No. _____

IN THE
UNITED STATES COURT OF APPEALS
FOR THE FEDERAL CIRCUIT

IN RE VOLKSWAGEN GROUP OF AMERICA, INC.,

PETITIONER

ON PETITION FOR A WRIT OF MANDAMUS TO THE
UNITED STATES PATENT AND TRADEMARK OFFICE, PATENT TRIAL AND APPEAL BOARD,
CASE NO. IPR2025-00925

APPENDIX TO PETITION FOR A WRIT OF MANDAMUS

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January 6, 2026

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571-272-7822

Paper 9
Date: September 12, 2025

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE OFFICE OF THE UNDER SECRETARY OF COMMERCE FOR INTELLECTUAL PROPERTY AND DIRECTOR OF THE UNITED STATES PATENT AND TRADEMARK OFFICE

VOLKSWAGEN GROUP OF AMERICA, INC.,
Petitioner,

v.

LONGHORN AUTOMOTIVE GROUP LLC,
Patent Owner.

IPR2025-00925
Patent 8,085,192 B2

Before COKE MORGAN STEWART, *Acting Under Secretary of Commerce for Intellectual Property and Acting Director of the United States Patent and Trademark Office*.

DECISION
Denying Institution of *Inter Partes* Review

Longhorn Automotive Group LLC ("Patent Owner") filed a request for discretionary denial (Paper 6, "DD Req.") in the above-captioned case, and Volkswagen Group of America, Inc., Volkswagen AG, and Audi AG. (collectively, "Petitioner") filed an opposition (Paper 7, "DD Opp.").

After considering the parties' arguments and the record, and in view of all relevant considerations, discretionary denial of institution is appropriate in this proceeding. This determination is based on the totality of the evidence and arguments the parties have presented.

Although the parties are engaged in a parallel proceeding involving the challenged patent, it is unclear whether a final written decision in this proceeding will issue after the district court trial occurs. The projected final written decision due date in the Board proceeding is November 25, 2026. *See* DD Req. 1. The district court's scheduled trial date is August 17, 2026, but the time-to-trial statistics suggest trial will begin in January 2027. DD Opp. 14. As such, these considerations neither favor nor counsel against discretionary denial.

Some considerations, however, favor discretionary denial. In particular, the challenged patent has been in force for thirteen years creating strong settled expectations for Patent Owner, and Petitioner does not provide persuasive reasoning why an *inter partes* review is an appropriate use of Board resources. *Dabico Airport Sols. Inc. v. AXA Power ApS*, IPR2025-00408, Paper 21 at 2–3 (Director June 18, 2025). Further, Petitioner's argument that the Examiner erred is unconvincing as it does not accurately characterize the prosecution history. *See* DD Opp. 2–7 (focusing on "removable storage"); Ex. 1003, 134 (interview summary discussing encrypted memory).

Although certain arguments are highlighted above, the determination to exercise discretion to deny institution is based on a holistic assessment of all of the evidence and arguments presented. Accordingly, the Petition is denied under 35 U.S.C. § 314(a).

In consideration of the foregoing, it is:

ORDERED that Patent Owner's request for discretionary denial is *granted*; and

FURTHER ORDERED that the Petition is *denied*, and no trial is instituted.

IPR2025-00925
Patent 8,085,192 B2

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Paper 12
Date: November 12, 2025

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE OFFICE OF THE UNDER SECRETARY OF COMMERCE FOR INTELLECTUAL PROPERTY AND DIRECTOR OF THE UNITED STATES PATENT AND TRADEMARK OFFICE

VOLKSWAGEN GROUP OF AMERICA, INC.,
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IPR2025-00925
Patent 8,085,192 B2

Before JOHN A. SQUIRES, *Under Secretary of Commerce for Intellectual Property and Director of the United States Patent and Trademark Office.*

ORDER

The Office received a request for Director Review of the Decision denying institution in the above-captioned case and an authorized response to the request. *See* Papers 10, 11.

Having reviewed the request and response, it is:

ORDERED that the request for Director Review is denied.

IPR2025-00925
Patent 8,085,192 B2

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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

VOLKSWAGEN GROUP OF AMERICA, INC.,
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PETITION FOR *INTER PARTES* REVIEW

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LIST OF EXHIBITS

Exhibit	Description
Ex-1001	U.S. Patent No. 8,085,192 ("the '192 patent")
Ex-1002	Declaration of William R. Michalson, Ph.D. ("Michalson")
Ex-1003	Prosecution History of the '192 Patent ("Prosecution History")
Ex-1004	U.S. Patent No. 6,490,513 to Fish et al. ("*Fish*")
Ex-1005	U.S. Patent Publication No. 2004/0103288 A1 to Ziv et al. ("*Ziv*")
Ex-1006	U.S. Patent No. 6,310,542 to Gehlot ("*Gehlot*")
Ex-1007	European Patent Application No. EP0962894 A2 to Stevenson et al. ("*Stevenson*")
Ex-1008	U.S. Patent No. 4,114,155 to Raab ("*Raab*")
Ex-1009	U.S. Patent No. 5,751,228 to Kamiya et al. ("*Kamiya*")
Ex-1010	U.S. Patent No. 4,161,730 to Anderson ("*Anderson*")
Ex-1011	International Publication No. WO 91/09275 to Kyrtsos et al. ("*Kyrtsos*")
Ex-1012	International Publication No. WO 89/05255 to Whyntie ("*Whyntie*")
Ex-1013	U.S. Patent No. 5,525,998 to Geier ("*Geier*")
Ex-1014	Reissued Patent No. RE 35,920 to Sorden et al. ("*Sorden*")
Ex-1015	U.S. Patent No. 5,416,712 to Geier et al. ("*Geier II*")
Ex-1016	U.S. Patent No 5,777,580 to Janky et al. ("*Janky*")
Ex-1017	U.S. Patent No. 5,508,931 to Snider ("*Snider*")
Ex-1018	U.S. Patent No. 6,791,472 to Hoffberg ("*Hoffberg*")

Ex-1019	Model Year 2005 Acura RL Navigation System User Manual ("*Acura User Manual*")
Ex-1020	U.S. Patent No. 6,801,855 to Walters et al. ("*Walters*")
Ex-1021	U.S. Patent No. 6,748,536 to Madau ("*Madau*")
Ex-1022	U.S. Patent No. 7,212,989 to Taniguchi et al. ("*Taniguchi*")
Ex-1023	U.S. Patent No. 5,926,546 to Maeda et al. ("*Maeda*")
Ex-1024	U.S. Patent No. 6,950,013 to Scaman et al. ("*Scaman*")
Ex-1025	Prosecution History of U.S. Patent Application No. 13/326,214
Ex-1026	Curriculum Vitae of William R. Michalson, Ph.D.

*All emphasis is added unless otherwise indicated.

I. Introduction

The ’192 patent describes storing and retrieving encrypted location data. All recited components are admittedly conventional, from the “locational information module” (GPS unit), to the “encryption module” (known encryption algorithms), to the “storage module” (memory), to the “processing module” (processor). The patent illustrates each as a nondescript box.

The sole stated reason for allowing claims 1-22 was the limitation: “A removable storage module for storing the encrypted location.” Ex-1003, 143. This was doubly incorrect. First, only independent claims 1 and 19 recite a “*removable* storage module.” Independent claims 13 and 22 more broadly recite a “storage module.” Second, *Fish*, which was not before the Examiner, expressly discloses a removable storage module in the same manner as the ’192 patent itself—e.g., secure digital (SD) memory.

Nothing described or claimed in the ’192 patent was new or inventive as of its claimed priority date, September 6, 2005. Each of claims 1-22 should be canceled.

II. Statement of Precise Relief Requested

Petitioner requests review under 35 U.S.C. § 311 of claims 1-22 in view of the following grounds. Each reference is pre-AIA 35 U.S.C. § 102(b) prior art.

Exhibit	Prior Art
Ex-1004	U.S. Patent No. 6,490,513 to Fish et al. ("*Fish*")
Ex-1005	U.S. Patent Publication No. 2004/1013288 A1 to Ziv et al. ("*Ziv*")
Ex-1006	U.S. Patent No. 6,310,542 to Gehlot et al. ("*Gehlot*")
Ex-1007	European Patent Application No. EP0962894 A2 to Stevenson et al. ("*Stevenson*")

Ground	Challenged Claims	Basis	Prior Art
Ground 1	1, 11-14, 19-22	§ 103	*Fish*
Ground 2	2-4, 15-17	§ 103	*Fish* in view of *Ziv*
Ground 3	5-8, 18	§ 103	*Fish* in view of *Ziv* and *Gehlot*
Ground 4	9-10	§ 103	*Fish* in view of *Ziv*, *Gehlot*, and *Stevenson*

III. '192 Patent Overview

The '192 patent describes "navigational or positional information systems," including "devices, systems and methods for controlling and storing sensitive information on a global positioning system (GPS) device." Ex-1001, 1:15-19; Michalson, ¶54. Figure 1 illustrates a device 100—including housing 102, display module 104, input module 106, buttons 108, storage module 110, transmission module 112, microphone 114, speaker 116, and hardware interlock 118—for carrying out the disclosed steps:

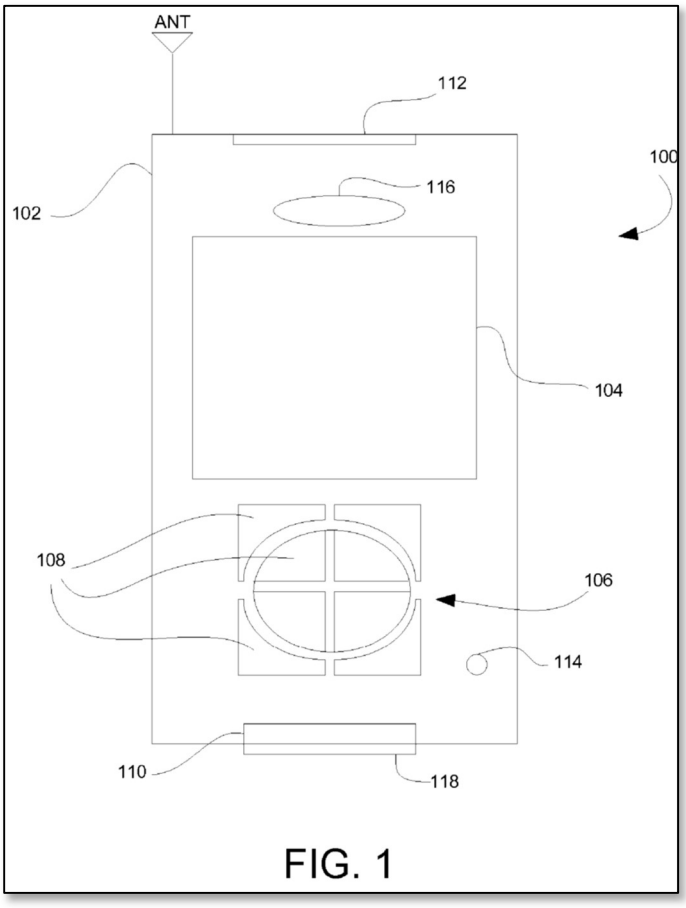


FIG. 1

Ex-1001, 3:7-24, Fig. 1.

The disclosed components—each a "module"—are shown in Figure 2 as boxes:

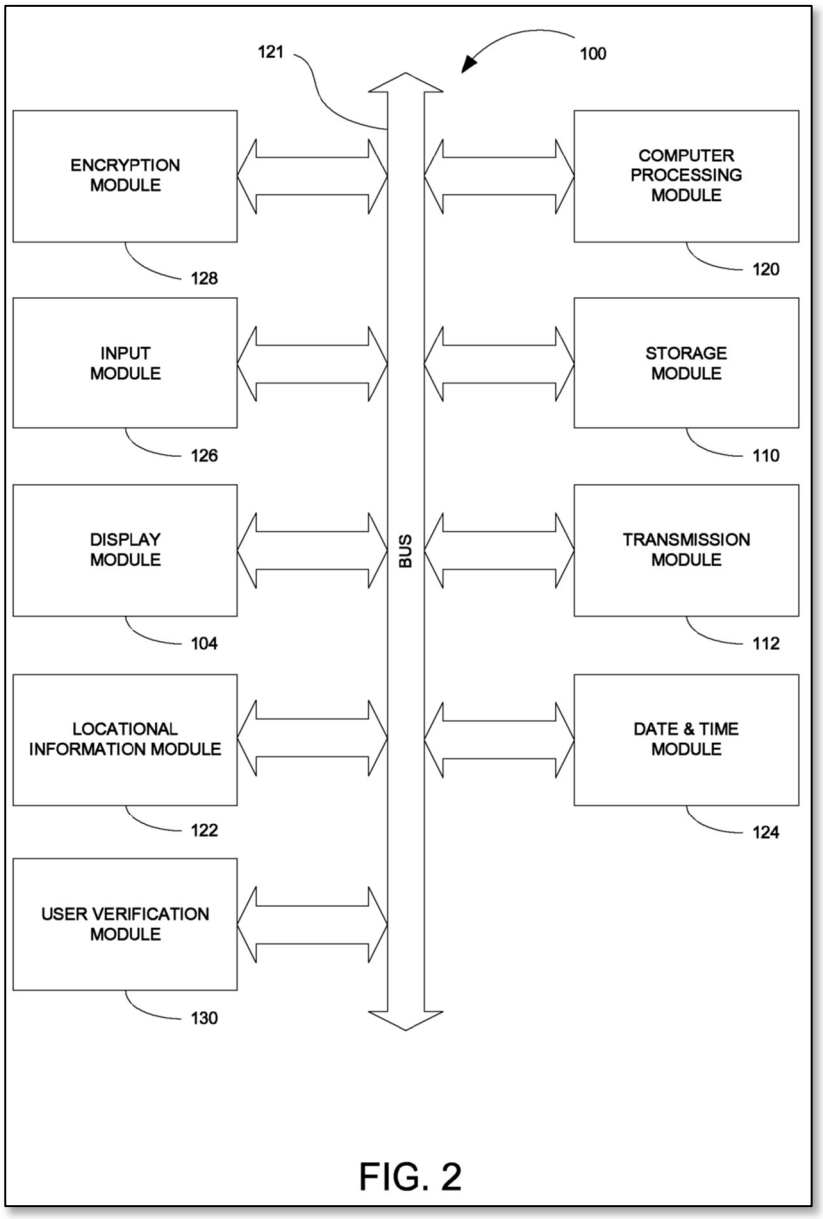


FIG. 2

Id., Fig. 2, 3:25-27, 3:55-56, 4:2-7, 4:8-9, 4:16-18, 4:27-32, 4:47-54, 4:58-66. Each of these "modules" is disclosed as being a known, conventional component. For example, "GPS devices" are admittedly "ubiquitous," GPS locational functionalities and memory storage abilities were known, and commercial providers are named. Ex-1001, 1:21-25, 3:56-62; Michalson, ¶¶57-59. Prior art

encryption and decryption algorithms are described as off-the-shelf tools, rather than a subject of innovation. Ex-1001, 4:60-66, 5:11-16; Michalson, ¶¶60-61. Identity verification tools are also described as known, including "biometric device[s], such as a retinal scanning device, finger print reader, facial recognition reader," and the patent "note[s] that identity detection devices such as biometric devices are common and are currently widely in use." Ex-1001, 5:54-61, 5:62-64; Michalson, ¶62.

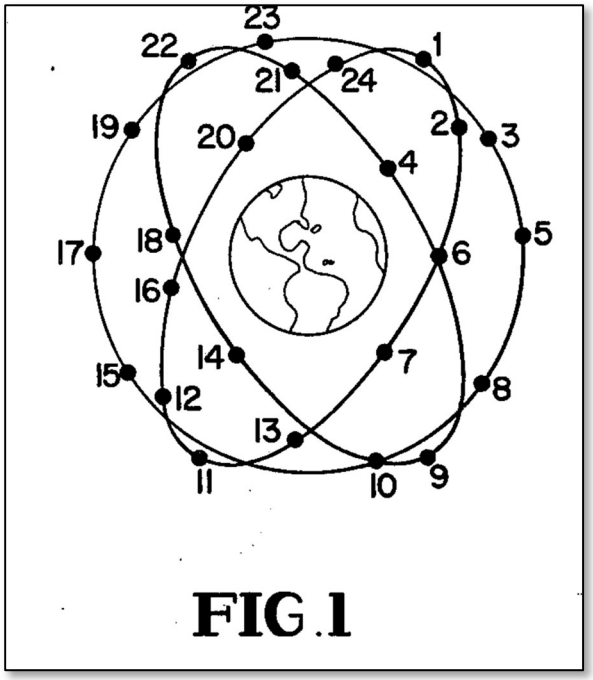
Rather than advance the state-of-the-art in GPS, encryption, user verification, or any other field, the '192 patent teaches merely using these components for their known purpose. Michalson, ¶63. As discussed below regarding *Fish* and other references, these uses themselves were also prior art.

Prosecution of the '192 patent included two substantive office actions, on September 9, 2010 and February 8, 2011. Ex-1003, 48-54, 88-96. After an Examiner interview on May 5, 2011, *id*., 134, the Examiner allowed the claims on October 11, 2011, *id*. at 138-144. The sole stated reason for allowance was the recitation: "A removable storge module for storing the encrypted location . . ." *Id*., 143. This statement appears incomplete, however, since independent claims 13 and 22 do not require "removable" storage.

IV. The Prior Art

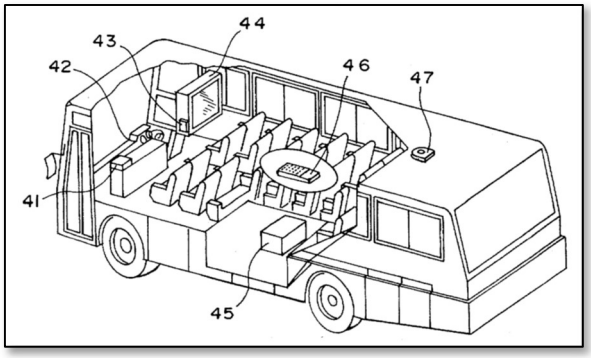
A. Background

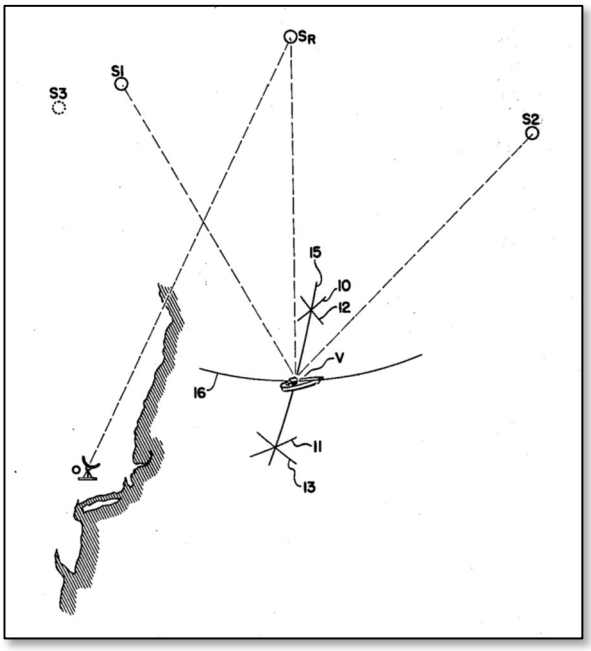
As Dr. Michalson explains, GPS and encryption technologies were well known before the '192 patent. GPS began in the 1970s as a U.S. government-maintained, satellite-based system developed for civilian and military uses. Michalson, ¶65. An early example is shown below, with 24 orbiting spacecraft:



Ex-1008, Fig. 1; Michalson, ¶65.

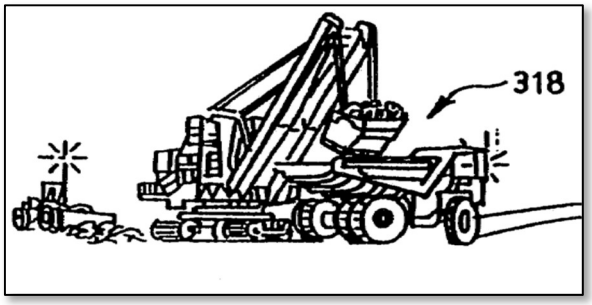
GPS was rapidly adopted across numerous fields, including, especially, transportation. Examples before 1995 include buses and ships:

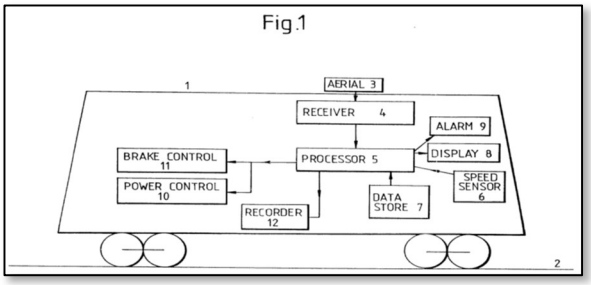




Ex-1009, Fig. 16; Ex-1010, Fig. 1; Michalson, ¶¶66-67.

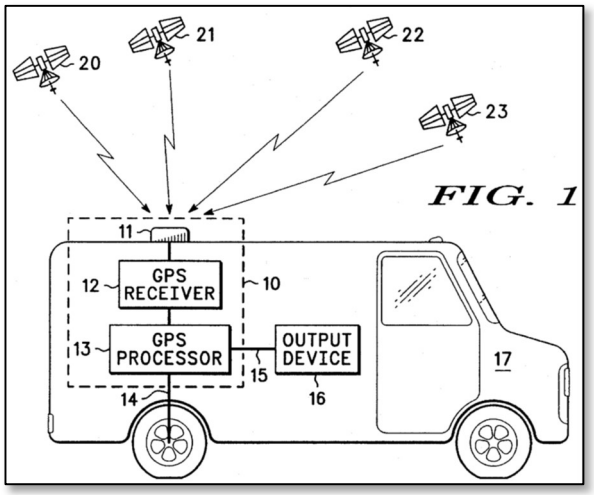
Heavy machinery and locomotives also utilized GPS technologies before 1990:

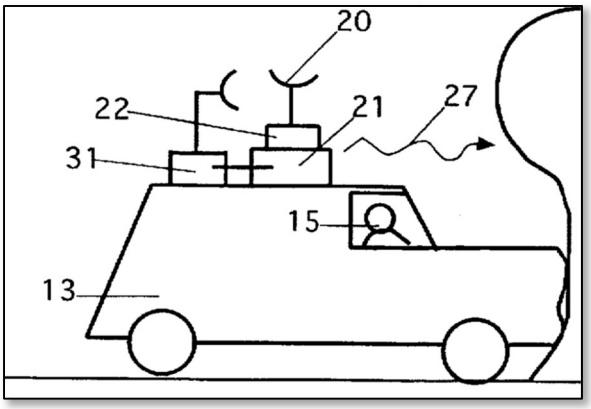


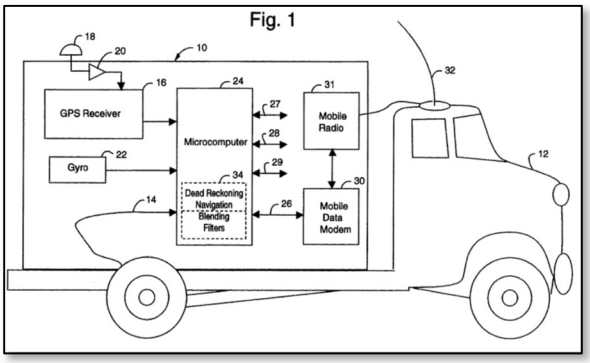


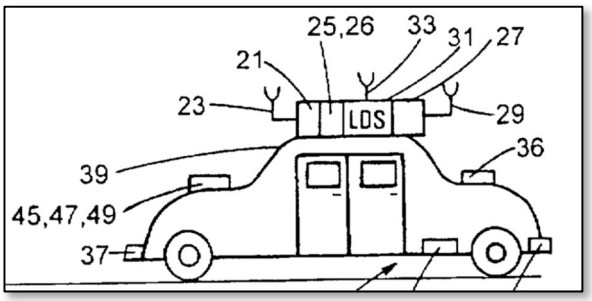
Ex-1011, Fig. 3; Ex-1012, Fig. 1; Michalson, ¶¶68-69.

Many other GPS implementations focused on automobiles, including the following from the early 1990s:









Ex-1013, Fig. 1; Ex-1014, Fig. 1; Ex-1015, Fig. 1; Ex-1016, Fig. 1; Michalson, ¶70. GPS usage in vehicles included visual displays of navigation guidance to track the position of a vehicle with reference to its route and destination. Michalson, ¶71. Examples from 1992 include the following:

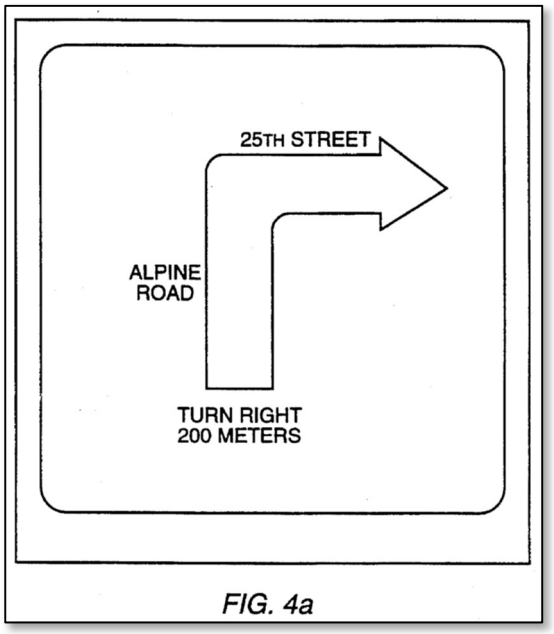


FIG. 4a

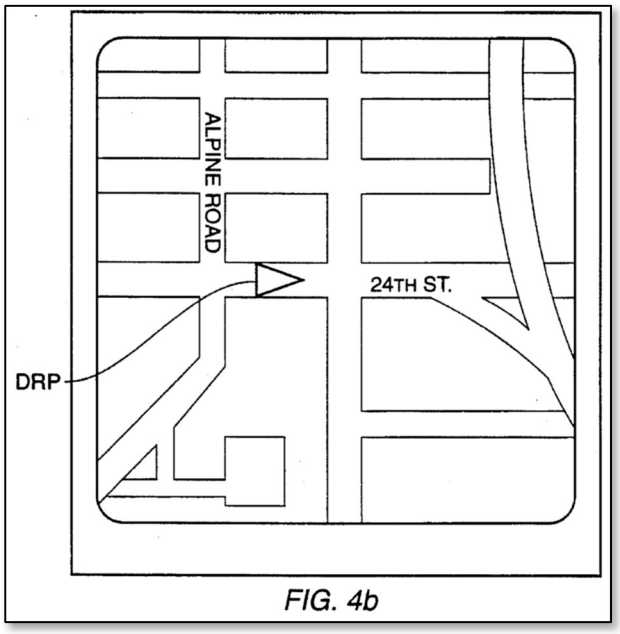


FIG. 4b

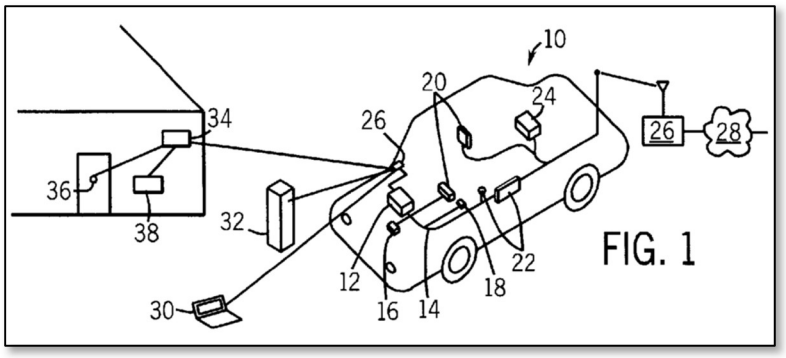
Ex-1017, Figs. 4a, 4b; Michalson, ¶71.

The '192 patent acknowledges that GPS devices were "everywhere," including vehicles. Ex-1001, 1:21-34; Michalson, ¶72. Indeed, GPS systems were "well known" and "navigational purposes were prime motivators for the creation of these systems." Ex-1018, 8:24-27, 9:14-24, 10:1-18:14; Michalson, ¶72. Manufacturers of in-vehicle and handheld electronic navigation devices included OnStar, Alpine, Clarion, Philips, Pioneer, Visteon, Delphi, and Garmin International. Ex-1020, 1:55-2:9; Ex-1019, 7; Michalson, ¶76.

Before the '192 patent, navigation systems in vehicles used map displays which, when given start and end locations, displayed routes. Ex-1018, 7:13-17; Michalson, ¶73. For instance, the General Motors 1994 Oldsmobile included such a display and allowed a driver to pinpoint a desired destination and be guided

along the most efficient route which was calculated by an onboard computer. Ex-1018, 7:13-33; Michalson, ¶74.

Before the '192 patent, users could store locations in navigation systems, including current GPS locations, points of interest, and destinations. Ex-1019, 4, 19, 24, 29, 43, 59, 77; Ex-1018, 18:66-19:17; Michalson, ¶¶75, 77. Stored data was secured within the navigation system with a PIN or password. Ex-1019, 29, 43, 76, 79, 118; Michalson, ¶75. Indeed, data encryption and decryption in vehicles were also well known before the '192 patent. Ex-1001, 4:60-66 (disclosing "conventional code encryption algorithms"); Ex-1018, 9:25-45; Michalson, ¶78. An example from 2000 described "key-based access to data stored on a vehicle," such as "user specific data including passwords, preference settings, and driving log data." Ex-1021, Abstract; Michalson, ¶79.



Ex-1021, Fig. 1, 4:7-15, 4:49-5:4; Michalson, ¶79. The disclosed "encryption engine 82" is described in much the same way as the encryption module 128 of the '192 patent. Ex-1021, 6:23-28, 6:65-7:2, Fig. 3; Michalson, ¶79.

An example from 1997 described "[e]ncrypted route information and the like" that are stored in a "vehicle-mounted apparatus 30." Ex-1022, Abstract; Michalson, ¶80. A further example from 1995 described encryption in vehicles for toll payments. Ex-1023, Abstract; Michalson, ¶80. Another example from 1998 described encrypted data storage in vehicles for incident verification. Ex-1024, Abstract; Michalson, ¶80.

Not only was storing location data in vehicles widely known in the prior art, but so too was storing data on removable media. Examples include a diskette or floppy disk (Ex-1018, 2:39; Ex-1022, 22:28-46), CD or DVD (Ex-1018, 27:42-43; Ex-1020, 18:3; Ex-1022, 22:48-53), and SD memory (Ex-1004, 7:10). Michalson, ¶80.

B. *Fish*

Fish describes a "vehicle data archive system" using encryption. Ex-1004, Abstract. Like the '192 patent, *Fish* discloses storing sensitive vehicle data securely, including GPS location information. *Id*., Abstract, 1:5-9, 4:22-29, 5:27-32, 7:6-52, Figs. 1-2; Michalson, ¶¶124-125. Vehicle 5 includes data archive 10:

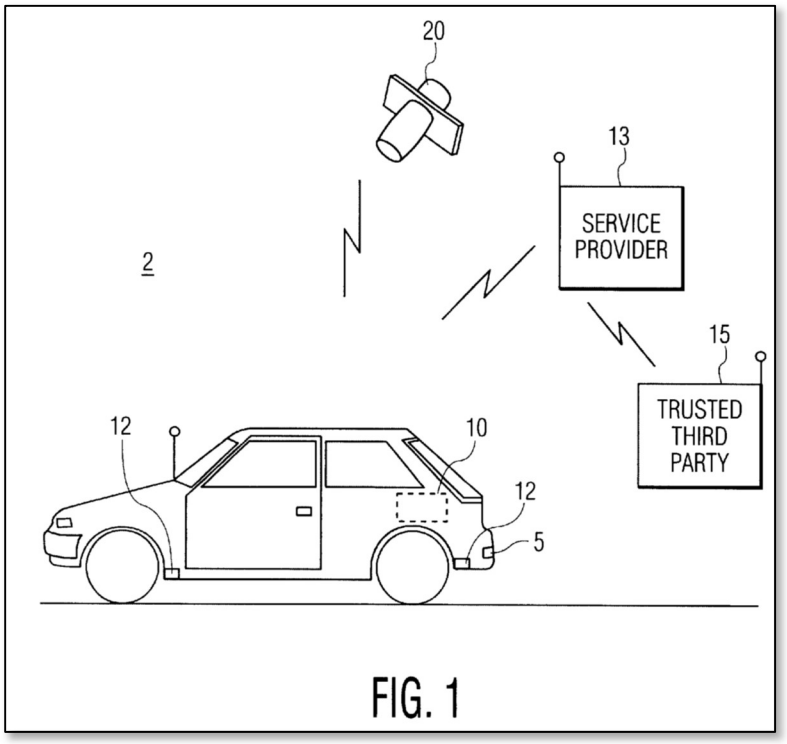
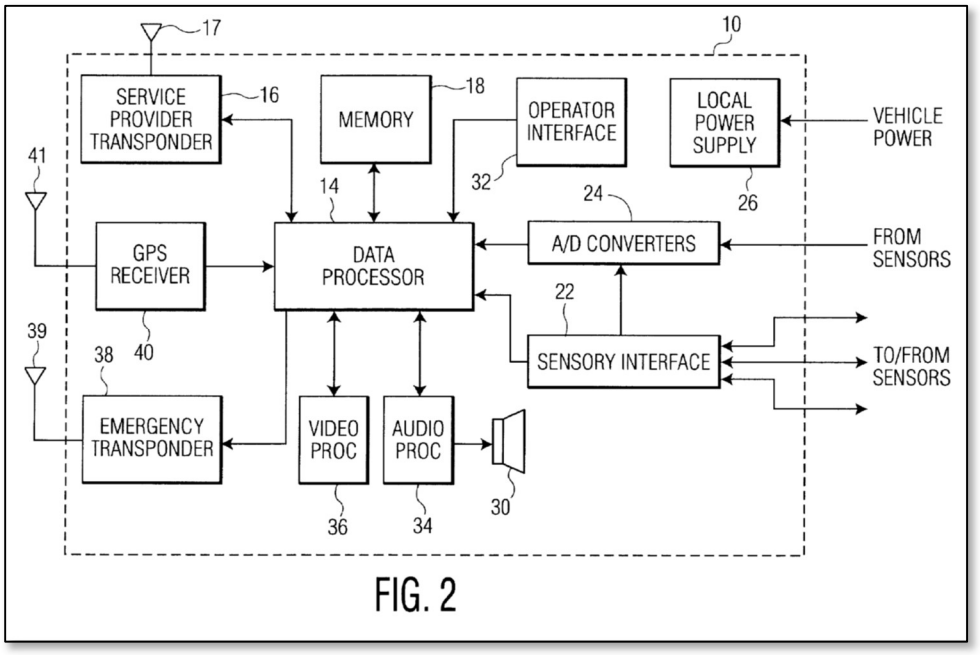


FIG. 1

Ex-1004, 2:45-52, Fig. 1; Michalson, ¶125.

Data archive 10 is illustrated in more detail in Figure 2:



Ex-1004, 4:22-29, Fig. 2; Michalson, ¶126.

Like the '192 patent, *Fish* teaches encrypting location (and other) data for a vehicle. Ex-1004, 4:8-21, 5:26-38, 11:8-29; Michalson, ¶127. Also, like the '192 patent, *Fish* uses "a removable non-volatile memory device such as a secure digital (SD) memory device or any of a number of other commercially available non-volatile memory devices." Ex-1004, 7:8-14; Michalson, ¶127.

C. *Ziv*

Ziv describes a "portable storage device including a microprocessor." Ex-1005, Abstract. A "portable storage device" performs "on-the-fly encryption/decryption of secure data stored on the storage device under a user password," and "exclude[s] access to the secure user data area unless the user password is provided." Ex-1005, Abstract; Michalson, ¶¶128-129.

Ziv discloses using a password to selectively encrypt or decrypt data. Michalson, ¶130. As shown in Figure 6, a user may enter a password in step 602, and if such a password is verified, the user may be able to access "secure user area 122" in step 605.

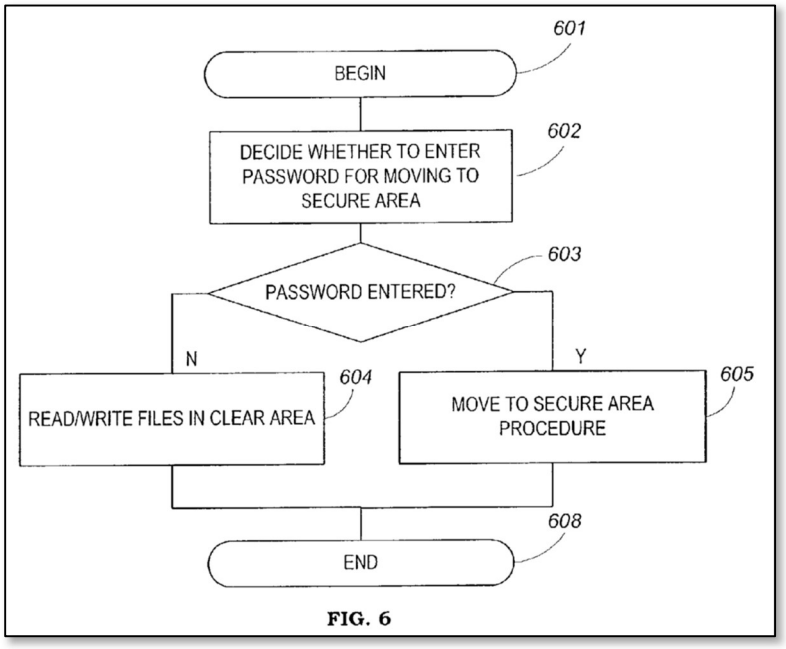


FIG. 6

Ex-1005, ¶[0037], Fig. 6; Michalson, ¶130.

In Figure 7, *Ziv* describes entering a password and, if the password is verified, performing encryption or decryption operations in step 709.

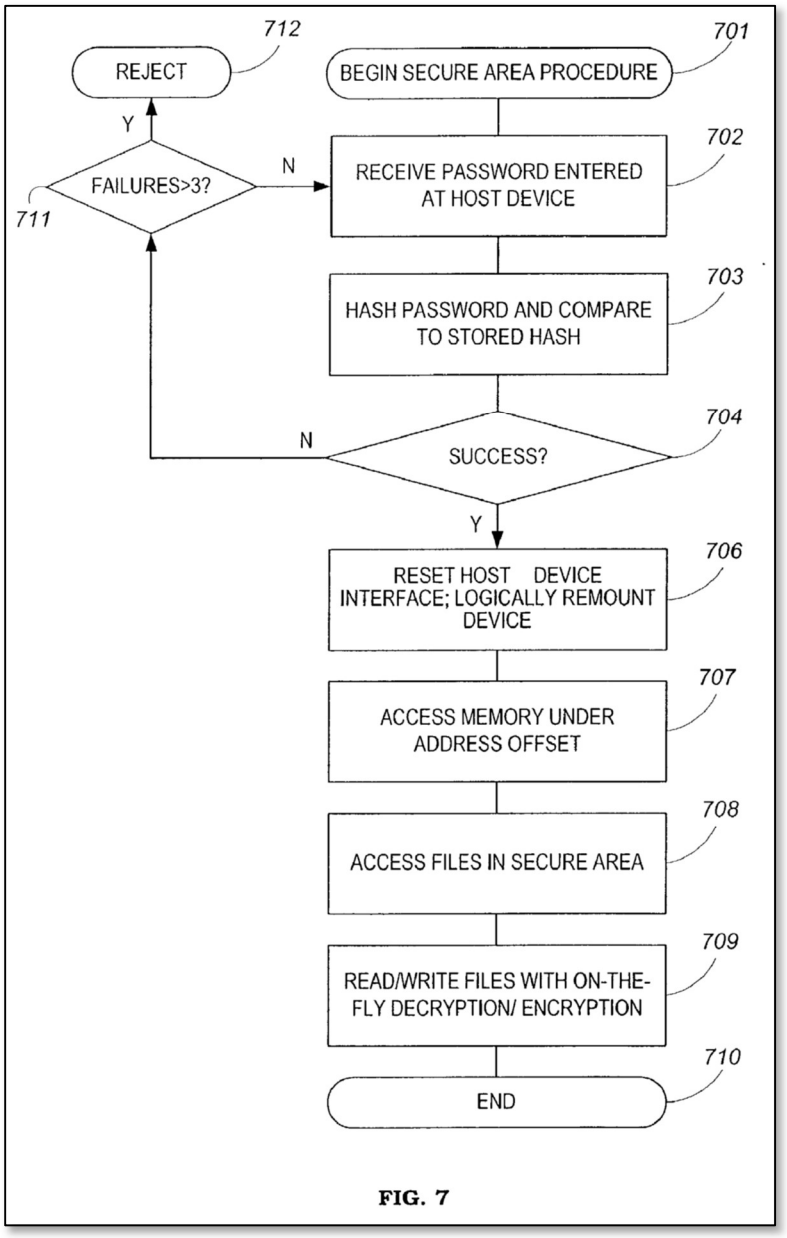


FIG. 7

Ex-1005, ¶¶[0038]-[0040], Fig. 7; Michalson, ¶131.

Like the '192 patent and *Fish*, *Ziv* discloses use of removable storage for sensitive information. Ex-1005, Abstract, ¶¶[0001], [0025]; Michalson, ¶132. Just as *Fish* uses removable storage media (e.g., SD memory), Ex-1004, 7:6-29, *Ziv* teaches the same types of memory, including SD memory, Ex-1005, ¶[0025];

Michalson, ¶132. *Ziv* confirms that its storage medium 113 may be "detachable from portable storage device 110." Ex-1005, ¶[0025]; Michalson, ¶132. Also, like the '192 patent and *Fish*, *Ziv* discloses encryption and decryption techniques for protecting data stored on a removable storage device, including the use of a user password or biometric identification (e.g., fingerprint) to provide further enhanced security. Ex-1005, Abstract, ¶¶[0026], [0031], [0033], [0037]-[0045]; Michalson, ¶132.

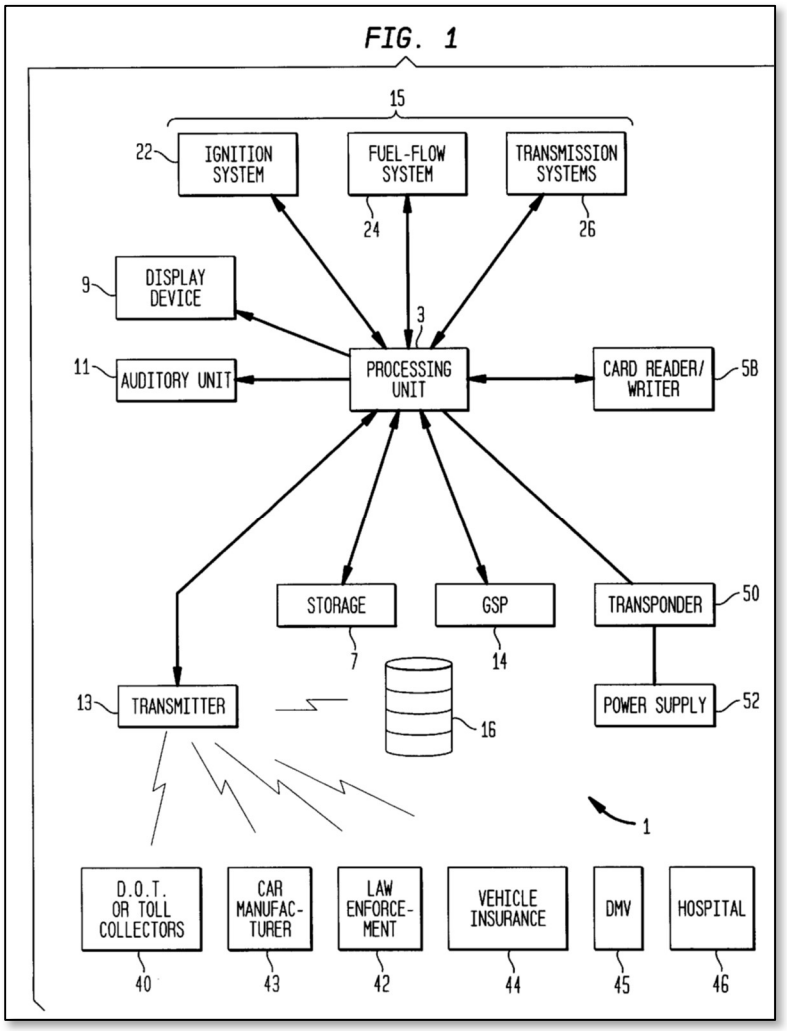
D. *Gehlot*

Similar to *Fish*, *Gehlot* discloses "receiving, processing, and storing real-time data from various types of input, including but not limited to information from a vehicle's micro-processing systems, a driver information card, a vehicle information card, and physical attributes of the driver/owner." Ex-1006, Abstract. *Gehlot* describes "collecting vehicle data and preventing unauthorized vehicle use" and "collecting data from various vehicle systems, information cards, and other external data sources and transmitting the collected data to external data receivers." Ex-1006, 1:5-9; Michalson, ¶¶133-134.

A "vehicle data processor" prompts the user to "input some form of physical data, i.e. retinal scan, fingerprint, voice recognition," whereby the VDP "matches the data to information stored in memory and grants authorization to the user" to drive the vehicle. Ex-1006, 2:3-8, 2:17-31, 6:1-12; Michalson, ¶135. The input

may alternatively be a "password via a keyboard." Ex-1006, 6:6-8; Michalson, ¶135.

Like the '192 patent and *Fish*, *Gehlot* discloses use of removable storage for vehicle-related information and collection and storage of vehicle data "such as average, maximum and minimum speeds driven, average fuel consumption, distance traveled, and the like," which could be "displayed on a visual display unit." Ex-1006, 4:24-5:33; Michalson, ¶136. The stored information can be transmitted to external entities. Ex-1006, 5:34-67; Michalson, ¶136. Data from a "GPS unit can also be routed by the processor unit 3 to transmitter 13 to be sent to law enforcement." Ex-1006, 6:51-54; Michalson, ¶137.



Ex-1006, Fig. 1; Michalson, ¶137.

E. *Stevenson*

Stevenson describes "a vehicle entry/exit control system." Ex-1007, Cover. *Stevenson* uses biometric sensing to confirm a driver's identity for controlling entry and exit of vehicles within a restricted area. Ex-1007, Abstract, ¶¶[0001], [0004]-[0007]; Michalson, ¶¶138-139. The biometric sensing includes iris recognition, fingerprint, palm print, voice pattern and DNA, such as saliva.

Ex-1007, ¶¶[0007], [0019]-[0020]; Michalson, ¶139. System 10 may include control unit 12 and camera 14, and may compare obtained images of a user (e.g., face or eye) to verify the user before vehicle operations are permitted.

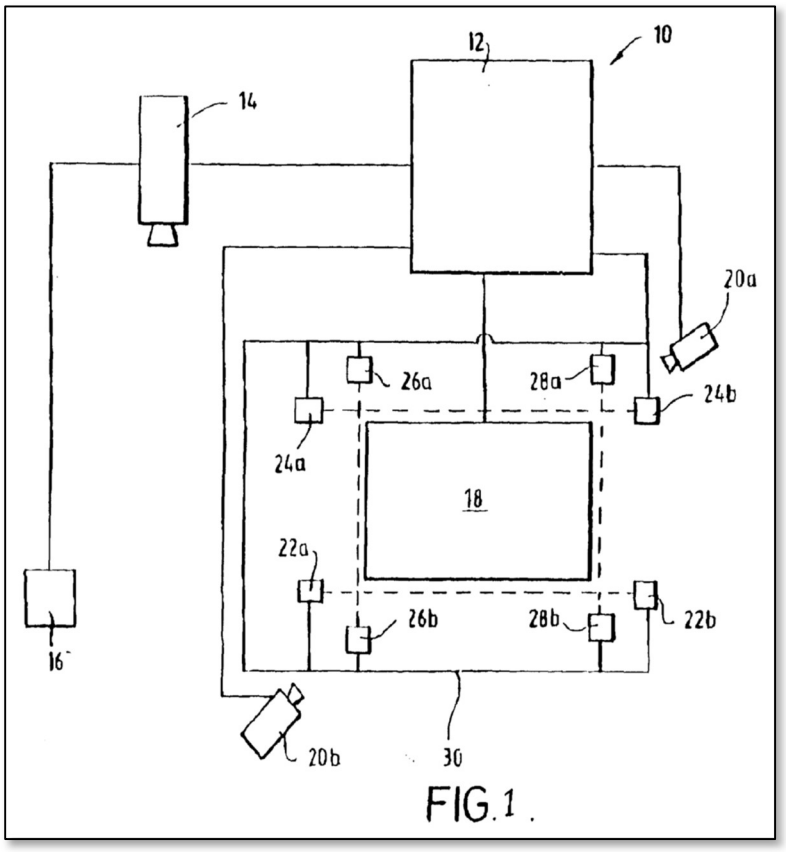


FIG. 1.

Ex-1007, ¶¶[0007]-[0010], Fig. 1; Michalson, ¶140.

V. Level of Ordinary Skill

A person of ordinary skill in the art ("POSITA") would have possessed at least a four-year degree in electrical engineering or a closely related field, and at least two years of experience with navigation systems, or an equivalent advanced education

in the field of navigation systems. Additional education could substitute for professional experience and vice versa. Michalson, ¶¶81-82.

VI. Claim Construction

The Board construes claims according to *Phillips v. AWH Corp.*, 415 F.3d 1303 (Fed. Cir. 2005) (en banc). Petitioner presents below certain constructions of claim terms that invoke pre-AIA 35 U.S.C. § 112, ¶ 6. These constructions include the noted functions and corresponding disclosed structure—all simple, conventional components—as well as equivalents of such structure.

Petitioner does not concede that the '192 patent discloses adequate structure, such as algorithms, for purposes of definiteness for any term. But this does not prevent the Board from comparing the prior art to the claims here because the prior art discloses the same (and more) structure as found in the '192 patent itself. *See Sisvel Int'l S.A. v. Sierra Wireless, Inc.*, 82 F.4th 1355 (Fed. Cir. 2023) (Board may "resolve the prior-art challenge to the patentability of the claims despite the potential indefiniteness of the means-plus-function term" unless "impossible to adjudicate"). Claims should only be construed to the extent necessary to resolve a controversy. *Nidec Motor Corp. v. Zhongshan Broad Ocean Motor Co.*, 868 F.3d 1013, 1017 (Fed. Cir. 2017). Because the prior art here discloses the same structure as the '192 patent, the Grounds here are possible to adjudicate.

A. "a locational information module for determining" (Claims 1, 13, 19, 22)

This term uses "module" as "a well-known nonce word that can operate as a substitute for 'means' in the context of § 112, para. 6." *Williamson v. Citrix Online, LLC*, 792 F.3d 1339, 1350 (Fed. Cir. 2015) (en banc); *Rain Computing, Inc. v. Samsung Elecs. Am., Inc*., 989 F.3d 1002, 1006 (Fed. Cir. 2021) ("'module' here does not provide any indication of structure"). As in *Williamson* and *Rain Computing*, "locational information" does "not impart structure into the term 'module.'" *Williamson*, 792 F.3d at 1351; Michalson, ¶90.

Function: Claims 1, 13, 19, and 22 recite the following function for the claimed "locational information module": "determining location information of the [location information] device."[1] *See also* Ex-1001, 3:55-56; Michalson, ¶91.

Structure: The locational information module "may include a receiver and an antenna ANT employing conventional locational information processing technology such as Global Positioning Satellite (GPS) Technology, Loran Technology, or any other available locational technology, to indicate the exact

[1] Claims 1 and 13 recite a "device" while claims 19 and 22 recite a "location information device."

location, e.g., latitude, longitude and altitude, of the device 100." Ex-1001, 3:56-62. Michalson, ¶¶92-93.

B. "an encryption module for encrypting" (Claims 1, 13, 19, 22)

This term uses "module" as "a well-known nonce word that can operate as a substitute for 'means' in the context of § 112, para. 6." *Williamson*, 792 F.3d at 1350; *Rain Computing*, 989 F.3d at 1006. Here too, "encryption" does "not impart structure into the term 'module.'" *Williamson*, 792 F.3d at 1351; Michalson, ¶94.

Function: Claims 1, 13, 19, and 22 recite the following function for the claimed "encryption module": "encrypting the determined location information." Michalson, ¶95.

Structure: The "encryption module" as disclosed is an encryption technique, such as symmetric-key techniques (e.g., DES, Triple-DES, Blowfish, RC2, RC4, and RC5) or asymmetric-key techniques (e.g., Diffie-Hellman, RSA, and ElGamal). *See* Ex-1001, 4:60-66; Michalson, ¶¶96-97.

C. "a storage module for storing" (Claims 13, 22)

This term again uses "module" as "a well-known nonce word that can operate as a substitute for 'means' in the context of § 112, para. 6." *Williamson*, 792 F.3d at 1350; *Rain Computing*, 989 F.3d at 1006. The recited "storage" connotes a function or action, but does "not impart structure into the term 'module.'" *Williamson*, 792 F.3d at 1351; Michalson, ¶98.

Function: Claims 13 and 22 recite the following function for the claimed "storage module": "storing the encrypted location information." Michalson, ¶99.

Structure: The "storage module may be internal memory." Ex-1001, 2:4-5; *see also id.*, 2:21-22. In particular, "[t]he storage module 110 includes internal storage memory, e.g., random access memory (RAM), or removable memory such as magnetic storage memory; optical storage memory, e.g., the various known types of CD and DVD media; solid-state storage memory, e.g., a CompactFlash card, a Memory Stick, SmartMedia card, MultiMediaCard (MMC), SD (Secure Digital) memory; or any other memory storage that exists currently or will exist in the future." *Id.*, 4:47-54; *see also id.*, Abstract, 1:66-2:4; Michalson, ¶¶100-101. In claims 13 and 22, which do not recite "removable" memory, the memory would include both removable and non-removable forms of memory. Michalson, ¶¶100-101.

D. "a removable storage module for storing" (Claims 1, 19)

Here too, the claimed "removable storage module" uses "module" as "a well-known nonce word that can operate as a substitute for 'means' in the context of § 112, para. 6." *Williamson*, 792 F.3d at 1350; *Rain Computing*, 989 F.3d at 1006. The recited "removable storage" connotes functions of removing and storing, but does "not impart structure into the term 'module.'" *Williamson*, 792 F.3d at 1351; Michalson, ¶102.

Function: Claims 1 and 19 recite the following function for the claimed "removable storage module": "storing the encrypted location information." Michalson, ¶103.

Structure: A POSITA would have understood the structure of a "removable storage module" to be a "removable storage memory" such as those described above for the term "storage module" to the extent they are removable (e.g., "CD and DVD media; solid-state storage memory, e.g., a CompactFlash card, a Memory Stick, SmartMedia card, MultiMediaCard (MMC), SD (Secure Digital) memory"). Ex-1001, 2:18-19, 4:48-54; Michalson, ¶¶104-105.

E. "a processing module for sending" (Claims 1, 13, 19, 22) and "the processing module selectively decrypts" (Claims 3, 16)

The claimed "processing module" uses "module" as "a well-known nonce word that can operate as a substitute for 'means' in the context of § 112, para. 6." *Williamson*, 792 F.3d at 1350; *Rain Computing*, 989 F.3d at 1006. As claimed, "processing" is a function, not a particular structure, and thus does "not impart structure into the term 'module.'" *Williamson*, 792 F.3d at 1351; Michalson, ¶106.

Function: The "processing module" performs at least two functions. Claims 1, 13, 19, and 22 recite the following functions for the claimed "processing module": "sending the encrypted location information to the [ ] storage module [ ]

. . . and retrieving the encrypted location information from[2] the [ ] storage module." Claims 1 and 19, unlike claims 13 and 22, are directed to encrypted location information sent to and retrieved from a "removable" storage module. Michalson, ¶107.

Dependent claims 3 and 16 recite the following function for the claimed "processing module": "selectively decrypts the location information stored in the [ ] storage module based on the identity of the user." Michalson, ¶108. Claim 3, unlike claim 16, is directed to location information stored in the "removable" storage module. *Id*.

Structure: The disclosed structure is "a computer processing module 120, e.g., a microprocessor," which "will use computer software instructions that have been programmed into the module and conventional computer processing power to interact and organize the traffic flow between the various other modules." Ex-1001, 3:26-34; Michalson, ¶¶109-110.

F. "an input module disposed on the housing configured for receiving" (Claims 2, 15)

Here too, the claimed "input module" uses "module" as "a well-known nonce word that can operate as a substitute for 'means' in the context of § 112,

[2] Claim 19 mistakenly recites "form" instead of "from."

para. 6." *Williamson*, 792 F.3d at 1350; *Rain Computing*, 989 F.3d at 1006. The term "input" connotes function, not particular structure, and thus does "not impart structure into the term 'module.'" *Williamson*, 792 F.3d at 1351; Michalson, ¶111.

Function: Claims 2 and 15 recite the following function: "receiving a code string input by a user, wherein the[3] user inputted code string is used for encrypting and decrypting the location information stored in the [ ] storage module." Michalson, ¶112. Claim 2, unlike claim 15, is directed to encrypting and decrypting the location information stored in the "removable" storage module. *Id*.

Structure: Claims 2 and 15 recite that the "input module" is "disposed on the housing." Michalson, ¶113. The "[i]nput module 106 includes a plurality of buttons 108 for inputting data and navigating through a plurality of menus and/or maps." Ex-1001, 3:14-16; Michalson, ¶113.

Additionally, "user input module 126" can "receive user instructions via text input by the way of buttons 108, a standard keyboard interface coupled to the device, or a character recognition capture device which translates user text input into alphanumeric characters," and may also include a "touch screen," "microphone 114" with an "analog-to-digital (A/D) converter," or "voice

[3] Claim 15 mistakenly recites "he" instead of "the."

recognition processor." Ex-1001, 4:27-46; Michalson, ¶114. These too are examples of the structure disclosed for the "input module." Michalson, ¶114.

G. "a user verification module for verifying the identity of [the] user" (Claims 3-5, 16-18)

The claimed "user verification module" uses "module" as "a well-known nonce word that can operate as a substitute for 'means' in the context of § 112, para. 6." *Williamson*, 792 F.3d at 1350; *Rain Computing*, 989 F.3d at 1006. The recited "user verification" is a function or action, not a particular structure, and thus does "not impart structure into the term 'module.'" *Williamson*, 792 F.3d at 1351; Michalson, ¶115.

Function: Claims 3 and 16 recite the following function for the claimed "user verification module": "verifying the identity of user of the device." Michalson, ¶116. Claims 4 and 17 recite the same function and further recite that the user verification module "executes a password protection algorithm for verifying the identity of the user of the device." *Id.*, ¶117. Claims 5 and 18 further recite that the "user verification module" "compris[es] an identity capture device for verifying the identity of the user of the device." *Id*.

Structure: User verification module 130 "will indicate and verify the identity of the user of the device 100." Ex-1001, 5:49-51; Michalson, ¶118. "The user verification module 130 may execute a password protection algorithm or may

include an identity capture device, either incorporated into the device 100 or coupled externally via a cable." Ex-1001, 5:51-54; Michalson, ¶118. An identity capture device "may be a biometric device, such as a retinal scanning device, finger print reader, facial recognition reader or another type of user identity verification input device which will collect information on the user to be compared to information that has previously been stored in the device's memory." Ex-1001, 5:54-59; Michalson, ¶118.

H. "a transmission module for transmitting" (Claims 12, 14, 22)

Once more, the claimed "transmission module" uses "module" as "a well-known nonce word that can operate as a substitute for 'means' in the context of § 112, para. 6." *Williamson*, 792 F.3d at 1350; *Rain Computing*, 989 F.3d at 1006. Adding "transmission" before "module" invokes only the function of transmitting, not particular structure, and thus does "not impart structure into the term 'module.'" *Williamson*, 792 F.3d at 1351; Michalson, ¶119.

Function: Claim 12 recites the following function for the claimed "transmission module": "transmitting the encrypted location information to an external computing device." Michalson, ¶120. Claims 14 and 22 more narrowly recite that the location information is transmitted "from the storage module to an external computing device." *Id*.

Structure: The "GPS device may further include a transmission module or connection, e.g., hardwire or wireless, to port the information to a computer." Ex-1001, 2:4-7; Abstract; Michalson, ¶121. The disclosed "transfer will be done by transmission module 112 including hardwired and/or wireless connectivity," and may use "hard wire cabling e.g., parallel or serial cables, USB cable, Firewire (1394 connectivity) cables, and the appropriate port" or "various known wireless protocols including but not limited to Bluetooth™ interconnectivity, infrared connectivity, radio transmission connectivity including computer digital signal broadcasting and reception commonly referred to as Wi-Fi or 802.11.X (where x denotes the type of transmission), or any other type of communication protocols or systems currently existing or to be developed for wirelessly transmitting data." Ex-1001, 6:26-40; Michalson, ¶121.

VII. Ground 1: *Fish* (Claims 1, 11-14, 19-22)

Claims 1, 11-14, and 19-22 are unpatentable under § 103 in view of *Fish*, alone or with the knowledge of a POSITA.

A. Claim 1

1. [1pre] A location information device with secure data storage comprising:

To the extent the preamble is limiting, *Fish* teaches a location information device with secure data storage. *E.g.*, Ex-1004, Abstract, 2:45-57, 3:10-27, 4:8-15, 4:57-59, 7:30-56, 8:41-53, 11:8-14, Fig. 1; Michalson, ¶¶142-143.

Fish discloses a "vehicle **data archive** system" with an "instrumentation interface [that] receives at least one sensory data signal of the vehicle" and stores it in memory. Ex-1004, Abstract; Michalson, ¶144. The information may be encrypted (i.e., "secure," as claimed) with its **data archive** "securely archiving signals," such as "situational data concerning a vehicle." Ex-1004, 1:6-9, 1:36-54, 2:16-43; Michalson, ¶144. *Fish* teaches storing and encrypting information in "**data archive 10** located in [the] vehicle." Ex-1004, 2:45-57, Fig. 1; Michalson, ¶144.

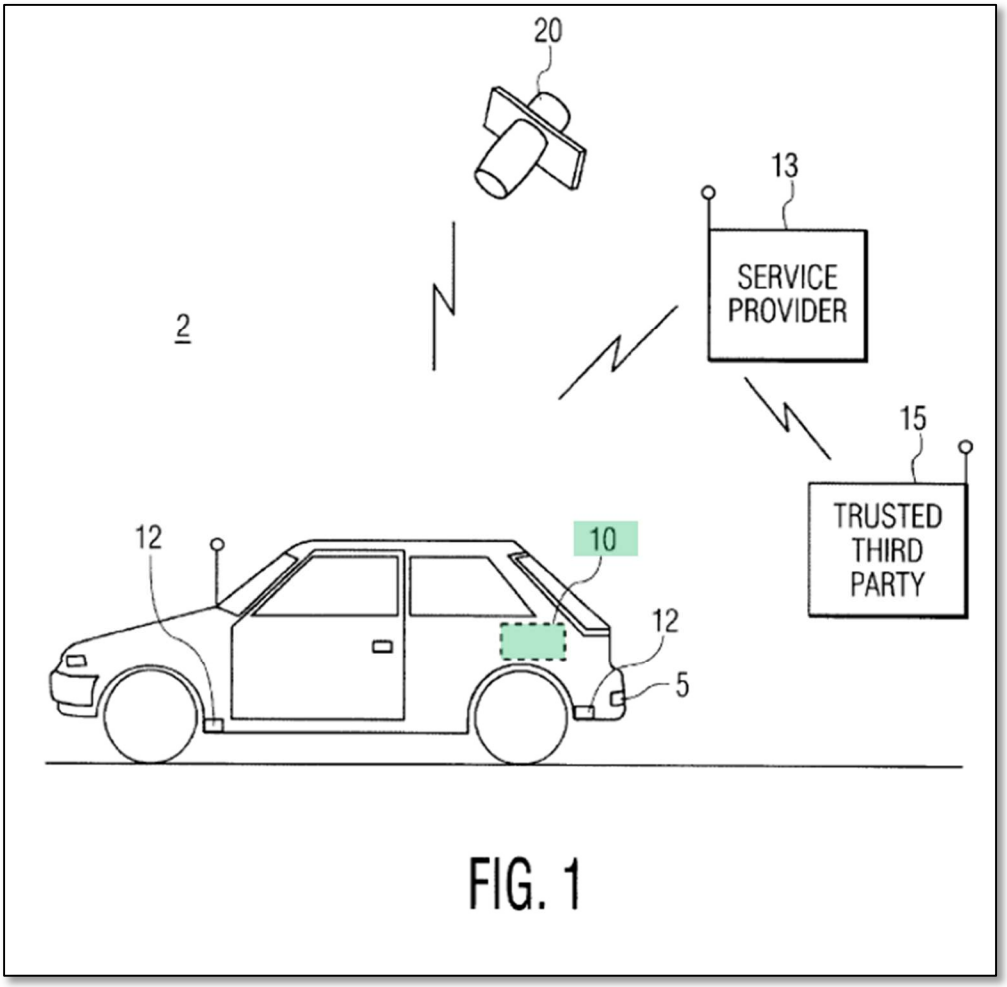
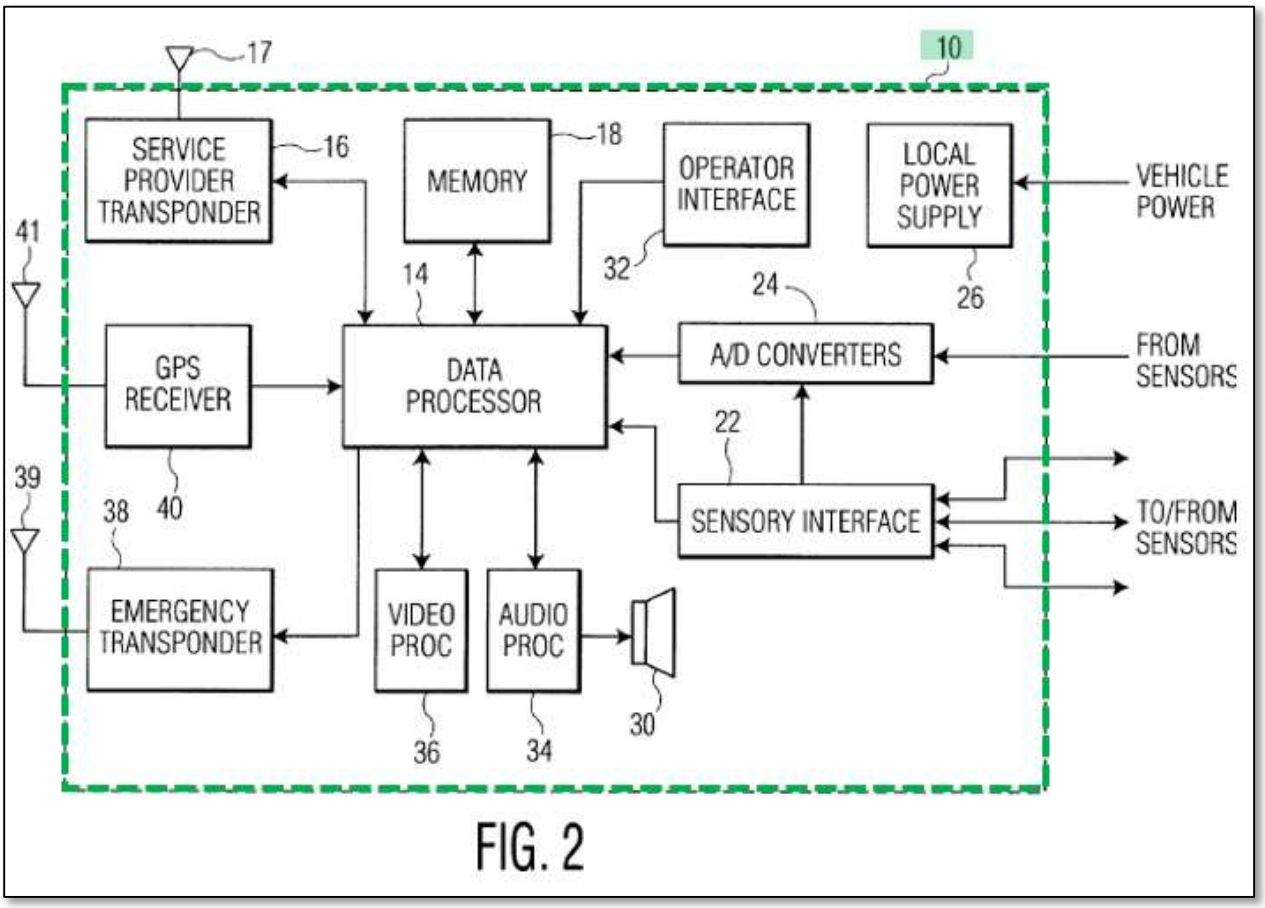


FIG. 1

Ex-1004, Fig. 1; Michalson, ¶144. *Fish*'s **data archive 10** is illustrated further in Figure 2:



Ex-1004, Fig. 2; Michalson, ¶144.

Location (e.g., GPS) information is stored in memory 18 of "**data archive 10**." Ex-1004, 3:10-27, 4:8-15, 4:22-29, 4:57-59, 7:30-56, 8:41-53, 11:8-14, Fig. 1; Michalson, ¶145.

2. [1a] a housing;

Fish teaches obvious a housing for the location information device. Ex-1004, 2:66-3:9; Michalson, ¶146.

"The data archive 10 of the exemplary embodiment is preferably **housed** in a **sealed cabinet**." Ex-1004, 3:2-4; Michalson, ¶¶147-148. This housing "is desirably fire and water resistant and designed to offer significant resistance to crush forces typically encountered in catastrophic vehicle wrecks." Ex-1004, 3:6-9; Michalson, ¶¶147-148. A POSITA would have understood this teaches the "housing" of claim 1, which is not claimed or described as requiring unique physical or functional attributes. Michalson, ¶148.

3. [1b] a locational information module for determining location information of the device, the determined location information being at least one route traveled by the device;

Fish discloses and renders obvious a locational information module for determining location information of the device, the determined location information being at least one route traveled by the device. *E.g.*, Ex-1004, 4:22-29, 5:27-32, 7:23-51, Figs. 1-2; Michalson, ¶149.

The claimed "locational information module" is a means-plus-function term with a function of determining location information of the device and disclosed structure of a receiver and antenna employing conventional locational information processing technology such as GPS. Ex-1001, 3:56-62; Michalson, ¶150. *Fish* discloses this same function and structure with **GPS receiver 40** and **antenna 41**.

Data archive 10 may include **GPS receiver 40**, which determines location information. Ex-1004, 4:22-29, Fig. 2; Michalson, ¶151. **GPS receiver 40** also

records temporal data corresponding to the location information. Ex-1004, 4:22-29, 5:27-32; Michalson, ¶151. **GPS receiver 40** has an associated **antenna 41**. Ex-1004, Fig. 2; Michalson, ¶151.

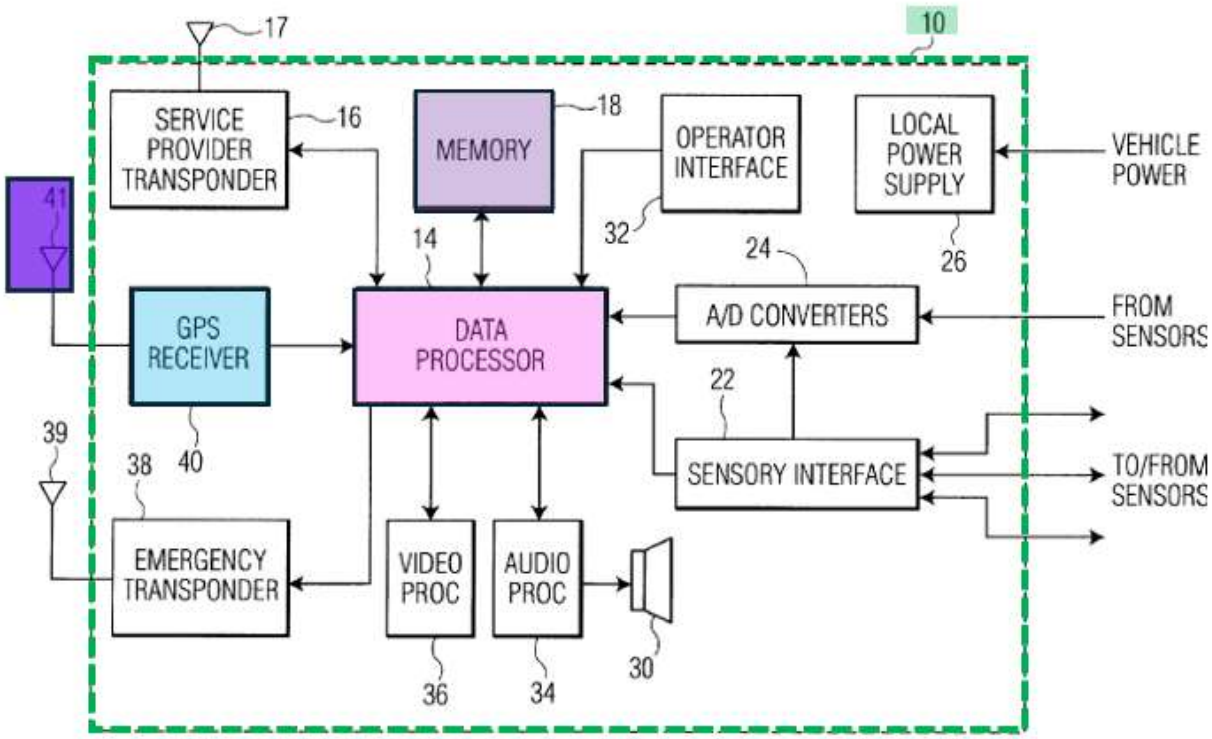


FIG. 2

Ex-1004, Fig. 2; Michalson, ¶151.

Fish also teaches storing location data at a "predetermined interval (e.g., 15 seconds)" in case of vehicle accidents. Ex-1004, 7:23-29; Michalson, ¶152. A POSITA would have understood that by storing location data collected at predetermined time intervals, the resulting data provides the route traveled by the device. Michalson, ¶¶152-153. This, too, discloses and renders obvious the

determined location information being at least one route traveled by the device, as claimed. Ex-1004, 5:27-32, 7:30-52, 11:8-26; Michalson, ¶¶152-155.

Fish also provides an example where a vehicle travels a particular route and data archive 10 stores encrypted route traveled data:

> For example, where a vehicle is traveling 60 mph along US. route 1 going south at 4PM EST., the speed data and operational details such as the pressure on the accelerator pedal and break pedal and the direction of the steering wheel are continuously provided to data archive 10, the time, **location, and direction data can be derived from the data provided by GPS receiver 40**. . . . Upon a collision, the sensors produce the predetermined sensory data signal (e.g. airbag deployment) the data archive 10 would halt data collection operations encrypt and sign any pending sensory data. In this way, data archive could be accessed after the collision to assess the conditions which preceded the accident.

Ex-1004, 11:8-26, 5:27-32; Michalson, ¶¶156-157. This too discloses and renders obvious the determined location information being at least one route traveled by the device. Such a route includes the time, location, direction, and/or cartographic data of the traveling vehicle. Ex-1004, 11:8-26, 5:27-32; Michalson, ¶158.

As another example, *Fish* discloses **data processor 14** using a portion of **secure memory 18** with preloaded cartographic content in conjunction with GPS information to identify cartographic locations, i.e., map locations:

> Although the primary function of the **secure memory 18** is to store the operational, situational and environmental data derived from the sensors 12, In the

> exemplary embodiment, a portion of **secure memory 18** is reserved for use by the **data processor 14** to enable GPS functionality, sensory data signal conditioning, and audio/video processing functionality. In this embodiment, **cartographic content may be preloaded** into the **secure memory 18** upon manufacture for use in conjunction with **data processor 14** and **GPS receiver 40** **for identifying a cartographic location corresponding to latitude and longitude coordinates derived from the GPS signal**.

Ex-1004, 7:30-41; Michalson, ¶159. Similarly, *Fish*'s claim 21 recites a GPS communication module "responsive to global positioning signals for identifying a cartographic location of the modular data archive." Ex-1004, 14:23-27; Michalson, ¶160. A "GPS signal for identifying the latitudinal and longitudinal coordinates of the data archive 10 [] may be translated to a geographical location if the secure memory 18 is preloaded with cartographic content." Ex-1004, 7:42-49; Michalson, ¶161. Also, latitude and longitude "may simply be recorded" without translation into cartographic location. Ex-1004, 7:49-51; Michalson, ¶161. *Fish* thus discloses cartographic locations are more than mere GPS coordinates, and a POSITA would have understood *Fish*'s cartographic locations to represent a route traveled. Michalson, ¶¶161-163.

4. [1c] an encryption module for encrypting the determined location information;

Fish discloses and renders obvious an encryption module for encrypting the determined location information. *E.g.*, Ex-1004, 1:35-54, 2:16-42, 3:10-37, 4:8-21,

5:27-32, 7:30-52, 13:9-22 (claim 10), 14:23-27 (claim 21), Figs. 1-3; Michalson, ¶164.

The claimed encryption module is a means-plus-function term, with a function of encrypting the determined location information and disclosed structure of an encryption technique, such as those referenced in the specification. Ex-1001, 4:60-66; Michalson, ¶165. *Fish* discloses this function and structure because its **data processor 14** or **data archive 10** performs the same conventional types of data encryption disclosed in the '192 patent. *E.g.*, Ex-1004, 4:43-5:3, 9:18-28, 10:16-30, 12:1-12; Michalson, ¶165.

Fish stores data on its data archive system using a "secret encryption key" and other encryption techniques. Ex-1004, 1:35-54, 2:16-24, 2:25-42, 3:10-37, 4:8-21, 5:27-38, Figs. 2-3; Michalson, ¶166. **Data processor 14** of **data archive 10** **may** receive keys from a service provider to encrypt and store information in **memory 18**. Ex-1004, 4:43-54, 13:9-22 (claim 10), Figs. 1-2; Michalson, ¶166.

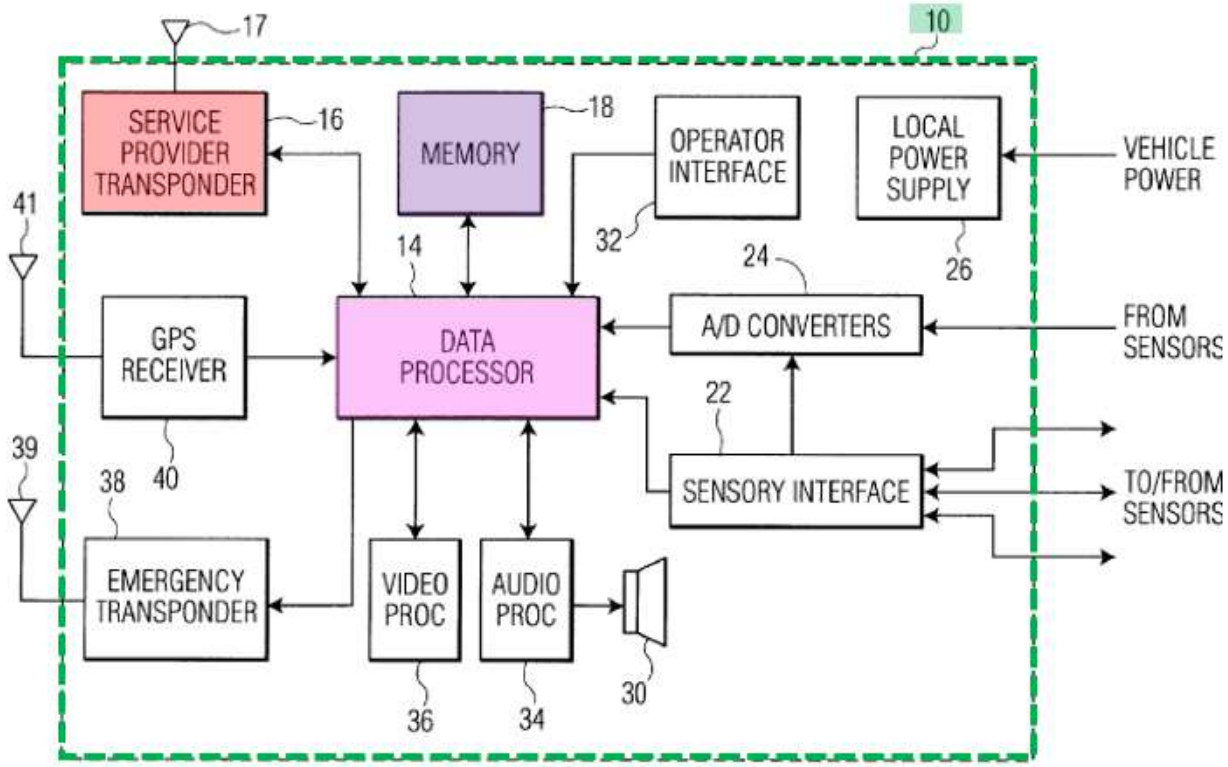


FIG. 2

Ex-1004, Fig. 2; Michalson, ¶166.

Encrypted and stored data includes GPS information and "cartographic information." Ex-1004, 4:8-22, 5:27-32, 7:30-49, 14:23-27 (claim 21); Michalson, ¶167. The encryption techniques of *Fish*—similar to the '192 patent itself—include Diffie-Hellman key exchange, and the like. Ex-1004, 4:66-5:4, 9:25-31, 10:5-11, 10:26-30, 12:1-5; *see also* Ex-1001, 4:60-5:3 (encryption techniques such as "DES, Triple-DES, Blowfish, RC2, RC4, RC5, etc.," and "Diffie-Hellman, RSA, ElGamal, etc."); Michalson, ¶167.

5. [1d] a removable storage module for storing the encrypted location information, the removable storage module being removably disposed in the housing; and

Fish discloses and renders obvious a removable storage module for storing the encrypted location information, the removable storage module being removably disposed in the housing, as claimed. *E.g.*, Ex-1004, 7:6-29; Michalson, ¶168.

The claimed removable storage module is a means-plus-function term, with a function of storing the encrypted location information and disclosed structure of storage removably disposed in the housing, e.g., magnetic memory, optical memory, CD and DVD media, solid-state memory, CompactFlash card, a Memory Stick, SmartMedia card, MultiMediaCard (MMC), or SD memory. Michalson, ¶169.

Fish's "secure memory 18 [may be] a **removable** non-volatile memory device such as a **secure digital (SD) memory device**." Ex-1004, 7:6-29; Michalson, ¶170. "[S]ecure memory 18 is **removable** to allow for easy access to the data after an accident." Ex-1004, 7:6-29; Michalson, ¶170. This includes encrypted location information stored in secure memory 18. Ex-1004, 11:44-51, 1:46-50, 3:10-4:7, Fig. 2; Michalson, ¶ *Fish* discloses and a POSITA would have understood that *Fish*'s housing or sealed cabinet for its data archive 10 would be a physical housing. Ex-1004, 3:2-9; Michalson, ¶170. According to such disclosure,

Fish's removable "**secure memory 18**" (e.g., SD memory, or the like) would be removably disposed in the housing. Michalson, ¶170.

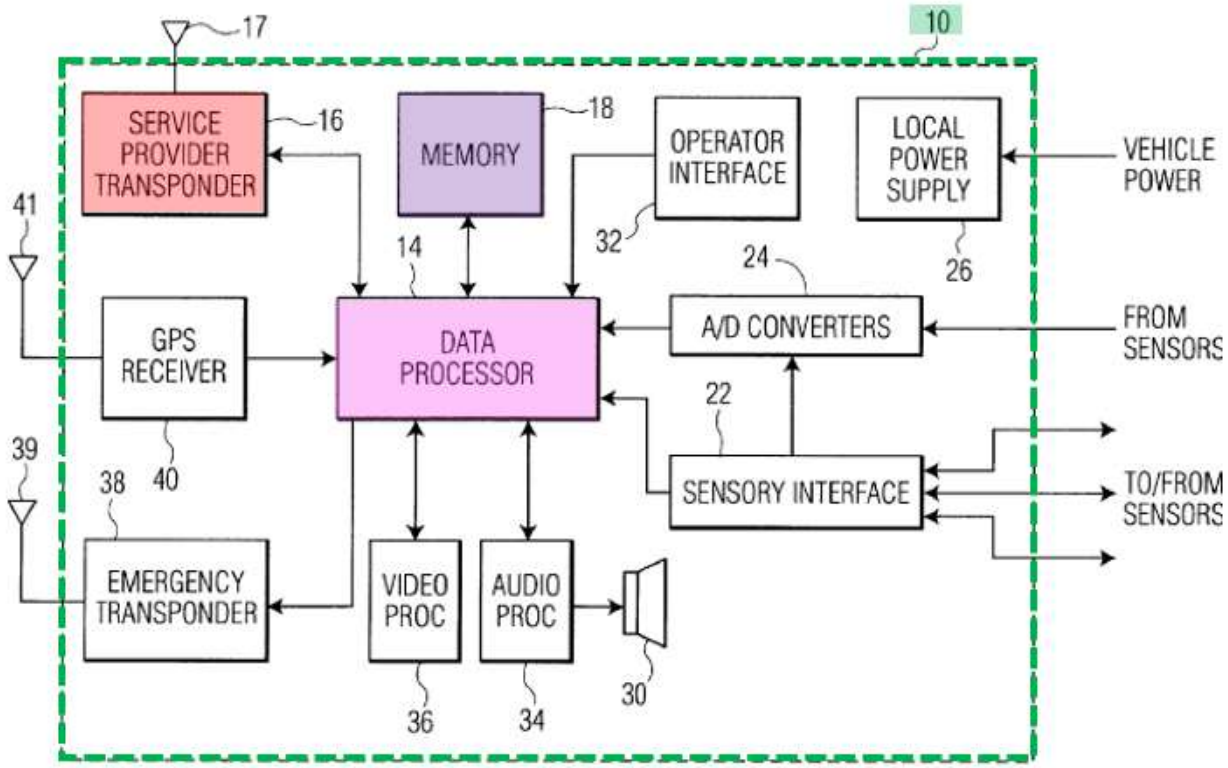


FIG. 2

Ex-1004, Fig. 2; Michalson, ¶170.

6. [1e] a processing module for sending the encrypted location information to the removable storage module removably disposed in the housing and retrieving the encrypted location information from the removable storage module.

Fish discloses a processing module for sending the encrypted location information to the removable storage module removably disposed in the housing and retrieving the encrypted location information from the removable storage

module, as claimed. *E.g.*, Ex-1004, 4:8-22, 4:51-54, 5:27-32, 6:63-7:5, 7:30-49, Fig. 2; Michalson, ¶171.

The claimed processing module is a means-plus-function term, with functions of sending the encrypted location information to the removable storage module and retrieving the encrypted location information from the removable storage module, and disclosed structure of computer processing module 120, e.g., a microprocessor. Ex-1001, 3:26-34; Michalson, ¶172. *Fish* discloses this function and structure in terms of **data processor 14**, which is or includes a processing module that exchanges "control information and data" with "**secure memory 18**" and other system components, including **GPS receiver 40**. Ex-1004, 6:63-7:5; Michalson, ¶173. **Data processor 14** encrypts data and stores encrypted data, including location information. Ex-1004, 4:8-22 (GPS data "may be combined . . . with the sensory signal data prior to encryption"), 4:51-54 (**data processor 14** generates encryption key), 5:27-32 (data archive may encrypt temporal, cartographic, GPS, and sensory data), 6:63-7:5 (data processor 14 controls exchange of information), 7:30-49 (**data processor 14** "identif[ies] a cartographic location" and stores longitude, latitude, and cartographic data in **secure memory 18**), Fig. 2; Michalson, ¶173.

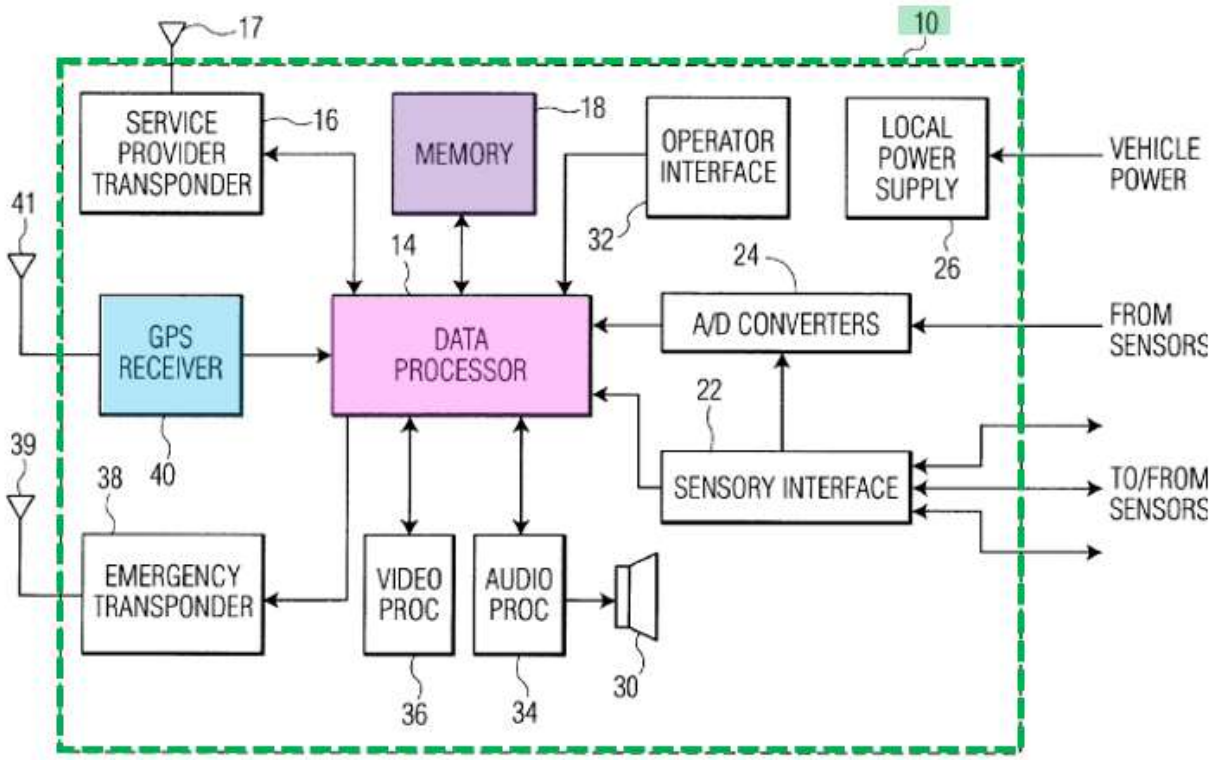


FIG. 2

Ex-1004, Fig. 2; Michalson, ¶173.

Once encrypted location data is stored on *Fish*'s **secure memory 18**, it may be retrieved via **data processor 14**. Ex-1004, 7:6-29; Michalson, ¶174. Indeed, retrieving this data from data "archive" 10 is the purpose of data archive 10. Ex-1004, Abstract, 1:36-45, 5:51-54, 7:12-17, 10:16-30, 11:24-26; Michalson, ¶174.

B. Claim 11

1. [11] The device as in claim 1, wherein the location information further includes at least one of a home address, destination addresses and velocity of the device at predetermined times.

Fish discloses and renders obvious the device as in claim 1, wherein the location information further includes at least one of a home address, destination addresses, and velocity of the device at predetermined times. Michalson, ¶175. *Fish* discloses and renders obvious that its location information includes each of home addresses, destination addresses, and velocities of the vehicle containing data archive 10.

First, *Fish* discloses storing location (e.g., **GPS** or **cartographic**) information as described above. *See supra* claim [1b]; Michalson, ¶176. According to *Fish*, its system identifies and stores "**cartographic locations**." *E.g.*, Ex-1004, 7:30-41; Michalson, ¶176. *Fish* stores in data archive 10 a "cartographic location corresponding to latitude and longitude coordinates derived from the **GPS** signal." Ex-1004, 7:30-41, 14:23-27 (claim 21); Michalson, ¶176. *Fish* notes that "location and temporal signals" from GPS receiver 40 are "widely available" in commercial devices, and a "GPS signal for identifying the latitudinal and longitudinal coordinates of the data archive 10 [] may be translated to a geographic location if the secure memory 18 is preloaded with cartographic content." Ex-1004, 7:42-49;

Michalson, ¶176. A POSITA would have understood *Fish*'s GPS and cartographic locations to include destination, home, or any other addresses where the vehicle containing data archive 10 is located. Michalson, ¶176. Indeed, when a vehicle containing data archive 10 was positioned at a user's home or destination, *Fish*'s stored cartographic or GPS data would be their home or destination address. Michalson, ¶176.

Second, *Fish* discloses storing **velocity** (speed and direction) data. Michalson, ¶177. *Fish* stores **acceleration** (change in velocity over time) data. Ex-1004, 2:58-65, 11:8-29; Michalson, ¶177. *Fish* also stores and encrypts "**speed data**" and multiple types of "**direction data**," along with "**time**," to data archive 10. Ex-1004, 11:8-26, 2:61-65; Michalson, ¶178. Further, *Fish* stores latitudinal and longitudinal information over time, which a POSITA would have understood represents motion of the vehicle. Ex-1004, 4:8-14, 7:30-55; Michalson, ¶178. It would have been known and obvious to a POSITA that the stored speed and directional data over time are velocity data. Michalson, ¶178.

C. Claim 12

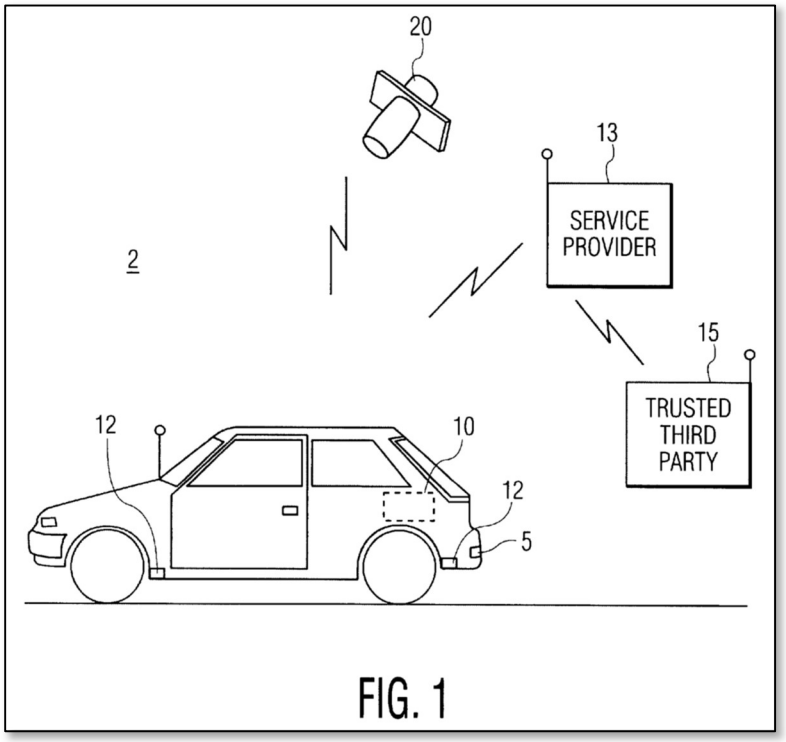
1. [12] The device as in claim 1, further comprising a transmission module for transmitting the encrypted location information to an external computing device.

Fish discloses the device as in claim 1, further comprising a transmission module for transmitting the encrypted location information to an external computing device, as claimed. Michalson, ¶179.

The claimed "transmission module" is a means-plus-function term, with a function of transmitting the encrypted location information to an external computing device and disclosed structure of "a transmission module or connection, e.g., hardwire or wireless, to port the information to a computer." Ex-1001, 2:4-7; Abstract, 6:26-40; Michalson, ¶180. *Fish* discloses and renders obvious this function and structure.

First, *Fish*'s **service provider transponder 16** is a transmission module of data archive 10, as recited in claim 12. Michalson, ¶181. **Service provider transponder 16** is a "communication module" for transmitting data via antenna 17 to service provider 13, and "[d]ata transmitted to the service provider 13 may include, for example, an electronic signature derived from the sensory data signals and location data." Ex-1004, 4:43-65; Michalson, ¶181. *Fish* sends encrypted location information to service provider 13. Ex-1004, 5:4-38 (data archive 10 sends composite encrypted sensory and location data to service provider 13), 8:41-52,

10:16-31; Michalson, ¶181. Service provider 13 is an external computing device, as recited in claim 12. Ex-1004, 9:51-55 (service provider 13 comprises processor and memory), Figs. 1, 3; Michalson, ¶181. Indeed, service provider 13 is external to data archive 10:



Ex-1004, Fig. 1; Michalson, ¶181.

Second, *Fish*'s "**emergency transponder 38**" is also a transmission module of data archive 10 for sending location information via antenna 39 to remote computing devices, as recited in claim 12. Ex-1004, 8:9-40, 9:56-65; Michalson, ¶182.

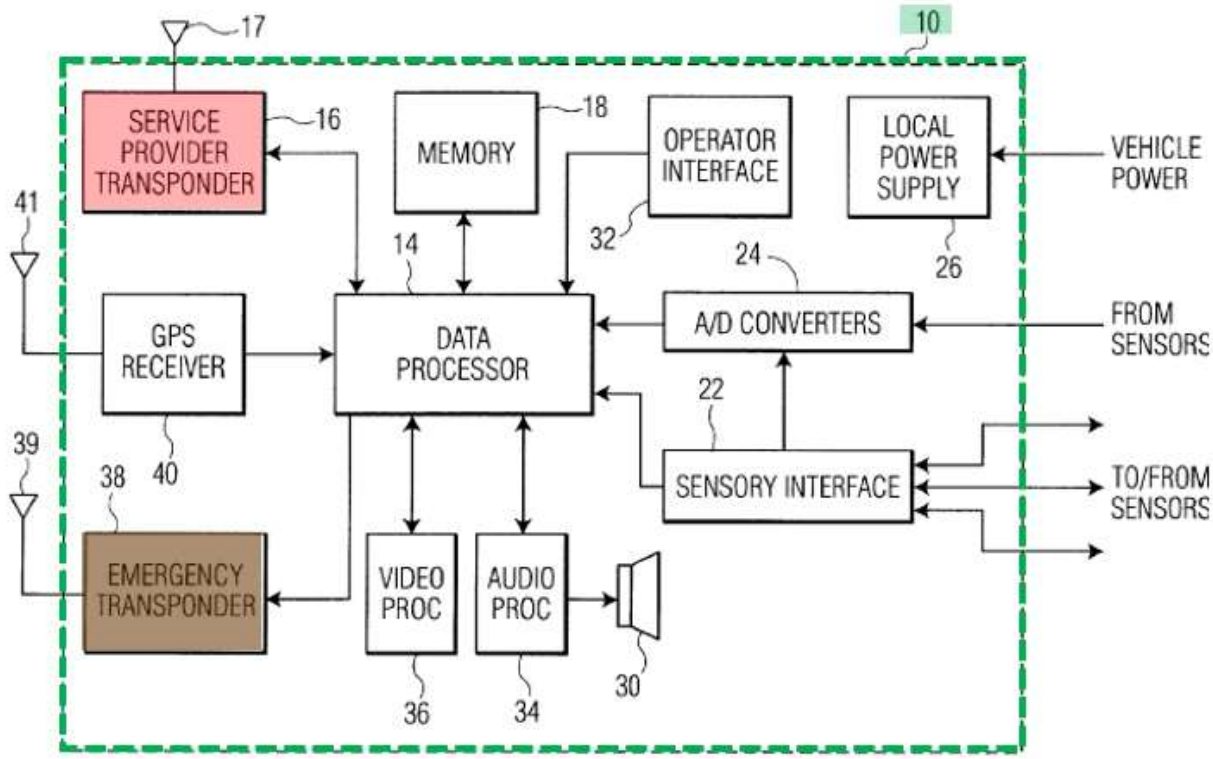


FIG. 2

Ex-1004, Fig. 2; Michalson, ¶182.

D. Claim 13

1. [13pre] A location information device with secure data storage comprising:

Fish discloses and renders obvious [13pre]. *See supra* claim [1pre]; Michalson, ¶183.

2. [13a] a housing;

Fish discloses and renders obvious [13a]. *See supra* claim [1a]; Michalson, ¶184.

3. [13b] a locational information module for determining location information of the device, the determined location information being at least one route traveled by the device;

Fish discloses and renders obvious [13b]. *See supra* claim [1b]; Michalson, ¶185.

4. [13c] an encryption module for encrypting the determined location information;

Fish discloses and renders obvious [13c]. *See supra* claim [1c]; Michalson, ¶186.

5. [13d] a storage module for storing the encrypted location information; and

See supra claim [1d]. Unlike claim 1, claim 13 does not recite that the "storage module" is "removable." Michalson, ¶187. Claim 13 is thus broader in this respect and is taught by *Fish*. *Id*.

6. [13e] a processing module for sending the encrypted location information to the storage module and retrieving the encrypted location information from the storage module.

Fish discloses and renders obvious [13e]. *See supra* claim [1e]; Michalson, ¶188.

E. Claim 14

1. [14] The device as in claim 13, further comprising a transmission module for transmitting the encrypted location information from the storage module to an external computing device.

Fish discloses and renders obvious claim 14. *See supra* claim 12. Unlike claim 12, claim 14 more specifically recites that the encrypted location information comes "from the storage module." Michalson, ¶189. This is taught by *Fish* for the reasons discussed regarding claim 12—i.e., *Fish*'s encrypted location information is stored in memory 18. *See supra* claim [1d]; Michalson, ¶189. This encrypted location information is then transmitted via *Fish*'s various transmission modules, as discussed above regarding claim 12. *See supra* claim 12; Michalson, ¶189.

F. Claim 19

1. [19pre] A system for controlling and storing location information comprising:

Fish discloses a system for controlling and storing location information, as recited in [19pre]. Michalson, ¶190. *Fish*'s data archive 10 is a system for controlling and storing location information, including GPS coordinates and identified cartographic locations. *See supra* claim [1pre]; Michalson, ¶190.

2. [19a] a location information device with secure data storage comprising:

Fish discloses and renders obvious [19a]. *See supra* claim [1pre]; Michalson, ¶191.

3. [19b] a housing;

Fish discloses and renders obvious [19b]. *See supra* claim [1a]; Michalson, ¶192.

4. [19c] a locational information module for determining location information of the location information device, the determined location information being at least one route traveled by the location information device;

Fish discloses and renders obvious [19c]. *See supra* claim [1b]; Michalson, ¶193.

5. [19d] an encryption module for encrypting the determined location information;

Fish discloses and renders obvious [19d]. *See supra* claim [1c]; Michalson, ¶194.

6. [19e] a removable storage module for storing the encrypted location information, the removable storage module being removably disposed in the housing; and

Fish discloses and renders obvious [19e]. *See supra* claim [1d]; Michalson, ¶195.

7. [19f] a processing module for sending the encrypted location information to the removable storage module removably disposed in the housing and retrieving the encrypted location information form [sic] the removable storage module; and

Fish discloses and renders obvious [19f]. *See supra* claim [1e]; Michalson, ¶196.

8. [19g] a computing device comprising:

Fish discloses and renders obvious a computing device, as recited in [19g]. Michalson, ¶197. *Fish* uses "facilities" to "directly read the contents of the memory." Ex-1004, 7:6-29; Michalson, ¶197. A POSITA would have understood the "facilities" to be or be part of a computing device, as claimed. Michalson, ¶198.

9. [19h] a reader configured for reading the removable storage module of the location information device when [t]he removable storage module [i]s removably disposed in the reader; and

Fish discloses and renders obvious a reader configured for reading the removable storage module of the location information device when the removable storage module is removably disposed in the reader, as claimed. Michalson, ¶199. Indeed, this is a core purpose of *Fish*. Ex-1004, 1:28-33, 2:16-22, 10:22-25. *Fish*'s "secure memory 18 is a removable non-volatile memory device" (e.g., SD memory), and "is removable to allow for easy **access to the data** after an accident" as well as to be accessible to "facilities (e.g. an external port) provided to directly **read the contents of the memory** without removing it from the data archive 10." Ex-1004, 7:7-17; Michalson, ¶¶198-200.

Fish's "facilities" will "directly read the contents of memory" through a port and would have been equipped to read the SD card. Michalson, ¶201. Standard

computing devices at the time included the ability to read memory through external ports and SD cards when inserted. Michalson, ¶201. A POSITA would have found including SD card reading capabilities disclosed and obvious in light of this common technology and *Fish*'s goal of enabling third parties to identify conditions preceding an accident. Ex-1004, 1:6-33, 2:16-24, 7:23-29, 11:8-29; Michalson, ¶201.

10. [19i] a processor configured to execute a decryption program for decrypting the encrypted location information on the removable storage module removably disposed in the reader.

Fish discloses and renders obvious a processor configured to execute a decryption program for decrypting the encrypted location information on the removable storage module removably disposed in the reader, as claimed. Michalson, ¶202.

Fish decrypts stored encrypted data using cryptographic keys. Ex-1004, 3:50-4:7; Michalson, ¶203. A POSITA would have found it disclosed and obvious to include a decryption program on a device reading *Fish*'s SD card based on these teachings and *Fish*'s goal of enabling parties (e.g., law enforcement or insurers) to identify conditions preceding an accident. Ex-1004, 1:6-33, 2:16-24, 7:23-29, 11:8-29; Michalson, ¶203.

G. Claim 20

1. [20] The system as in claim 19, wherein the location information further includes at least one of a home address, destination addresses and velocity of the device at predetermined times.

Fish discloses and renders obvious claim 20. *See supra* claim 11. Michalson, ¶204.

H. Claim 21

1. [21] The system as in claim 19, wherein the computing device further comprises a memory for storing a plurality of geographical maps and the processor is configured to overlay the location information on at least one of the plurality of geographical maps.

Fish discloses and renders obvious the system as in claim 19, wherein the computing device further comprises a memory for storing a plurality of geographical maps and the processor is configured to overlay the location information on at least one of the plurality of geographical maps, as claimed. Michalson, ¶205.

Fish's data processor 14 uses a portion of secure memory 18 with **preloaded cartographic content** in conjunction with **GPS information** to identify a cartographic (map) location:

> Although the primary function of the secure memory 18 is to store the operational, situational and environmental data derived from the sensors 12, In the exemplary embodiment, a portion of secure memory 18 is reserved for use by the data processor 14 to enable **GPS functionality**, sensory data signal conditioning, and audio/video

> processing functionality. In this embodiment, **cartographic content may be preloaded into the secure memory 18** upon manufacture **for use in conjunction with data processor 14 and GPS receiver 40 for identifying a cartographic location corresponding to latitude and longitude coordinates derived from the GPS signal**.

Ex-1004, 7:30-41; Michalson, ¶206.

It would have been obvious that a device reading *Fish*'s stored cartographic data in conjunction with GPS data would—as taught by *Fish* itself—include preloaded cartographic maps stored in data archive 10 to achieve *Fish*'s goals of representing and recreating vehicle travel information for later analysis. Ex-1004, 7:30-41; Michalson, ¶206. This overlaying of GPS data with map data was obvious and conventional. Ex-1004, 1:6-33, 2:16-24, 3:21-27, 6:25-29, 7:23-29, 8:2-9, 8:49-52, 10:19-25, 10:54-57, 11:8-29; Michalson, ¶207.

I. Claim 22

1. [22pre] A system for controlling and storing location information comprising:

Fish discloses and renders obvious [22pre]. *See supra* claim [19pre]; Michalson, ¶208.

2. [22a] a location information device with secure data storage comprising:

Fish discloses and renders obvious [22a]. *See supra* claim [1pre]; Michalson, ¶209.

3. [22b] a housing;

Fish discloses and renders obvious [22b]. *See supra* claim [1a]; Michalson, ¶210.

4. [22c] locational information module for determining location information of the location information device, the determined location information being at least one route traveled by the location information device;

Fish discloses and renders obvious [22c]. *See supra* claim [1b]; Michalson, ¶211.

5. [22d] an encryption module for encrypting the determined location information;

Fish discloses and renders obvious [22d]. *See supra* claim [1c]; Michalson, ¶212.

6. [22e] a storage module for storing the encrypted location information;

Fish discloses and renders obvious [22e]. *See supra* claim [1d]; Michalson, ¶213. Unlike claim 19, which recites a "removable" "storage module," claim 22 more broadly recites a "storage module," which *Fish* teaches as discussed above. Michalson, ¶213.

7. [22f] a processing module for sending the encrypted location information to the storage module and retrieving

the encrypted location information from the storage module; and

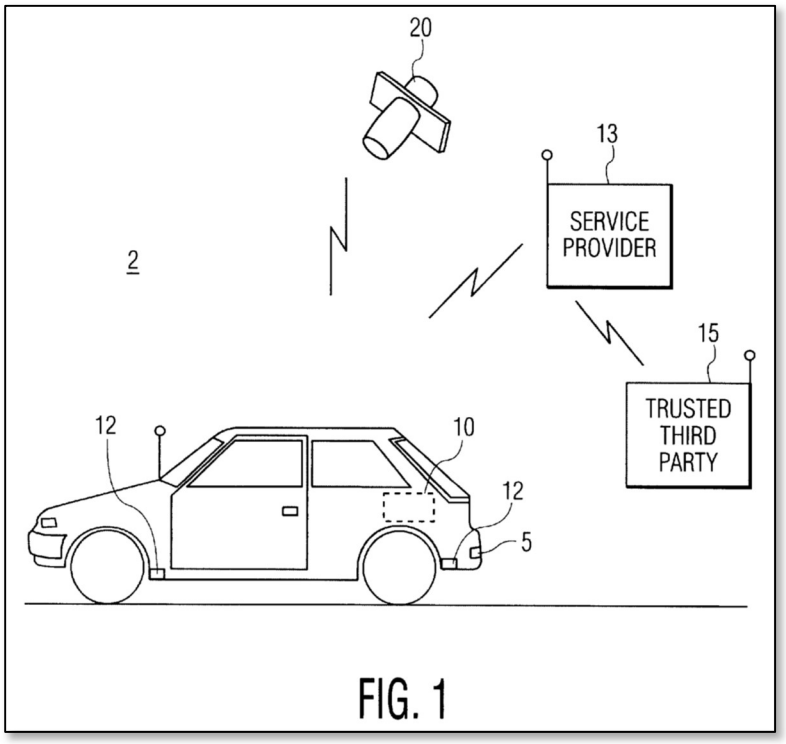
Fish discloses and renders obvious [22f]. *See supra* claim [1e]; Michalson, ¶214. Unlike claim 19, which recites a "removable" "storage module," claim 22 more broadly recites a "storage module," which *Fish* also teaches. Michalson, ¶214.

8. [22g] a transmission module for transmitting the encrypted location information from the storage module to an external computing device; and

Fish discloses and renders obvious [22g]. *See supra* claim 12; Michalson, ¶215.

9. [22h] the external computing device comprising: a connectivity device configured for receiving the encrypted location information form [sic] the location information device; and

Fish discloses and renders obvious the external computing device comprising a connectivity device configured for receiving the encrypted location information from the location information device, as claimed. Michalson, ¶216. *Fish*'s service provider 13 is an external computing device that includes a "data receiver," which is a "connectivity device" as claimed. Ex-1004, 9:51-55, Fig. 3; Michalson, ¶217. Such a connectivity device is required for service provider 13 to communicate with data archive 10, as disclosed. Ex-1004, 4:43-65, 5:4-38, 8:41-52, 9:51-55, 10:16-31, Figs. 1, 3; Michalson, ¶217.



Ex-1004, Fig. 1.

Further, *Fish*'s "**emergency transponder 38**" is a transmission module of data archive 10 for sending location information to additional external computing devices, as claimed. *Id*., 8:9-40, 9:56-65; Michalson, ¶218. Such external computing devices would necessarily have a connectivity device configured for receiving the encrypted location information from *Fish*'s data archive 10. Michalson, ¶218.

10. [22i] a processor configured to execute a decryption program for decrypting the encrypted location information received from the location information device.

Fish discloses and renders obvious a processor configured to execute a decryption program for decrypting the encrypted location information received from the location information device, as claimed. Michalson, ¶219.

Fish's external computing device includes a processor, as claimed. Ex-1004, 9:51-55, Fig. 3; Michalson, ¶220. Data archive 10 encrypts the data according to the key received from the service provider 13, and the processor of external service provider 13 decrypts the received encrypted data. Ex-1004, 9:51-10:36, Fig. 3; Michalson, ¶220. This is both disclosed and inherent in *Fish*, because service provider 13 requires a way to decrypt the received encrypted location data. *Id*.

VIII. Ground 2: *Fish* In View of *Ziv* (Claims 2-4, 15-17)

Claims 2-4 and 15-17 are unpatentable under § 103 in view of *Fish* and *Ziv*, alone or with the knowledge of a POSITA.

A. Motivation to Combine *Fish* and *Ziv*

A POSITA would have been motivated to use *Ziv*'s password protection techniques to further enhance security in *Fish*. Michalson, ¶222. It would have been obvious and beneficial to utilize *Fish*'s "password" (used for data deletion) for other purposes as well, such as selective encryption and decryption of data, as

taught by *Ziv*, to ensure that these operations were performed with proper security. *Id*.

Ziv and *Fish* each disclose using removable (i.e., portable) data storage devices. Ex-1005, Abstract, ¶¶[0001], [0025]; Ex-1004, 7:6-29; Michalson, ¶223. Both describe techniques for ensuring data security through the use of encryption and user passwords. Ex-1005, Abstract, ¶¶[0026], [0031], [0033], [0037]-[0045]; Ex-1004, 3:49-4:7, 5:39-6:3; Michalson, ¶223. A POSITA implementing *Fish*'s data security techniques would have found it obvious and beneficial to enhance security with *Ziv*'s additional password protection techniques. Michalson, ¶¶223-224. This would also enhance flexibility and convenience by enabling different options for protecting encrypted and decrypted data. *Id*.

Fish teaches that, "[t]o ensure that data is not deleted accidentally, . . . the user may be required to enter a password or personal identification number (PIN) via the operator interface 32 before being allowed to delete any data." Ex-1004, 5:60-64; Michalson, ¶225. The user may "confirm any command to delete the data before the data is actually deleted." Ex-1004, 5:64-66; Michalson, ¶225. *Fish*'s password thus helps ensure the security of stored data. Michalson, ¶225. A POSITA would have found it obvious and advantageous to combine this with *Ziv*'s use of a password to move data to a secure storage area. Michalson, ¶225. *Ziv* teaches this in Figure 6:

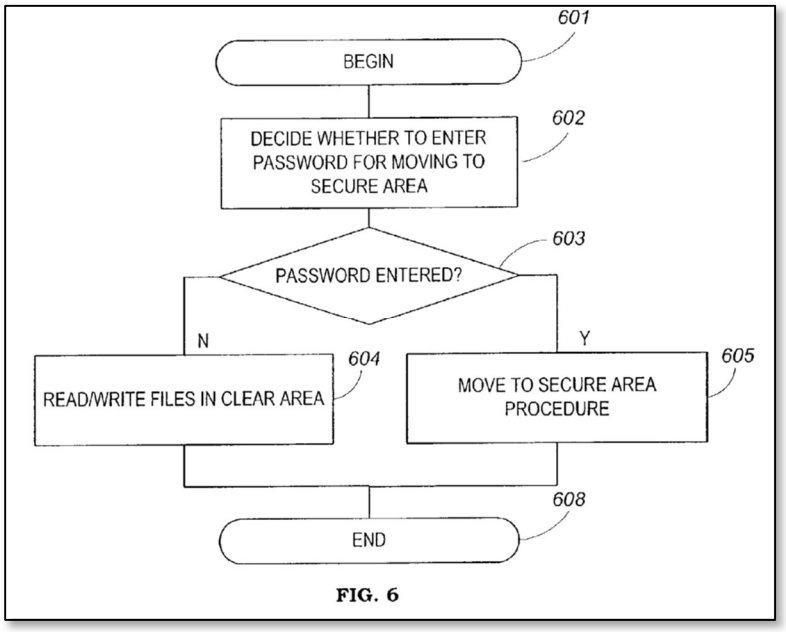


FIG. 6

Ex-1005, Fig. 6.

Similar to *Fish*'s secure storage of data in memory 18, *Ziv* stores data in "secure [user] area 122." *Id*., ¶[0026]; Michalson, ¶226. Secure user area 122 stores "secure user data accessible only upon the provision of a password or biometric signature." Ex-1005, ¶[0026]; Michalson, ¶226; *see also* Ex-1005, ¶¶[0037], [0039], [0040], [0043]; Michalson, ¶¶226-227.

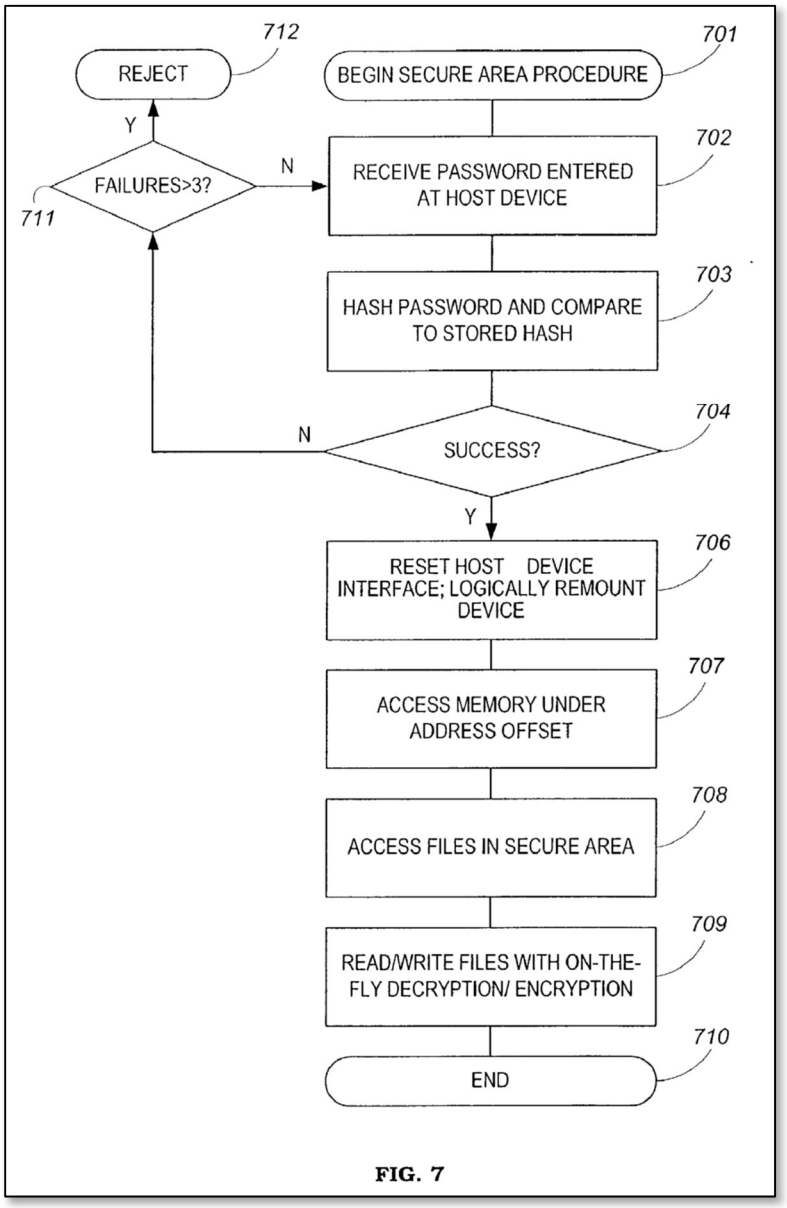


FIG. 7

Ex-1005, Fig. 7.

Ziv's Figure 10 "expands the procedure of step 709 of FIG. 7" by describing "respectively on-the-fly encryption/decryption of data moving from/to host device 101 to/from secure data area 410." Ex-1005, ¶[0045]; Michalson, ¶227. In **step 952** of Figure 10, the encrypted key is retrieved and decrypted using the password. *Id*.

The key may then be used to either encrypt or decrypt data in step 953. *Id.* Encryption is performed in steps 961-964 and **decryption is performed in steps 972-973**. *Id.*

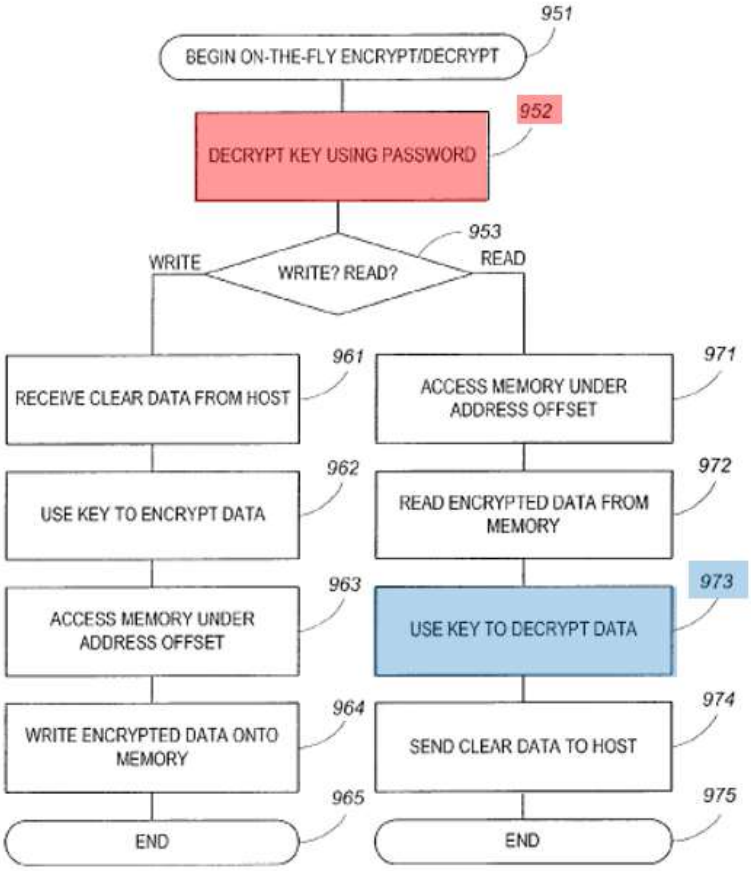


FIG. 10

Id., Fig. 10.

In this way, the user's **password**—as taught by *Fish*—selectively encrypts and **decrypts** stored data. Michalson, ¶¶227-228. It would have been obvious and beneficial to a POSITA to use a password in this manner, especially given *Fish*'s teaching of a password for selective data deletion. *Id.*

B. Claim 2

1. [2] The device as in claim 1, further comprising an input module disposed on the housing configured for receiving a code string input by a user, wherein the user inputted code string is used for encrypting and decrypting the location information stored in the removable storage module.

Fish in view of *Ziv* discloses and renders obvious the device as in claim 1, further comprising an input module disposed on the housing configured for receiving a code string input by a user, wherein the user inputted code string is used for encrypting and decrypting the location information stored in the removable storage module, as claimed. *E.g.*, Ex-1004, 5:39-6:3, Fig. 2; Michalson, ¶229.

The claimed "input module" is a means-plus-function term, with a function of receiving a code string input by a user, wherein the user inputted code string is used for encrypting and decrypting the location information stored in the removable storage module, and disclosed structure of "input module 106, [which] includes a plurality of buttons 108 for inputting data and navigating through a plurality of menus and/or maps." Ex-1001, 3:14-16; Michalson, ¶230. This function and structure are disclosed by *Fish*.

Fish discloses an input module disposed on the housing configured for receiving a code string input by a user. Michalson, ¶231. **Data archive 10** includes

operator interface 32, which is an "input module" as claimed. Ex-1004, 5:39-6:3, Fig. 2; Michalson, ¶231.

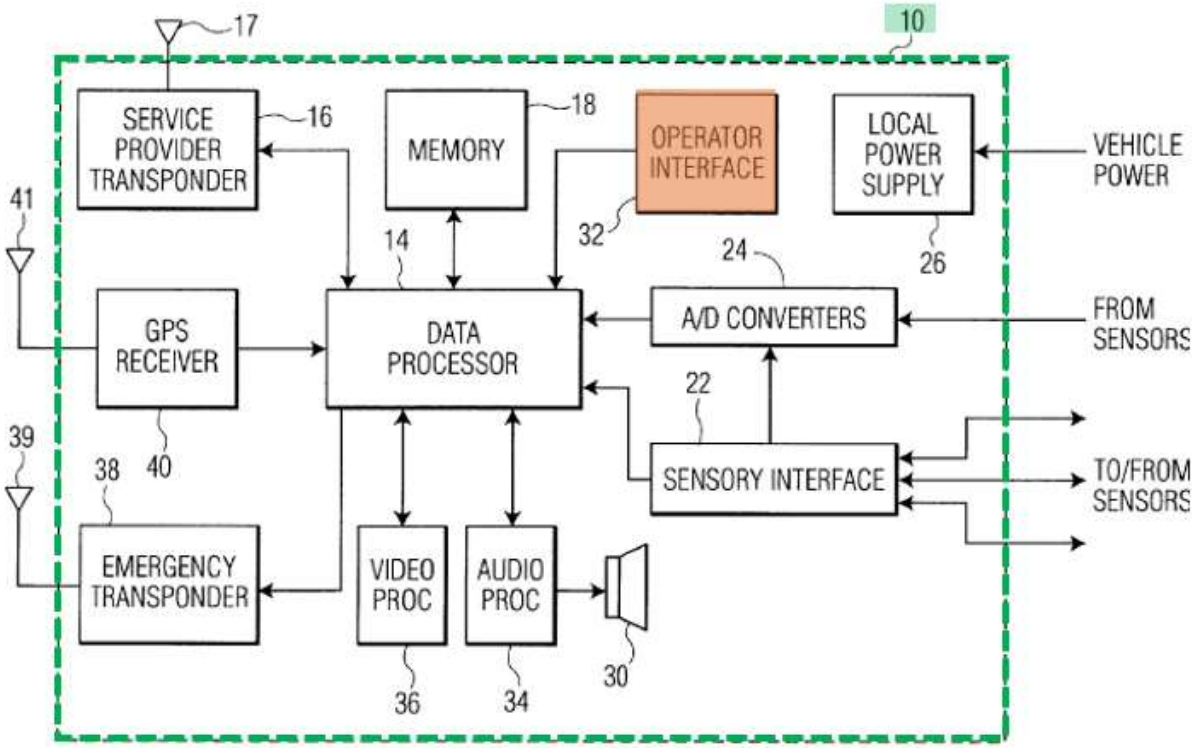
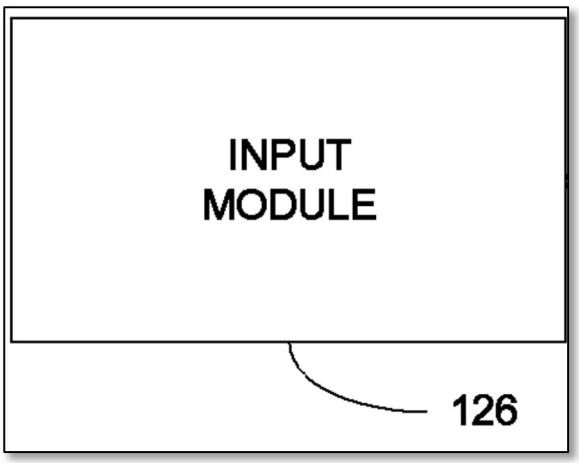


FIG. 2

Ex-1004, Fig. 2; Michalson, ¶231.

"The **data archive 10** of the exemplary embodiment is preferably housed in a sealed cabinet (not shown)." Ex-1004, 3:2-3; Michalson, ¶232. The housing "is desirably fire and water resistant and designed to offer significant resistance to crush forces typically encountered in catastrophic vehicle wrecks." Ex-1004, 3:6-8; Michalson, ¶232. A POSITA would have understood that *Fish*'s **operator interface 32** is disposed "on the housing" in the same manner as the '192 patent

itself. Michalson, ¶232. The patent discloses only that its various components are "disposed in a generally rectangular housing 102," without specifics. Ex-1001, 3:7-9, Fig. 2 (element 126); Michalson, ¶232. The claimed input module 126 is shown below, and the input module 106 of Figure 1 is described as having buttons but no particular physical attributes. Ex-1001, 3:14-16; Michalson, ¶232.



Ex-1001, Fig. 2; Michalson, ¶232.

Comparably, *Fish*'s **operator interface 32** also has buttons. Ex-1004, 5:46-51 ("push-button switches"); Michalson, ¶233. With more detail than the '192 patent, *Fish*'s controls 32 "may be physically located on the data archive 10, or positioned at a readily accessible location of the vehicle 5, such as an area of the passenger or engine compartments." Ex-1004, 5:51-54; Michalson, ¶233.

Fish's **data archive 10** receives "control parameters from **operator interface 32**" to delete or deactivate data. Ex-1004, 5:39-54; Michalson, ¶234. **Operator interface 32** "provide[s] an operator means for adjusting/controlling the

operation of **data archive 10**" and allows one to "control how and when the [stored] data is used." Ex-1004, 5:39-60; Michalson, ¶234. *Fish*'s "controls may be physically located on the **data archive 10**," i.e., disposed on the housing of the location information device, as claimed. *Id.*

For data deletion in *Fish*, "the user may be required to enter a password or personal identification number (PIN) via the **operator interface 32**." Ex-1004, 5:55-6:3; Michalson, ¶235. A password or PIN is a code string input by the user, as claimed. Michalson, ¶235. The '192 patent itself describes a "code string" as any characters a user may choose. Ex-1001, 5:4-9; Michalson, ¶235.

Fish's secure storage of data in memory 18 is similar to *Ziv*'s storage of data in "secure [user] area 122." Ex-1005, ¶[0026]; Michalson, ¶237. *Ziv*'s secure user area 122 stores "secure user data accessible only upon the provision of a password or biometric signature." *Id.*; *see also* Ex-1005, ¶¶[0037], [0039], [0040]; Michalson, ¶237.

A POSITA would have found it obvious to use *Fish*'s password for other data security purposes, especially controlling encryption and decryption of stored data. Michalson, ¶236. *Ziv*'s portable storage device 110, like *Fish*'s data archive 10, includes a user interface for receiving a password. *Id*. *Ziv* teaches entering a password using an interface such as a screen. Ex-1005, ¶[0031]; Michalson, ¶236. As discussed above, *supra* §VIII.A, *Fish* in view of *Ziv* teaches

that the password (i.e., "user inputted code string") is used for controlling encryption and decryption of location information stored in the removable storage module. *Id*.; *id*. ¶¶236-37. To achieve this, *Ziv*'s selective encryption and decryption of stored data (e.g., *Fish*'s stored location information) would be performed. *Id*.

The password is used with a clear key to encrypt stored data in *Ziv*. Ex-1005, ¶¶[0043]-[0045]; Michalson, ¶238. The encrypted key is retrieved and decrypted using the password, and may then be used to either "encrypt[]" or "decrypt[]" data via step 953. Ex-1005, ¶¶[0043]-[0045]; Michalson, ¶238. Encryption is performed in steps 961-964 and decryption is performed in steps 972-973. Ex-1005, ¶¶[0043]-[0045]; Michalson, ¶238. Thus, the password—as in *Fish*—is used to selectively encrypt and decrypt stored data. Michalson, ¶238. A POSITA would have readily and obviously appreciated this beneficial use of a password, especially given *Fish*'s use of a password for selective data deletion. *Id*.

C. Claim 3

1. [3] The device as in claim 1, further comprising a user verification module for verifying the identity of user of the device, wherein the processing module selectively decrypts the location information stored in the removable storage module based on the identity of the user.

Fish in view of *Ziv* discloses and renders obvious the device as in claim 1, further comprising a user verification module for verifying the identity of user of

the device, wherein the processing module selectively decrypts the location information stored in the removable storage module based on the identity of the user, as claimed. Michalson, ¶239.

The claimed "user verification module" is a means-plus-function term, with a function of verifying the identity of user of the device, and disclosed structure of "user verification module 130" that "will indicate and verify the identity of the user of the device 100." Ex-1001, 5:49-59; Michalson, ¶240. *Fish* in view of *Ziv* discloses this function and structure multiple ways.

First, as discussed regarding claim 2, *Fish*'s operator interface 32 allows input of a password or PIN. Ex-1004, 5:55-6:3; Michalson, ¶241. A password or PIN is information that verifies the identity of a user, as claimed. *Id*. *Fish* in view of *Ziv* thus teaches using this password to selectively encrypt or decrypt data, such as *Fish*'s stored location data. *Id*.; *see supra* claim 2; Michalson, ¶¶241-243.

Ziv further discloses and renders obvious a user verification module for verifying the identity of a user of the device in *Ziv*'s disclosure of alternatives to passwords, such as "biometric identification data." Ex-1005, ¶[0006]; Michalson, ¶244. *Ziv* explains a user may provide "a password or biometric signature." Ex-1005, ¶[0026]. The user verification module of *Ziv* is "a biometric reader such as a fingerprint reader." Ex-1005, ¶[0031]; Michalson, ¶244. *Ziv* teaches using biometric parameters as an alternative to a password for selectively encrypting and

decrypting stored data as discussed regarding claim 2. Ex-1005, ¶¶[0033], [0037]-[0038]; Michalson, ¶244. These biometric-based techniques of *Ziv* also disclose that the processing module of *Fish* selectively decrypts the location information stored in the removable storage module based on the identity of the user, as recited in claim 3. Michalson, ¶244.

A POSITA would have been motivated to use *Ziv*'s password techniques for selective encryption and decryption of *Fish*'s stored location data for the reasons discussed above regarding claim 2. Michalson, ¶244. Further, using *Ziv*'s biometric-based techniques for selective encryption and decryption of *Fish*'s stored location data would have been beneficial and obvious for other reasons, such as accepting biometric input (e.g., a fingerprint or retina scan) instead of a password to obviate a user manually typing password characters. Michalson, ¶244. A POSITA would have appreciated the benefits of obviating a full QWERTY keyboard in confined spaces, such as an automobile. Michalson, ¶244. Using a biometric identifier in place of a password, per *Ziv*, would also add heightened security to *Fish* because it is harder to "hijack" or copy biometric details than a password. Michalson, ¶244. A POSITA would thus have found it obvious and beneficial to use *Ziv*'s biometric selective encryption and decryption techniques for *Fish*'s stored location data. Michalson, ¶244.

D. Claim 4

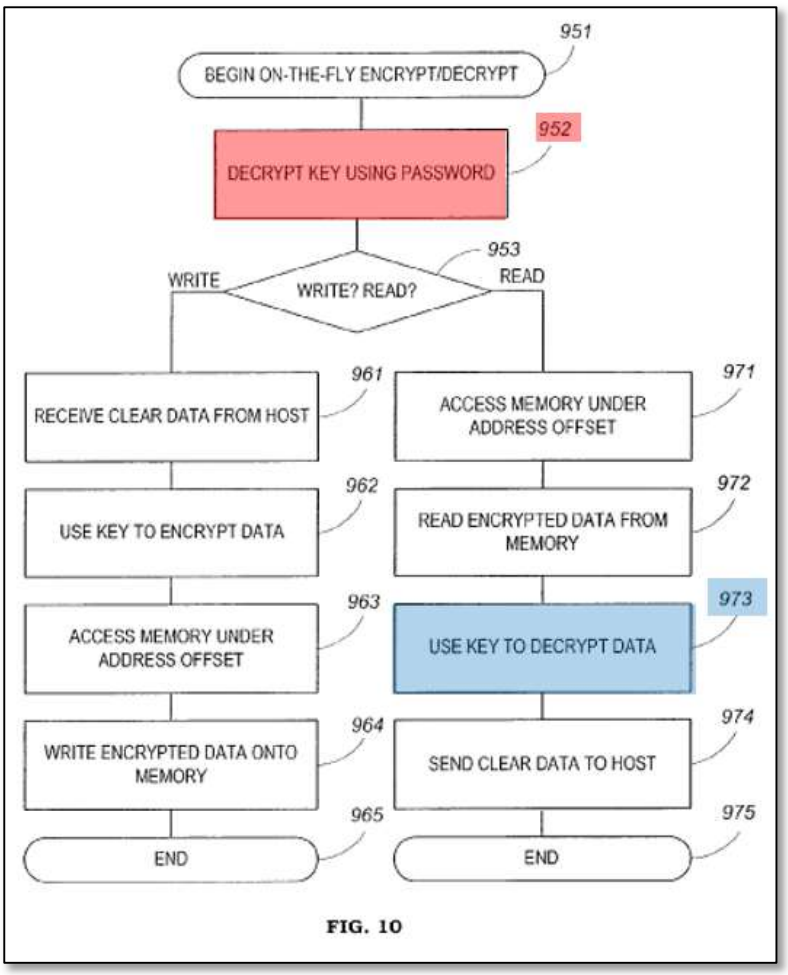
1. [4] The device as in claim 3, wherein the user verification module executes a password protection algorithm for verifying the identity of the user of the device.

Fish in view of *Ziv* discloses and renders obvious the device as in claim 3, wherein the user verification module executes a password protection algorithm for verifying the identity of the user of the device, as claimed. Michalson, ¶245.

First, *Fish* discloses "the user may be required to enter a password or personal identification number (PIN) via the operator interface 32." Ex-1004, 5:55-6:3; Michalson, ¶246. Password-based authentication is a password protection algorithm for verifying user identity, as claimed, as discussed above in connection with claims 2 and 3. Michalson, ¶246. A POSITA would have understood that *Fish*'s verification of a password involves executing a password protection algorithm, as claimed. Michalson, ¶246. The '192 patent discloses nothing specific about any claimed algorithm, only requiring that it somehow verify the password itself. Ex-1001, 5:48-6:7; Michalson, ¶¶246-247.

Second, *Fish* in view of *Ziv* also discloses and renders obvious the user verification module executing a password protection algorithm for verifying the identity of the user of the device. *Fish* in view of *Ziv* teaches this at least two ways, as discussed regarding claims 2 and 3. For example, *Fish* in view of *Ziv* teaches using *Ziv*'s password verification techniques to identify a user and selectively

decrypt data. Michalson, ¶248; *see also supra* claims 2-3. A POSITA would have been motivated to use *Ziv*'s password protection related techniques to enhance the password protection and encryption techniques of *Fish* as described regarding claims 2 and 3, including enhanced data security and better user-friendliness. Michalson, ¶¶248-250; Ex-1005, ¶¶[0043], [0045], Fig. 10.



Ex-1005, Fig. 10 (annotated).

Further, *Fish* in view of *Ziv* also teaches using *Ziv*'s biometric verification techniques to identify a user and selectively decrypt data. Ex-1005, ¶[0006];

Michalson, ¶248. In an example, a user provides "a clear, un-hashed password or biometric signature." Ex-1005, ¶[0026]; Michalson, ¶251. For this, *Ziv* teaches using "a biometric reader such as a fingerprint reader." Ex-1005, ¶[0031]; Michalson, ¶251. *Ziv* also teaches using biometric parameters as an alternative to a password for verifying a user's identity. Ex-1005, ¶¶[0033], [0037]-[0038]; Michalson, ¶251.

A POSITA would have been motivated to use *Ziv*'s password techniques for verifying a user's identity as discussed above. Michalson, ¶251. Further, using *Ziv*'s biometric-based techniques for user verification would have been beneficial and obvious for other reasons, such as accepting biometric input (e.g., a fingerprint or retina scan) instead of a password, obviating the need for a manually typed password—especially helpful in a vehicle lacking a full keyboard. Michalson, ¶251. Further, using a biometric identifier in lieu of a password, per *Ziv*, would strengthen security for *Fish* because it is harder to misappropriate or copy biometric details than a password. Michalson, ¶251. A POSITA thus would have found it obvious and helpful to use *Ziv*'s biometric user verification in *Fish*. Michalson, ¶251.

E. Claim 15

1. [15] The device as in claim 14, further comprising an input module disposed on the housing configured for receiving a code string input by a user, wherein [t]he user inputted code string is used for encrypting and decrypted the location information stored in the storage module.

Fish discloses and renders obvious claim 15. *See supra* claim 2. Unlike claim 2, claim 15 does not recite that its storage module is "removable." Claim 15 is thus broader than claim 2 and taught by *Fish* as explained above regarding claim 2. Michalson, ¶252.

F. Claim 16

1. [16] The device as in claim 14, further comprising a user verification module for verifying the identity of [the] user of the device, wherein the processing module selectively decrypts the location information stored in the storage module based on the identity of the user.

Fish discloses and renders obvious claim 16. *See supra* claim 3. Unlike claim 3, claim 16 does not recite that its storage module is "removable." Claim 16 is thus broader than claim 3 and taught by *Fish* as explained above regarding claim 3. Michalson, ¶253.

G. Claim 17

1. [17] The device as in claim 16, wherein [t]he user verification module executes a password protection algorithm for verifying the identity of the user of the device.

Fish discloses and renders obvious claim 17. *See supra* claim 4. Michalson, ¶254.

IX. Ground 3: *Fish* In View of *Ziv* and *Gehlot* (Claims 5-8, 18)

Claims 5-8 and 18 are unpatentable under § 103 in view of *Fish*, *Ziv*, and *Gehlot*, alone or with the knowledge of a POSITA.

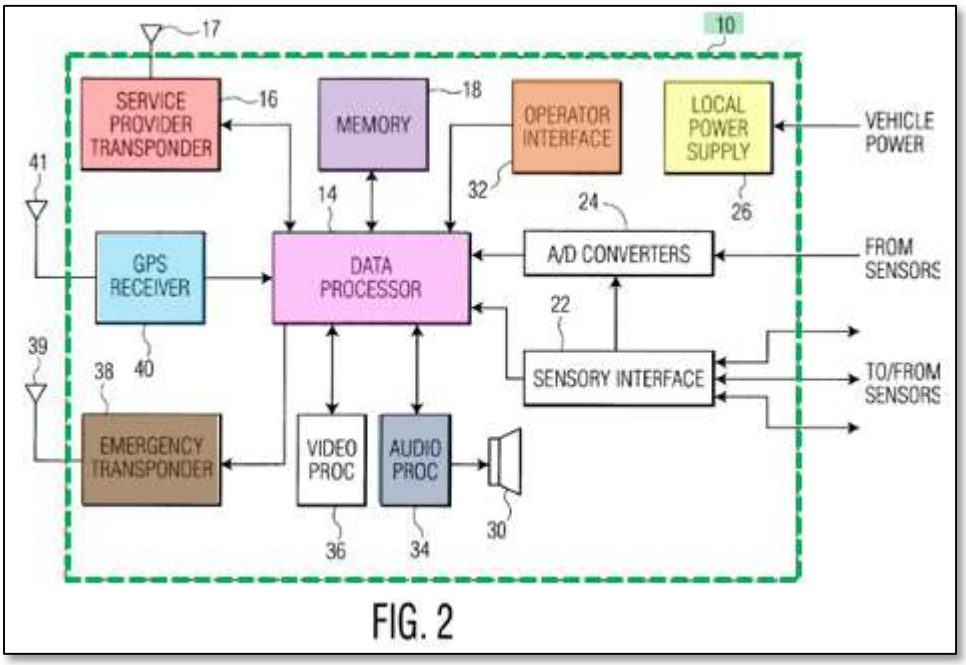
A. Motivation to Combine *Fish*, *Ziv*, and *Gehlot*

A POSITA would have been motivated to use *Gehlot*'s identity capture device and biometric authentication methods to identify users for restricting access to encrypted data on *Fish*'s data archive 10. Michalson, ¶256. *Fish* and *Gehlot* have similar goals and techniques—*Gehlot* uses vehicle-based processing unit 3 to capture vehicle data from vehicle components, including a GPS module 14, Ex-1006, 2:14-16, 3:43-55, 4:37-47, 6:51-58, Figs. 1 & 4, while *Fish* uses vehicle-based data archive 10 including data processor 14, Ex-1004, 4:22-29, 4:51-57, 6:18-29, 6:63-7:5, Figs. 1 & 2; Michalson, ¶257. *Gehlot*'s collected data may be stored at the vehicle (e.g., storage device 7) or transmitted to external entities (e.g., central database 16, D.O.T. or toll collectors 40, car manufacturer 43, law enforcement 42, vehicle insurance 44, DMV 45, or hospital 46), Ex-1006, 4:48-52, 4:64-5:25, Figs. 1 & 4, while *Fish*'s data archive 10 likewise gathers data from a variety of vehicle-based electronic units, including GPS receiver 40, which may be stored locally (e.g., in memory 18) or transmitted to external entities (e.g., service provider 13 or trusted third party 15), Ex-1004, 3:10-27, 4:22-29, 4:43-65, 5:16-26, 5:39-44, 7:6-41, Figs. 1 & 2; Michalson, ¶257. A POSITA would thus have

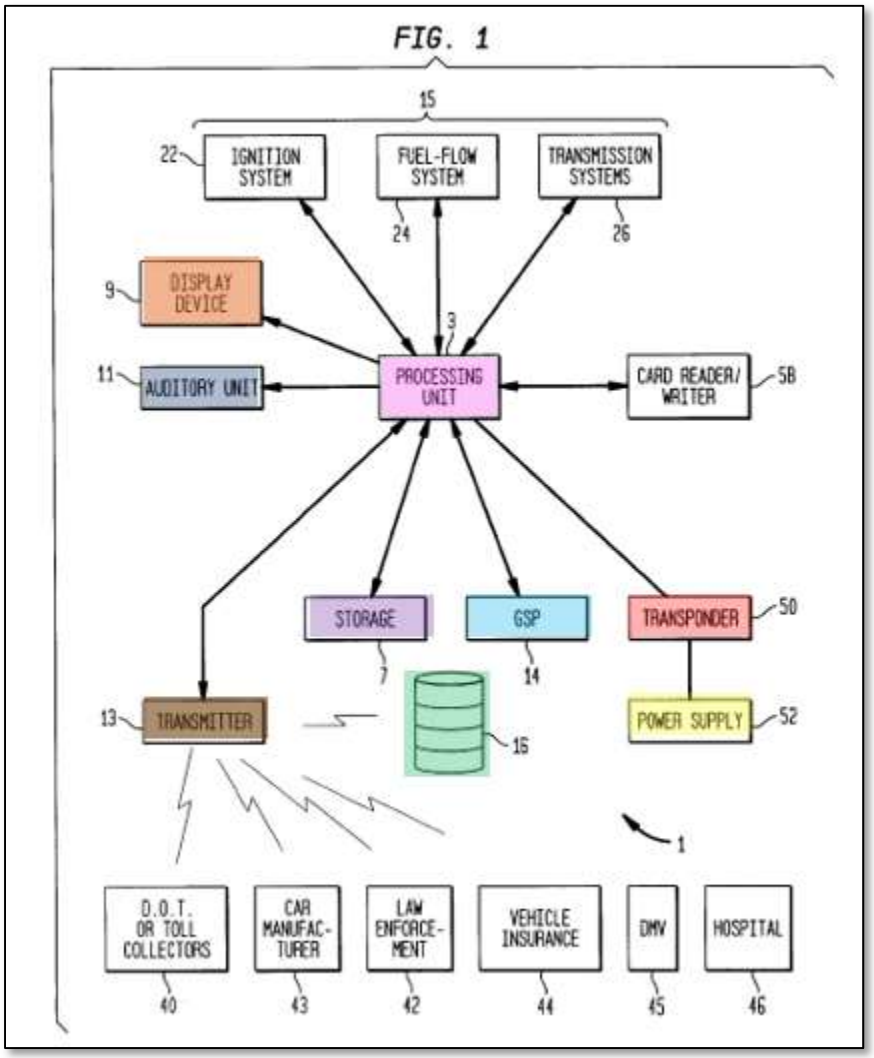
appreciated that *Fish* and *Gehlot* are in the same field of endeavor and relate to similar techniques. Michalson, ¶257.

A POSITA in possession of *Fish* and *Ziv* would have looked to *Gehlot* for additional known techniques to enhance security and privacy of data on *Fish*'s data archive 10. Michalson, ¶258. *Fish* and *Gehlot* are directed to securely storing vehicle location (and other) data. Ex-1004, 4:22-29, 5:27-32, 7:30-52, Figs. 1-2; Ex-1006, 2:1-46, 3:5-42, 4:37-53; Michalson, ¶258. *Gehlot* stores vehicle tracking information so location information can be shared, as with *Fish*'s methods. Ex-1006, 2:14-16, 4:64-5:19, 5:34-67; Michalson, ¶258. Both describe assisting third parties, e.g., law enforcement and insurers, following accidents or theft. Ex-1004, 1:6-33, 2:16-24, 7:23-29, 10:67-11:29; Ex-1006, 1:38-58, 2:1-46, 4:64-5:19; Michalson, ¶258.

Further, *Fish* and *Gehlot* disclose the same basic hardware, and a POSITA would have been familiar with *Gehlot*'s system and related software, which were common by the time of *Fish*. Michalson, ¶259. Both contain a **data processor**, **memory**, **transponder**, **emergency transmitter**, and **GPS**.



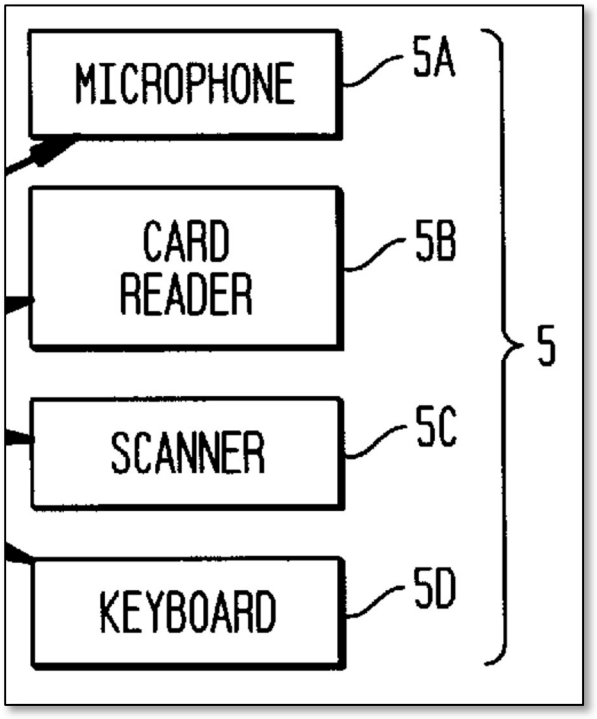
Ex-1004, Fig. 2; Michalson, ¶259.



Ex-1006, Fig. 1; Michalson, ¶259. Both also disclose collecting and storing data on removable storage devices, including location data. Ex-1004, 4:22-29, 5:27-32, 7:6-29 (SD cards); Ex-1006, 3:5-42 ("vehicle data system collects vehicle data and writes the collected data onto removable information cards 28-34."), 4:64-5:19, 6:51-58 (gathering GPS data). Michalson, ¶260.

While *Ziv* discloses capturing a user's biometric identification data for identification purposes, Ex-1005, ¶¶[0006], [0026], [0031], [0037], [0038], a

POSITA would have looked to *Gehlot* for more implementation details on such a biometric identity capture device. Michalson, ¶261. *Gehlot* teaches how "the user is prompted by the VDS to input some form of physical data, i.e. retinal scan, fingerprint, voice recognition, and to insert a driver and/or vehicle information card into a card reader/writer that is designed to work in conjunction with the VDP." Ex-1006, 2:16-21. Michalson, ¶261. VDS 1 includes "a vehicle data processing unit ('VDP') 3 for communicating and collecting data from various vehicle systems 15 and physical input devices 5, e.g., a microphone 5A for voice recognition, a card reader/writer 5B, and a scanner 5C such as a hand or retinal scanner." Ex-1006, 3:6-12; Michalson, ¶261.



Ex-1006, Fig. 4.

Implementing *Gehlot*'s biometric user identification components and/or methods in the combination of *Fish* and *Ziv* would have been advantageous and obvious. Michalson, ¶262. This would enhance flexibility and convenience with different options for accessing encrypted data. Michalson, ¶262. This would amount to simply substituting *Gehlot*'s known biometric authentication to achieve predictable results, enhanced security, in *Fish* and *Ziv*'s system. Michalson, ¶262. Indeed, *Gehlot*, like *Ziv*, teaches that its biometric methods are interchangeable with password-based authentication. Ex-1006, 6:6-8 ("physical data may include the entry of a password via a keyboard, a driver's voice, a driver's retinal scan, a driver's hand-print, or the like."); Michalson, ¶262.

B. Claim 5

1. [5] The device as in claim 3, wherein the user verification module further comprises an identity capture device for verifying the identity of the user of the device.

Fish in view of *Ziv* and *Gehlot*, alone or with the knowledge of a POSITA, discloses and renders obvious the device as in claim 3, wherein the user verification module further comprises an identity capture device for verifying the identity of the user of the device, as claimed. Michalson, ¶263.

The claimed "identity capture device" may be a "biometric device, such as a retinal scanning device, finger print reader, facial recognition reader or another type of user identity verification input device which will collect information on the

user to be compared to information that has previously been stored in the device's memory." Ex-1001, 5:54-59; Michalson, ¶264. *Gehlot* discloses the same types of identity capture devices.

Gehlot securely stores vehicle data during operation, including location information. *E.g.*, Ex-1006, 3:5-42 ("vehicle data system collects vehicle data and writes the collected data onto removable information cards 28-34."), 4:64-5:1, 6:51-58 (gathering GPS data); Michalson, ¶265. *Gehlot*'s VDS includes a GPS system for tracking the vehicle and sharing location information. Ex-1006, 2:1-16; Michalson, ¶265. *Gehlot* uses biometric safeguards for access to VDS 1. Michalson, ¶266. "In a preferred embodiment, the user is prompted by the VDS [vehicle data system] to input some form of physical data, i.e. **retinal scan**, **fingerprint**, **voice recognition**, and to insert a **driver and/or vehicle information card** into a card reader/writer that is designed to work in conjunction with the VDP." Ex-1006, 2:17-21; Michalson, ¶266. *Gehlot* matches this information to stored data and uses it to grant authorization. Ex-1006, 2:21-23; Michalson, ¶266.

As discussed above, a POSITA would have been motivated to use *Gehlot*'s biometric authentication methods for restricting access to encrypted data on *Fish*'s data archive 10. Michalson, ¶267. While *Ziv* uses biometric techniques to verify a user's identity, *Gehlot* discloses components, implementation examples, and prompts for such biometric identification devices. Michalson, ¶267. A POSITA

would have thus been motivated to implement *Fish* and *Ziv*'s biometric identification techniques with *Gehlot*'s more specific components and techniques of biometric identification. Michalson, ¶267.

C. Claim 6

1. [6] The device as in claim 5, wherein the identity capture device is a biometric device.

Fish in view of *Ziv* and *Gehlot*, alone or with the knowledge of a POSITA, discloses and renders obvious the device as in claim 5, wherein the identity capture device is a biometric device, as claimed. Michalson, ¶268. As discussed regarding claim 5, a POSITA would have been motivated to implement *Gehlot*'s biometric authentication components and techniques (e.g., **retinal scan**, **fingerprint**, **voice recognition** with accompanying input devices) in the system of *Fish* and *Ziv*. *See supra* claim 5; Ex-1006, 2:1-23, 3:5-42, 4:64-5:1, 6:51-58; Michalson, ¶¶265-68. In such a system, as discussed regarding claim 5, *Gehlot*'s more specific biometric components, techniques, and prompts would accomplish the biometric-based security techniques of *Fish* and *Ziv*. Michalson, ¶268.

D. Claim 7

1. [7] The device as in claim 5, wherein the identity capture device is a retinal scanning device.

Fish in view of *Ziv* and *Gehlot*, alone or with the knowledge of a POSITA, discloses and renders obvious the device as in claim 5, wherein the identity capture device is a retinal scanning device, as claimed. Michalson, ¶269.

As discussed regarding claim 5, a POSITA would have been motivated to implement *Gehlot*'s biometric authentication, including the use of a "**retinal scanner**." Ex-1006, 3:6-12; *see also id.*, 2:16-20 ("[T]he user is prompted by the VDS to input some form of physical data, i.e. **retinal scan**, fingerprint, voice recognition, and to insert a driver and/or vehicle information card into a card reader/writer that is designed to work in conjunction with the VDP."), 6:6-11 ("Such physical data may include the entry of a password via a keyboard, a driver's voice, a driver's **retinal scan**, a driver's hand-print, or the like. The physical data may be retrieved from the driver/owner by the use of a keyboard, a microphone, a **retinal scanner** or a hand-scanner."), 6:28-33 ("[P]rocessing unit 3 can also request the driver to provide the input of a hand-print using a scanner 5C, which may be a hand-scanner, or a **retinal scan using a retinal scanner**, and compare these inputs in a manner similar to the voice comparison discussed above."); Michalson, ¶269. A POSITA would have been motivated to use a retinal

scan for biometric verification procedures, as retinal scans are difficult to falsify and would efficiently use the confined space within vehicles, especially absent a full keyboard. Michalson, ¶269.

E. Claim 8

1. [8] The device as in claim 5, wherein the identity capture device is a finger print reader.

Fish in view of *Ziv* and *Gehlot*, alone or with the knowledge of a POSITA, discloses and renders obvious the device as in claim 5, wherein the identity capture device is a fingerprint reader, as claimed. Michalson, ¶270. As discussed regarding claim 5, a POSITA would have been motivated to implement *Gehlot*'s biometric authentication, including fingerprint methods. Ex-1006, 2:16-20 ("[T]he user is prompted by the VDS to input some form of physical data, i.e. retinal scan, **fingerprint**, voice recognition, and to insert a driver and/or vehicle information card into a card reader/writer that is designed to work in conjunction with the VDP."), claims 28-29; Michalson, ¶270. Indeed, *Ziv* itself teaches using "a **fingerprint reader**" to verify a user's identity. Ex-1005, ¶31; Michalson, ¶270.

A POSITA would have been motivated by this teaching to utilize *Gehlot*'s more specific and complete implementation (e.g., with user prompts) of a fingerprint reader, as taught in *Ziv*. Ex-1006, 2:16-20, 3:10-12, 6:28-33; Michalson, ¶270. For example, a POSITA would have understood that fingerprints

cannot easily be falsified and can be quick for a user to provide, especially in a vehicle without a full keyboard. Michalson, ¶271. These security and user-friendliness benefits would have motivated a POSITA to use fingerprint verification for identity capture in *Fish-Ziv*. *Id*.

F. Claim 18

1. [18] The device as in claim 16, wherein the user verification module further comprising an identity capture device for verifying the identity of the user of the device.

Fish in view of *Ziv* and *Gehlot*, alone or with the knowledge of a POSITA, discloses and renders obvious claim 18. *See supra* claim 5; Michalson, ¶272.

X. Ground 4: *Fish*, *Ziv*, *Gehlot*, and *Stevenson* (Claims 9-10)

Claims 9-10 are unpatentable under § 103 in view of *Fish*, *Ziv*, *Gehlot*, and *Stevenson*, alone or with the knowledge of a POSITA.

A. Motivation to Combine *Fish*, *Ziv*, *Gehlot*, and *Stevenson*

A POSITA practicing *Fish*, *Ziv*, and *Gehlot* would have looked to *Stevenson* for ways to further enhance data security and secure access to *Fish*'s data archive 10. Michalson, ¶274.

Like *Fish* and *Gehlot*, *Stevenson* generally relates to security for vehicle systems, and, like *Ziv*, *Stevenson* relates to portable device data encryption and retrieval. *E.g.*, Ex-1004, 1:6-33, 2:16-24; Ex-1006, 1:5-59, 2:1-46, 3:5-42; Ex-1007, Abstract, ¶¶[0001]-[0007], [0018]-[0020]; Michalson, ¶275. *Stevenson* is

in the same field of endeavor as *Fish*, as well as *Fish* as combined with *Ziv* and *Gehlot*. Michalson, ¶275. Like *Fish*, *Stevenson* describes a vehicle-based control system 10. Ex-1007, Abstract, ¶¶[0010], [0011], [0016], Fig. 1; Michalson, ¶275. Also, like *Fish*, *Stevenson* discloses user authentication or authorization. Ex-1007, Abstract, ¶¶[0005], [0006], [0008], [0010], [0012]-[0020], Fig. 1; Michalson, ¶275.

Combining *Fish-Ziv-Gehlot* with *Stevenson* would have been beneficial and obvious because both *Gehlot* and *Stevenson* disclose eye scanning (iris or retinal), fingerprints, palm (hand) prints, and voice patterns to enhance security in a vehicle, Ex-1006, 2:17-26, 3:5-12, 6:1-35; Ex-1007, Abstract, ¶¶[0007], [0018]-[0020], and *Stevenson* discloses **additional** types of such user verification (e.g., **facial recognition** and **DNA recognition**), Ex-1007, Abstract, ¶¶[0005], [0007], [0010], [0020]; Michalson, ¶276. These additional security techniques would further enhance security and provide greater user flexibility to one implementing *Gehlot*'s biometric techniques in *Fish-Ziv*'s system. Michalson, ¶¶276-277. *Stevenson*'s techniques could be used instead of, or in addition to, *Gehlot*'s, which would enhance flexibility, simplify the user experience, and offer convenience by enabling different options for accessing encrypted data. *Id*. Some users may be limited in their ability or preference for using *Stevenson*'s facial or DNA recognition as opposed to *Gehlot*'s techniques, or vice versa. *Id*.

B. Claim 9

1. [9] The device as in claim 5, wherein the identity capture device is a facial recognition reader.

Fish-Ziv, in view of *Gehlot* and *Stevenson*, discloses and renders obvious the device as in claim 5, wherein the identity capture device is a facial recognition reader, as claimed. Michalson, ¶278. As discussed regarding claim 5, a POSITA would have been motivated to implement *Gehlot*'s biometric authentication techniques in combination with *Fish-Ziv-Gehlot*. Michalson, ¶278.

Stevenson enhances security with facial recognition and DNA-based authentication for vehicle entry and exit systems. Ex-1007, Abstract; Michalson, ¶279. *Stevenson*'s authentication methods include **facial recognition**, iris recognition, palm prints, fingerprints, or "means for examining the DNA of a driver, such as from a sample of saliva." Ex-1007, Abstract, ¶¶[0007], [0018]-[0020]; Michalson, ¶279. For facial recognition, *Stevenson* positions a camera to recognize a user's face and compares images to stored images for driver authentication. Ex-1007, Abstract, ¶[0007]; Michalson, ¶279. A POSITA would have found it obvious and advantageous to use such facial recognition or DNA techniques in *Fish-Ziv-Gehlot* to enhance security and provide more user-friendly options for authentication and authorization. Michalson, ¶¶279-280.

C. Claim 10

1. [10] The device as in claim 5, wherein the identity capture device is a DNA detection device.

Fish-Ziv, in view of *Gehlot* and *Stevenson*, discloses and renders the device as in claim 5, wherein the identity capture device is a DNA detection device, as claimed. Michalson, ¶281.

As discussed regarding claim 9, a POSITA would have used *Stevenson*'s biometric authentication methods in *Fish-Ziv-Gehlot*'s system. *See supra* claim 9; Michalson, ¶282. *Stevenson* also uses **DNA-based authentication** for drivers. Ex-1007, ¶¶Abstract ("**DNA analysis**"), [0007] & [0020] ("**DNA** of the driver"); Michalson, ¶282. A POSITA would have been motivated to implement *Stevenson*'s DNA-based user authentication methods in *Fish-Ziv-Gehlot* to provide further enhanced user authentication and identification, user flexibility, and rapidity of identification. Michalson, ¶282.

XI. Discretionary Denial Is Not Warranted

A. 35 U.S.C. § 325(d) Denial Is Improper

The factors in *Becton, Dickinson & Co. v. B. Braun Melsungen AG*, IPR2017-01586, Paper 8 at 17-18 (P.T.A.B. Dec. 15, 2017) favor institution. *See also Advanced Bionics, LLC v. MED-EL Elektromedizinische Geräte GmbH*, IPR2019-01469, Paper 6 at 8-11 (P.T.A.B. Feb. 13, 2020) (precedential).

Advanced Bionics, step 1, and *Becton, Dickinson* factors (a), (b), and (d), favor institution, because none of the references used in this Petition were considered during prosecution. Ex-1003 at 48-54, 88-96; *see Microsoft Corp. v. Parallel Networks Licensing LLC*, IPR2015-00486, Paper 10 at 15-20 (P.T.A.B. July 15, 2015) (granting institution when "there [was] no evidence that the Examiner considered the particular disclosures cited"). The *Becton Dickinson* "analysis ends at this point, and [the Board] need not proceed to part two of the *Advanced Bionics* framework." *See Amazon.com, Inc. v. Nokia Techs. Oy*, IPR2024-00799, Paper 9 at 17-18 (P.T.A.B. Jan. 8, 2025).

B. *Fintiv* Denial Is Improper

The Office's Memorandum of March 26, 2025, titled "Interim Process for PTAB Workload Management," describes a procedure where Petitioner can respond to any discretionary denial arguments Patent Owner may raise in bifurcated briefing. Petitioner believes discretionary denial is unwarranted here and, at the appropriate time, plans to rebut any claims by Patent Owner to the contrary.

Petitioner identifies below several nonlimiting considerations that weigh against discretionary denial:

- The complaint in the parallel district court case was served January 28, 2025, less than three months before this Petition was filed. No discovery or other substantive work has occurred in the litigation. *See*

Apple Inc. v. Fintiv, Inc., IPR2020-00019, Paper 11, at 11 (P.T.A.B. Mar. 20, 2020) (expeditious filing weighs against denial); *SharkNinja v. iRobot Corp.*, IPR2021-00545, Paper 11, at 8 (P.T.A.B. Sept. 8, 2021) (petitioner's diligence and remaining work in litigation weigh against denial).

- Petitioner promptly brought this challenge less than one month after infringement contentions (and notice of the asserted claims) were served, on April 4, 2025. *CoolIT Sys., Inc. v. Asetek Danmark A/S*, IPR2021-01195, Paper 10 at 11-14 (P.T.A.B. Dec. 28, 2021).
- No other forum has adjudicated these claims.
- This Petition challenges three claims (7, 8, and 10) not asserted in the parallel litigation.
- The merits of this Petition are strong. Indeed, as noted above, the claims were allowed based on the doubly erroneous premise that "removable" storage was present in all claims and was patentable.
- Petitioner stipulates that, if this Petition is instituted, it will not pursue in district court the grounds identified in this Petition or grounds that could reasonably have been raised in this IPR.

The *Fintiv* factors thus weigh strongly in favor of institution.

XII. Mandatory Notices Under 37 C.F.R. § 42.8

A. Real Parties-in-Interest

The real parties-in-interest are Volkswagen Group of America, Inc., Volkswagen AG, and Audi AG.

B. Related Matters

To the best of Petitioner's knowledge, the '192 patent is involved in only *Longhorn Automotive Group LLC v. Volkswagen AG*, 2:24-cv-00933 (E.D. Tex.).

C. Lead and Back-Up Counsel

Lead Counsel	Back-up Counsel
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	Reston, VA 20190-6023 Tel.: 571-203-2700 Fax: 202-408-4400

Petitioner consents to electronic service at the following email address: Finnegan-Longhorn-192IPR@finnegan.com.

XIII. Standing

The '192 patent is available for IPR. Petitioner is not barred or estopped.

XIV. Conclusion

Petitioner requests institution and cancellation of challenged claims 1-22.

Respectfully submitted,

Dated: April 24, 2025

By: /Elliot C. Cook/
Elliot C. Cook (Reg. No. 61,769)
Lead Counsel

CLAIM APPENDIX

[1.pre] 1. A location information device with secure data storage comprising:

[1.a] a housing;

[1.b] a locational information module for determining location information of the device, the determined location information being at least one route traveled by the device;

[1.c] an encryption module for encrypting the determined location information;

[1.d] a removable storage module for storing the encrypted location information, the removable storage module being removably disposed in the housing; and

[1.e] a processing module for sending the encrypted location information to the removable storage module removably disposed in the housing and retrieving the encrypted location information from the removable storage module.

[2] 2. The device as in claim 1, further comprising an input module disposed on the housing configured for receiving a code string input

by a user, wherein the user inputted code string is used for encrypting and decrypting the location information stored in the removable storage module.

[3] 3. The device as in claim 1, further comprising a user verification module for verifying the identity of user of the device, wherein the processing module selectively decrypts the location information stored in the removable storage module based on the identity of the user.

[4] 4. The device as in claim 3, wherein the user verification module executes a password protection algorithm for verifying the identity of the user of the device.

[5] 5. The device as in claim 3, wherein the user verification module further comprises an identity capture device for verifying the identity of the user of the device.

[6] 6. The device as in claim 5, wherein the identity capture device is a biometric device.

[7] 7. The device as in claim 5, wherein the identity capture device is a retinal scanning device.

[8] 8. The device as in claim 5, wherein the identity capture device is a finger print reader.

[9] 9. The device as in claim 5, wherein the identity capture device is a facial recognition reader.

[10] 10. The device as in claim 5, wherein the identity capture device is a DNA detection device.

[11] 11. The device as in claim 1, wherein the location information further includes at least one of a home address, destination addresses and velocity of the device at predetermined times.

[12] 12. The device as in claim 1, further comprising a transmission module for transmitting the encrypted location information to an external computing device.

[13.pre] A location information device with secure data storage comprising:

[13.a] a housing;

[13.b] a locational information module for determining location information of the device, the determined location information being at least one route traveled by the device;

[13.c] an encryption module for encrypting the determined location information;

[13.d] a storage module for storing the encrypted location information; and

[13.e] a processing module for sending the encrypted location information to the storage module and retrieving the encrypted location information from the storage module.

[14] 14. The device as in claim 13, further comprising a transmission module for transmitting the encrypted location information from the storage module to an external computing device.

[15] 15. The device as in claim 14, further comprising an input module disposed on the housing configured for receiving a code string input by a user, wherein he user inputted code string is used for encrypting and decrypted the location information stored in the storage module.

[16] 16. The device as in claim 14, further comprising a user verification module for verifying the identity of user of the device, wherein the processing module selectively decrypts the location information stored in the storage module based on the identity of the user.

[17] 17. The device as in claim 16, wherein he user verification module executes a password protection algorithm for verifying the identity of the user of the device.

[18] 18. The device as in claim 16, wherein the user verification module further comprising an identity capture device for verifying the identity of the user of the device.

[19.pre] 19. A system for controlling and storing location information comprising:

[19.a] a location information device with secure data storage comprising:

[19.b] a housing;

[19.c] a locational information module for determining location information of the location information device, the determined location information being at least one route traveled by the location information device;

[19.d] an encryption module for encrypting the determined location information;

[19.e] a removable storage module for storing the encrypted location information, the removable storage module being removably disposed in the housing; and

[19.f] a processing module for sending the encrypted location information to the removable storage module removably disposed in the housing and retrieving the encrypted location information form the removable storage module; and

[19.g] a computing device comprising:

[19.h] a reader configured for reading the removable storage module of the location information device when he removable storage module s removably disposed in the reader; and

[19.i] a processor configured to execute a decryption program for decrypting the encrypted location information on the removable storage module removably disposed in the reader.

[20] 20. The system as in claim 19, wherein the location information further includes at least one of a home address, destination addresses and velocity of the device at predetermined times.

[21] 21. The system as in claim 19, wherein the computing device further comprises a memory for storing a plurality of geographical maps and the processor is configured to overlay the location information on at least one of the plurality of geographical maps.

[22.pre] 22. A system for controlling and storing location information comprising:

[22.a] a location information device with secure data storage comprising:

[22.b] a housing;

[22.c] locational information module for determining location information of the location information device, the determined location information being at least one route traveled by the location information device;

[22.d] an encryption module for encrypting the determined location information;

[22.e] a storage module for storing the encrypted location information;

[22.f] a processing module for sending the encrypted location information to the storage module and retrieving the encrypted location information from the storage module; and

[22.g] a transmission module for transmitting the encrypted location information from the storage module to an external computing device; and

[22.h] the external computing device comprising:

[22.i] a connectivity device configured for receiving the encrypted location information form the location information device; and

[22.j] a processor configured to execute a decryption program for decrypting the encrypted location information received from the location information device.

CERTIFICATE OF COMPLIANCE

The undersigned hereby certifies that the foregoing **Petition for *Inter Partes* Review** contains 13,628 words, excluding those portions identified in 37 C.F.R. § 42.24(a), as measured by the word-processing system used to prepare this paper.

Dated: April 24, 2025

/Elliot C. Cook/
Elliot C. Cook (Reg. No. 61,769)
Lead Counsel

CERTIFICATE OF SERVICE

The undersigned certifies that the foregoing Petition for *Inter Partes* Review of U.S. Patent No. 8,085,192, the associated Power of Attorney, and Exhibits 1001 through 1026 were served on April 24, 2025, by FedEx Priority Overnight® on the correspondence address of record indicated in the Patent Office's Patent Center system for U.S. Patent No. 8,085,192.

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A courtesy copy is also being sent via FedEx Priority Overnight® to litigation counsel at:

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Dated: April 24, 2025

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Finnegan, Henderson, Farabow,
Garrett & Dunner, LLP

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

VOLKSWAGEN GROUP OF AMERICA, INC.,

Petitioner,

v.

LONGHORN AUTOMOTIVE GROUP LLC,

Patent Owner.

Patent No. 8,085,192
Filing Date: April 5, 2010
Issue Date: December 27, 2011

Inventor: Leigh M. Rothschild

Title: DEVICE, SYSTEM AND METHOD FOR CONTROLLING AND STORING SENSITIVE INFORMATION ON A GPS DEVICE

PATENT OWNER'S REQUEST FOR DISCRETIONARY DENIAL OF INSTITUTION

Case No. IPR2025-00925

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LIST OF EXHIBITS

Exhibit No.	Description of Document
2001	Fourth Amended Docket Control Order, Dkt. 58, *Longhorn Automotive Group LLC. v. Volkswagen AG*, Case No. 2:24-cv-00933-JRG (E.D. Tex. May 15, 2025)
2002	Longhorn Automotive Group LLC's Infringement Contentions and P.R. 3-1 and 3-2 Disclosures in *Longhorn Automotive Group LLC. v. Volkswagen AG*, Case No. 2:24-cv-00933-JRG (E.D. Tex.), dated April 4, 2025

I. INTRODUCTION

Pursuant to the Director's March 26, 2025, Memorandum Regarding Interim Processes for PTAB Workload Management, Longhorn Automotive Group LLC ("Patent Owner") files this Request for Discretionary Denial of Institution.

On April 24, 2025, Volkswagen Group of America, Inc. ("Petitioner") submitted a Petition (Paper No. 1, "Petition" or "Pet.") requesting *inter partes* review ("IPR") of U.S. Patent No. 8,085,192 (Ex. 1001, the "'192 Patent"), challenging Claims 1-22 (the "Challenged Claims"). The Petition identifies co-pending district court litigation *Longhorn Automotive Group LLC. v. Volkswagen AG*, Case No. 2:24-cv-00933-JRG (E.D. Tex.) (the "District Court Litigation"), with a trial date set for August 17, 2026. Pet. 89; Ex. 2001. With Patent Owner's Preliminary Response due August 25, 2025, institution of any grounds will result in the issuance of a Final Written Decision ("FWD") by November 25, 2026.

The Director should exercise discretion to deny the Petition under 35 U.S.C. § 314(a) for at least the following reasons: (i) the parallel District Court Litigation exists between the same parties or real-parties-in-interest; (ii) the District Court Litigation involves the same subject patent, the '192 Patent, with the same claims; (iii) the District Court's trial will be more than ***three months*** before as the projected statutory deadline for FWD and more than ***four months*** before the deadline for

Director Review; (iv) the parties will have heavily invested in the District Court Litigation and exchanged proposed claim construction terms before the November 25, 2025 institution deadline; and (v) settled expectations have been created because the '192 Patent was issued over thirteen years ago.

For the reasons set forth herein, the Director should exercise discretion to deny the Petition.

II. THE PETITION SHOULD BE DENIED IN THE DISCRETION OF THE DIRECTOR UNDER 35 U.S.C. § 314(a)

The circumstances of the parallel District Court Litigation, *Longhorn Automotive Group LLC. v. Volkswagen AG*, Case No. 2:24-cv-00933-JRG (E.D. Tex.), necessitate denial of the Petition under the Board's precedent, as every factor considered in relation to efficiency, fairness, and the merits supports denial. *See Apple Inc. v. Fintiv, Inc.*, IPR2020-00019, Paper 11, at 6 (P.T.A.B. Mar. 20, 2020) (precedential) (considering (a) "whether the petitioner and the defendant in the parallel proceeding are the same party"; (b) "overlap between issues raised in the petition and in the parallel proceeding"; (c) "proximity of the court's trial date to the Board's projected statutory deadline for a final written decision"; (d) "investment in the parallel proceeding by the court and the parties"; (e) "whether the court granted a stay or evidence exists that one may be granted if a proceeding is instituted"; and

(f) "other circumstances that impact the Board's exercise of discretion, including the merits.").

As set forth below, these factors collectively demonstrate that efficiency and integrity of the AIA are best served by denying review. First, the issues in the parallel District Court litigation are identical to this proceeding. *See infra* Section II.A. Second, the District Court Litigation involves the same claims at issue in the Petition. *See infra* Section II.B. Third, trial in the District Court Litigation is set for August 17, 2026, more than ***three months*** before the projected statutory deadline for a Final Written Decision of this Petition on November 25, 2026. *See infra* Section II.C. Fourth, the parties (and Patent Owner in particular) have invested significant resources in developing legal and factual issues of validity and infringement in the District Court Litigation and will have invested substantially more resources before any decision on this Petition. *See infra* Section II.D. Fifth, there is no stay in the parallel District Court Litigation, and a stay will likely not be entered before an institution decision here. *See infra* Section II.E. Sixth, other factors weigh in favor of denial. *See infra* Section II.F. Finally, there are settled expectations regarding the '192 Patent, as it was granted over ***thirteen years ago***. *See infra* Section II.G.

Accordingly, the Director should exercise discretion under § 314(a) and deny the Petition because institution of this proceeding would not be consistent with the

objective of the AIA to "provide an effective and efficient alternative to district court litigation." *NHK Spring Co. v. Intri-Plex Techs., Inc.*, IPR2018-00752, Paper 8, at 20 (P.T.A.B. Sept. 12, 2018) (quoting *Gen. Plastic Indus. Co. v. Canon Kabushiki Kaisha*, IPR2016-01357, Paper 19, at 16–17 (P.T.A.B. Sept. 6, 2017) (precedential)).

A. The Parallel District Court Litigation and the Petition Involve the Same Parties

As Petitioner notes, there exists a parallel District Court Litigation between real parties-in-interest in this proceeding – *i.e.,* Volkswagen AG and Audi AG – regarding the same subject patent (the '192 Patent) and involving the real parties' Accused Products, which includes a variety of Volkswagen-branded and Audi-branded vehicles. Pet. at 89; Ex. 2002 at 3-4.

Accordingly, this factor weighs strongly in favor of discretionary denial.

B. The District Court Litigation Involves Substantially the Same Claims

There is complete overlap between the claims at issue in this Petition and the District Court Litigation because the Petition challenges all claims asserted in the District Court Litigation, including Claims 7, 8, and 10, not asserted in the District Court Litigation. *See* Ex. 2002 at 3; Pet. at 1. "In at least these ways, the parallel proceedings would duplicate effort. This is an inefficient use of Board, party, and

judicial resources and raises the possibility of conflicting decisions." *Cisco Sys., Inc. v. Ramot at Tel Aviv Univ. Ltd.*, IPR2020-00122, Paper 15 at 10 (P.T.A.B. May 15, 2020).

Accordingly, this factor weighs strongly in favor of discretionary denial.

C. Proximity of the District Court's Trial Date

The proximity of the District Court Litigation's trial date to the Board's projected statutory deadline for a Final Written Decision weighs strongly in favor of discretionary denial.

The parties' trial is scheduled for August 17, 2026. Ex. 2001. Pursuant to 35 U.S.C. §§ 314(b)(1) and 316(a)(11), the projected statutory deadline for a Final Written Decision of this Petition is November 25, 2026.[1] As the District Court's trial will be over ***three months*** before the projected statutory deadline, this factor weighs

[1] Patent Owner will file a timely preliminary response on August 25, 2025. The statutory deadline for institution is Monday, November 25, 2025, "three months after receiving a preliminary response to the petition under section 313." *See* 35 U.S.C. § 314(b)(1). If instituted, the statutory deadline for a Final Written Decision is Tuesday, November 25, 2026, "not later than 1 year after the date on which the Director notices the institution of a review."

in favor of denying institution. *See Supercell Oy v. Gree, Inc.*, IPR2020-00513, Paper 11 at 10-12 (P.T.A.B. June 24, 2020) (denying institution where the jury trial was scheduled to conclude approximately ten months before the statutory deadline); *Edward LifeSciences Corp. v. Evalve, Inc.*, IPR2019-01479, Paper 7, at 6-13 (P.T.A.B. Feb. 26, 2020) (denying institution where jury trial would conclude more than nine months before a final decision would be due); *Samsung Elecs. Am., Inc. v. Uniloc 2017 LLC*, IPR2019-01218, Paper 7, at 7-10 (P.T.A.B. Jan. 7, 2020) (denying institution where jury selection was scheduled for approximately six months before trial in the Board proceeding would conclude); *Next Caller Inc. v. TRUSTID, Inc.*, IPR2019-00961, -00962, Paper 10, at 8-16 (P.T.A.B. Oct. 16, 2019) (denying institution where trial was scheduled to conclude "several months," before a final decision would be due); *Cisco Sys., Inc.*, IPR2020-00122, Paper 15 at 8 ("Because the trial date is substantially earlier than the projected statutory deadline for the Board's final decision, this factor weighs in favor of discretionary denial."); *Cisco Sys., Inc. v. Estech Sys., Inc.,* IPR2021-00329, Paper 13 at 7-15 (P.T.A.B. Jul. 6, 2021) (denied when two related trials predate FWD by eleven months and seven months, respectively); *F5 Networks, Inc. v. WSOU Invs., LLC,* IPR2022-00239, Paper 12 at 7-8 (P.T.A.B. May 19, 2022) (denied when trial predates FWD by six months); *Google LLC v. EcoFactor, Inc.*, IPR2021-00488, Paper 12 at 11-12

(P.T.A.B. Aug. 11, 2021) (denied when trial predates FWD by six months); *Cisco Sys., Inc. v. Oyster Optics, LLC,* IPR2021-00238, Paper 10 at 11-13 (P.T.A.B. Jun. 1, 2021) (denied when trial predates FWD by seven months); *Samsung Elecs. Co. v. Truesight Commc'ns LLC*, IPR2025-00123, Paper 12 at 6-7 (P.T.A.B. Apr. 22, 2025) (denied when trial predates FWD by six months). The significant difference between the August 17, 2026, trial date and the November 25, 2026, FWD justifies discretionary denial on its own.

The justification is compounded when considering the deadline for a request for Director Review, which is within 30 days of the entry of the FWD (*i.e.*, December 26, 2026), let alone the ultimate decision of any Director Review. Notably, it was only on Oct. 1, 2024, that the U.S. Patent and Trademark Office (USPTO) issued a final rule governing Director Review of PTAB decisions in contested proceedings brought under the AIA, Rules Governing Director Review of Patent Trial and Appeal Board Decisions, effective Oct. 31, 2024, as 37 C.F.R. § 42.75. 89 Fed. Reg. 79744 (Oct. 1, 2024). As such, the Board's *Apple Inc. v. Fintiv, Inc.* decision was unable to consider the extended period of time for the PTAB Director to opine on a FWD. In this proceeding, such a determination from Director Review would likely be over ***four months*** past the August 17, 2026, trial date.

Accordingly, because the trial date is well before the project statutory deadline

of a FWD and any determination from a Director Review of a FWD, this factor weighs strongly in favor of discretionary denial.

D. Significant Investment and Petitioner's Delay in Filing the Petition

The parties' and the Court's investment in the parallel proceeding weighs strongly in favor of discretionary denial. In the District Court Litigation, Patent Owner has already served infringement contentions, and claim construction proceedings will begin on October 23, 2025, a month before the institution deadline. Ex. 2001. Therefore, on the November 25, 2025, statutory deadline for an institution decision, the parties will have completed infringement contentions, served invalidity contentions, and conducted months of discovery. *See* Ex. 2001.

Accordingly, the parties' and Court's substantial investment in this proceeding weighs in favor of denial of institution.

E. No Stay of the Parallel District Court Litigation

There is no stay of the parallel District Court Litigation. Even if a defendant in the District Court Litigation moves to stay the case, the Eastern District of Texas routinely denies requests to stay pending IPRs before institution on all asserted claims of all Asserted Patents. *See Force Mos Tech., Co. v. ASUSTek Comput., Inc.*, No. 2:22-cv-00460-JRG, 2024 WL 1586266, at *4 (E.D. Tex. Apr. 11, 2024) (citation omitted). A stay in the District Court Litigation is unlikely before the

institution decision in this matter because the most recently filed petition for *inter partes* review against a patent asserted in the District Court Litigation will not have an institution decision entered until December 26, 2025. *See Nissan Motor Co., Ltd. v. Longhorn Automotive Group LLC*, IPR2025-01089, Paper 5 (P.T.A.B. June 25, 2025) (according the petition the filing date).

Accordingly, the lack of a stay and future unlikelihood of a stay weighs strongly in favor of denial of institution.

F. Other Factors Favor Discretionary Denial

The Petition should be denied for the additional reason that the Petition is weak. Not including the discussion of discretionary denial, the Petition is 86 pages long. *See generally* Pet. In contrast, Petition is effectively a copy-and-paste of the expert declaration, which is also nearly 50 pages longer than the substantive portion of the Petition. *Compare* Pet. *with* Ex. 1002. Petitioner, therefore, relies almost entirely on the expert declaration, evidencing its weakness.

G. Settled Expectations of the Parties

The ’192 Patent was granted December 27, 2011, over ***thirteen years*** before Petitioner filed this Petition, and claims priority to an application filed on September 6, 2005, which is ***nineteen years*** before Petitioner filed its Petition. *See* Ex. 1001. Furthermore, the ’192 Patent will expire on October 7, 2025, over a month before

the institution decision is expected. As such, Patent Owner has settled expectations at this point. The Board has previously discretionarily denied institution because "the challenged patent has been in force almost eight years, creating settled expectations." *Dabico Airport Sols. Inc. v. AXA Powers Aps*, IPR2025-00408, Paper 21 at 2 (P.T.A.B. June18, 2025). The Board also noted that "the longer the patent has been in force, the more settled expectations should be" and equated this approach to the six-year damages period related to filing infringement lawsuits. *Id*. at 3. The situation is even more applicable here, where the patent is ***five years older*** than the patent at issue in *Dabico*.

When viewing the factors together, and particularly in view of District Court Litigation's trial date and Patent Owner's settled expectations, the Petition should be denied in the Director's discretion under 35 U.S.C. § 314(a).

III. CONCLUSION

For the foregoing reasons, Patent Owner respectfully requests that the Director exercise discretion to deny institution of the Petition in its entirety.

Respectfully submitted,

July 23, 2025 By: /*Vincent J. Rubino, III*/

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CERTIFICATE OF WORD COUNT

The undersigned hereby certifies that the portions of the above-captioned PATENT OWNER'S REQUEST FOR DISCRETIONARY DENIAL OF INSTITUTION has 2,073 words in compliance with the 14,000 word limit set forth in 37 C.F.R. § 42.24. This word count was prepared using Microsoft Word for Office 365.

Respectfully submitted,

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CERTIFICATE OF SERVICE

A copy of the foregoing PATENT OWNER'S REQUEST FOR DISCRETIONARY DENIAL OF INSTITUTION and Exhibits 2001 through 2002 have been served on Petitioner's counsel of record as follows:

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Paper No. 7
Filed: August 25, 2025

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

VOLKSWAGEN GROUP OF AMERICA, INC.,

Petitioner,

v.

LONGHORN AUTOMOTIVE GROUP LLC,

Patent Owner.

Patent No. 8,085,192
Filing Date: April 5, 2010
Issue Date: December 27, 2011

Title: DEVICE, SYSTEM AND METHOD FOR CONTROLLING AND STORING SENSITIVE INFORMATION ON A GPS DEVICE

Inter Partes Review No. IPR2025-00925

PETITIONER'S OPPOSITION TO PATENT OWNER'S DISCRETIONARY DENIAL REQUEST

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List of Exhibits

Exhibit	Description
1001	U.S. Patent No. 8,085,192 ("the '192 patent")
1002	Declaration of William R. Michalson, Ph.D. ("Michalson")
1003	Prosecution History of the '192 Patent ("Prosecution History")
1004	U.S. Patent No. 6,490,513 to Fish et al. ("*Fish*")
1005	U.S. Patent Publication No. 2004/0103288 A1 to Ziv et al. ("*Ziv*")
1006	U.S. Patent No. 6,310,542 to Gehlot ("*Gehlot*")
1007	European Patent Application No. EP0962894 A2 to Stevenson et al. ("*Stevenson*")
1008	U.S. Patent No. 4,114,155 to Raab ("*Raab*")
1009	U.S. Patent No. 5,751,228 to Kamiya et al. ("*Kamiya*")
1010	U.S. Patent No. 4,161,730 to Anderson ("*Anderson*")
1011	International Publication No. WO 91/09275 to Kyrtsos et al. ("*Kyrtsos*")
1012	International Publication No. WO 89/05255 to Whyntie ("*Whyntie*")
1013	U.S. Patent No. 5,525,998 to Geier ("*Geier*")
1014	Reissued Patent No. RE 35,920 to Sorden et al. ("*Sorden*")
1015	U.S. Patent No. 5,416,712 to Geier et al. ("*Geier II*")
1016	U.S. Patent No 5,777,580 to Janky et al. ("*Janky*")
1017	U.S. Patent No. 5,508,931 to Snider ("*Snider*")
1018	U.S. Patent No. 6,791,472 to Hoffberg ("*Hoffberg*")
1019	Model Year 2005 Acura RL Navigation System User Manual ("*Acura User Manual*")
1020	U.S. Patent No. 6,801,855 to Walters et al. ("*Walters*")
1021	U.S. Patent No. 6,748,536 to Madau ("*Madau*")
1022	U.S. Patent No. 7,212,989 to Taniguchi et al. ("*Taniguchi*")
1023	U.S. Patent No. 5,926,546 to Maeda et al. ("*Maeda*")
1024	U.S. Patent No. 6,950,013 to Scaman et al. ("*Scaman*")
1025	Prosecution History of U.S. Patent Application No. 13/326,214
1026	Curriculum Vitae of William R. Michalson, Ph.D.
1027	Fourth Amended Docket Control Order, *Longhorn Automotive Group LLC v. Volkswagen AG*, Case No. 2:24-cv-00933-JRG (E.D. Tex. May 15, 2025) (ECF No. 58)
1028	Plaintiff Longhorn Automotive Group LLC's Notice of Compliance with Service of Its P.R. 3-1 and 3-2 Infringement Contentions,

Exhibit	Description
	Longhorn Automotive Group LLC v. Volkswagen AG, Case No. 2:24-cv-00933-JRG (E.D. Tex. April 8, 2025) (ECF No. 31)
1029	Docket Navigator, Gilstrap IPR Stay Motion Success Statistics
1030	Docket Navigator, Gilstrap Reexam Stay Motion Success Statistics
1031	National Judicial Caseload Profile Trial Statistics
1032	Civil Court Docket, *Longhorn Automotive Group LLC v. Volkswagen AG*, Case No. 2:24-cv-00933-JRG (Aug. 20, 2025)
1033	Judge Rodney Gilstrap's Calendar of Events (Aug. 2026)
1034	Dufresne, A. et al., How reliable are trial dates relied on by the PTAB in the Fintiv analysis? (Oct. 29, 2021)
1035	Judge Rodney Gilstrap's Time to Trial Statistics
1036	Docket Navigator, Judge Rodney Gilstrap Profile
1037	LAG-VW00000001 – LAG-VW00002532
1038	Docket Control Order, *Pictiva Displays International Ltd. v. Samsung Electronics Co., Ltd. et al.,* Case No. 2:23-cv-00495-JRG-RSP (E.D. Tex. April 17, 2024) (ECF No. 40)
1039	First Amended Docket Control Order, *Pictiva Displays International Ltd. v. Samsung Electronics Co., Ltd. et al.,* Case No. 2:23-cv-00495-JRG-RSP (E.D. Tex. April 21, 2025) (ECF No. 224)
1040	Civil Court Docket, *Pictiva Displays International Ltd. v. Samsung Electronics Co., Ltd. et al.,* Case No. 2:23-cv-00495-JRG-RSP (E.D. Tex. 2025)
1041	Docket Control Order, *Cyandia, Inc. v. SAP America, Inc. and SAP SE,* Case No. 2:24-cv-00096-JRG (E.D. Tex. June 17, 2024) (ECF No. 32)
1042	First Amended Docket Control Order, *Cyandia, Inc. v. SAP America, Inc. and SAP SE,* Case No. 2:24-cv-00096-JRG (E.D. Tex. May 9, 2025) (ECF No. 102)
1043	Civil Court Docket, *Cyandia, Inc. v. SAP America, Inc. and SAP SE,* Case No. 2:24-cv-00096-JRG (E.D. Tex. 2025)
1044	Docket Control Order, *Emerging Automotive LLC v. KIA Corporation et al.,* Case No. 2:23-cv-00437-JRG (E.D. Tex. Feb. 6, 2024) (ECF No. 40)
1045	First Amended Docket Control Order, *Emerging Automotive LLC v. KIA Corporation et al.,* Case No. 2:23-cv-00437-JRG (E.D. Tex. May 21, 2025) (ECF No. 265)

Exhibit	Description
1046	Civil Court Docket, *Emerging Automotive LLC v. KIA Corporation et al.,* Case No. 2:23-cv-00437-JRG (E.D. Tex. 2025)
1047	Amended Complaint for Patent Infringement, *Longhorn Automotive Group LLC v. Volkswagen AG*, Case No. 2:24-cv-00933-JRG (E.D. Tex. April 18, 2025) (ECF No. 39)
1048	Assignment Record 66911-261
1049	Assignment Record 65227-107
1050	Assignment Record 65015-773
1051	Assignment Record 37535-104
1052	Assignment Record 27990-946
1053	Assignment Record 27990-854
1054	Assignment Record 22427-208
1055	Assignment Record 27983-476
1056	"Critics Call Him a Patent Troll. He Prefers Modern-Day Edison," Bloomberg Law (Oct. 23, 2023)
1057	Defendant Volkswagen AG's Motion to Dismiss, *Longhorn Automotive Group LLC v. Volkswagen AG*, Case No. 2:24-cv-00933-JRG (E.D. Tex. April 4, 2025) (ECF No. 28)
1058	Civil Court Docket, *Longhorn Automotive Group LLC v. Volvo Car Corp. et al.,* Case No. 2:24-cv-00603-JRG (E.D. Tex. Aug. 21, 2025)
1059	About Volkswagen Group of America, Inc. (2025)
1060	Chattanooga Facts Official Media Site Newsroom (2025)

I. Introduction

Longhorn's request for discretionary denial (Paper 6, "Request") should be rejected. There is no dispute that (1) the Examiner objectively erred during prosecution in understanding what limitations the claims contained; (2) the lead prior art reference here, *Fish*, remedies that misunderstanding; (3) this IPR challenges three claims not asserted by Patent Owner in district court litigation; and (4) the official and most recent federal government statistics demonstrate that the actual trial date will likely be 1.5 months ***after*** a FWD from the Board here. Patent Owner's settled expectations when buying the '192 patent must necessarily account for the fact that the patent was allowed in error, *Fish* remedies that error, and indeed the '192 patent's child application was abandoned after *Fish* was eventually discovered and applied in rejections during prosecution of the child application. Given the uncontested facts here, Patent Owner must have known and expected that the '192 patent should never have issued.

Every other consideration also weighs against discretionary denial or is neutral. Patent Owner has served no discovery requests to Petitioner in litigation—whether interrogatories, document requests, requests for admission, requests for deposition, or otherwise. Contrary to Patent Owner's unexplained generalities, it is untrue that "the parties (and Patent Owner in particular) have invested significant resources" in the litigation. Paper 6, at 3. The court likewise has not issued any

substantive rulings in the litigation. This Petition was extraordinarily timely, coming just three weeks after infringement contentions and five months before invalidity contentions. And while Petitioner included a broad stipulation in the Petition, it includes a far broader stipulation here, ensuring this IPR will be the sole proceeding adjudicating the patentability of the '192 patent based on prior art. Numerous other considerations too, as detailed below, demonstrate that this IPR is worthy of the Board's resources to review.

Patent Owner's arguments for discretionary denial are all misplaced. They range from factual errors (e.g., asserting that "the issues in the parallel District Court litigation are identical to this proceeding"), *id*. at 3, to procedural errors (e.g., identifying only a preliminarily scheduled trial date, not the statistics-based trial date as embraced by the Board), *id*. at 1, to legal errors (e.g., considering under *Fintiv* Factor 1 whether a stay is likely pre-, not post-institution), *id*. at 8-9.

II. The '192 Patent Was Allowed in Error

The '192 patent was allowed with an incorrect understanding of what its claims recite. Paper 1, at 1, 5. The Examiner allowed all of claims 1-22 based on the following conclusion:

Allowable Subject Matter

1. The following is an examiner's statement of reasons for allowance: The closest prior arts does not teach or make obvious:

- "A removable storage module for storing the encrypted location …"

Ex-1003, at 143 (emphasis added). No other reason for allowance was identified.

The Examiner's conclusion was mistaken because only independent claims 1 and 19 recite a "***removable*** storage module." Independent claims 13 and 22 more broadly recite a "***storage module***."

This misapprehension of the claims makes the present IPR challenge especially apt, since prior art not before the Examiner—e.g., *Fish*—plainly teaches this purportedly missing claim element. Indeed, *Fish* teaches a "removable storage module" in precisely the same form as the '192 patent itself: e.g., secure digital (SD) memory. Paper 1, at 1, 5. While *Fish* was not considered during examination of the '192 patent, it was cited by the Examiner during prosecution of the child application, and was used in a claim rejection before the applicant abandoned that application. *See* Ex-1002, ¶123.

Fish discloses "a data archive system for securely archiving signals, and, more particularly, to a mobile data archive system which authenticates and records operational and situational data concerning a[] vehicle." Ex-1004, at 1:6-9. Like

the '192 patent, *Fish* discloses storing sensitive vehicle data securely, including GPS location information. *Id*., at Abstract, 1:5-9, 4:22-29, 5:27-32, 7:6-52, Figs. 1-2; Ex-1002, ¶¶124-125. Just like the '192 patent, *Fish* uses "**secure memory 18** [which may be] a ***removable*** non-volatile memory device such as a ***secure digital (SD) memory*** device or any of a number of other commercially available non-volatile memory devices." Ex-1004, at 7:6-29 (emphasis added); Ex-1002, ¶¶127, 170. The '192 patent's removable memory is likewise described as "removable memory cards or cartridges including CompactFlash, ***SD memory***, Memory Stick, etc." Ex-1001, at 2:3-5 (emphasis added); *see also id*., at 4:52-53 ("***SD (Secure Digital) memory***; or any other memory storage that exists currently or will exist in the future."). *Fish*'s "**secure memory 18** is ***removable*** to allow for easy access to the data after an accident." Ex-1004, at 7:6-29; Ex-1002, ¶170; Paper 1, at 38. *Fish*'s ***removable*** **secure memory 18** is shown in Fig. 2, reproduced below with annotations.

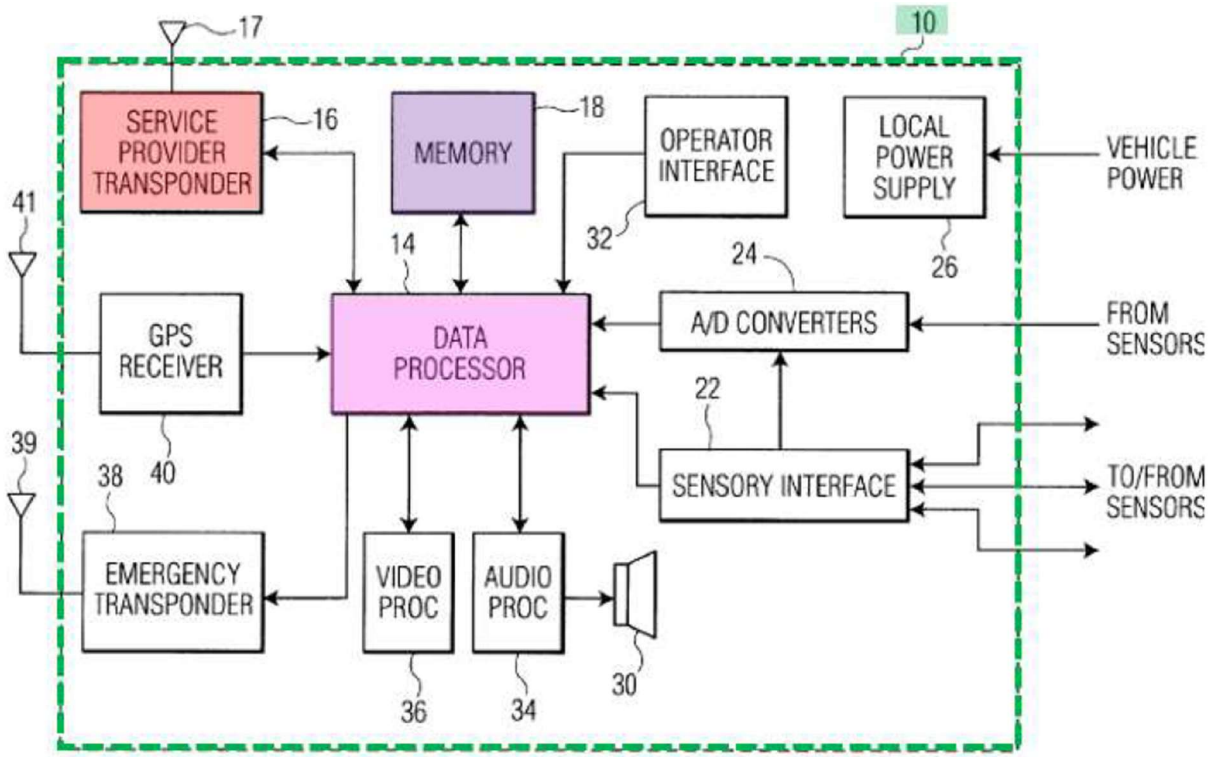


FIG. 2

Petitioner explained this error by the Examiner in detail. Paper 1, at 1, 5. Petitioner also explained how *Fish* remedies the supposed deficiency in the prior art before the Examiner. *Id*., at 5, 13, 38-39. Patent Owner does not respond. *See generally* Paper 6. Patent Owner does not address the Examiner's reason for allowance or the "removable" storage module limitation. Nor does Patent Owner address *Fish* at all. On this record, it is undisputed that the '192 patent was allowed in error and that *Fish* discloses what the Examiner believed was missing in the art.

When the Office materially errs during prosecution, this weighs heavily against discretionary denial, regardless of the trial date or issue date of the challenged patent. *See, e.g., Microsoft Corp. v. Partec Cluster Competence Ctr.*

GmbH, IPR2025-00318, Paper 9, at 3 (P.T.A.B. June 12, 2025) ("Although the scheduled district court trial is set to ***precede*** the expected final written decision due date by a month [], discretionary denial of institution is not warranted because of Petitioner's showing of material error during patent examination.") (emphasis added); *Anthony, Inc. v. Controltec, LLC*, IPR2025-00559, Paper 12, at 2 (P.T.A.B. July 16, 2025) (referring to the panel and finding that petitioner's showing of material error favored referring to panel for ***17- and 18-year old patents***); *Tesla, Inc. v. Charge Fusion Techs., LLC*, IPR2025-00152, Paper 11, at 2 (P.T.A.B. June 12, 2025) (referring to the panel where "Petitioner provides persuasive evidence that the Office erred in a manner material to the patentability of the challenged claims by overlooking the teachings of [a reference during prosecution]."). Indeed, the error during examination here is virtually identical to that considered in *Skullcandy, Inc. v. Earin AB*, IPR2025-00690, Paper 9 (P.T.A.B. July 31, 2025). There, the "examiner identified a 'wherein' clause listing various structural features . . . as the reason for allowance of the challenged claims," yet "[t]he challenged claims . . . do not recite those features." *Id*., at 2. Because of this "material error by the Office," IPR was deemed an "appropriate use of Board resources" and discretionary denial was rejected. *Id*. The same is true here, and *Fish*'s clear teaching of what the Examiner believed was missing weighs even more heavily against discretionary denial.

Here, the Examiner's mistake during prosecution, *Fish*'s negation of the Examiner's reason for allowance, and Patent Owner's silence regarding these facts all weigh strongly against discretionary denial.

III. The *Fintiv* Factors Weigh Against Discretionary Denial

A. Factor 1 (Likelihood of a Stay) is Neutral Given the Many Ongoing Post-Grant Challenges to the Asserted Patents

Factor 1, considered in terms of how the district court actually rules on post-institution motions to stay, is neutral. Patent Owner's argument to the contrary is legally erroneous: it focuses on the likelihood of a stay "before institution" and fails to address the district court's willingness to grant stays post-institution. Paper 6, at 8-9.

Fintiv Factor 1 is concerned with whether a stay exists or may be granted "if a proceeding is ***instituted***." *Apple Inc. v. Fintiv, Inc.*, IPR2020-00019, Paper 11, at 6 (P.T.A.B. Mar. 20, 2020) (emphasis added). Patent Owner argues "there is no stay in the parallel District Court Litigation, and a stay will likely not be entered before an institution decision here." Paper 6, at 3; *see also id*., at 8. This argument is circular and incomplete—it fails to address the likelihood of a ***post***-institution stay, as contemplated by *Fintiv*. Where, as here, "the record contains adequate evidence that the District Court may grant a stay upon institution," even if "not specifically directed to this proceeding," this weighs against discretionary denial. *See Juniper*

Networks, Inc. v. Packet Intelligence LLC, IPR2020-00336, Paper 21, at 16 (P.T.A.B. Sept. 10, 2020) ("[T]he District Court's statements provide some evidence that it *may* grant a stay upon institution considering all circumstances at the time the motion is filed"—"This is all the first *Fintiv* factor asks.") (emphasis in original).

Given the facts here, a stay is possible. In the district court case, a *Markman* hearing will not be held until ***three months*** after the DI deadline, confirming the district court will have yet to invest significant resources. Ex-1027 at 4. Indeed, *Markman* ***briefing*** will not have begun by then. *Id.* at 5. Moreover, fact discovery will remain open more than ***four months*** thereafter, and expert discovery will not have begun. *Id*. at 4. As the court has characterized a more advanced schedule, "[t]he most burdensome parts of the case—filing and responding to pretrial motions, preparing for trial, going through the trial process, and engaging in post-trial motions practice—all lie in the future." *Cywee Grp. Ltd. v. Samsung Elecs. Co.*, No. 2:17-CV-00140-WCB, 2019 WL 11023976, at *6, *10 (E.D. Tex. Feb. 14, 2019) (Bryson, J., of the Federal Circuit sitting by designation) (granting stay although "claim construction had been conducted and discovery was nearly complete"). By the DI deadline in the present case, the *Markman* hearing, fact and expert discovery, and all the "most burdensome parts" of the case will have yet to occur.

The district court often stays litigation even when the FWD deadline lags the scheduled trial date by several months. *See, e.g.*, *Commc'n Techs., Inc. v. Samsung*

Elecs. Am., Inc., No. 2:21-cv-00444-JRG, 2023 WL 1478447, at *1, *5 (E.D. Tex. Feb. 2, 2023) (Gilstrap, J.) (five months); *Broadphone LLC v. Samsung Elecs. Co.*, No. 2:23-cv-00001-JRG, 2024 WL 3524022, at *2-3 (E.D. Tex. July 24, 2024) (Gilstrap, J.) (three months). Here, a FWD will likely ***precede*** the expected trial date by 1.5 months. *See infra* § III.B. This timing is more favorable for a stay than many cases in which the court has granted a stay. *See, e.g., Resonant Sys., Inc. v. Samsung Elecs. Co., Ltd.*, No. 2:22-cv-00423-JRG, 2024 WL 1021023, at *2-4 (E.D. Tex. Mar. 8, 2024) (Gilstrap, J.) (granting stay with claim construction briefing underway, two depositions taken, close of fact discovery two months away, and IPR filed three months after invalidity contentions); *Commc'n Techs.,* 2023 WL 1478447, at *3 ("[W]ith the close of discovery, the claim construction hearing, and the trial setting all in the future, the Court concludes that this factor weighs in favor of a stay. . . ."); *Broadphone*, 2024 WL 3524022, at *2-3 (granting stay motion where "[a] significant amount of discovery remains, the claim construction hearing has not occurred, and trial is currently [7 months away]"); *e-Watch Inc. v. Apple, Inc.*, No. 2:13-cv-1061-JRG, 2015 WL 12915668, at *3 (E.D. Tex. Mar. 25, 2015) (granting a stay partially because, "[b]y the time [Defendant] filed its renewed motion, the claim construction briefing process . . . had not yet fully completed, . . . over three-and-a-half months remained within the fact discovery period . . . and over five months remained within the expert discovery period" (citations omitted)).

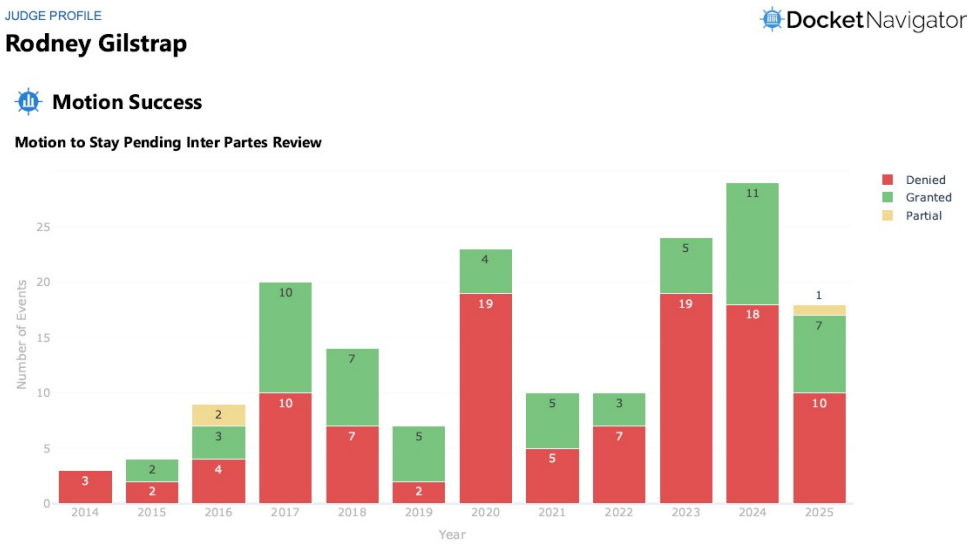
Further, Petitioner diligently and expeditiously filed the Petition just ***three weeks*** after Patent Owner's service of infringement contentions. Ex-1028. That is extraordinarily fast. *See Samsung Elecs. Co., Ltd v. Mojo Mobility Inc.*, IPR2023-01090, Paper 11, at 19 (P.T.A.B. Jan. 11, 2024) (finding "Petitioner was diligent in filing the Petition, which was filed within ***four months*** of service of infringement contentions") (emphasis added); *Samsung Elecs. Co., Ltd. v. CardWare Inc.*, PGR2023-00012, Paper 14, at 19 (P.T.A.B. Aug. 11, 2023) (finding "the Petition was expeditious" where filed "***four months*** after the service of preliminary infringement contentions") (emphasis added). Indeed, the Petition was filed ***five months before*** invalidity contentions are due. Ex-1027. That is also extraordinarily quick. *See Nikon Corp. v. Optimum Imaging Techs.*, *LLC*, IPR2024-01374, Paper 19, at 19 (P.T.A.B. Apr. 29, 2025) (finding "Petitioner was diligent in filing its Petition" two months before invalidity contentions); *Tesla, Inc. v. Autonomous Devices, LLC*, IPR2023-01172, Paper 21, at 9 (P.T.A.B. Jan. 8, 2024) (finding petitioner's "diligence in filing the Petition . . . before serving its initial invalidity contentions . . . weighs against discretionary denial"); *Apple Inc. v. Parus Hldgs., Inc.*, IPR2020-00686, Paper 9, at 14-15 (P.T.A.B. Sept. 23, 2020) (finding "Petitioner acted expeditiously" where petition was filed "just after" invalidity contentions). As discussed above, Judge Gilstrap grants stays in cases with more

advanced schedules than the present case. *See, e.g.*, *Commc'n Techs.*, 2023 WL 1478447, at *3; *Resonant Sys.*, 2024 WL 1021023, at *2-4.

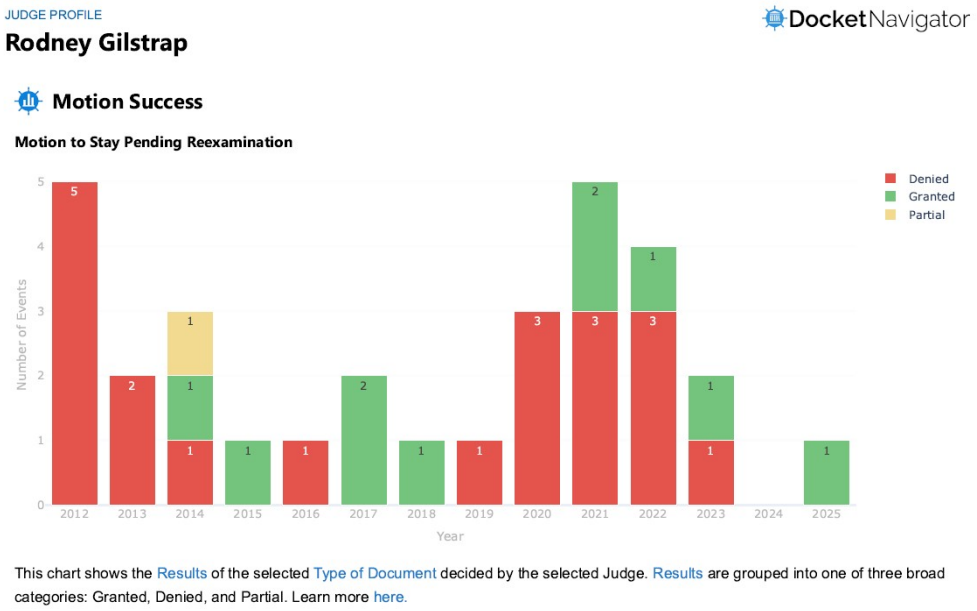
Lastly, while Patent Owner asserts that the court "routinely denies requests to stay pending IPRs before institution on all asserted claims of all Asserted Patents," Paper 6 at 8, here each of Patent Owner's five asserted patents has an active post-grant validity challenge. In addition to the present proceeding, U.S. Patent No. 7,513,238 is challenged in *Nissan Motor Co., Ltd. v. Longhorn Automotive Group LLC*, IPR2025-01089 (P.T.A.B.); U.S. Patent No. 7,987,002 is challenged in *Ex Parte* Reexamination Control No. 90/019,867, with an office action dated August 6, 2025, rejecting 10 claims; U.S. Patent No. 8,265,353 is challenged in *Volkswagen Group of Am., Inc. v. Longhorn Automotive Group LLC*, IPR2025-01064 (P.T.A.B.); and U.S. Patent No. 8,810,803 is challenged in *Koito Mfg. Co., Ltd. v. Longhorn Automotive Group LLC*, IPR2025-00955 (P.T.A.B.). Nevertheless, given the pending status of these challenges to the asserted patents, and the potential for others in the future, this factor should be weighed neutrally. *See Nikon Corp.*, IPR2024-01374, Paper 19, at 10 (concluding "[w]e will not attempt to predict how the court in the parallel district court proceedings would proceed if a stay is requested because the court may determine whether or not to stay any individual case based on a variety of circumstances and facts beyond our control and to which the Board is not privy," and weighing Factor 1 neutrally). By contrast, Patent Owner's reliance on *Force*

Mos Technology, Co., Ltd. v. ASUSTek Computer, Inc. is inapt, since in that case only two of the three asserted patents were challenged, the petition was filed nearly a year after the case was filed, and the petition was filed more than five months after infringement contentions were served. No. 2:22-CV-00460-JRG, 2024 WL 1586266, at *3 (E.D. Tex. Apr. 11, 2024). No comparable circumstances exist here.

Further, based on Docket Navigator statistics, Judge Gilstrap has trended toward granting motions to stay both IPRs and requests for reexamination in recent history. *See* Ex-1029, Ex-1030.



Ex-1029



Ex-1030

Notably, included in the calculations of denials are requests for stay filed prior to the institution of Patent Office challenges which are denied without prejudice, with the understanding that motions will be refiled and likely granted following institution. The actual grant-rates are thus higher than they may appear. Based on these statistics and trends, it is likely that a stay will be granted in the parallel litigation post-institution.

Thus, Factor 1, properly considered for how the district court will likely rule post-institution under the particular facts here, should weigh neutrally.

B. Factor 2 (Parallel Trial Date) Weighs Against Discretionary Denial Because the Board is Likely to Issue a Final Written Decision 1.5 Months Before a District Court Trial

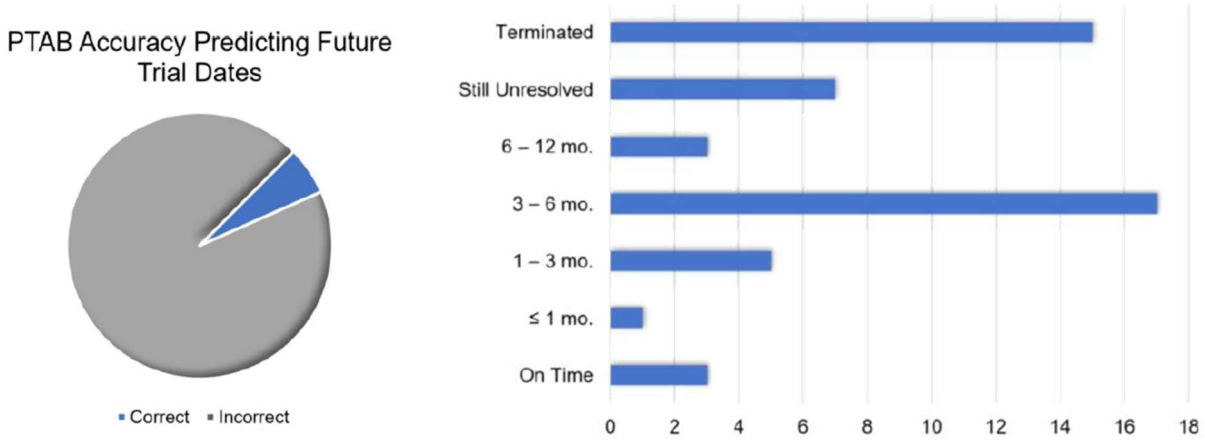
Factor 2 weighs against discretionary denial because the Board will likely issue its FWD ***1.5 months before*** any district court trial, and well before the district court renders its final judgment. Patent Owner's contrary argument is artificial because it fails to account for any statistical time-to-trial data for the district court, which the Board regularly considers instead of just initially scheduled trial dates. According to the current and official federal government statistics for the Eastern District of Texas, trial is expected to begin approximately 25.9 months from the filing of the case. Ex-1031 at 35.[1] Trial will likely begin in ***mid-January 2027***—1.5 months ***after*** a FWD.

The Board routinely considers statistical time-to-trial data for cases before the district court in evaluating *Fintiv* Factor 2, not merely initially scheduled trial dates. *See, e.g.*, *Aylo Freesites Ltd v. WellcomeMat, LLC*, IPR2024-00710, Paper 13, at 14-15 (P.T.A.B. Sept. 5, 2024) (considering "recent ***median time-to-trial statistics*** for the Eastern District of Texas" making FWD date two months before expected trial date, and finding "*Fintiv* Factor 2 weighs against" discretionary denial) (emphasis

[1] The actual date is likely to be later, since this case took substantial time to accomplish service for the foreign defendants—2.5 months for Volkswagen AG and 6 months for Audi AG. Ex-1032, at 5, 8.

added); *Shenzhen Tuozhu Tech. Co., Ltd. v. Stratasys, Inc.*, IPR2025-00321, Paper 10, at 10 (P.T.A.B. June 18, 2025) (considering "recent ***median time-to-trial statistics*** for Judge Gilstrap" and finding "this factor is neutral or weighs slightly against discretionary denial") (emphasis added); *BOE Tech. Group Co., Ltd. v. Optronic Sciences, LLC*, IPR2024-01133, Paper 16, at 10-11 (P.T.A.B. Jan. 27, 2025) (considering ***"median time to trial" statistics*** for Judge Gilstrap to conclude that trial "is around the same time or after the" FWD date, and thus "this factor weighs against" discretionary denial) (emphasis added).

The Board considers statistically forecasted trial dates over initially scheduled dates for good reason. The district court case here is scheduled for jury selection on August 17, 2026, but 10 cases are scheduled to begin jury selection that day alone, with 31 cases scheduled to begin jury selection throughout August 2026. *See* Ex-1033. The trial date is statistically very likely to be delayed, as shown below. *See* Ex-1034 (studying reliance on the initially scheduled trial dates in *Fintiv* analysis and finding the dates were "wrong 94% of the time" compared to the actual trial dates, the vast majority being delayed 3-6 months). Statistically, trial in the present case likely will begin well after the FWD deadline.



Ex-1034, at 2-3

As described in the table below, data from Docket Navigator indicates that of the cases before Judge Gilstrap making it to trial in the last year, ***all*** cases except one were delayed—half by four months or more. Ex-1035. Statistically, therefore, the Board will likely reach a FWD before trial begins (especially since the Board often issues DIs and FWDs before their statutory deadlines).

Case	Filing	Original Trial	Actual Trial	Days Trial Delayed
Mojo Mobility Inc v. Samsung Elecs. Co., Ltd., et al., No. 2-22-cv-00398	10/7/2022	8/5/2024	9/6/2024	32
Pardalis Tech. Licensing, LLC v. Int'l Bus. Machines Corp., No. 2-22-cv-00452	11/22/2022	8/19/2024	9/20/2024	32

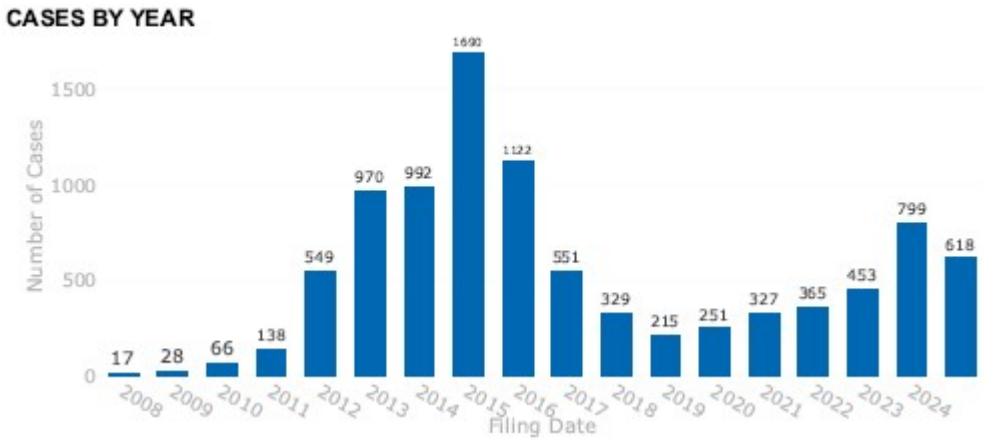
Touchstream Techs., Inc. d/b/a Shodogg v. Charter Commc'ns, Inc. et al., No. 2-23-cv-00059	2/16/2023	10/28/2024	3/3/2025	126
Headwater Research LLC v. Samsung Elecs. Co., Ltd. et al., No. 2-23-cv-00103	3/10/2023	1/6/2025	4/21/2025	105
General Access Solutions, Ltd. v. T-Mobile US, Inc. et al., No. 2-23-cv-00158	4/6/2023	1/27/2025	4/7/2025	70
Daingean Techs. Ltd. v. T-Mobile USA, Inc. et al., No. 2-23-cv-00347	7/24/2023	4/7/2025	7/7/2025	91
Headwater Research LLC v. Verizon Commc'ns Inc. et al., No. 2-23-cv-00352	7/28/2023	5/19/2025	7/16/2025	58
Empire Tech. Development LLC v. Samsung Elecs. Co., Ltd. et al., No. 2-23-cv-00427	9/18/2023	6/23/2025	6/23/2025	0
Netlist, Inc. v. Samsung Elecs. Co., Ltd. et al., No. 2-22-cv-00293	8/1/2022	4/15/2024	11/12/2024	211
Correct Transmission, LLC v. Nokia Corp. et	9/2/2022	4/15/2024	10/30/2024	198

al., No. 2-22-cv-00343				
Headwater Research LLC v. Samsung Elecs. Co., Ltd. et al., No. 2-22-cv-00422	10/26/2022	8/5/2024	1/13/2025	161
Force MOS Tech. Co., Ltd. v. ASUSTeK Computer, Inc., No. 2-22-cv-00460	11/28/2022	10/7/2024	2/7/2025	123
Multimedia Techs. Pte. Ltd. v. LG Elecs. Inc. et al., No. 2-22-cv-00494	12/23/2022	11/18/2024	5/19/2025	182
General Access Solutions, Ltd. v. Cellco Partnership d/b/a Verizon Wireless et al., No. 2-22-cv-00394	10/10/2022	6/24/2024	12/6/2024	165
			Average	**111**

Ex-1035 Judge Gilstrap Trial Delays (Past Year)

These delays are almost certain to worsen by the scheduled jury selection date here. The trials above involve cases filed in 2022 and 2023. *Id.* The present case was filed in late 2024. As indicated below, the district court's case filings have essentially ***doubled*** since 2022 and 2023—a continuing trend—with 927 cases projected by the end of 2025 based on caseload to date. *See* Ex-1036. This is also suggested by the federal judicial data noted above, which show a continuously

increasing time-to-trial in the Eastern District of Texas: 19.0 months in 2023, 21.3 months in 2024, and 25.9 months in 2025. Ex-1031. Delays are thus likely to lengthen, and delays last year already averaged nearly four months, ranging up to seven months. *See* Ex-1035. Just 1 of 14 jury trials began as scheduled. *Id.*



Ex-1036 Judge Gilstrap Docketed Cases by Year

The main purpose of *Fintiv* Factor 2 is to ensure efficiency and avoid duplicative efforts. Given Petitioner's broad stipulations here, there can be no repetition or inefficiency: the IPR would be a true alternative for prior art challenges, as Congress intended. *See* 77 Fed. Reg. at 48612 (Aug. 14, 2012) ("The purpose of the AIA and this final rule is to establish a more efficient and streamlined patent system that will improve patent quality and limit unnecessary and counterproductive litigation costs.").

Patent Owner's cited cases are all irrelevant because, unlike here, they concern situations where a district court trial date precedes a FWD. In *Supercell Oy*

v. Gree, Inc., the trial date was nearly 11 months ***before*** the FWD date, and had special certainty since it was "accelerated" by two weeks by the court and the petitioner's request for a continuance was denied. IPR2020-00513, Paper 11, at 9 (P.T.A.B. June 24, 2020). By contrast, here the expected trial date is 1.5 months ***after*** the FWD date and no special certainty exists as in *Supercell*. Likewise, in *Edward LifeSciences Corp. v. Evalve, Inc.*, a trial was scheduled nine months ***before*** the FWD and the court's "comments in the docket reflect an intent to preserve this trial date." IPR2019-01479, Paper 7, at 7 (P.T.A.B. Feb. 26, 2020). Similarly, in *Samsung Elecs. Am., Inc. v. Uniloc 2017 LLC*, trial was set six months ***before*** a FWD. IPR2019-01218, Paper 7, at 9-10 (P.T.A.B. Jan. 7, 2020). In *Next Caller Inc. v. TRUSTID, Inc.*, the trial was not only set to occur "several months" ***before*** a FWD, but was also "on track." IPR2019-00961, Paper 10, at 14-15 (P.T.A.B. Oct. 16, 2019). In *Cisco Sys., Inc. v. Ramot at Tel Aviv Univ. Ltd.*, trial was set six months ***before*** a FWD. IPR2020-00122, Paper 15, at 7 (P.T.A.B. May 15, 2020). In *Cisco Sys., Inc. v. Estech Sys., Inc.*, ***two*** trials ***preceded*** a FWD: one by 11 months and the other by 7 months. IPR2021-00329, Paper 13, at 7-15 (P.T.A.B. Jul. 6, 2021). In *F5 Networks, Inc. v. WSOU Invs., LLC*, trial was set for six months ***before*** a FWD and, "even if [petitioner's] requested extension were granted, the 'trial would still occur nearly five months ***before*** a FWD.'" IPR2022-00239, Paper 12, at 8 (P.T.A.B. May 19, 2022) (emphasis added). In *Google LLC v. EcoFactor, Inc.*, trial was set

"more than six months ***before***" a FWD, and the "parties agreed that trial should proceed" within one month of scheduling. IPR2021-00488, Paper 12, at 12 (P.T.A.B. Aug. 11, 2021) (emphasis added). In *Cisco Sys., Inc. v. Oyster Optics, LLC*, trial was set for seven months ***before*** a FWD. IPR2021-00238, Paper 10, at 12 (P.T.A.B. Jun. 1, 2021). Lastly, in *Samsung Elecs. Co. v. Truesight Commc'ns LLC*, trial was "likely to occur at least six months ***before*** the projected statutory deadline for a" FWD. IPR2025-00123, Paper 12, at 7 (P.T.A.B. Apr. 22, 2025) (emphasis added). Patent Owner's argument that the "final rule governing Director Review of PTAB decisions" postdated *Fintiv* also misses the point. Paper 6, at 7. The authority cited and compared in detail above by Petitioner postdates *Finitv* and considers FWD deadlines, not Director Review deadlines, under the *Fintiv* framework. Not surprisingly, Patent Owner offers no legal authority to support its challenge to the Board's established practice of considering FWD dates under *Fintiv*. *Id*., at 7-8. Indeed, Patent Owner's argument about post-FWD Director Review deadlines backfires, because the district court analog would be post-trial briefing, which extends for several months[2]—much longer than Director Review decisions. If

[2] A post-trial motion may be filed 28 days after entry of judgment. Fed. R. Civ. P. 59(b). Once a motion is filed, a response is due in 14-days, a reply is due 7 days thereafter, and a sur-reply may be filed 7 days after that—unless these dates are extended. E.D. Tex. Local Rule CV-7(e)-(f). After this of 56 days of briefing, which often is extended, the motion is submitted to the court for consideration in due course.

Director Review and post-trial motions were considered in the *Fintiv* calculus—which they are not—the result would weigh even more against discretionary denial.

Underscoring the inapplicability of discretionary denial here, denial has been withheld in recent cases where—unlike here—scheduled trial dates predated the FWD deadline. *See Samsung Display Co., Ltd. v. Pictiva Displays Int'l Ltd.*, IPR2024-01222, Paper 12, at 7, 24 (P.T.A.B. Mar. 6, 2025) (seven-month difference); *SAP Am., Inc. v. Cyandia, Inc.*, IPR2024-01433, Paper 13, at 9, 27 (P.T.A.B. Apr. 7, 2025) (six-month difference); *Kia Corp. v. Emerging Automotive LLC*, IPR2024-01167, Paper 14, at 15, 49 (P.T.A.B. Jan. 27, 2025) (same); *IBM Corp. v. Digital Doors, Inc.*, IPR2023-00973, Paper 10, at 12, 25 (P.T.A.B. Jan. 19, 2024) (five-month difference); *Tesla, Inc. v. Autonomous Devices, LLC*, IPR2023-01172, Paper 21, at 7, at 17 (P.T.A.B. Jan. 8, 2024) (same); *MediaTek Inc. v. Daedalus Prime LLC*, IPR2025-00100, Paper 10, at 27, 35 (P.T.A.B. May 19, 2025) (four-month difference). The circumstances here are much more favorable for institution, and unsuitable for discretionary denial, since the FWD will significantly predate the expected trial and Petitioner has entered stipulations far broader than in any of these exemplary cases. *See Tesla, Inc. v. U.S. Sec'y of the Navy*, IPR2025-00341, Paper 12, at 2-3 (P.T.A.B. June 13, 2025) (broad stipulation outweighed other *Fintiv* factors, including trial date). For all of these reasons, *Fintiv* Factor 2 weighs against discretionary denial.

C. Factor 3 (Investment in Parallel Proceeding at the DI Deadline) Weighs Against Discretionary Denial Because the District Court Case Will be in Its Early Stages, With the *Markman* Hearing After the DI Deadline

"If, at the time of the institution decision, the district court has not issued orders related to the patent at issue in the petition, this fact weighs against exercising discretion to deny institution." *Fintiv*, IPR2020-00019, Paper 11, at 10. Factor 3 thus weighs against discretionary denial, because the DI deadline (November 25, 2025) is before the onset of even claim construction ***briefing*** (January 15, 2026-February 5, 2026), let alone the *Markman* hearing (February 26, 2026), and the court has yet to hold any hearings or issue any substantive decisions related to the '192 patent. Ex-1027. Indeed, Petitioner's invalidity contentions for the '192 patent are not due until September 27, 2025. *Id*. This weighs against discretionary denial. *See Nikon Corp.*, IPR2024-01374, Paper 19, at 18 (granting institution where "the district court has not issued any substantive orders related to the" challenged patent).

Longhorn points only to its infringement contentions and the fact that "claim construction proceedings will begin on October 23, 2025, a month before the institution deadline" in support of discretionary denial. *See* Paper 6, at 8. That is not enough. *See SAP*, IPR2024-01433, Paper 13, at 10-11 (rejecting the notion that such activities constitute significant investment and concluding Factor 3 favors institution); *Kia*, IPR2024-01167, Paper 14, at 16-17 (same); *Autonomous Devs.*,

IPR2023-01172, Paper 21, at 7-9 (same). No party has served interrogatories in the parallel litigation, and the only document productions to date have been those strictly required by the Eastern District of Texas local rule P.R. 3-2 (document production accompanying initial disclosures). Indeed, Longhorn has produced only a single PDF file compromised of public information. Ex-1037. No third-party discovery has been requested or occurred. No answer has been filed in response to the complaint, and two motions to dismiss remain pending before the Court. Ex-1032. The close of fact discovery, expert discovery, and the claim construction hearing fall well after the DI deadline. Ex-1027. It is thus false for Patent Owner to claim—without any legal or factual support—that "[t]he parties' and the Court's investment in the parallel proceeding weighs strongly in favor of discretionary denial." Paper 6, at 8. Factor 3 weighs strongly ***against*** discretionary denial. *See SAP*, IPR2024-01433, Paper 13, at 11 (finding Factor 3 weighs against discretionary denial where *Markman* hearing was rescheduled from before DI deadline to after DI deadline); *Kia*, IPR2024-01167, Paper 14, at 17 (finding Factor 3 weighs against discretionary denial where "[f]act and expert discovery are ongoing [for six more weeks and 11 more weeks], respectively" and *Markman* hearing was rescheduled from before DI deadline to after DI deadline); *Autonomous Devs.*, IPR2023-01172, Paper 21, at 8-9 (finding Factor 3 weighs against discretionary denial where "fact discovery is

ongoing[and] expert discovery has not begun" and "the District Court has yet to issue a claim construction order").

Comparing the timeline in the present case to other cases with analogous timelines, as in the table below, confirms that Factor 3 weighs against discretionary denial. *Compare* Ex-1027, *with* Ex-1038-Ex-1046.

Stage	*SAP* (Instituted)	*Kia* (Instituted)	*Pictiva* (Instituted)	Parallel Case
Service of Complaint	219 days (9½ mos.) before IPR	294 days (10 mos.) before IPR	287 days (9½ mos.) before IPR	86 days (<3 mos.) before IPR
Invalidity contentions	127 days before IPR	109 days before IPR	62 days before IPR	
	IPR Filed			
				156 days after IPR
CC Briefing[3]	47 days before DI	53 days before DI	72 days before DI	
CC Hearing			30 days before DI	
	Decision on Institution (DI)			
CC Briefing				51 days after DI
CC Hearing	17 days after DI	18 days after DI		93 days after DI
Fact Discovery Close	1 month after DI	1 month after DI	4 days after DI	4 months after DI
Expert Discovery Close	2½ months after DI	2½ months after DI	1½ months after DI	5 months after DI
Est. Trial	4 days before FWD	2 months before FWD	2½ months before FWD	
	Final Written Decision (FWD)			
Est. Trial				1½ months after FWD[4,5]

[3] Using the due date for the Opening Claim Construction Brief.
[4] Using 25.9 months from the filing of the Complaint as estimated in current federal government statistics for Eastern District of Texas. Ex-1031.
[5] Using estimated FWD of November 25, 2026.

In all three cases above, Factor 3 was found to weigh affirmatively ***against*** discretionary denial. *See SAP*, IPR2024-01433, Paper 13, at 11 ("We conclude that [Factor 3] ***favors institution***." (emphasis added)); *Kia*, IPR2024-01167, Paper 14, at 17 (finding Factor 3 "weighs ***against discretionary denial***" (emphasis added)); *Pictiva*, IPR2024-01222, Paper 12, at 7 (finding Factor 3 "***weighs against denial***" (emphasis added)). There is no reason to find otherwise in the present case, where the case schedule has not advanced as much.

Unlike the cases above, the DI deadline in the present case precedes claim construction briefing. It also precedes the *Markman* hearing by three months—far more than in any of the cases above. The present case is much less advanced by comparison. Each of the dates for the close of fact discovery, close of expert discovery, and trial are months longer relative to the DI deadline when compared to the cases above.

Moreover, as explained for Factor 1, "the most burdensome parts of the case" still "all lie in the future" after the DI deadline. *Cywee*, 2019 WL 11023976, at *6. Comparing the present case to comparable cases before Judge Gilstrap demonstrates that the court itself would agree the stage of this case is not advanced. *See supra* § III.A. What matters, as shown above, is the significant substantive work that would remain after the DI deadline, such that investment in the parallel proceedings before the DI deadline will have been minimal. So much time remains in the

schedule after the DI deadline that instituting IPR would minimize (perhaps altogether eliminate) the investment by the parties and the court necessary to resolve the disputes. Tellingly, Longhorn provides no legal authority in support of its position that Factor 3 supports denial of institution. *See* Paper 6, at 8.

Lastly, Patent Owner's unexplained assertion of "[d]elay" by Petitioner is incorrect. Paper 6, at 8. Because Petitioner was diligent filing the Petition, this further weighs against discretionary denial under *Fintiv* Factor 3. The Petition was filed within ***three weeks*** of Patent Owner's infringement contentions in district court, and the Board has held filing a petition "within four ***months***" shows diligence. *See Mojo Mobility*, IPR2023-01090, Paper 11, at 19 ("this factor weighs against exercising discretion to deny institution"). Further, the Petition was filed such that the *Markman* hearing is scheduled three months after the DI, which also demonstrates diligence. *See Canadian Solar Inc. v. Maxeon Solar Pte. Ltd.*, IPR2024-01038, Paper 13, at 31 (P.T.A.B. Jan. 14, 2025) (petitioner acted "expeditiously" where "the Markman hearing is not scheduled to occur for several months"). Indeed, petitions are deemed "expeditious" even if filed such that the DI occurs ***after*** the *Markman* hearing but before an order. *See CardWare Inc.*, PGR2023-00012, Paper 14, at 19 ("[T]his factor weighs slightly against exercising discretion to deny institution"). By any measure, the Petition here was expeditious and Petitioner was diligent.

Because investment in the parallel district court litigation has been and will remain minor by the DI deadline, Factor 3 weighs against discretionary denial.

D. Factor 4 (Overlap Between Petition and Parallel Proceeding) Weighs Against Discretionary Denial Because Petitioner Has Committed to Extraordinarily Broad Stipulations and the Petition Includes Additional Claims

Factor 4 weighs strongly against discretionary denial because Petitioner has committed to extremely broad stipulations that would eliminate all overlap between this IPR and the district court action, and this IPR challenges three claims of the '192 patent not asserted in district court, making this IPR the only avenue to assess their patentability.

First, a *Sotera* stipulation remains a weight "***strongly against***" denial. *Samsung Elecs. Co. v. Truesight Commc'ns LLC*, IPR2024-01477, Paper 12, at 14 (P.T.A.B. Apr. 21, 2025) (emphasis added). Petitioner offered a *Sotera* stipulation here with the Petition. Paper 1, at 88. Patent Owner identifies no issue with this stipulation. *See generally* Paper 6. Thus, this stipulation alone weighs heavily against discretionary denial.

Additionally, to avoid any doubt about potential overlap between this IPR and the district court proceeding, Petitioner now further offers a stipulation that extends well beyond *Sotera*, making this IPR an absolute alternative to district court for invalidity based on prior art. Specifically, Petitioner stipulates that if the Board

institutes this IPR and institution is not subsequently vacated, reversed, or otherwise withdrawn by rehearing or Director Review, Petitioner will not pursue against any of the claims challenged in this IPR proceeding, in any pending district court litigation, the following: (i) the specific grounds raised in the instituted IPR proceeding; (ii) any other grounds that reasonably could have been raised before the Board in the instituted IPR proceeding (i.e., any ground that reasonably could have been raised under pre-AIA §§ 102 or 103 on the basis of prior art patents or printed publications); or (iii) any other invalidity ground under pre-AIA §§ 102 or 103 involving any type of legally recognized prior art, including any patent, printed publication, or system art.

These stipulations weigh very heavily against discretionary denial. *See, e.g.*, *Tesla*, IPR2025-00341, Paper 12, at 2; *Tesla, Inc. v. Intell. Ventures II*, IPR2025-00339, Paper 10, at 2 (P.T.A.B. June 13, 2025). They would ensure that this IPR, if instituted, would be a true alternative to litigation and would substantially simplify issues in district court. *See Shenzhen Tuozhu Technology*, IPR2025-00321, Paper 10, at 13-14 (noting that "Patent Owner does not address Petitioner's updated second stipulation" and broad stipulation "weighs against exercising discretion to deny institution").

Second, the Petition here challenges three claims (7, 8, and 10) not asserted in the district court litigation. Paper 1, at 88. While Patent Owner acknowledges this

midway through its brief, Paper 6, at 4, Patent Owner makes repeated misleading characterizations about the claims challenged in the two proceedings. According to Patent Owner:

- "the District Court Litigation involves the . . . ***same claims***" (*id*. at 1, emphasis added)
- "the issues in the parallel District Court litigation are ***identical*** to this proceeding" (*id*. at 3, emphasis added)
- "the District Court Litigation involves the ***same claims*** at issue in the Petition" (*id*. at 3, emphasis added)
- "There is ***complete overlap*** between the claims at issue in this Petition and the District Court Litigation . . ." (*id*. at 4, emphasis added)

These statements are not true. Because this IPR challenges three claims not at issue in the district court litigation, this IPR is the sole vehicle addressing their patentability. Unlike in the proceeding cited by Patent Owner, *Cisco Systems, Inc. v. Ramot at Tel Aviv University Ltd.*, where all four claims challenged via IPR were also asserted in the parallel district court litigation, here three claims are challenged via IPR but not asserted in litigation. IPR2020-00122, Paper 9, at 15 (P.T.A.B. Feb. 18, 2020).

In circumstances like those here, the ***non***-overlap between proceedings weighs against discretionary denial. Under *Fintiv*, "if the petition includes

materially different grounds, arguments, and/or evidence than those presented in the district court, this fact has tended to weigh against exercising discretion to deny institution." *Fintiv*, IPR2020-00019, Paper 11, at 12-13. That is the case here, since the Petition asserts two references against claims 7, 8, and 10—*Gehlot* (Ex-1006) and *Stevenson* (Ex-1007)—not asserted against the majority of challenged claims, including those challenged based on *Fish* and/or *Ziv* (claims 1-4, 11-17, and 19-22). Paper 1, at 2. Claims 7, 8, and 10, respectively, address subject matter of "retinal scanning," a "finger print reader," and "DNA detection"—none of which are recited in the other claims of the '192 patent and none of which are at issue in the district court case. "The patentability of this subject matter will not be resolved in the district court litigation." *MED-EL Elektromedizinische Geräte Ges.m.b.h. v. Sonova AG*, IPR2021-00023, Paper 10, at 18 (P.T.A.B. Apr. 6, 2021). This weighs against discretionary denial. *Id.*; *see also Comcast Cable Commc'ns, LLC v. Touchstream Techs., Inc.*, IPR2024-00325, Paper 13, at 12-13 (P.T.A.B. July 26, 2024) ("[T]he fact that the Petition challenges claims that are not asserted in the litigation shows that there is not a complete overlap" and "factor four weighs slightly against denial.").

E. Factor 5 (Whether the Parties Are the Same) Does Not Favor Discretionary Denial Because the Parties Are Almost Always the Same

The parties or RPIs here overlap with those at the district court. Although the Board has taken varying approaches to the weighing of this factor under such circumstances, persuasive Board authority reasons that this factor should be considered "neutral" where, as here, other *Fintiv* factors more heavily guide the analysis. "Under these circumstances, the fifth *Fintiv* factor's weight is neutral." *Shenzhen Root Tech. Co., Ltd. v. Chiaro Tech. Ltd*., IPR2024-01296, Paper 9, at 20 (P.T.A.B. Feb. 25, 2025). Patent Owner's position to the contrary, Paper 6 at 4, fails to account for this authority, or indeed any Board authority at all.

F. Factor 6 (Other Considerations—Including Settled Expectations, Material Error During Prosecution, Complexity of the Case, and the Strength of the Petition) Weighs Against Discretionary Denial

All considerations under Factor 6 weigh heavily ***against*** discretionary denial, as discussed further below.

1. Settled Expectations Weigh Against Discretionary Denial

Patent Owner's "settled expectations" argument, Paper 6 at 9-10, is refuted by consistent Board decisions rejecting discretionary denial where a material mistake was made during examination. Settled expectations cannot be selective. They must account for a patent's full life, including examination, as the Board's decisions reflect. In addition to being contrary to caselaw, Patent Owner's argument is a

classic conclusory statement lacking reasoning, particularly, or evidence of any kind. The Board gives conclusory arguments like Patent Owner's little or no weight. When settled expectations are considered in full, they weigh strongly against discretionary denial for several reasons.

a. A Material Error by the Patent Examiner Outweighs Alleged Settled Expectations

The Board consistently finds that a material error during examination is sufficient reason to reject discretionary denial, regardless of the duration of a Patent Owner's alleged settled expectations. The Board's reasoning is made clear in numerous recent decisions:

- *Anthony*, IPR2025-00559, Paper 12, at 2-3 (given Examiner's material error in prosecution, rejecting discretionary denial for ***17- and 18-year old*** patents);
- *Microsoft Corp. v. X1 Discovery, Inc.*, IPR2025-00253, Paper 13, at 2-3 (P.T.A.B. June 25, 2025) (given Examiner's material error in prosecution, rejecting discretionary denial for ***17-year old***, ***8-year old***, and ***5.5-year old*** patents);
- *Skullcandy*, IPR2025-00690, Paper 9, at 2 (given Examiner's mistake about what claim limitations were present in claims, rejecting discretionary denial for ***9-year old*** patent);

- *Eunsung Global Corp. v. Hydrafacial LLC*, IPR2025-00445, Paper 14, at 2-3 (P.T.A.B. July 10, 2025) (given Examiner's mistake about prior art's disclosure, rejecting discretionary denial for ***8.5-year old*** patent); and
- *Embody, Inc. v. Lifenet Health*, IPR2025-00248, Paper 13, at 2-3 (P.T.A.B. June 26, 2025) (given prior art remedying reason for allowance, rejecting discretionary denial for ***6.5-year old*** patent).

Just as in *Anthony*, where a prior art reference was found to likely remedy the Examiner's error, here Petitioner explains how *Fish* does the same. *Anthony*, IPR2025-00559, Paper 12, at 2. Indeed, the significance of this error by the Examiner and *Fish*'s pertinence are magnified because *Fish* teaches the supposedly missing claim element (removable storage) in the same way as the '192 patent itself (e.g., SD memory), and Patent Owner fails to contest any of these facts (nor can it). *See supra* § II. Indeed, in *Skullcandy*, the Examiner's error alone was deemed sufficient to reject discretionary denial, with no mention of remediating prior art or silence by the Patent Owner. IPR2025-00690, Paper 9, at 2. The facts here weigh particularly heavily against discretionary denial, since the Examiner's misapprehension of the claim language is not disputed (nor can be disputed), *Fish*'s disclosure of what the Examiner believed was missing in the prior art is not disputed (not can be disputed), and *Fish*'s materiality is underscored because it was applied

to reject the claims of the '192 patent's child application, in response to which the application was abandoned. *See* Ex-1002, ¶123.

Patent Owner's sole cited authority, *Dabico Airport Sols. Inc. v. AXA Powers Aps*, is readily distinguishable because there "Petitioner does not provide any persuasive reasoning why an *inter partes* review is an appropriate use of Office resources." IPR2025-00408, Paper 21, at 3 (P.T.A.B. June 18, 2025). In *Dabico* it was thus appropriate to consider "the absence of any such information" weighing in favor of discretionary denial. *Id*. But here as explained above each of the *Fintiv* factors and the Examiner's material error during examination weigh heavily against discretionary denial. Patent Owner fails to identify any caselaw or other authority addressing settled expectations with facts akin to the present case. Consistent with the Board's caselaw as addressed above, settled expectations here weigh heavily against discretionary denial.

b. Patent Owner's Alleged Settled Expectations are Conclusory, Unexplained, and Entitled to No Weight

Longhorn references the age of the '192 patent and then concludes—without any explanation, particularity, or evidence—"Patent Owner has settled expectations at this point." Paper 6, at 10. This is a purely conclusory statement. Nowhere does Patent Owner explain, much less substantiate, ***what*** its supposed expectations are. For example, if Patent Owner means to contend that it expects the '192 patent to be

valid, this is objectively implausible under the unique facts here, where the patent was undisputedly allowed in error and invalidating prior art was used to reject the child application, which was then abandoned. *See supra* § II. Alternatively, if Patent Owner means to contend that it expected no IPR to be filed challenging the '192 patent, this too is implausible. Patent Owner's decision to purchase and then litigate the patent, prompting this IPR, was a choice entirely within Patent Owner's control. Indeed, if Patent Owner's expectation was to do what it did—purchase and litigate the '192 patent—Patent Owner should have expected[6] those it sued to challenge the validity of the patent. Patent Owner further fails to provide any evidence or argument supporting settled expectations based on any amount of financial, time, or other investments dedicated to research, development, or other activities. *Cf. Amgen Inc. v. Bristol-Myers Squibb Co.*, IPR2025-00601, Paper 9, at 2-3 (P.T.A.B. July 24, 2025) (considering such factors).

On this record, Patent Owner's invocation of "settled expectations" is generic, unexplained, and conclusory—the type of contention given no weight by the Board in every other context. *Cf.* 37 C.F.R. §§ 42.104(b)(4)-(5) (conclusory arguments and references to evidence in petition are inadequate); 37 C.F.R. § 42.65(a) (conclusory

[6] These actions by Patent Owner all predated the Office's March 26, 2025 memorandum on Interim Processes for PTAB Workload Management, and thus Patent Owner cannot claim settled expectations derived from that memorandum.

expert testimony receives "little or no weight"); *Avant Tech., Inc. v. Anza Tech., Inc.*, IPR2018-00828, Paper 7, at 10-11 (P.T.A.B. Oct. 16, 2018) (citing *In re Magnum Oil Tools Int'l, Ltd*., 829 F.3d 1364, 1380 (Fed. Cir. 2016) (conclusory statements cannot show obviousness); *Nikon Corp. v. Optimum Imaging Techs., LLC*, IPR2024-01372, Paper 17, at 40 (P.T.A.B. Apr. 23, 2025) (conclusory statements cannot defeat obviousness); *Intuitive Surgical, Inc. v. Ethicon LLC*, IPR2018-01248, Paper 34, at 41 (P.T.A.B. Feb. 6, 2020) (conclusory statements cannot show anticipation); *Denso Corp. v. Collision Avoidance Techs. Inc*., IPR2017-01709, Paper 28, at 21 (P.T.A.B. Jan. 22, 2019) (citing *Phillips v. AWH Corp*., 415 F.3d 1303, 1318-39 (Fed. Cir. 2005)) (conclusory statements cannot support claim construction); *Samsung Elecs. Co., Ltd. v. Sung*, IPR2024-00534, Paper 14, at 29 (P.T.A.B. Sept. 18, 2024) (conclusory statements cannot show level of skill in the art); *HTC Corp. v. Uniloc 2017 LLC*, IPR2018-01589, Paper 9, at 9 (P.T.A.B. Feb. 27, 2019) (conclusory statements do not support joinder); *Hanshow Am. Inc. v. SES-Imagotag Inc*., IPR2024-00190, Paper 10, at 9-10 (P.T.A.B. May 20, 2024) (conclusory statements do not show differences between parallel IPRs for purposes of discretionary denial); *Nokia of Am. Corp. v. General Access Solutions, Ltd*., IPR2024-00461, Paper 13, at 19 (P.T.A.B. June 14, 2024) (conclusory statements do not show privity or real party-in-interest for purposes of discretionary denial); *Shenzhen Silver Star Intelligent Tech. Co., Ltd. v. iRobot Corp*., IPR2018-00882,

Paper 9, at 11 (P.T.A.B. Oct. 1, 2018) (conclusory statements about petitioner's knowledge of prior art do not support discretionary denial). There is no reason to credit Patent Owner's conclusory assertion of settled expectations here when such assertions are given no weight in every other context.

c. Petitioner's Broad Stipulation and Patent Owner's Diverse Assertion of Patents Weighs Against Discretionary Denial

The Board also finds that broad stipulations by a petitioner combined with sprawling allegations in district court by a patent owner weigh against the age of challenged patents, thus weighing against discretionary denial. These circumstances are present here.

In *Tesla, Inc. v. Intellectual Ventures II LLC*, the petitioner "filed a broad stipulation and asserts that the merits are strong" based on prior successful validity challenges. IPR2025-00217, Paper 9, at 2 (P.T.A.B. June 13, 2025). The petitioner also noted "the complex and diverse litigation," which spanned many patent families and involved "a diverse range of subject matter," which helped "tip the balance against discretionary denial." *Id*. at 2-3. "The large number and vast scope of the patents asserted in the district court litigation . . . weigh[ed] against discretionary denial," even though—unlike here—the trial date preceded a FWD date, there was insufficient evidence regarding a potential stay, and the parties made meaningful investments in the parallel litigation. *Id*. at 2-3. These considerations prevailed in

the analysis for six challenged patents, including one ***14-years old***, one ***9.5-years old***, and one ***8-years old***. *Id*. at 2-3. Similarly, in *Tesla, Inc. v. The United States of America*, the Board made essentially the same findings with respect to litigation scope and diversity, and rejected discretionary denial for a patent ***18-years old***. IPR2025-00341, Paper 12, at 2-3. *See also Shenzen Tuozhu Tech. Co., Ltd. v. Stratasys, Inc.*, IPR2025-00438, Paper 10, at 3 (P.T.A.B. July 17, 2025) ("The large number and vast scope of the patents asserted in" litigation "weighs against discretionary denial, as the Board is better suited to review a large number of patents involving diverse subject matter.").

Consistent with the Board's reasoning in both *Tesla* matters and *Shenzen Tuozhu*, here Petitioner has filed not only a broad stipulation in its Petition, Paper 1, at 88, but also a much broader stipulation here, *supra* § III.D. These stipulations go beyond basic IPR estoppel, ensuring that that this proceeding, if instituted, will serve as the sole proceeding to adjudicate the patentability of the '192 patent based on prior art.

Also consistent with both *Tesla* matters, Patent Owner's allegations in district court are diverse and sprawling. Patent Owner asserts five patents in the parallel litigation—each coming from different and unrelated owners and inventors, and each covering unrelated technology. Specifically, Patent Owner alleges that U.S. Patent No. 8,810,803 relates to "headlight systems," Ex-1047 ¶16; U.S. Patent No.

7,987,002 relates to mobile applications, *id*. ¶17; U.S. Patent No. 7,513,238 relates to pistons in "internal combustion engines," *id*. ¶18; U.S. Patent No. 8,265,353 relates to imaging used in "driver assistance systems," *id*. ¶19; and the '192 patent relates to vehicle navigation systems, *id*. ¶20. Patent Owner purports to accuse 23 different vehicle models, among two different brands, of infringing these five unrelated patents, including "all trims and configurations" across an unlimited period of time.[7] *See id*. ¶15; *see also id*. ¶¶24, 38, 53, 69, 87. Consistent with the Board's approach in these circumstances, the diverse and wide-ranging nature of Patent Owner's allegations in district court weigh further against according any weight to Patent Owner's purported settled expectations.

d. Patent Owner's Alleged Settled Expectations are Overcome by a Lack of Commercialization, Marking, or Assertion

Based on all evidence available to Petitioner, Patent Owner (and its predecessors in ownership) have not commercialized, marked, or asserted the '192 patent, which further counsels against discretionary denial. Nor does Patent Owner contend that it or its predecessors have engaged in any of these activities. *See* Paper 6, at 9-10. This weighs against Patent Owner's contention of settled expectations.

[7] Patent Owner's allegations are sprawling and diverse, but also lacking in particularity and support as required by the district court's caselaw and local rules.

In *Intel Corp. v. Proxense LLC*, the Board explained that "[t]here may be persuasive reasons why the Board should review challenged claims several years after their issuance date," including when "a patent may have been in force for years but may not have been commercialized, asserted, marked, licensed, or otherwise applied in a petitioner's particular technology space, if at all." IPR2025-00327, Paper 12, at 2-3 (P.T.A.B. June 26, 2025). Here, Patent Owner, a non-practicing entity, acquired the '192 patent from another non-practicing entity, AI-Core Technologies, on October 6, 2023. Ex-1048. Prior to this assignment, the '192 patent was owned by a series of non-practicing entities and holding companies. Ex-1049-Ex-1055 (owned by Intellectual Ventures Assets 190 LLC, Xenogenic Development Limited Liability Company, Flaxen Holdings LLC, Reagan Inventions, LLC, Rothschild Trust Holdings, LLC). The only other owner, the sole inventor of the '192 patent, considers himself "among the most prolific inventors of his generation" and when interviewed readily admits his entire business model is built around monetizing his intellectual properly though litigation and licensing, not selling products based on his inventions. Ex-1056. There is no evidence that any of these owners has ever commercialized, marked, or asserted the '192 patent. Regarding marking under 35 U.S.C. § 287(a), in response to a motion to dismiss highlighting Patent Owner's failure to allege marking, Ex-1057, Patent Owner responded with an amended complaint retaining the exact same deficient allegations

of compliance with the statute but no allegations of marking, Ex-1047. Further, none of these entities compete with Petitioner or any real party-in-interest. Because Patent Owner and its predecessors failed to commercialize, mark, or assert the '192 patent for nearly the entire life of the patent—or make any allegation that such activities occurred—this too weighs against Patent Owner's alleged settled expectations.

e. Settled Expectations Instruct Rothschild Patents Are Vulnerable to Invalidity Challenges Before the Office

The litigation track record of the sole inventor of the '192 patent further demonstrates that any purchaser of the '192 patent cannot have a settled expectation of validity. As referenced above, Leigh Rothschild, the sole inventor of the '192 patent, is a self-proclaimed prolific inventor who obtains patents primarily for settlement fees rather than to develop products or serve consumers. Ex-1056, at 1. Of the 80 lawsuits asserting patent infringement in federal courts between 2021 and October 2023 by Rothchild-affiliated non-practicing entities, none reached a jury. *Id*. Mr. Rothschild has been described as a nuisance to the patent system, and the "litany of cases brought on by Rothschild . . . rekindled talk of patent system changes" to discourage the use of the patent system in the way Rothschild has through his own patents. *Id*. at 3. The "vexatious litigation" conduct of at least one Rothschild-affiliated entity has been publicly discussed in at least one Federal Circuit opinion. *Rothschild Connected Devices Innovations, LLC v. Guardian Prot.*

Servs., Inc., 858 F.3d 1383 (Fed. Cir. 2017) (finding an exceptional case under 35 U.S.C. § 285, given "a pattern of litigation abuses characterized by the repeated filing of patent infringement actions for the sole purpose of forcing settlements, with no intention of testing the merits of one's claims, is relevant to a district court's exceptional case determination under § 285.").

A review of Mr. Rothchild's patents challenged before the PTAB supports a lack of settled expectations that the '192 patent would survive a validity challenge when purchased. Of the readily identifiable petitions for IPR and CBM of a patent invented by Mr. Rothschild, fourteen resulted in a favorable outcome for the patent challenger,[8] whether through an unpatentability finding or an agreement not to contest the IPR. Unsurprisingly, an additional ten resulted in settlement.[9] Only two IPRs (IPR2020-01407 and IPR202-01406—both regarding the same patent) survived a patent challenge. Many of the patent challenges with unfavorable rulings for the patent owner include patents in technology fields overlapping or adjacent to the '192 patent. *See* IPR2015-00624 (patent owner receiving an adverse finding

[8] *See* IPR2015-00624, IPR2015-00622, IPR2015-00623, IPR2015-00620, IPR2015-00621, IPR2015-01364, IPR2016-00443, IPR2016-00472, IPR2018-00745, IPR2018-00746, IPR2019-00855, IPR2019-00856, CBM2020-00015, IPR2022-00429.

[9] *See* IPR2015-00474, IPR2015-00793, IPR2015-001181, IPR2016-00535, IPR2017-01514, IPR2017-02022, IPR2018-01001, IPR2021-00448, IPR2022-00708, IPR2023-00031.

after declining to contest challenges to patent regarding user verification and "locational . . . verification device"); IPR2018-00746 (patent owner receiving an adverse finding after declining to contest challenges to patent directed to verified identification system); IPR2022-00429 (finding unpatentable all challenged claims of patent for "[d]evice, system and method for controlling speed of a vehicle using a positional information device"). Therefore, any purchaser of the '192 patent could not have had settled expectations of validity given this strong historical headwind of weak patents.

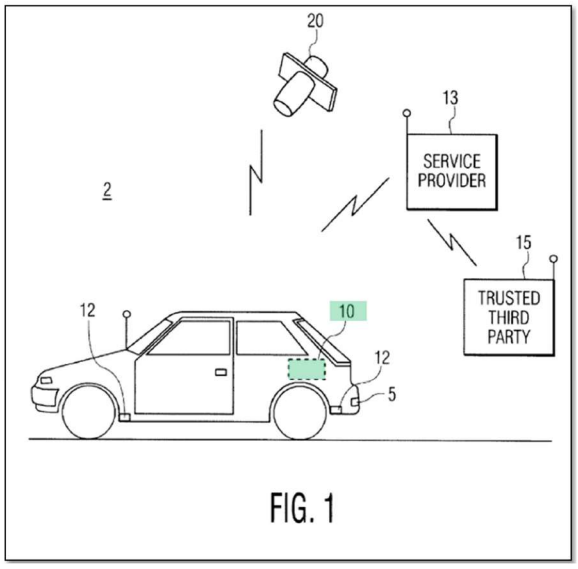
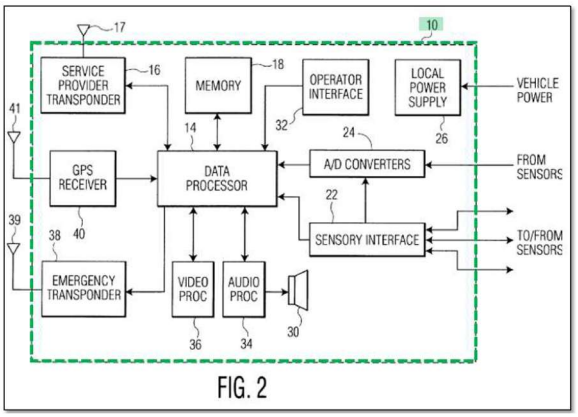
2. The Strength of Petitioner's Grounds Weighs Against Discretionary Denial

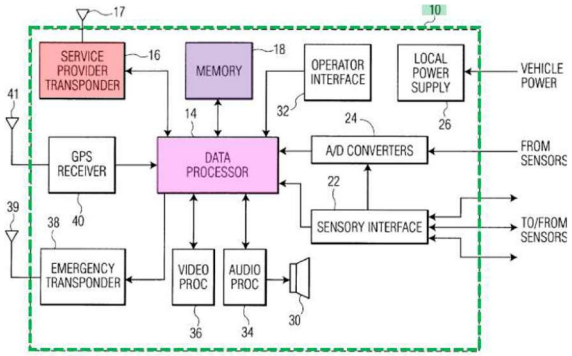
Patent Owner's assertion that "the Petition is weak," Paper 6 at 9, is not only conclusory and unexplained, but demonstrably false. According to Longhorn, "[n]ot including the discussion of discretionary denial, the Petition is 86 pages long" yet the expert declaration "is also nearly 50 pages longer than the substantive portion of the Petition." *Id*. This does not demonstrate weakness. Nor does it show that the "Petition is effectively a copy-and-paste of the expert declaration." *Id*. Because "none of these allegations are sufficiently explained," they should be rejected. *Twitch Interactive, Inc. v. Razdog Hldgs. LLC*, IPR2025-00307, Paper 18, at 3 (P.T.A.B. May 16, 2025). It is also not surprising that Petitioner's expert declaration is longer than the Petition. In his declaration, Dr. Michalson explains his own

experience and credentials (Ex-1002, ¶¶8-19), relevant legal standards (*id*., ¶¶33-53), and the background knowledge of a person of ordinary skill in the art (*id*. ¶¶64-80), in addition to his substantive analysis of claim construction, the prior art, and patentability (*id*. ¶¶84-282). This appropriate presentation of expert opinion "also weighs ***against*** discretionary denial." *See iRythm Tech., Inc. v. Welch Allyn, Inc.*, IPR2025-00363, Paper 10, at 2-3 (P.T.A.B. June 6, 2025) (emphasis added) (finding use of "expert to explain the background knowledge of a person of ordinary skill in the art" and "provide[] citations to evidence in support of his statements in the required manner" weighed against discretionary denial).

The strength of Petitioner's grounds is also demonstrable. As discussed above, the Examiner materially erred in prosecution by believing that each claim required a "removable storage module," when in fact independent claims 13 and 22 do not contain that limitation. *See supra* § II. Here, *Fish* teaches exactly that subject matter—in the same manner as the '192 patent itself—and was used to reject the '192 patent's child application claims before that application was abandoned. *Id*. This objectively reflects the merits of *Fish* and Petitioner's grounds based on *Fish*.

The compelling strength of *Fish* and Petitioner's other cited art is also readily apparent from a simple comparison of the claim language to the art's disclosure. While the Petition explains this correspondence in much greater detail and with much more citation to evidence, the simplified chart below highlights this point.

'192 Patent, Claim 1	***Fish*'s Disclosure**
[1pre] A location information device with secure data storage comprising:	*Fish* teaches storing and encrypting location information in "**data archive 10** located in [the] vehicle." Paper 1, at 30-31.  FIG. 1  FIG. 2
[1a] a housing;	"The **data archive 10** of the exemplary embodiment is preferably housed in

	a **sealed cabinet**." *Id*. at 32.
[1b] a locational information module for determining location information of the device, the determined location information being at least one route traveled by the device;	**Data archive 10** may include **GPS receiver 40**, which determines location information. *Id*. at 32. **GPS receiver 40** is used to store routes traveled by the device. *Id*. at 33-35.
[1c] an encryption module for encrypting the determined location information;	**Data processor 14** of **data archive 10** encrypts and stores location information in **memory 18**. *Id*. at 36-37.  FIG. 2
[1d] a removable storage module for storing the encrypted location information, the removable storage module being removably disposed in the housing; and	"**Secure memory 18** [may be] a **removable** non-volatile memory device such as a **secure digital (SD) memory device**." *Id*. at 38-39.

[1e] a processing module for sending the encrypted location information to the removable storage module removably disposed in the housing and retrieving the encrypted location information from the removable storage module.	**Data processor 14** encrypts location data and stores it in **secure memory 18**. *Id*. at 40-41. **Data processor 14** then retrieves such stored data, allowing the device to function as a "data archive" for data retrieval. *Id*. at 41-42.

The merits here are strong. Because the merits are demonstrable and Patent Owner has made no specific argument to the contrary, *see* Paper 6 at 9, this further supports rejecting discretionary denial on this record.

3. No Forum Has Adjudicated Any Claim of the '192 Patent, Which Weighs Against Discretionary Denial

No forum has yet considered the validity of the '192 patent, and with Petitioner's broad stipulations, this IPR if instituted would be the sole proceeding to do so. Only three cases have been filed involving the '192 patent: (1) the Petition here, (2) the above-referenced district court action against VW, Audi, and Mazda in which the '192 patent was only asserted against VW and Audi, and (3) *Longhorn Automotive Group LLC v. Volvo Car Corp., et al*., No. 2:24-CV-00603-JRG (E.D. Tex.) where Volvo was not required to file an answer to the complaint until August 18, 2025. *See* Ex-1058. No claim of the '192 patent has been reexamined, and the

'192 patent has not been reissued. There is thus no prospect of "multiple, serial" petitions here. *See Code200, UAB v. Bright Data Ltd.*, IPR2022-00861, Paper 18, at 3-6 (P.T.A.B. Aug. 23, 2022) (citing *Gen. Plastic Indus. Co. v. Canon Kabushiki Kaisha*, IPR2016-01357, Paper 19 (P.T.A.B. Sept. 6, 2017)) (discussing considerations for discretionary denial involving serial challenges). This too weighs against discretionary denial.

IV. *Inter Partes* Review of the '192 Patent Is an Appropriate Use of Office Resources in View of Compelling Economic Considerations

Compelling economic and policy considerations also make IPR of the '192 patent an appropriate and valuable use of the Office's resources. Petitioner is a vibrant U.S. company and a significant contributor to the U.S. economy. Petitioner, an indirect subsidiary of Volkswagen AG, handles operations of a worldwide family of storied automotive brands. Ex-1059. In addition, Volkswagen Group of America Chattanooga Operations, LLC, a wholly owned subsidiary of Petitioner, operates a state-of-the-art assembly facility in Chattanooga, Tennessee. *Id*. Petitioner's headquarters are in Reston, VA.

Petitioner has approximately 10,000 employees in the United States. *Id*. Of these employees, approximately 4,500 are based in Chattanooga, TN, where Petitioner's 3.8 million square-foot facility produces models such as the Volkswagen ID.4, Atlas, and Atlas Cross Sport. Ex-1060, at 1. Since 2008, Petitioner invested

more than $4.3 billion in the Chattanooga assembly plant, which has led to more than 125,000 direct and indirect jobs. *Id*., at 3. Indeed, the unemployment rate in Chattanooga in 2008 was more than 10%, but by 2023 it dropped to 3.5%—a testament to Petitioner's commitment to job creation in the United States. *Id*. The facility and several employees are pictured below:

In view of Petitioner's significant positive impact on and contribution to the U.S. economy, sound economic and public policy rationales support Petitioner being able to bring the present Petition for consideration by the Office. By contrast, Petitioner is aware of no comparable evidence of Patent Owner's contributions or support. On balance, therefore, this factor should weigh against discretionary denial.

V. Conclusion

For the foregoing reasons, under the particular facts of this case this Petition should be referred to the Board panel with instructions to consider the merits.

Dated: August 25, 2025

Respectfully submitted,

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CERTIFICATE OF COMPLIANCE

As calculated by the "Word Count" feature of Microsoft Word for Microsoft 365, the foregoing **Petitioner's Opposition to Patent Owner's Discretionary Denial Request** contains 10,441 words, excluding this Certification and the following: Table of Contents, Table of Authorities, List of Exhibits, and Certificate of Service.

Dated: August 25, 2025

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CERTIFICATE OF SERVICE

The undersigned hereby certifies that a copy of the foregoing **Petitioner's Opposition to Patent Owner's Discretionary Denial Request and Exhibits 1027-1060** were served on August 25, 2025, via e-mail directed to counsel of record for Patent Owner at the following:

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Dated: August 25, 2025

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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

VOLKSWAGEN GROUP OF AMERICA, INC.,

Petitioner,

v.

LONGHORN AUTOMOTIVE GROUP LLC,

Patent Owner.

Inter Partes Review No. IPR2025-00925
Patent No. 8,085,192

PETITIONER'S REQUEST FOR DIRECTOR REVIEW OF INSTITUTION DECISION

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Pursuant to 37 C.F.R. § 42.75(c), Petitioner Volkswagen Group of America, Inc. ("Petitioner") respectfully requests that the Director vacate the Decision Denying Institution of *Inter Partes* Review (Paper 9, Sept. 12, 2025) ("Decision") of U.S. Patent No. 8,085,192 ("the '192 Patent") and institute review on all grounds. Because the Decision made a material error of fact when relying on an examiner interview (rather than the reasons for allowance provided by the examiner) when assessing whether a material error by the examiner was made in allowing all claims, the Decision should be vacated and all arguments presented in Petitioner's Opposition to Patent Owner's Discretionary Denial Request (Paper 7, August 25, 2025) ("Petitioner's Opposition") should be considered.

I. The Decision Erred When Relying on an Interview Summary, Not the Stated Reasons for Allowance, to Determine Whether the '192 Patent Was Allowed in Error

The Decision erred when relying on an examiner interview summary, rather than the rationale provided in the Notice of Allowability, in evaluating whether the examiner may have committed a material error in allowing the '192 Patent. 37 C.F.R. § 1.104(e) provides: "If the examiner believes that the record of the prosecution as a whole does not make clear his or her reasons for allowing a claim or claims, the examiner may set forth such reasoning." The Manual of Patent Examining Procedure further underscores the importance of expressly stated reasons for allowance, explaining: "One of the primary purposes of 37 C.F.R. § 1.104(e) is to improve the

quality and reliability of issued patents by providing a complete file history which should clearly reflect, as much as is reasonably possible, the reasons why the application was allowed." MPEP § 1302.14. The MPEP further explains:

> In determining whether reasons for allowance should be recorded, the primary consideration lies in the first sentence of 37 CFR 1.104(e) which states: If the examiner believes that the record of the prosecution *as a whole* does not make clear his or her reasons for allowing a claim or claims, the examiner may set forth such reasoning. (Emphasis added).

Id.

As detailed in the Petition (Paper 1, at 1, 5) and Petitioner's Opposition (Paper 7, at 2-3), the '192 Patent examiner determined reasons for allowance were warranted under 37 C.F.R. § 1.104(e) and provided the following as the singular reason for allowance: "[t]he closest prior arts [sic] does not teach or make obvious: 'A *removable storage module* for storing the encrypted location. . . .'" Ex. 1003, at 143 (emphasis added). This language, and specifically the language regarding "a removable storage module," is not present in or relevant to all of the independent claims and was thus not a proper basis for allowing at least claims 13-18 and 22.

Instead of accepting the examiner's stated rationale for allowance, the Decision denied the Petition under 35 U.S.C. § 314(a), stating: "Petitioner's argument that the Examiner erred is unconvincing as it does not accurately

characterize the prosecution history." Paper 9, at 2. In support, the Board relied on Ex. 1003 at 134, an examiner interview summary coming five months before the Notice of Allowability, which states:

> Applicant argues that Adcox does not teach the information in the memory being encrypted. He pointed Adcox (column 4. lines 39-43) teaches that the device retrieved information from the memory, then encoded in order to transfer to the transmitter. Therefore the information in the memory is not encoded yet.

The examiner did not make any statements regarding allowability in this interview summary. Nor did the examiner ever credit the applicant's arguments, of which there were many throughout the course of examination. *See* Ex-1003, at 76-84 (responding to Office Action of Sept. 9, 2010, addressing rejections under 35 U.S.C. § 112, ¶ 1, double patenting rejections, and obviousness rejections), 121-124 (responding to Office Action of Feb. 8, 2011, addressing double patenting and obviousness rejections).

Not every argument by an applicant is a reason for allowance. Indeed, the applicant's description of the interview states that "*[n]o agreement was reached* other than that Application [sic] would submit remarks to discuss the patentable distinctions between the claims and the cited references to the Examiner in this Response." Ex-1003, at 121 (emphasis added).

On this record, the Decision did not provide any support for its decision to rely on this interview summary rather than the examiner's chosen language included in the Notice of Allowability. Nor is there any basis in the record to supplant or alter the examiner's stated rationale.

Director Review of a decision regarding institution is warranted when the decision presents "(a) an abuse of discretion, (b) important issues of law or policy, (c) erroneous findings of material fact, or (d) erroneous conclusions of law." Director Review Process, § 2.B. Here, the Decision made an erroneous finding of material fact when it found a basis for allowance of the '192 Patent lacking any stated acceptance or approval from the examiner, and despite the examiner deciding to memorialize their own reasons for allowance in the Notice of Allowability. As discussed above, by rule any reasons for allowability provided in a Notice of Allowability are meant to clarify the reasons a patent was allowed where the prosecution history *does not make clear* the rationale for allowability. *See* 37 C.F.R. § 1.104(e); MPEP § 1302.14. Specifically, if "the record of the prosecution as a whole"—including the interview summary—*did* "make clear [the examiner's] reasons for" allowance, as the Decision found, there would have been *no need* for the examiner's decision to explicitly state the reasons for allowance in the Notice of Allowability. *See* 37 C.F.R. § 1.104(e). Here, contrary to such a hypothesis, the examiner did not credit the applicant's arguments and instead decided to file express

reasons for allowance. Because those reasons pertained to only *two* of the four independent claims—i.e., those requiring a "removable" storage module—the two independent claims that omitted removability were allowed contrary to the examiner's stated reason for allowance. This was error.

This error weighs heavily against discretionary denial and warrants institution for the reasons Petitioner articulated. *See, e.g., Anthony, Inc. v. Controltec, LLC*, IPR2025-00559, Paper 12, at 2 (P.T.A.B. July 16, 2025); *Tesla, Inc. v. Charge Fusion Techs., LLC*, IPR2025-00152, Paper 11, at 2 (P.T.A.B. June 12, 2025); *Skullcandy, Inc. v. Earin AB*, IPR2025-00690, Paper 9 (P.T.A.B. July 31, 2025). The Decision should therefore be vacated, and the Petition should be referred for institution on the merits.

II. The Prior Art in the Petition Overcomes the Decision's Understanding of the Examiner's Reasons for Allowance

A separate and independent reason for Director Review is also present because even the applicant's arguments for allowance—never credited by the examiner as reasons for allowance—are erroneous on this record. Based on the reasoning provided in the Decision, the examiner erred in allowing the '192 Patent over a 35 U.S.C. § 103 rejection regarding art based on encrypted memory. Paper 9, at 2. Here, the Petition details prior art disclosing memory encryption (rather than

the disputed "memory encoding" in the prosecution history), which renders all claims of the '192 Patent unpatentable.

The primary reference, *Fish* (U.S. Patent No. 6,490,513), is extensively detailed in the Petition, and discloses the use of encryption of data stored in a memory. *See*, *e.g.*, Paper 1, at 35-41. Further, the Petition details the conventional use of encryption in vehicles well in advance of the '192 Patent. *Id.*, at 10-11. Even if the reason for allowance was "encryption" of stored location data as argued by applicant—and not the examiner's stated reason for allowance—here, the prior art clearly teaches it. In that counterfactual, it would have been erroneous for the examiner to allow the claims despite unconsidered prior art such as *Fish*, and thus the Decision erred when denying institution under 35 U.S.C. § 314(a).

III. The Decision Failed to Consider Key Arguments in Favor of Institution, Contrary to the APA and Due Process

Finally, the Decision failed to address several arguments presented in Petitioner's Opposition. The only *Fintiv* factor discussed by the Board was Factor 2, the impact of a parallel litigation trial date, which the Board found to be neutral. Paper 9, at 2. However, Factor 3, the investment in the parallel proceeding, strongly counsels against discretionary denial as the parties have invested minimal efforts into the district court proceeding to date. Paper 7, 23-29. Factor 4, the overlap between the Petition and the parallel proceeding, also weighs against discretionary

denial, because of the broad stipulations agreed to by Petitioner and the fact that three claims not asserted in the parallel litigation were addressed in the Petition. *Id.*, at 29-32.

Factor 6, which strongly weighs against discretionary denial, was only addressed in terms of the age of the patent despite a number of circumstances existing which strongly support institution. *Id.*, at 33-50; Paper 9, at 2. For instance, the Decision failed to address Patent Owner's failure to provide anything but conclusionary, unexplained allegations regarding its purported settled expectations. *Id.*, at 36-39. The Decision failed to address the impact of Petitioner's stipulations in relation to any settled expectations. *Id.*, at 39-41. The Decision failed to address how Patent Owner's alleged settled expectations are overcome by a lack of commercialization, marking, or assertion. *Id.*, at 41-43. The Decision failed to address the impact of the inventor's reputation of possessing patents vulnerable to patent challenges on settled expectations of a sophisticated downstream purchaser. *Id.*, at 43-45. The Decision failed to address the strength of the Petition outweighing discretionary denial. *Id.*, at 45-49. And the Decision failed to address the fact that the '192 Patent had not yet been adjudicated in any forum, which also weighs against discretionary denial. *Id.*, at 49-50.

Considering the significant unaddressed circumstances set forth in Petitioner's Opposition, discretionary denial is not appropriate and the Decision's

unsubstantiated determination violates the Administrative Procedure Act and Due Process. Specifically, under 5 U.S.C. § 706(2)(A), the Decision reached an arbitrary and capricious outcome that constitutes an abuse of discretion because it rests on a material error of fact regarding the examiner's reasons for allowance. *See supra* § I. Because the Decision's rearticulation of the examiner's reasons for allowance is contrary to the examiner's own stated findings, and contrary also to the guidance of 37 C.F.R. § 1.104(e) regarding the need for express reasons for allowance, it "(1) is clearly unreasonable, arbitrary, or fanciful; (2) is based on an erroneous conclusion of law; (3) rests on clearly erroneous fact findings; [and] (4) involves a record that contains no evidence on which the [Office] could rationally base its decision." *See In re Vivint, Inc*., 14 F.4th 1342, 1351 (Fed. Cir. 2021) (quoting *Honeywell Int'l Inc. v. Arkema Inc*., 939 F.3d 1345, 1348 (Fed. Cir. 2019)). The Decision's failure to address Petitioner's arguments is thus not only contrary to the APA and Due Process for being unsubstantiated and unexplained, but it is also contrary to these legal mandates for lacking factual and legal support in the record.

IV. Conclusion

For the foregoing reasons, the Decision should be vacated and the Board should institute review on all grounds.

Dated: October 14, 2025

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CERTIFICATE OF SERVICE

The undersigned hereby certifies that a copy of the foregoing **Petitioner's Request for Director Review of Institution Decision** was served on October 14, 2025, via e-mail directed to counsel of record for Patent Owner at the following:

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