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Defensive Publications Series

December 2019

IS - INTELLIGENT SEARCH

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Recommended Citation

Blunder, Verena, "IS - INTELLIGENT SEARCH", Technical Disclosure Commons, (December 19, 2019)
https://www.tdcommons.org/dpubs_series/2782



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IS - INTELLIGENT SEARCH

Technical task:

Personalized automated intelligent search with data storage in a categorized personalized directory of a motor vehicle for a multifunctional use.

Initial situation:

During the journey, the driver encounters information, objects and conspicuous features that he would like to note down for the future or capture photographically before the object has disappeared again. Examples include informative inscriptions on vehicles and the characteristics or design of other vehicles for personal use or for the information of third parties. At present, there is a danger of endangering road safety by using a smartphone or instructing a co-driver. This is particularly the case in a hectic situation in which the information is recorded before it disappears. Existing programs try to solve this danger with relatively stiff, non-personalized POI/favorite locations/notes. There is a freely programmable and linked object, property, behaviour pattern, logo, letter and number combinatorial search, also partially qualified. The solutions do not support further processing or interfaces with mobile end devices, which is why the driving operation is negatively influenced within the scope of activation or use. This reduces traffic safety.

Solution:

The starting point of the procedure is an automated, personalized recognition, documentation, notification, data storage, transfer and further processing of personalized objects or objects in any combination. Here, a general model is created, for example with lettering and company or brand logos with special characteristics and criteria by a motor vehicle with a view to efficient re-use in case of need. The system "IS - intelligent search" describes a procedure and a control unit for a personalised, automated and intelligent search with data storage in a categorised, personalised directory of a motor vehicle for multifunctional use with the aid of a vehicle camera and/or a drone accompanying the vehicle. This provides the driver with a multifunctional, i.e. flexible, freely combinable, personalised and automated assistance which performs an "autoscan" and/or an "auto-trigger" on the basis of a personalised setup in the IS procedure during a journey in order to record and store the preferred data on an object, a thing or something special in general, right down to a particular characteristic or behaviour.

In the process:

- in a first processing step, the IS system automatically stores the result inside the vehicle, without driver activity, if the search criteria are not met
- in a second processing step, transfer the search result from the IS system to a mobile terminal in a special execution form after the end of the trip
- in a third processing step, an analysis and, if necessary, further processing and, if necessary, storage in a personalised register of the motor vehicle, such as a personal classified file, with personalised search categories, are carried out
- in a fourth processing step, enables the data to be forwarded to a third person or a service provider, etc.

The intelligent process and the control device make use of the following components in/on a motor vehicle, i.e. the task is solved by the process:

- a front camera
- a drone, i.e. a UAV with camera, reception and transmission unit
- an IS data memory in the motor vehicle, intermediate data memory and read-only memory
- an IS setup
- any mobile terminal with interface to the vehicle
- a special design with output unit, display, an audio system and/or an MMI

The IS procedure does not claim to be a conventional navigation system with POI data and/or features in the form of favorites or notes. It is much more flexible and automated in terms of autoscan/autotrigger functionality and a very personal approach. In a figurative sense, it describes a kind of intelligent personal search program with extended automated functions, which ensures a distraction of the primary steering and driving activity to be carried out in an increasingly narrow and stressful traffic area.

The personalised scan/trigger order in the IS system can read as an example: "search Audi Cabrio with #special color, with #special trim and equipments #quattro #S5". Further examples are the commands "searching #wild-cards ..." or "find 5#TFSI", whereupon the procedure finds all TFSI motor vehicles with any acceleration classification starting with 5, i.e. TFSI 50, TFSI 55, etc.

Data from a buffer can also be deleted after evaluation, i.e. they are not entered in the "special, personalized memory". This memory is used, for example, for later route guidance if the driver wants to be navigated back to a special holiday destination after years, to a very private place with particularly personalised preferred characteristics, e.g. "Cafe, sea, sunset feeling, etc." and this place is not documented under POI - "Point of interest".

With this system feature, the IS system primarily increases traffic safety within the framework of a natural behavior pattern of distraction by interesting things around the vehicle.

Advantages:

- Intelligent, i.e. automated scan/trigger with data storage and networking of personalized preferences
- Increase traffic safety by reducing distractions
- Consistently, especially with regard to a unique customer experience with added value

Possible application:

- Mr. Huber drives his car towards Italy and wants to spend a few days at the seaside.
- Mr. Huber is particularly fond of colorful, high-priced convertibles with very special equipment from the Audi brand.
- Mr. Huber passes a parking bay along the route where a very special motor vehicle is parked (see photos) and is unfortunately unable to stop and pursue his interest, i.e. his very special affinity for water sports and for the Audi brand, due to the volume of traffic.
- The IS system enables Mr. Huber to view and analyze the vehicle and, in particular, details of the vehicle at a later point in time, since the IS system has executed a scan and auto trigger function predefined from a specific setup of the system and the data is stored in a temporary memory of the vehicle.
- Contact with a VAG dealer allows you to transparently present image documents from this process and other details in order to upgrade your own vehicle if necessary.
- The link can be shared in a special event with another person who has similar interests