



**Empowering ALL Inventors by  
providing access to advance  
innovation tools**



PATENT QUALITY THROUGH  
ARTIFICIAL INTELLIGENCE

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# Background



- PQAI stands for Patent Quality through Artificial Intelligence
- PQAI is an Open Source, nonprofit, initiative to create a library of software components specifically designed to advance innovation. The PQAI search engine is one example of how these components can be assembled to create new and useful tools.
- PQAI supporters include: companies, universities and industry organizations
- PQAI vision: Accelerate the pace of innovation by increasing the number of inventors and improving the quality of innovation by creating an open community to develop tools for all members of the innovation ecosystem
- PQAI website <https://projectpq.ai/>

## PQAI Search Engine

- High quality **AI-based** prior art search engine rivaling any engine on the market
- Simple **Natural Language interface** allows anyone to run an effective novelty search
- Rapid assessment through **concise and efficient prior art presentation**
- Only prior art search engine to provide **single and combinational reference (alpha) search** results
- Search engine software will be part of the PQAI Open Source library to ensure continuous improvement (coming soon)
- PQAI search engine website provides complete privacy
- Creates report for inventors to use with patent attorney, funding sources, etc...



A simple and powerful way to help you run prior-art checks.

SMART READER ROOM 2 +

### Smart Reader

FILTERS

PQAI REPORT

Invention

Describe your invention

SAMPLE INVENTIONS

CLEAR

FIND PRIOR ART

### Results

Showing 10 closest prior-arts

SEARCH TYPE: 102

Sort by

### Insights

Based on top 200 results

PQAI-SAFETY-CAR-SYSTEM-5-3-2021 MAY 03, 2021

# SAFETY CAR SYSTEM

## PQAI REPORT

PQAI-SAFETY-CAR-SYSTEM-5-3-2021  
May 03, 2021

PQAI-SAFETY-CAR-SYSTEM-5-3-2021 MAY 03, 2021

**INVENTION**  
An autonomous car that shifts the control from manual to automatic mode when it detects that the driver is drunk and therefore unfit for driving.

**DATABASES QUERIED**

- USPTO Bulk Datasets
- Semantic Scholar's Open Research Corpus

**FILING TREND**

The patent office delays the publishing of patent applications filed near term filing count which will skew the near term filing count.

**TECHNOLOGIES SEARCHED**

**G05D** Physics; Controlling; regulating; System variables

**B60K** Performing operations; transporting; Vehicle propulsion units or of transmissions in vehicles; diverse prime-movers in vehicles; auxiliary drive

PQAI-SAFETY-CAR-SYSTEM-5-3-2021 MAY 03, 2021

**PRIOR-ART SUMMARY**  
There are 7 **Directly related documents (102)** and 1 **Combination document (103)** which are found to be similar to this invention.

- VEHICLE CONTROL SYSTEM THAT LEARNS DIFFERENT DRIVING CHARACTERISTICS**  
Potnis et al. Assignee N/A Apr 25, 2018 US20180113461A1
- AUTONOMOUS VEHICLE CONTROL SYSTEM**  
Yopp Ford Global Technologies, LLC May 1, 2018 US20180113461A1
- VEHICLE CONTROL SYSTEM**  
Takahashi HONDA MOTOR CO., LTD. Oct 1, 2018 US20180113461A1
- Vehicle control system**  
Takahashi Honda Motor Co., Ltd. Jul 01, 2018 US20180113461A1
- VEHICULAR DRIVER MONITORING SYSTEM**  
Hassan et al. Assignee N/A Oct 21, 2018 US20180113461A1
- VEHICLE CONTROL DEVICE**  
MORISAKI TOYOTA JIDOSHA KABUSHIKI COMPANY, LTD. US20190315340A1

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**DIRECTLY RELATED DOCUMENTS(102)**

**VEHICLE CONTROL SYSTEM THAT LEARNS DIFFERENT DRIVING CHARACTERISTICS**  
Potnis et al. Assignee N/A Apr 25, 2018 US20180113461A1

A driving assistance system for a vehicle includes a control operable to control the vehicle in an autonomous or semi-autonomous mode. When operating in the autonomous mode, driving of the vehicle is controlled by the control without human intervention and, when operating in the semi-autonomous mode, an occupant of the vehicle at least partially drives the vehicle. The control learns a driving style of a particular occupant when the vehicle is being driven by that particular occupant and when the control is operating in the semi-autonomous mode. The control, when operating in the autonomous mode, controls the vehicle in accordance with the learned driving style of the particular occupant of the vehicle. Responsive to a determination of a characteristic of an occupant in the vehicle, the control, when operating in the autonomous, may adjust control of the vehicle irrespective of the learned driving style of the particular occupant.

| Element                                                                                                                                           | Reference Text                                                                                                                                    |
|---------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|
| An autonomous car that shifts the control from manual to automatic mode when it detects that the driver is drunk and therefore unfit for driving. | An autonomous car that shifts the control from manual to automatic mode when it detects that the driver is drunk and therefore unfit for driving. |

- Recognition of PQAI support on the IFIA website
- Participation in IFIA publications (e.g., newsletter, blogs, social media, etc...)
- Recognition of IFIA support on the PQAI website
- Help engaging IFIA chapters
- Feedback and input on improvements to PQAI search and other inventor tools

# Thank You

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