suggestions' column is highlighted with a red box.
- AI Suggestions:** A list of suggested CPC codes: B01J23/18, B01J23/20, B01J23/22, B01J23/847, and B01J37/08.
- Classification Options:** Includes radio buttons for 'Invention', 'Additional', and 'KW', and a 'Finish' button.

Allocate symbol as Invention or Additional information



This close-up shows the 'AI Suggestions' list with the following items:


- B01J23/18
- B01J [i] [A] [!]
- B01J23/22
- B01J23/847
- B01J37/08

The 'Delete' button (represented by an exclamation mark icon) is highlighted with a box and a callout.

Delete

AI FOR RECLASSIFICATION

Projects > RP0676_SA32

RP0676_SA32 

EPUS NPL IRWL · Created on 23/12/2021 15:42:38 Download report [Finish Reclassification](#)

[Project progress](#)

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






Required Quality Level Total number of documents **1059**

90% Documents fully reclassified (for all source groups) Docs. reclassified by exa. for at least one source group Docs. reclassified by AI for at least one source group

Supported by AI Not supported by AI

824 18 18 0

Overview per source group of RCL

Source group	Type	Transfer type	Nbr. 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	
B29C70/00		C	INT	3	Not started	10	10	0	0	6
B29C70/30		C	INT	3	Not started	10	10	0	0	9
B29C70/46		C	INT	2	Not started	10	10	0	0	7
B29C70/54		C	INT	3		1022	1004	18	0	796
B29D99/0003	Intellectual recla for this group AI recla for this group			3	Not started	10	10	0	0	8

All 5 loaded.

- 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