Simplify and improve your patent search using classification codes

Patent classification systems are used to sort patents and utility models by technology. This helps make searching for patents easier as each code discloses a technical feature found in the document. There are several classification schemes, for example, the International Patent Classification (IPC) used by patent offices globally, the Cooperative Patent Classification (CPC), and national schemes such as the Japanese F-Terms.

Using classification codes can help to broaden your patent search strategy to ensure all highly relevant documents appear in your results for review. This is a key part of prior art searching, to explore existing inventions within a full technology field. Keyword searches alone may will not always find all patent documents related to a technology area of interest. On the other hand, Classification codes can also help narrow your search strategy if used as a filter to eliminate unwanted technology groups from your results. On PatBase, there are several tools to simplify searching using patent classification codes. For instance:

1. Classification Finder

The *Classification Finder* helps you build a more comprehensive search strategy by identifying relevant classification codes to your search term, ensuring all relevant patents are flagged, even those which may be missed with just a keyword search.

The Classification Finder is found in the Search tab of the toolbar. There is a field to input a search term to search across classification schemes. On PatBase there are several classification schemes indexed, the IPC, CPC, UC Class, European (ECLA) and Japanese F-Terms. In the Finder tool, all these schemes can be searched across at once or selected individually.

When a search is run in the Classification Finder, the matching codes will appear below. From the results, you can select the codes of interest and see related data by clicking on Stats.

Search Classifications:			speech recognition Search
			eg. cam near shaft Ø International (IPC) Cooperative Patent (CPC) US class European (ECLA) Japanese (F-terms)
~	International (IPC) (162) Show p		rent class Select all highlighted class
	✓ G101	Stats	SPEECH ANALYSIS OR SYNTHESIS; SPEECH RECOGNITION; AUDIO ANALYSIS OR PROCESSING
	G10L11/00	Stats	Determination or detection of speech or audio characteristics not restricted to a single one of groups
	G10L11/02	Stats	Detection of presence or absence of speech signals
	G10L11/04	Stats	Pitch determination of speech signals
	G10L11/06	Stats	Discriminating between voiced and unvoiced parts of speech signals
	G10L13/00	Stats	Speech synthesis; Text to speech systems
	G10L13/02	Stats	Methods for producing synthetic speech Speech synthesisers

2. Optimise Function

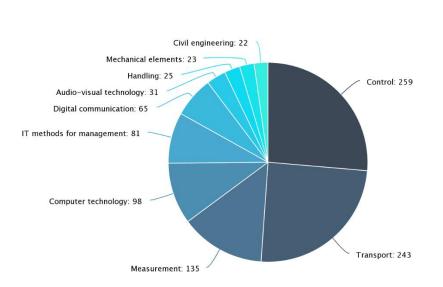
The *Optimise* function provides several options for refining your results by companies, technologies, publication dates and countries. This allows you to further refine results to remove any records from irrelevant technology areas before review. From here, the categories can be selected using the checkboxes on the left, or even drilled down further into sub-groups by expanding the categories using the orange arrows.

timise / refine results (Search 6)	
 Integration veterinary science, hygiene (4%) 	
🕨 🗏 Hand tools; portable power-driven tools; handles for hand implements; workshop equipment; manipul (4%)	
🕨 🗏 Engineering elements or units; general measures for producing and maintaining effective functioni (4%)	
Agriculture; forestry; animal husbandry; hunting; trapping; fishing (2%)	
aircraft; aviation; cosmonautics (2%)	
Conveying; packing; storing; handling thin or filamentary material (2%)	
Construction of roads, railways, or bridges (2%)	
Locks; keys; window or door fittings; safes (2%)	
Musical instruments; acoustics (2%)	
Acoustics not otherwise provided for (1%)	
Speech recognition (1%)	
Information and communication technology [ict] specially adapted for specific application fields (2%)	
Basic electric elements (2%)	
Optimise Search	

3. Class Analysis (Snapshot)

There is a simple way to run a classification analysis from the Search History page. Click on "more..." in the Options column. On the right-hand side menu, the second option is Class Analysis. This function analyses the top classification codes of your selected result set. You can select to analyse by IPC, CPC, Japanese F-Term and US Class schemes. A new tab will open with Snapshot directly on the classification of choice chart.

Snapshot is a quick analysis tool which allows you to see the classification codes across the whole result set in a table or graph. All the tables and graphs are interactive so PatBase searches can be run by simply clicking on code groups! This click-through feature can be a good way to find relevant technology areas that you haven't thought to look at but could be relevant.



Top 10 IPC Fields by Family* TAC=(self driving vehicle)

4. Classification Explorer

When viewing a patent family in PatBase, the list of classification codes associated with the invention is shown within the bibliographic information. The Classification Explorer module can be opened from here either by clicking on the Classification Explorer link or an individual code. The Explorer shows the hierarchical information for the code clicked, or all the codes of the family. Highlighted codes shown in this module are those associated with the invention. The codes from the hierarchical view can be selected and used in a new search. This is a good way to narrow or broaden your search.

IP	C CPC	ECLA	UC					
International class (Family: 63359531)							Browse classificati	ion
B:		SECTION B PER	RFORMING	PERATIONS				
B	0:	VEHICLES IN G	ENERAL					
B	50Q:	ARRANGEMENT OF SIGNALLING OR LIGHTING DEVICES, THE MOUNTING OR SUPPORTING THEREOF OR CIRCUITS THEREFOR, FOR VEHICLES IN GENERAL						
6	B60Q1/00;	Arrangement of	optical signal	ing or lighting devices, the mountir	g or supporting thereof or circuits	s therefor		di 👘
6	B60Q1/26;	. the devices bei	ng primarily i	ntended to indicate the vehicle, or	earts thereof, or to give signals, to	o other traffic		ıl. 👘
(B60Q1/50	for indicating of	other intention	ns or conditions, e.g. request for wa	iting or overtaking			di 👘
(B60Q5/00	Arrangement or	adaptation of	acoustic signal devices				di 👘
B60W:		CONJOINT CONTROL OF VEHICLE SUB-UNITS OF DIFFERENT TYPE OR DIFFERENT FUNCTION; CONTROL SYSTEMS SPECIALLY ADAPTED FOR HYBRID VEHICLES; ROAD VEHICLE DRIVE CONTROL SYSTEMS FOR PURPOSES NOT RELATED TO THE CONTROL OF A PARTICULAR SUB-UNIT						
(B60W30/00:	Purposes of road	d vehicle driv	e control systems not related to the	control of a particular sub-unit, e.	.g. of systems using conjoint control o	f vehicle sub-units	di 👘
6	B60W30/06	. Automatic man	oeuvring for p	arking				ıl. 👘
(B60W50/00;	Details of control	I systems for	road vehicle drive control not relate	ed to the control of a particular sub	b-unit		di 👘
(B60W50/08:	. Interaction betw	veen the drive	er and the control system				di 👘
G:		SECTION G PH	YSICS					
G	1:)1C:	MEASURING; T MEASURING DI VIDEOGRAMME	STANCES, L	EVELS OR BEARINGS; SURVEY	NG; NAVIGATION; GYROSCOPI	IC INSTRUMENTS; PHOTOGRAMME	ETRY OR	
(G01C21/00;	Navigation; Navi	gational instr	uments not provided for in groups				di 👘
(G01C21/26:	. specially adapt	ed for naviga	tion in a road network				di 👘
(G01C21/34	Route searchi	ng; Route gu	idance				di 👘

PatBase is designed to simplify patent searching. The tools and breadth of information available in PatBase equip you with the best chances to find what you are searching for. Classifications are just one method of narrowing or broadening your search by technology area.

For more information on patent searching possibilities, why not visit the Minesoft Library? <u>https://minesoft.com/minesoft-library/</u> The Minesoft Library contains reports and whitepapers to inspire new ways of uncovering and presenting useful patent information.