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Technology Searching

You're interested in a particular technology field but have no idea where to begin. You've got a patent search tool called PatSnap available to you but have no idea what you can do with it to achieve your goals. In this document, I am going to go through how you would use PatSnap to achieve these goals.

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Technology Searching

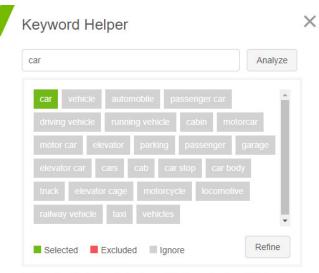
The obvious place to start is a simple keyword search but even for something like this, there are certain ways of doing it which will help you get results closer to what you are interested in. Let's say you are interested in the automotive industry and you go to the search page and simply type "car" into the "*All Fields*" search box.

Advance	d Bulk Semantic E	xpand C	Classification Legal Image Chemical Literature
III	Databases		Save template 🔹
All Fields		•	car
AND 🔻	Title/Abstract	•	Example: car AND seat
	Assignee	•	Example: Apple OR Samsung
AND 🔻	IPC	•	Example: A61K OR C07H7/06
	+ Add Field		
car			Command Search ✔
			Command Search 🖉
Searc	h Clear		Search Helper

Once you reach the search results page after you have performed this search, you can see lots of results that contain the word "*car*".

#	Publication Number	Title	Assignee Name	Inventor Name	Application Date	Publication Date	
1	WO2018053885A1	PREPARATION METHOD FOR AND USE OF ENHANCED SLIT2 CAR-T CELL AND CAR-NK CELL	LI, HUASHUN	LI, HUASHUN WANG, BAOLEI REN, BAOYONG +1	11 Oct 2016	29 Mar 2018	
2	WO2017088269A1	CHIMERIC ANTIGEN RECEPTOR HCD87-CAR, LENTIVIRUS AND PLASMID CAR RYING HCD87-CAR GENE STRUCTURE AND USE THEREOF	WANG, RENZHI REN, YUAN	WANG, RENZHI REN, YUAN	30 Dec 2015	01 Jun 2017	
• 3	WO2018076391A1	PD-1 CAR NK-92 CELL AND PREPARATION METHOD THEREFOR AND USE THEREOF	LI, HUASHUN	LI, HUASHUN WANG, BAOLEI HAN, KUNKUN +1	04 Nov 2016	03 May 2018	
4	WO2018028157A1	VC-CAR MOLECULE AND APPLICATION THEREOF TO HIV-1 INFECTION CELL CLEARING	SUN YAT-SEN UNIVERSITY	Zhang, hui Liu, bingfeng zou, fan	23 Jan 2017	15 Feb 2018	
• 5	WO2018068257A1	UNIVERSAL CAR-T CELL AND PREPARATION METHOD AND APPLICATION THEREFOR	BEIJING IMMUNOCHINA MEDICAL SCIENCE & TECHNOLOGY CO., LTD.	HE, TING LU, XIN-AN	13 Oct 2016	19 Apr 2018	
6	WO2016056228A1	CAR EXPRESSION VECTOR AND CAR-EXPRESSING T CELLS	YAMAGUCHI UNIVERSITY	TAMADA, KOJI SAKODA, YUKIMI ADACHI, KEISHI	06 Oct 2015	14 Apr 2016	
7	WO2017133222A1	CAPTURE PROBE FOR DETECTING CAP-T CELL, METHOD FOR DETECTING CELL CONTENT, AND APPLICATION	BEIJING IMMUNOCHINA MEDICAL SCIENCE & TECHNOLOGY CO., LTD.	lu, Xin'an He, Ting Ma, Lie	24 Aug 2016	10 Aug 2017	
• 8	WO2017219937A1	DAR-T CELL FOR EFFICIENTLY AND STABLY EXPRESSING INHIBITING ANTIBODY AND APPLICATION THEREOF	SHANGHAI CELL THERAPY RESEARCH INSTITUTE SHANGHAI ENGINEERING RESEARCH CENTER FOR CELL THERAPY GROUP CO., LTD	qian, qijun jin, huajun Xu, jieying 1 5	19 Jun 2017	28 Dec 2017	
9	WO2017177575A1	PD-1 CAR-T CELL, PREPARATION METHOD THEREFOR, AND APPLICATION THEREOF	LI, HUASHUN	LI, HUASHUN	19 Sep 2016	19 Oct 2017	
• 10	WO2018068354A1	SIRNA OF HUMAN INTERLEUKIN 6, RECOMBINANT EXPRESSION CAR-T VECTOR, AND CONSTRUCTION METHOD AND USE THEREOF	SHANGHAI UNI <mark>CAR</mark> -THERAPY BIO- MEDICINE TECHNOLOGY CO., LTD	QI, WEI KANG, LIQING YU, LEI ±1	10 Nov 2016	19 Apr 2018	
• 11	EP2769594B1	CAR-2-X COMMUNICATION SYSTEM, PARTICIPANT IN SUCH A SYSTEM AND METHOD FOR RECEIVING OF RADIO SIGNALS IN SUCH A SYSTEM	AUDI AG	KRATZSCH, CLAUDIA BAIRLEIN, WILHELM PANDEY, MOHINDER	11 Aug 2012	18 May 2016	
• 12	EP2769594A1	CAR-TO-X COMMUNICATION SYSTEM, PARTICIPANT IN SUCH A SYSTEM, AND METHOD FOR RECEIVING RADIO SIGNALS IN SUCH A SYSTEM		KRATZSCH, CLAUDIA BAIRLEIN, WILHELM PANDEY, MOHINDER	11 Aug 2012	27 Aug 2014	
13	CN105368859A	Chimeric antigen receptor hCD87-CAR, lentivirus carying hCD87-CAR gene structure, plasmid and application of chimeric antigen receptor hCD87-CAR	王任直 任远 冯铭	王任直 任远 冯铭	25 Nov 2015	02 Mar 2016	
• 14	JP6161098B2	Car expression vector and the car expressing t cells	国立大学法人山口大学	玉田 耕治 佐古田 幸美 安達 圭志	06 Oct 2015	12 Jul 2017	

The issue with this is that patent owners often use synonyms within their patent applications since this makes it harder for their competitors to find their patents. Because of this it is worth also using the various synonyms for the keywords you have inputted into your search. You can find these in PatSnap by using our <u>Keyword Helper</u>.



Click on the labels to switch colours. Click to mark relevant labels with green and double click to mark labels you wish to exclude with red. You can choose to further refine the selected labels before submitting a search with your final choice of green keyword labels.



After going through this with our example, you decide that the words/phrases that could be considered as synonyms for "car" are "automobile", "driving vehicle", "motorcar" and "motor car" building a search query of "car" OR "automobile" OR "driving vehicle" OR "motorcar" OR "motor car" and giving more results in total.

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4	WO2018028157A1	VC-CAR MOLECULE AND APPLICATION THEREOF TO HIV-1 INFECTION CELL CLEARING	SUN YAT-SEN UNIVERSITY	Zhang, hui Liu, bingfeng zou, fan	23 Jan 2017	15 Feb 2018	
• 5	WO2018068257A1	UNIVERSAL CAR-T CELL AND PREPARATION METHOD AND APPLICATION THEREFOR	BEIJING IMMUNOCHINA MEDICAL SCIENCE & TECHNOLOGY CO., LTD.	HE, TING LU, XIN-AN	13 Oct 2016	19 Apr 2018	
6	WO2016056228A1	CAR EXPRESSION VECTOR AND CAR-EXPRESSING T	YAMAGUCHI UNIVERSITY	TAMADA, KOJI SAKODA, YUKIMI ADACHI, KEISHI	06 Oct 2015	14 Apr 2016	
7	WO2017133222A1	CAPTURE PROBE FOR DETECTING CAR-T CELL, METHOD FOR DETECTING CELL CONTENT, AND APPLICATION	BEIJING IMMUNOCHINA MEDICAL SCIENCE & TECHNOLOGY CO., LTD.	lu, Xin'an He, Ting Ma, Lie	24 Aug 2016	10 Aug 2017	Ŷ \$
• 8	WO2017219937A1	DAR-T CELL FOR EFFICIENTLY AND STABLY EXPRESSING INHIBITING ANTIBODY AND APPLICATION THEREOF	SHANGHAI CELL THERAPY RESEARCH INSTITUTE SHANGHAI ENGINEERING RESEARCH CENTER FOR CELL THERAPY GROUP CO., LTD	QIAN, QIJUN JIN, HUAJUN XU, JIEYING + 5	19 Jun 2017	28 Dec 2017	
• 9	EP2769594B1	CAR-2-X COMMUNICATION SYSTEM, PARTICIPANT IN SUCH A SYSTEM AND METHOD FOR RECEIVING OF RADIO SIGNALS IN SUCH A SYSTEM	AUDI AG	KRATZSCH, CLAUDIA BAIRLEIN, WILHELM PANDEY, MOHINDER	11 Aug 2012	18 May 2016	
• 10	EP2769594A1	CAR-TO-X COMMUNICATION SYSTEM, PARTICIPANT IN SUCH A SYSTEM, AND METHOD FOR RECEIVING RADIO SIGNALS IN SUCH A SYSTEM		KRATZSCH, CLAUDIA BAIRLEIN, WILHELM PANDEY, MOHINDER	11 Aug 2012	27 Aug 2014	
11	WO2017177575A1	PD-1 CAR-T CELL, PREPARATION METHOD THEREFOR, AND APPLICATION THEREOF	LI, HUASHUN	LI, HUASHUN	19 Sep 2016	19 Oct 2017	
• 12	WO2018068354A1	SIRNA OF HUMAN INTERLEUKIN 6, RECOMBINANT EXPRESSION CAR-T VECTOR, AND CONSTRUCTION METHOD AND USE THEREOF	SHANGHAI UNI <mark>CAR</mark> -THERAPY BIO- MEDICINE TECHNOLOGY CO., LTD	QI, WEI KANG, LIQING YU, LEI +1	10 Nov 2016	19 Apr 2018	
13	CN105368859A	Chimeric antigen receptor hCD87-CAR, lentivirus carrying hCD87-CAR gene structure, plasmid and application of chimeric antigen receptor hCD87-CAR	王任直 任远 冯铭	王任直 任远 冯铭	25 Nov 2015	02 Mar 2016	
• 14	JP6161098B2	Car expression vector and the car expressing t cells	国立大学法人山口大学	玉田 耕治 佐古田 幸美 安達 圭志	06 Oct 2015	12 Jul 2017	

Once you have got this far you may think that many of the results aren't relevant. The reason for this is because when inputting a search query in the "All" field this will search within the entirety of each of the patent documents, not necessarily the important parts. This can be problematic since, for example, the title, abstract and claims are more important than the description.

- Titles give a very brief meaning to the document.
- Abstracts give a paragraph long description of the overall purpose and intent of the invention described.
- The claims describe exactly what the patent is protecting, and defines the limit of what the patent owner has a right to exclude others from doing and usually as the most important part of the patent.
- The description is a full explanation of the invention but as it does not define what is protected and often mentions words not specific to the technology it is often considered as not as important and may be worth leaving out of searches.

To search in the title, abstract and claims you can use the search command TAC. So for your example, the search query would be TAC:("*car*" OR "*automobile*" OR "*driving vehicle*" OR "*motorcar*" OR "*motor car*") and you get the following results.

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7	WO2016056228A1	CAR EXPRESSION VECTOR AND CAR-EXPRESSING T	YAMAGUCHI UNIVERSITY	TAMADA, KOJI SAKODA, YUKIMI ADACHI, KEISHI	06 Oct 2015	14 Apr 2016
8	WO2017133222A1	CAPTURE PROBE FOR DETECTING CAR-T CELL, METHOD FOR DETECTING CELL CONTENT, AND APPLICATION	BEIJING IMMUNOCHINA MEDICAL SCIENCE & TECHNOLOGY CO., LTD.	lu, Xin'an he, Ting Ma, Lie	24 Aug 2016	10 Aug 2017
9	WO2017219937A1	CAR-T CELL FOR EFFICIENTLY AND STABLY EXPRESSING INHIBITING ANTIBODY AND APPLICATION THEREOF	SHANGHAI CELL THERAPY RESEARCH INSTITUTE SHANGHAI ENGINEERING RESEARCH CENTER FOR CELL THERAPY GROUP CO., LTD	QIAN, QIJUN JIN, HUAJUN XU, JIEYING 1 5	19 Jun 2017	28 Dec 2017
• 10	EP0628054B1	CAR RECEPTORS AND RELATED MOLECULES AND METHODS	THE GENERAL HOSPITAL CORPORATION	MOORE, DAVID, D. BAES, MYRIAM, I.	22 Feb 1993	14 Oct 1998
11	EP2769594A1	CAR-TO-X COMMUNICATION SYSTEM, PARTICIPANT IN SUCH A SYSTEM, AND METHOD FOR RECEIVING RADIO SIGNALS IN SUCH A SYSTEM	AUDI AG	KRATZSCH, CLAUDIA BAIRLEIN, WILHELM PANDEY, MOHINDER	11 Aug 2012	27 Aug 2014
12	WO2017177575A1	PD-1 CAR-T CELL, PREPARATION METHOD THEREFOR, AND APPLICATION THEREOF	LI, HUASHUN	LI, HUASHUN	19 Sep 2016	19 Oct 2017
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14	CN105368859A	Chimeric antigen receptor hCD87-CAR, lentivirus batrying hCD87-CAR gene structure, plasmid and application of chimeric antigen receptor hCD87-CAR	王任直 任远 冯铭	王任直 任远 冯铭	25 Nov 2015	02 Mar 2016

Even after you have done this, you may still feel that your results are still not relevant and it may be helpful to then be a good move to use some classification codes in your search. The most commonly used of these is the IPC as it has been used for the longest time and is used globally.

The way you would use this is to go to the IPC filters on the left-hand side of the screen and then select the relevant IPC codes from here.

IPC IPC Sub Group

B60H1/00 Heating, cooling or ventilating devices (heating, co	21388
B60R16/02 . electric [2006.01]	20132
B60J5/04 . arranged at the vehicle sides [2006.01]	13141
F21S8/10 . specially adapted for vehicles [2006.01]	12612
B62D25/08 . Front or rear portions [2006.01]	12131
B60L11/18 . using power supplied from primary cells, secondary c	11869
B60R11/02 . for radio sets, television sets, telephones, or the like;	11684
H02J7/00 Circuit arrangements for charging or depolarising batteri	9851
B60H1/32 . Cooling devices (vehicles adapted to transport refrigerate	9492
B66B11/02 . Cages (doors, gates, or other apparatus controlling acc	8991

As you are specifically interested in cars and how they work you decide only to search for patents that have the IPC codes that begin with B (if you look in our classification search for B this is given as "*Performing Operations*; *Transporting*") so you select B60H1/00, B60R16/02, B60J5/04, B62D25/08, B60R11/02, B60L11/18 and B60H1/32.

From here you get the following results which seem more relevant.

More

#	#	Publication Number	Title	Assignee Name	Inventor Name	Application Date	Publication Date
• 1	1	EP1000808B1	CAR AUDIO MOUNTING DEVICE	MITSUBISHI DENKI KABUSHIKI KAISHA	IKUNAMI, TAKAHIRO, MITSUBISHI DENKI K.K	27 May 1998	20 Apr 2011
• 2	2	KR1020140013448A	APPARATUS FOR CONTROLLING VELOCITY OF MOTOR CAR FOR CHILDREN	이다희	이다희	24 Jul 2012	05 Feb 2014
• 3	3	EP1209069B1	Car body front structure for automobiles	DAIHATSU MOTOR CO., LTD.	TERAMAE, HIDEKI NOBUYA, NAKADE	16 Nov 2001	04 May 2005
• 4	4	TW201515366A	DIFFERENTIAL MOTOR-OPERATOR	HONGYU ENERGY SCIENCE CO., LTD. CHU, CHEN CHIANG	CHU, CHEN CHIANG	03 Oct 2013	16 Apr 2015
• 5	5	EP2639097A2	Control device, control method and electric motor car	KABUSHIKI KAISHA TOSHIBA	Koga, takeru Nogi, masayuki Kawai, hirotoshi +1	26 Jul 2012	18 Sep 2013
• 6	6	EP2639097A3	Control device, control method and electric motor car	KABUSHIKI KAISHA TOSHIBA	KOGA, TAKERU NOGI, MASAYUKI KAWAI, HIROTOSHI +1	26 Jul 2012	12 Aug 2015
• 7	7	EP0274993B1	Front body module for a motor cal , a front modular sub- assembly for a motor cal using this front module, and a method for assembling a motor vehicle with the use of this modular sub-assembly	FIAT AUTO S.P.A.	CORNACCHIA, FELICE BRUNO, ANDREINO GHIONE, STEFANO	24 Nov 1987	06 Feb 1991
• 8	8	EP0274993A1	Front body module for a motor cal, a front modular sub- assembly for a motor cal using this front module, and a method for assembling a motor vehicle with the use of this modular sub-assembly	FIAT AUTO S.P.A.	CORNACCHIA, FELICE BRUNO, ANDREINO GHIONE, STEFANO	24 Nov 1987	20 Jul 1988
• 9	9	EP0108522A1	Instrument panel for a <mark>motor cat</mark>	FORD MOTOR COMPANY LIMITED FORD-WERKE AKTIENGESELLSCHAFT FORD FRANCE SOCIETE ANONYME	PERCY, JOHN ALBERT GEORGE	12 Oct 1983	16 May 1984
• 1	10	DE102013003035A1	Method for obtaining movement profile of observed motor car e.g. bus, involves receiving vehicle identifier and associated observation data with meeting time point and position indicator for meeting location of observed indior car	AUDI AG	HAINZLMAIER ANDRE LAMPRECHT ANDREAS	22 Feb 2013	28 Aug 2014
• 1	11	EP1177968B1	Impact absorbing structure for Car body front of automobile	DAIHATSU MOTOR CO., LTD.	KUBOTA, KAZUHIKO WATANABE, TAKETSUGU SUYAMA, TAKAO	24 Jul 2001	12 Oct 2005
• 1	12	JP2014073078A	CHARGE CONTROL UNIT AND INTERVAL ADJUSTMENT METHOD FOR ELECTROMAGNETIC INDUCTION TYPE CHARGING PROCESS	シーメンス アクチエングゼルシヤフト	グンター フライターク カール-ヨーゼフ クーン	30 Sep 2013	21 Apr 2014
• 1	13	EP0108522B1	Instrument panel for a <mark>motor cat</mark>	FORD MOTOR COMPANY LIMITED FORD-WERKE AKTIENGESELLSCHAFT FORD FRANCE SOCIETE ANONYME	PERCY, JOHN ALBERT GEORGE	12 Oct 1983	28 Jan 1987



These are the best ways we recommend for making your search results more relevant but you should not feel that this stop from trying to make them even more relevant. You can do this by using other classification codes (such as CPCs or UPCs, for example), searching within specific application/publication years, searching for specific assignees/inventors or even searching for patents from specific authorities. You can also save a template for your choices of search field by clicking the "*Save template*" button from the "*Advanced Search*" page which will mean that you will always see the same search fields when you access this page.

Advanced Bulk Semantic Expand C	lassification Legal Image Chemical Literature
All Databases	Save template
All Fields	Enter keyword, company name, or patent number
AND Title/Abstract/Claims	Example: car AND seat
AND V Assignee V	Example: Apple OR Samsung
AND V IPC V	Example: A61K OR C07H7/06
+ Add Field	
Click to enter Command Search 🖍	
Search Clear	Search Helpe

To sum up, it may initially seem that searching for a specific technology is complicated but once you become well-versed in some of the best practices regarding this it can become whole easier. If you are still having difficulties with this, please feel free to let us know by emailing *help@patsnap.com*.

Innovators ask. PatSnap answers.

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