



# Al for preclassification (file routing)



### PRECLASSIFICATION BY AI



Internal AI engine in production for all patent applications



90% of these files are routed by AI - 10% intellectually



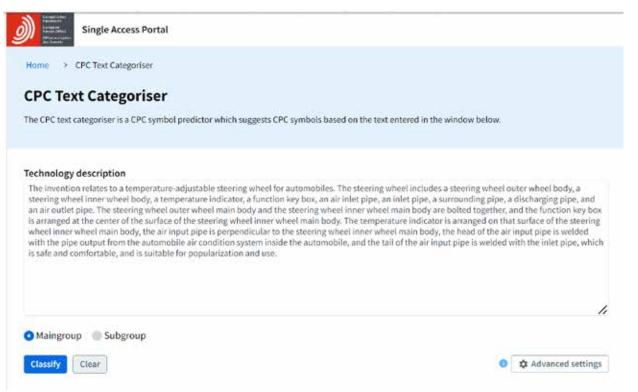
90% accuracy in sending file to appropriate directorate



## Al for classification



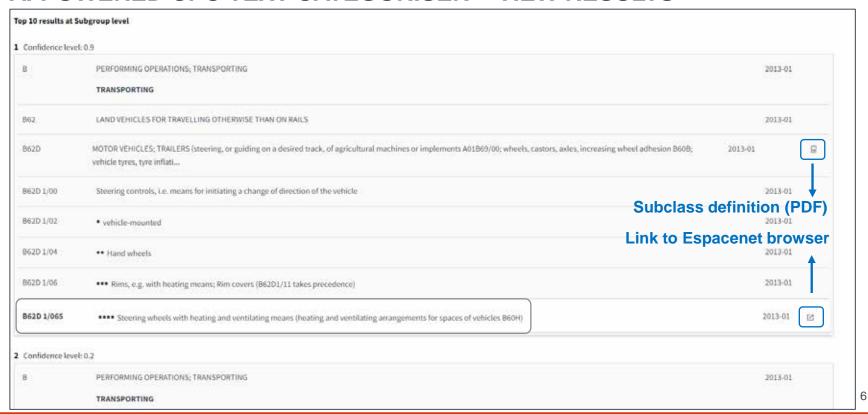
#### AI POWERED CPC TEXT CATEGORISER



CPC symbol predictions with Al



#### AI POWERED CPC TEXT CATEGORISER - VIEW RESULTS





#### AI-GENERATED CPC FOR CLIMATE CHANGE MITIGATION TECHNOLOGIES

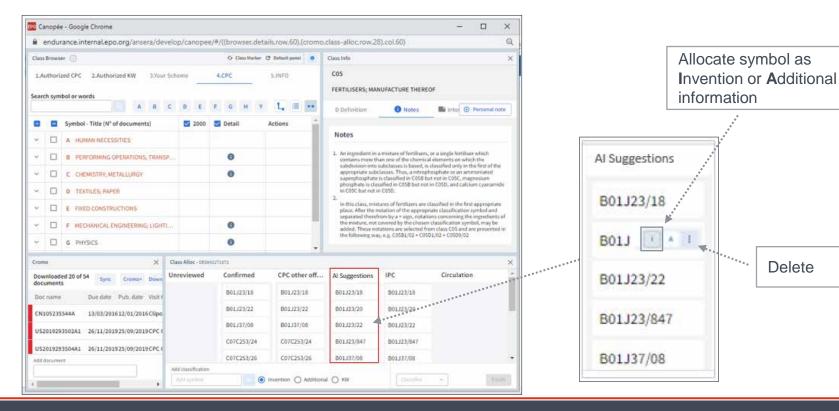
□ Y	GENERAL TAGGING OF NEW TECHNOLOGICAL DEVELOPMENTS; GENERAL TAGGING OF CROSS-SECTIONAL TECHNOLOGIES SPANNING OVER SEVERAL SECTIONS OF THE IPC; TECHNICAL SUBJECTS COVERED BY FORMER USPC CROSS-REFERENCE ART COLLECTIONS [XRACs] AND DIGESTS [2013-01]
☐ Y02	TECHNOLOGIES OR APPLICATIONS FOR MITIGATION OR 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]

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

- 372 entries
- Easier maintenance than preparations
- Updates can be done more frequently (twice per week currently)



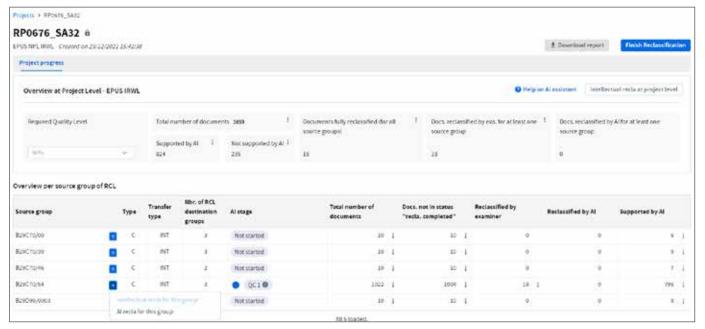
### AI-SUPPORTED CLASSIFICATION





## Al for reclassification





- § Al trained by examiner
- § Al 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]

