

Beyond Features

Effective and Efficient Patent Searches with PatSeer

varidian GmbH

10 Patent Researches

**Mechanical
Engineering**

Chemistry

**Information
Technology**

Patent Databases

we are currently using at varidian

PatSeer

STN

PatBase

Octimine

Derwent Innovation

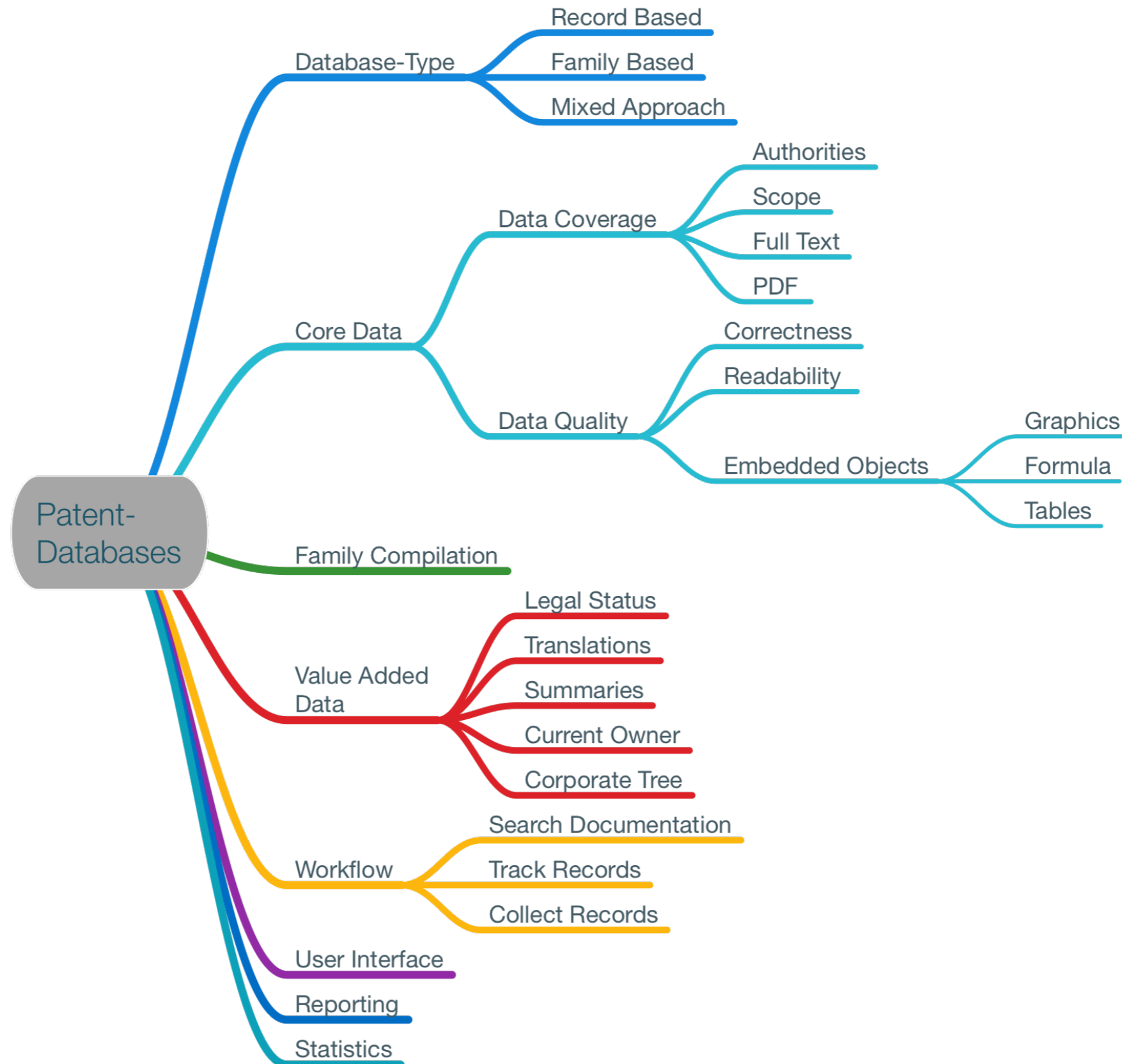
IP7

TotalPatent

Public Databases

PatentOne

(Orbit)



Workflows

Effective

Do the right thing

- Technical understanding of the subject matter
- Understanding of patent searching
- Creative
- Thorough
- Correct Data

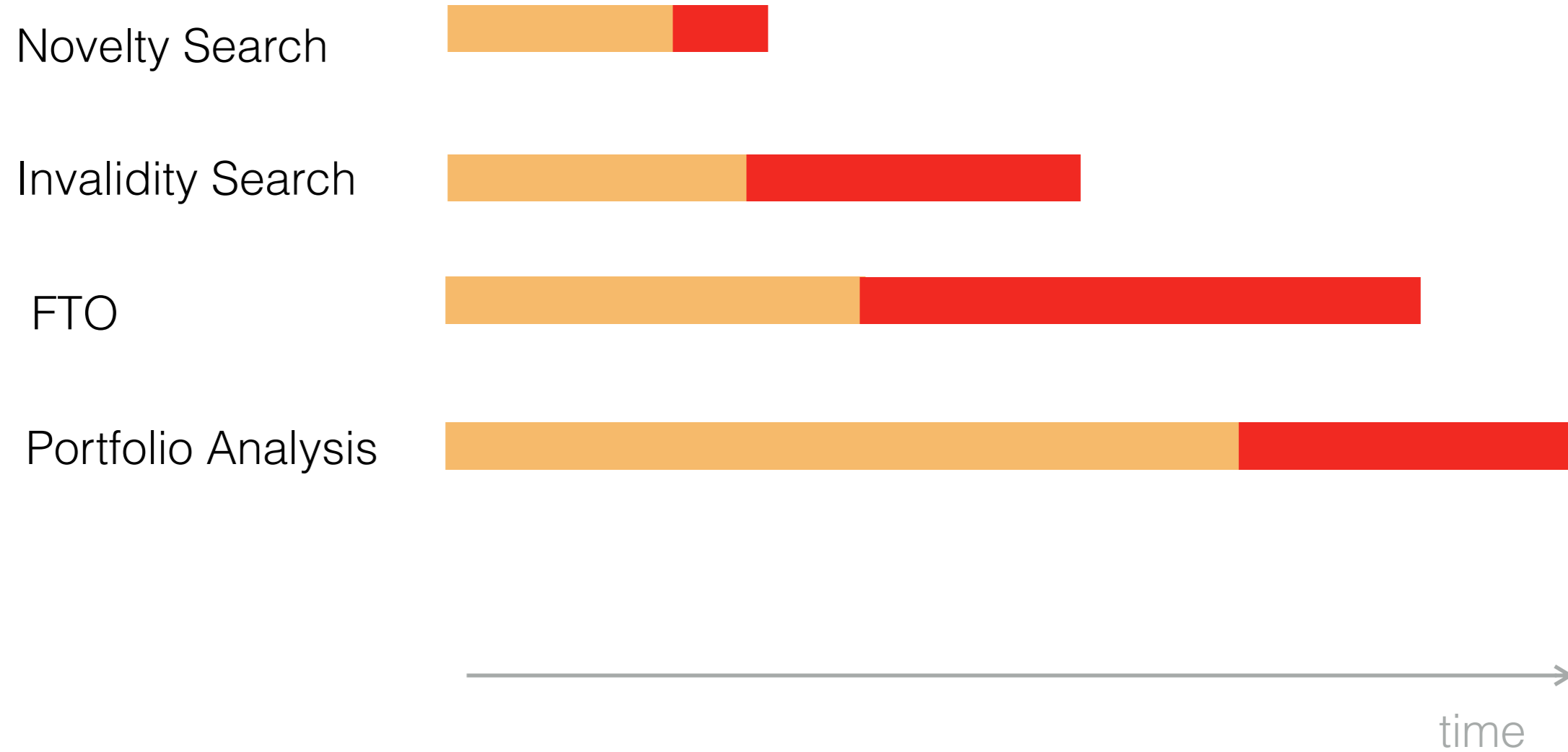
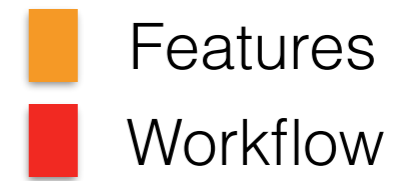
Human Resources +
Data Coverage & Search

Efficient

Do things right

- Don't waste time

Workflows



Search Results

Collect

Global

Comment

Group

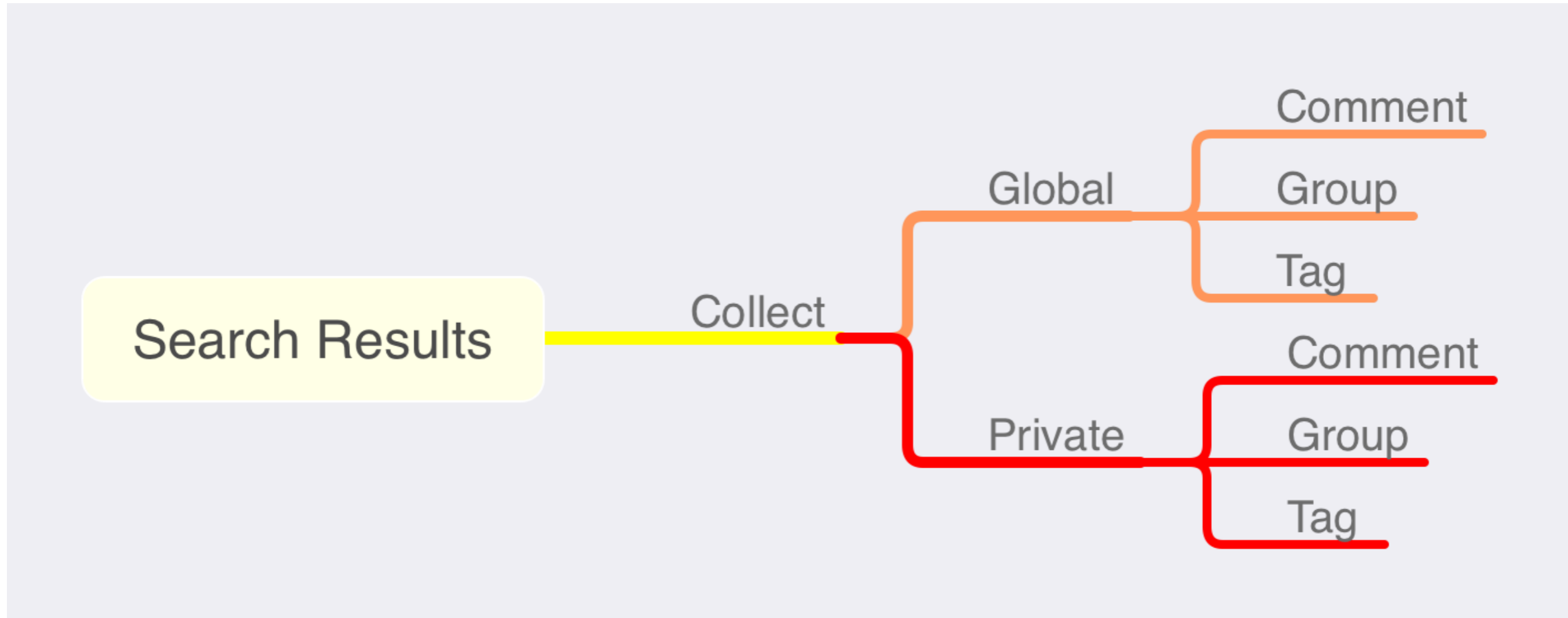
Tag

Private

Comment

Group

Tag

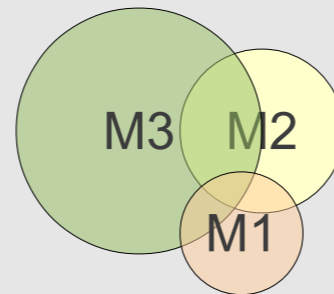


Collect Records / Families with PatSeer

	Projects	by Saved Search	Recall
Scope	private	private	private + global
Size	60.000	unlimited	unlimited
Method	explicitly added	implicitly added	implicitly added
Tracking	very flexible	ignore / not ignore	relevancy & comments
Annotations	extensive	basic	basic
Documents or Families	both	both	both
Application	FTO & Invalidity Portfolio Analysis	Novelty	Long Term Projects

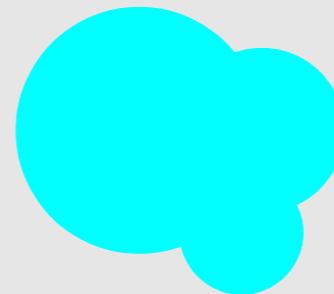
Einfache Strategien

[M1] [M2] [M3]



Schnittmengen werden mehrfach gesichtet

[M1 or M2 or M3]

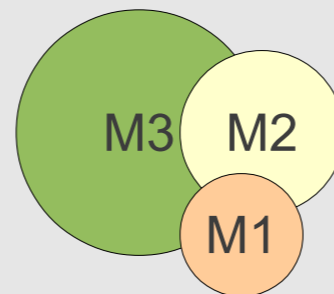


große Treffermenge

alle Suchterme müssen zu Beginn der Recherche vorliegen

varidian Strategie

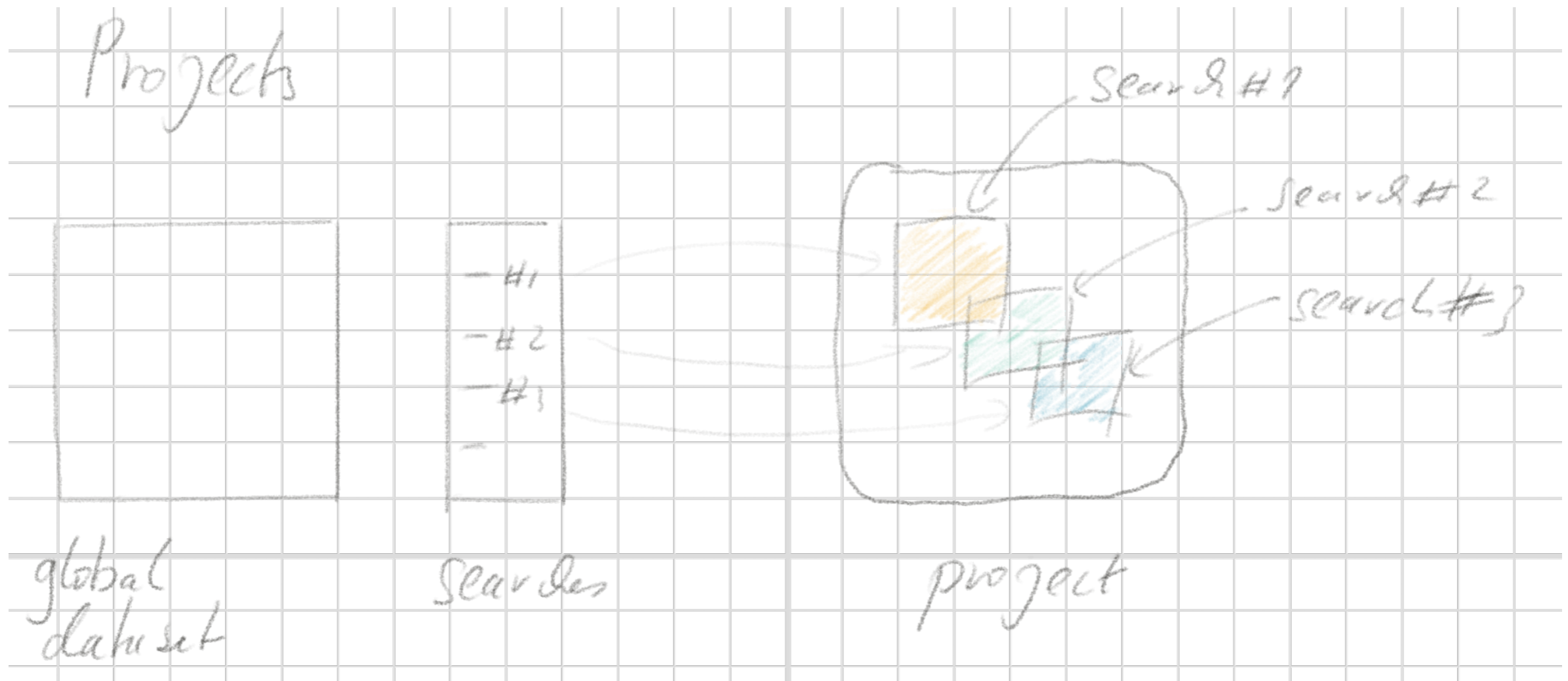
[M1] or [(M2 not M1)] or
[(M3 not (M2 or M1))]



kleine Treffermengen

Schnittmenge werden nur einmal gesichtet

Kategorisierung wird auf Familiendokumente übertragen



- new documents or families are added with each search step
- existing documents or families are ignored

Search ▾ Current Search Saved Search QuickList Project ▾ Alert ▾ Thesaurus FTO Demo 1 ▾ F8 10

FTO Demo 1 | 2595 Records ▾ | Project Settings | Add Records | Project Files | Search History | FilterSets ▾ | Show Group All ▾

Search Results Quick Stats

2595 Records Standard 50 Pub. Date ↓ Add ▾ View ▾ Export Edit ▾ Highlight

1. EP2664782B1 ▲ ☆☆☆☆☆ 06-Sep-2018

Injector for a fuel supply system of a combustion engine and fuel supply system

Abstract:
The injector (1) has an injection nozzle (2), a control valve (3) and a holding body, where the injection nozzle and the control valve form a braced combination (6). The combination is assembled on the holding body as a unit and is disassembled from the holding body as a unit. An intermediate plate, particularly a valve plate (4) or a throttle plate (5) is positioned between the injection nozzle and the control valve. The intermediate plate together with the injection nozzle and the control valve is braced to the combination. An independent claim is included for a fuel supply system for an internal combustion engine, which has a pump unit.

[EP2664782A1]

Filing: 03-May-2013 Publication: 29-Aug-2018 Estimated Expiry: 03-May-2033 Earliest Pub: 20-Nov-2013

Assignee Orig.: MAN DIESEL & TURBO SE (DE)
Assignee Norm.: MAN DIESEL & TURBO SE (DE)
Current Owner: VOLKSWAGEN AG

Inventors:
ATZKERN THOMAS (DE), INDRICH MAXIMILIAN (DE), KERN STEFAN (DE), KLAUA THOMAS (DE), MAIER LUDWIG (DE), SCHAAR HOLGER (DE), WAGNER WOLFGANG (DE), WEBER CLAUDIUS (DE), WELLENKOTTER HARALD (DE), WORLE WERNER (DE)

Priority : DE201210208075 (15-May-2012)

IPC : F02M61/16
CPC: F02M41/16 , F02M61/168 , F02M2200/8023 , F02M2200/803 , F02M2200/8076

Comment

Categories :

Label	Searches Performed	Records	Date
6	CPC: F02M61/168	1592	06-Sep-2018
5	(IC:F02M55/02 OR CPC:F02M55/02) AND TACDE:(verbindung*)	825	06-Sep-2018
4	(IC:F02M55/02 OR CPC:F02M55/02) AND TAC:(weld*)	246	06-Sep-2018
3	CPC:F02M55/025 AND TAC:(weld* OR schweiss*)	134	06-Sep-2018
2	TAC:(common rail AND welding)	110	06-Sep-2018
1	TA:(common rail AND welding)	16	06-Sep-2018

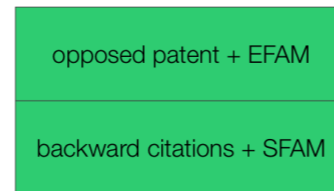
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Project Σ 2595

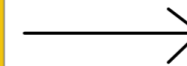
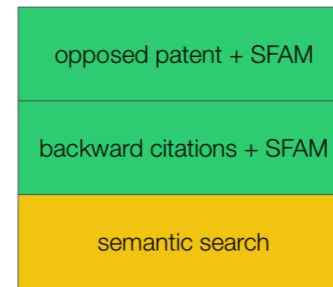
328

Workflow Invalidity Search

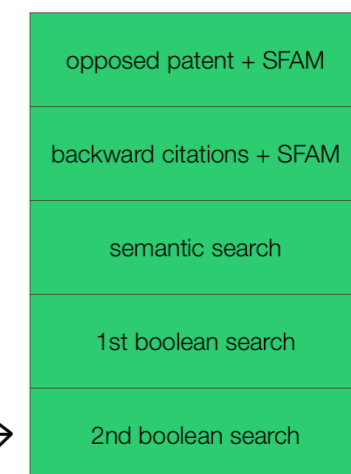
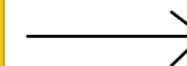
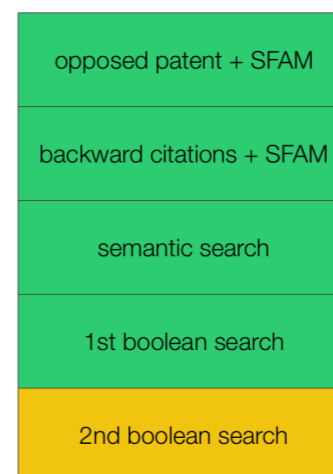
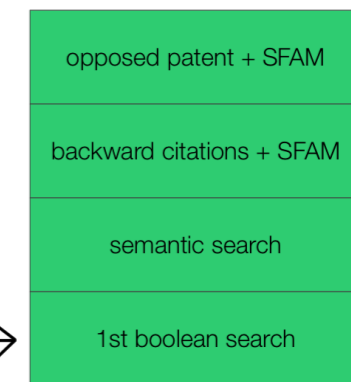
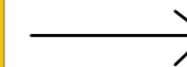
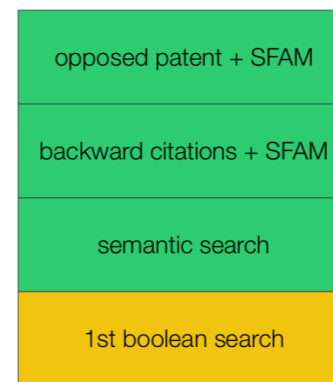
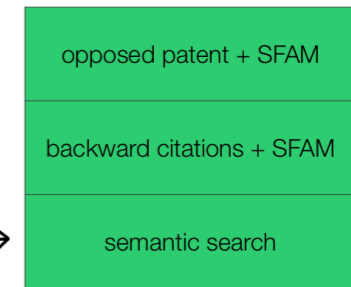
preparation



search



review



The screenshot shows the PatSeer interface with search results for two patents. A red circle highlights the 'Ungrouped Records' option in a dropdown menu, with a red arrow pointing to a green box on the right.

Record 5: US2013283259A1
APPLICATION INSTALLATION
 Abstract: Methods, computer program products, and systems for installing an application at a runtime instance. A method includes receiving a request to install an application and accessing data defining shared resources required by the application. Data that defines shared resources already installed at existing runtime instances is accessed. An existing runtime instance with the greatest number of installed shared resources common to the shared resources required by the application is selected. The application is installed at the selected runtime instance.
 Filing: 15-Mar-2013 Publication: 24-Oct-2013 Estimated Expiry: 15-Mar-2033 Earliest Pub: 30-May-2012
 Assignee Orig.: IBM (US)
 Assignee Norm.: IBM CORP (US)
 Current Owner: IBM CORP
 Inventors: ELLIS RICHARD R (GB), LEMING MATTHEW W (GB), WARD TIMOTHY J (GB)
 Priority: GB20120006824 (18-Apr-2012)
 IPC: G06F9/445
 CPC: G06F8/61 , G06F8/60 , G06F9/5055
 Register Status: Patented Case

Record 6: US2013275695A1
BACKUP AND STORAGE SYSTEM
 Abstract: A computer-implemented method of backing up data comprises selecting a local file stored on a client device to be backed-up, encoding the file into multiple fragments, transmitting the multiple fragments from the client device to a plurality of remote storage areas, storing the multiple fragments at the remote storage areas.
 Filing: 10-May-2012 Publication: 17-Oct-2013 Estimated Expiry: 10-May-2032 Earliest Pub: 30-May-2012
 Assignee Orig.: GUERRERO SIMON (QA), PONSFORD SIMON (QA), QATAR FOUNDATION (QA)
 Assignee Norm.: QATAR FOUNDATION (QA)
 Current Owner: QATAR FOUNDATION QATAR
 Inventors: PONSFORD SIMON (QA), GUERRERO SIMON (QA)
 Priority: GB20120006443 (12-Apr-2012)

- opposed patent + SFAM
- backward citations + SFAM
- semantic search
- 1st boolean search
- 2nd boolean search

Summary: Workflow for Invalidity Searches

Workflow Tools:

Projects & Groups & Custom Fields (for semantic search scores)

Workflow Details:

add opposed patent & family to a group with the project

add prior art & family members to a group within the project

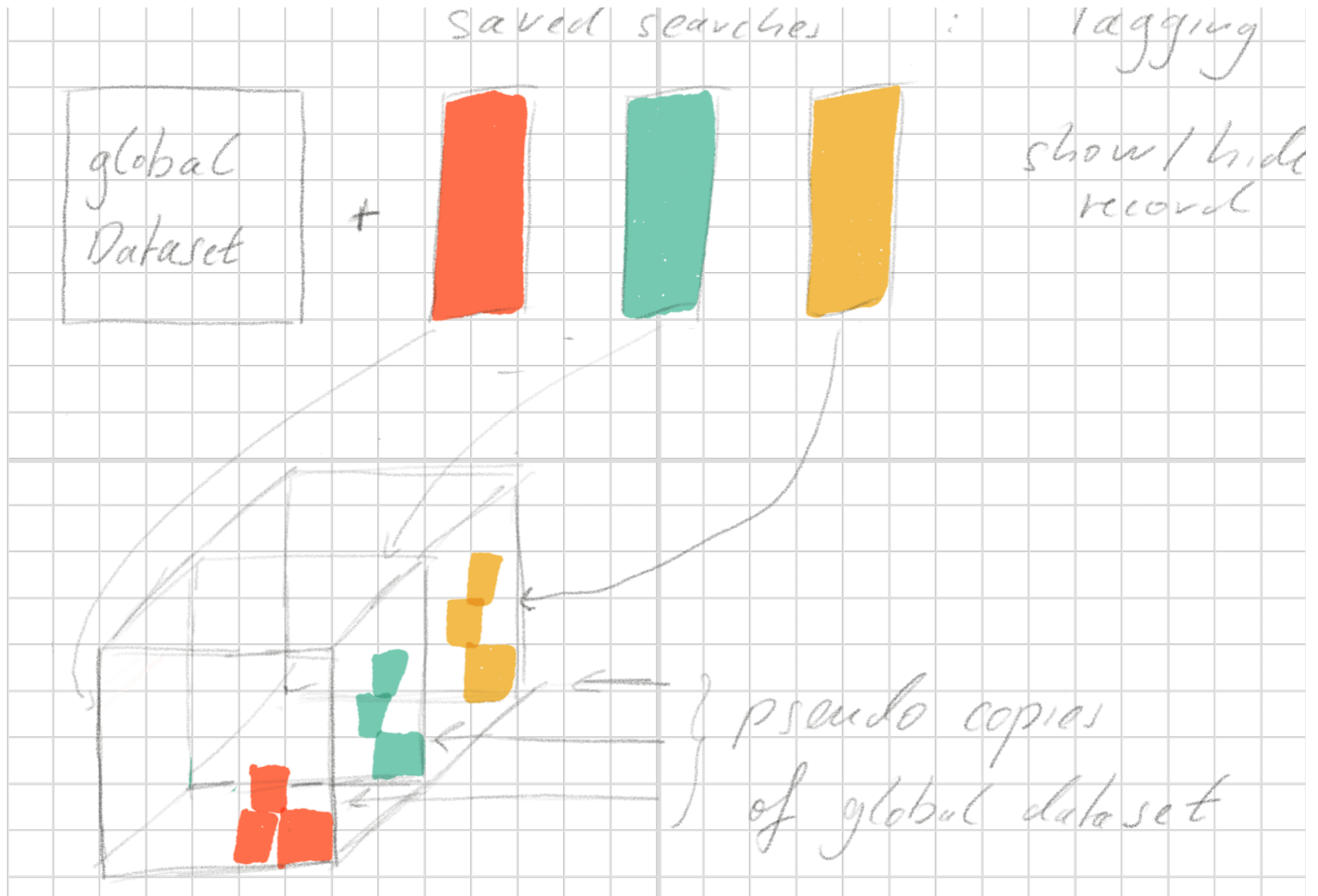
add only new family members obtained by a search to project

expand search in small increments

Collect Records / Families with PatSeer

	Projects	by Saved Search	Recall
Scope	private	private	private + global
Size	60.000	unlimited	unlimited
Method	explicitly added	implicitly added	implicitly added
Tracking	very flexible	ignore / not ignore	relevancy & comments
Annotations	extensive	basic	basic
Documents or Families	both	both	both
Application	FTO & Invalidity Portfolio Analysis	Novelty	Long Term Projects

**workflow approaches may be combined
for efficient tracking of search results**



Tagging by Saved Search

Search Current Search Saved Search QuickList Project Alert

back to search | Search Terms : (lc:F02M55/02 OR CPC:F02M55/02) AND TAC:(weld* OR schweiss*) | 246 SFAM | Edit Search | Set Alert

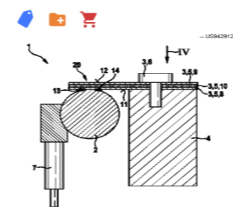
Search Results Quick Stats Matrix

246 Records Custom View: Bibl_List 20 Pub. Date

1. EP2841757B1 **ARRANGEMENT WITH A FUEL DISTRIBUTER AND A RETAINING ELEMENT**

A: The invention relates to an arrangement (1) which is used in particular as a fuel injection system for high-pressure fuel injection in internal combustion engines, comprising a fuel distributor (2) and at least one retaining element (3) which is used to secure the fuel distributor (2) to an attachment structure (4). The retaining element (3) comprises a retaining element body (5) which has a first layer (8), a second layer (9), and an elastically deformable damping layer (10). The first layer (8) and the second layer (9) are made of a metal material. The elastically deformable damping layer (10) is arranged between the first layer (8) and the second layer (9). The retaining element body (5) is connected to the fuel distributor (2) by means of laser welding. The damping layer (10) is made of a viscoelastic material.

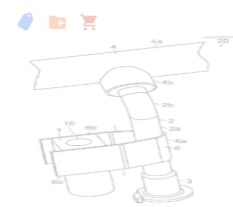
[WO2013160069A1]
Pub. Date : 15-Aug-2018
Current Assignee: ROBERT BOSCH GMBH (70442 STUTTGART , DE)
Application Number: EP20130716238
Legal Status Current: ACTIVE - GRANTED



2. EP3353409A1 **FUEL RAIL ASSEMBLY AND METHOD FOR MANUFACTURING A FUEL RAIL ASSEMBLY**

A: A fuel rail assembly (20) with a fuel delivery pipe unit to be hydraulically coupled to an elongated tubular fuel rail (4) is disclosed. The pipe unit comprises an injector cup (3), a pipe (2), and a fixation unit for fixing the fuel delivery pipe unit to the combustion engine. The fixation unit comprises a connecting element (6) being axially and rotatably movable with respect to the pipe (2) and the injector cup (3), the connecting element (6) being fixedly connected to a predetermined pipe unit portion by a first filler material joint, and a bracket element (1) being laterally movable with respect to the connecting element (6) for adjusting its radial distance from the pipe (2) and the injector cup (3), the bracket element (1) being fixedly connected to a predetermined connecting element portion by a second filler material joint. Further, a method for manufacturing the same is disclosed.

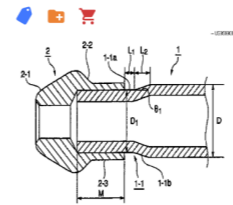
[EP20130716238]
Pub. Date : 01-Aug-2018
Current Assignee: CONTINENTAL AUTOMOTIVE GMBH (30165 HANNOVER , DE)
Application Number: EP20160770008
Legal Status Current: ACTIVE - APPLIED



3. EP2821631B1 **TERMINAL STRUCTURE OF HIGH-PRESSURE FUEL PIPE FOR DIRECT INJECTION ENGINE**

A: Provided is a terminal structure of a high-pressure fuel pipe for a direct injection engine which can prevent stress concentration to a brazed portion between a pipe and a connection part effectively. In the terminal structure of a high-pressure fuel pipe for a direct injection engine where a connection head is brazed to an end of a fuel pipe, the end of the fuel pipe continued to a fuel pipe insertion portion of the connection head is provided with a drawn portion, an outer diameter D1 of the drawn portion to a fuel pipe diameter D satisfies $0.8D \leq D1 \leq 0.9D$, and a length L1 of the drawn portion having the outer diameter D1 in a pipe-axial direction from an end of the fuel pipe insertion portion satisfies $L1 \geq 0.06D$.

[EP2821631A1]
Pub. Date : 04-Jul-2018
Current Assignee: USUI KOKUSAI SANGYO KAISHA LTD (JP)
Application Number: EP20130754886
Legal Status Current: ACTIVE - GRANTED



Search Script Current Search

Saved Search Script : FTO Demo Rename Delete CSV

Combine Queries : Add Clear

L8	CPC: F02M61/168	SFAM(R) 1592	06-Sep-2018
L7	(lc:F02M55/02 OR CPC:F02M55/02) AND TACDE:(verbindung*)	SFAM(R) 825	06-Sep-2018
L6	(lc:F02M55/02 OR CPC:F02M55/02) AND TACDE:(*schweiss*)	SFAM(R) 127	06-Sep-2018
L4	(lc:F02M55/02 OR CPC:F02M55/02) AND TAC:(weld* OR schw eiss*)	SFAM(R) 246	07-Sep-2018
L3	CPC:F02M55/025 AND TAC:(weld* OR schweiss*)	SFAM(R) 134	06-Sep-2018
L2	TAC:(common rail AND welding)	SFAM(R) 110	06-Sep-2018
L1	TA:(common rail AND welding)	SFAM(R) 16	06-Sep-2018

Combining Workflow Tools for Invalidity Searches

typical procedure using PatSeer:

- add all known prior art to a Project and Group as „Known Prior Art“
- carry out searches in family mode, restrict by earliest publication date
- mark obviously irrelevant documents using Saved Search tagging
- add potentially relevant documents to the Project,
known prior art and documents in Project will be excluded automatically
- review and annotate relevant documents in Project
and produce search report

Features for Improving Workflow Efficiency

[← back to search](#) | Search Terms : TAC:(vehicle W2 battery) AND PBC:(US OR EP OR DE) | 14589 SFAM | [Edit Search](#) | [Set Alert](#)

Search Results Quick Stats Matrix

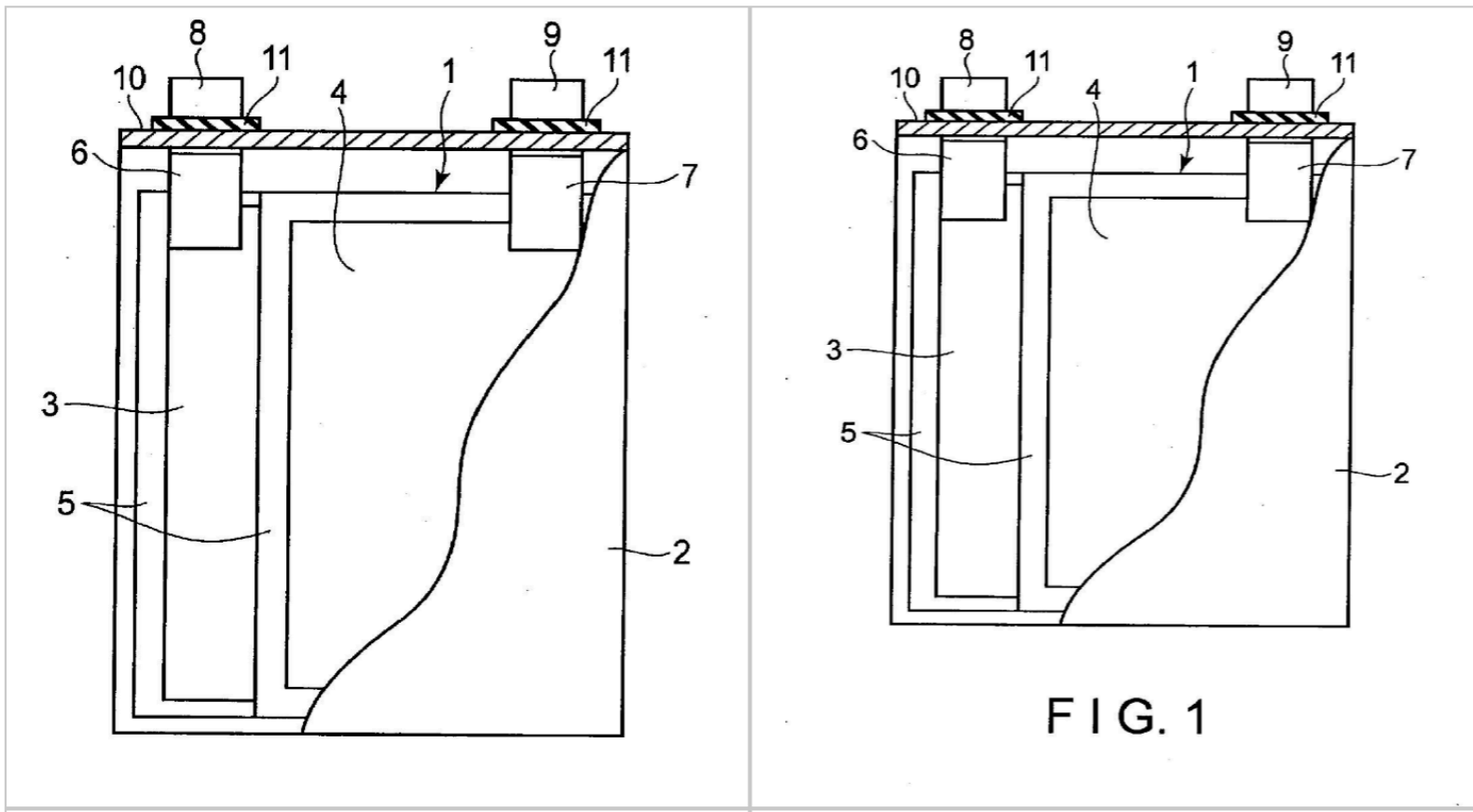
<< < 1 > >> **14589 Records** Drawings 10 Pub. Date ↓ Add View Export Hit Analysis Highlight

5. [US2018241090A1](#) ▲ 30-Aug-2017 / 23-Aug-2018 KABUSHIKI KAISHA TOSHIBA (MINATOKU, JP)

 KWIC

SECONDARY BATTERY, BATTERY MODULE, BATTERY PACK, AND VEHICLE

Abstract: According to one embodiment, a secondary battery includes a positive electrode, a negative electrode and an aqueous electrolyte. The negative electrode includes a titanium-containing oxide. The aqueous electrolyte includes a sodium ion having a concentration of 3 mol/L or more and at least one type of first anion selected from the group consisting of $[N(FSO_2)_2]^-$, SO_3^{2-} , $S_2O_3^{2-}$ and SCN^- .



#	Description	Legend Nr
1	An electrode group An electrode group 1 is stored in a rectangular tubular metal container 2	
2	tubular metal container An electrode group 1 is stored in a rectangular tubular metal container 2	
3	a positive electrode The electrode group 1 has a structure formed by spirally winding a positive electrode 3 and a negative electrode 4 with a separator 5	
4	a negative electrode The electrode group 1 has a structure formed by spirally winding a positive electrode 3 and a negative electrode 4 with a separator 5	

[← back to search](#) | Search Terms : TAC:(vehicle W2 battery) AND PBC:(US OR EP OR DE) | [14589 SFAM](#) | [Edit Search](#) | [Set Alert](#)

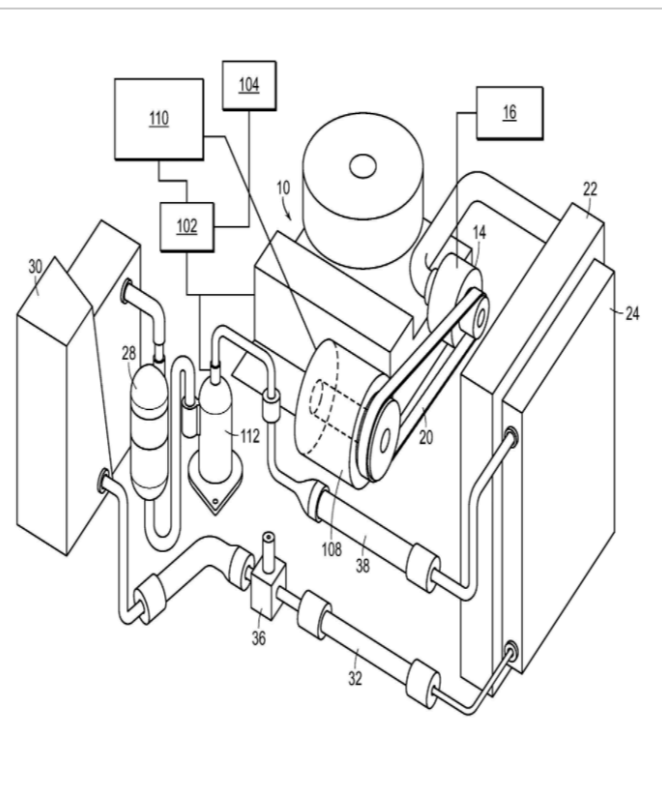
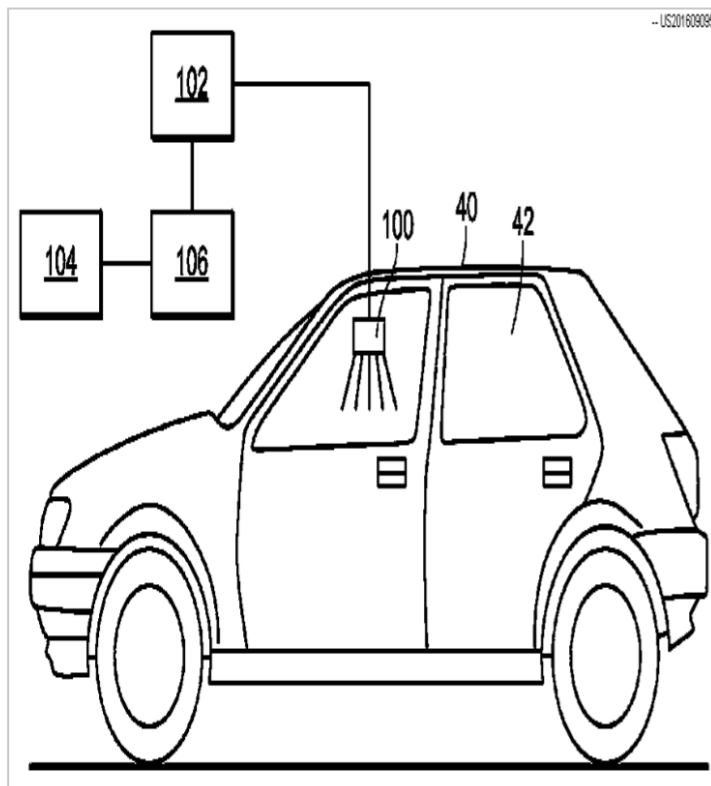
[Search Results](#) | [Quick Stats](#) | [Matrix](#)

<< < 3 > >> 14589 Records Drawings 10 Pub. Date ↓ Add View Export Hit Analysis Highlight

24. [US10054096B2](#) ▲ 22-Sep-2015 / 21-Aug-2018 BERKSON BRUCE RICHARD (SEDONA , US)

Vehicle occupant protection and engine idle reduction system

Abstract: A system for automatically adjusting the temperature and carbon monoxide level in an occupied passenger compartment of a vehicle includes sensors for sensing carbon monoxide levels, temperature, and occupants in the passenger compartment. A controller receives input from the sensors, and activates an electric heater or an electric cooler to bring the temperatures within the passenger compartment within a predetermined temperature range if the temperature detected within the passenger compartment falls outside of the predetermined range of temperatures. The controller may automatically shut off the engine of the vehicle when the vehicle is in idle and the carbon monoxide level within the passenger compartment falls above a predetermined level, or if a transmission lever of the vehicle is placed in a park position. A motor generator unit coupled to the engine provides electricity to rechargeable batteries of an alternate power unit, which powers the electric heater and the electric cooler.



#	Description	Legend No.
	compressor 18	
36	refrigerant charge tube The evaporated refrigerant is then passed through tubing 32 , through one or more orifices 34 , a refrigerant charge tube 36 , and then onto the condenser 24 , before being returned via tubing 38 to the mechanical air conditioning compressor 18	
38	returned via tubing The evaporated refrigerant is then passed through tubing 32 , through one or more orifices 34 , a refrigerant charge tube 36 , and then onto the condenser 24 , before being returned via tubing 38 to the mechanical air conditioning compressor 18	
40	a vehicle 2 , a vehicle 40	







































ID	Search String	Deduped	Records	Comments	Tags
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L28	(IC:E04G1/365 OR CPC:E04G1/365) AND EPBD:[1950-01-01 TO 2017-01-05]	SFAM	70	all checked	E04G1/365
L14	(IC:E06C7/16 OR CPC:E06C7/16) AND EPBD:[1900-01-01 TO 2017-01-05]	SFAM	1625	all checked	E06C7/16
L33	AC: E06C7/16 AND TAC\$:(strebe*) AND EPBD:[1950-01-01 TO 2017-01-05]	SFAM	19	all checked	E06C7/16
L22	(IC:E06C7/42 OR CPC:E06C7/42) AND EPBD:[2010-01-01 TO 2017-01-05]	SFAM	277	all checked	E06C7/42
L27	(IC:E06C7/426 OR CPC:E06C7/426) AND EPBD:[1950-01-01 TO 2017-01-05]	SFAM	119	all checked	E06C7/426
L12	(IC:E06C7/44 OR CPC:E06C7/44) AND EPBD:[1950-01-01 TO 1970-01-01]	SFAM	146	all checked	E06C7/44
L11	(IC:E06C7/44 OR CPC:E06C7/44) AND EPBD:[1970-01-01 TO 1980-01-01]	SFAM	157	all checked	E06C7/44
L10	(IC:E06C7/44 OR CPC:E06C7/44) AND EPBD:[1980-01-01 TO 1990-01-01]	SFAM	241	all checked	E06C7/44
L9	(IC:E06C7/44 OR CPC:E06C7/44) AND EPBD:[1990-01-01 TO 2000-01-01]	SFAM	265	all checked	E06C7/44
L8	(IC:E06C7/44 OR CPC:E06C7/44) AND EPBD:[2000-01-01 TO 2010-01-01]	SFAM	254	all checked	E06C7/44
L7	(IC:E06C7/44 OR CPC:E06C7/44) AND EPBD:[2010-01-01 TO 2018-02-20]	SFAM	134	all checked	E06C7/44
L32	TAC\$:(stütz* W2 leiter) AND EPBD:[1950-01-01 TO 2017-01-05]	SFAM	270	all checked	keywords
L29	TAC:(ladder support) EPBD:[2000-01-01 TO 2017-01-05]	SFAM	341	all checked	keywords
L35	TACDE:(strebe* W12 traverse) AND EPBD:[1950-01-01 TO 2017-01-05]	SFAM	96	all checked	keywords

Summary and Structure of IPC AND CPC used in a Saved Search

E	FIXED CONSTRUCTIONS
E04	BUILDING
E04G	SCAFFOLDING; FORMS; SHUTTERING; BUILDING IMPLEMENTS OR OTHER BUILDING AIDS, OR THEIR USE; HANDLING BUILDING MATERIALS ON THE SITE; REPAIRING, BREAKING-UP OR OTHER WORK ON EXISTING BUILDINGS
E04G1/00	Workmen s or safety scaffolds; Scaffolds primarily resting on the ground
E04G1/34	. Scaffold constructions able to be folded in prismatic or flat parts or able to be turned down
E04G1/36	. Scaffolds for particular parts of buildings or buildings of particular shape, e . g . for stairs, cupolas, domes scaffolding usable on slipways and in dry docks B63C5/02
E04G1/365	. . specially adapted for staircases or stairs
E06	DOORS, WINDOWS, SHUTTERS, OR ROLLER BLINDS IN GENERAL; LADDERS
E06C	LADDERS
E06C7/00	Component parts, supporting parts, or accessories
E06C7/16	. Platforms on, or for use on, ladders, e . g . liftable or lowerable platforms
E06C7/42	. Ladder feet; Supports therefor
E06C7/426	. . Height adjustable supports for receiving both ladder feet
E06C7/44	. . Means for mounting ladders on uneven ground

Hierarchical IPC / CPC Class Search

IC:G03G9/08\$ will search the full hierarchy !

 	G03G 7/00	Selection of materials for use in image-receiving members, i.e. for reversal by physical contact; Manufacture thereof (photosensitive materials for photographic purposes G03C) [1, 2006.01]
 	G03G 8/00	Layers covering the final reproduction, e.g. for protecting, for writing thereon [2, 2006.01]
 	G03G 9/00	Developers [1, 5, 2006.01]
 	G03G 9/06	. the developer being electrolytic [1, 2006.01]
 	G03G 9/08	. with toner particles [2, 2006.01]
 	G03G 9/083	. . Magnetic toner particles [5, 2006.01]
 	G03G 9/087	. . Binders for toner particles [5, 2006.01]
 	G03G 9/09	. . Colouring agents for toner particles [5, 2006.01]
 	G03G 9/093	. . Encapsulated toner particles [5, 2006.01]
 	G03G 9/097	. . Plasticisers; Charge controlling agents [5, 2006.01]
 	G03G 9/10	. . characterised by carrier particles [2, 5, 2006.01]
 	G03G 9/107	. . . having magnetic components [5, 2006.01]
 	G03G 9/113	. . . having coatings applied thereto [5, 2006.01]
 	G03G 9/12	. . in liquid developer mixtures [2, 2006.01]
 	G03G 9/125	. . . characterised by the liquid [5, 2006.01]
 	G03G 9/13	. . . characterised by polymer components [5, 2006.01]
 	G03G 9/135	. . . characterised by stabiliser or charge-controlling agents [5, 2006.01]
 	G03G 9/16	. Developers not provided for in groups G03G 9/06-G03G 9/135 , e.g. solutions, aerosols [2, 2006.01]
 	G03G 9/18	. . Differentially-wetting liquid developers [2, 2006.01]