FILING A PROVISIONAL PATENT ON :

INNOVATIVE INTEGRATED FLEET ASSET MANAGEMENT SOLUTION

FILING OF A PROVISIONAL PATENT: INNOVATIVE INTEGRATED FLEET ASSET MANAGEMENT SOLUTION

INDEX

1. **INVENTOR**

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0044

A brief by Inventor and Applicant. It is hereby recorded that we file a Provisional Patent.

…….

SIGNATURE AND DATE: Thus done and signed at ……on the ……March 2020

2. **NAME OF THE APPLICANT**

IZZARD TECH PTY LTD

3. **PRIORITY DATE**

Herewith file a Provisional Patent

Therefore this invention does not record and claim the priority from the Provisional Patent. There is no dispute with regard to the priority status of this invention/patent.

FILING DATE OF THE PROVISIONAL PATENT: March 2020

4. SUMMARY AND NATURE OF THE PATENT

INNOVATIVE INTEGRATED FLEET ASSET MANAGEMENT SOLUTION

The power of mobile computing devices has led to the convergence of multiple technologies in dedicated legacy platforms. This means that traditional fleet management systems are no longer restricted to fixed in-cab boxes (also known as 'black boxes').

Today we can integrate various technologies such as Mobile technologies, Real-Time technologies and other dedicated systems/platforms to perform one common task to produce or accomplish an objective.

With the assistance of smart technology integration, we can now effectively and efficiently merge, trigger, measure & consume processes of different integrated systems on one centralized platform to maximize the accuracy of reporting of Fleet and or Asset for more advanced decision, Support or & Feedback.

SYSTEM BACKGROUND

A successful integrated fleet management solution will in this instance be a business tool for the business and the driver. The IIFAMS aims at achieving various objectives in a fixed and dynamic environment. Some of the **features** that make it possible to achieve the ultimate integration include :

-The inventor has designed IIFAMS to provide various stakeholders with the information and intelligence for a full asset control and management, the said IIFAMS system has advanced features that are designed to simplify and well manage fleet/asset mechanising/digitizing the daily duties in an effective and efficient manner.

This application gives data and retrieves accurate information about the fleet/asset and their handlers on respective days mentioned in a report.motorists and motor vehicles using eg a geo tagging amongst many.

***A*sset Management**

- *Location Management & Tracking*
- *Incident Monitoring & Reporting*
- *Service Maintenance Management*
- *Scheduled Trip Management*
- *Fuel Activity Validation & Logging*
- *Advanced Decision Support*
- *Automated Reporting*

The IFFAMS can support fleet operators in achieving the following (just to state a few **advantages**) :

- Effective & on-time SLA compliance
- Reduction in fuel consumption
- Resource and fleet optimisation
- Pre-planned or dynamic allocation of trips
- Improved customer service

The only challenge the IFFAMS might face on a very scarce basis is integration with an incompatible tracking unit, which is very rare but can occur in different ways. IFFAMS is compatible with over 90% of tracking units that already exist in the market. Is this inclusion necessary ?

To counter this, the IFFAMS has an optional hardware component (a low cost GPS/SMS/GPRS tracking unit) which can be installed on a vehicle for the full optimized performance of the system.

SYSTEM COMPONENTS

Mobile Application : The mobile device is used for running the IFFAMS Android based mobile application. The application allows the manual logging of fuel filling at a depot (if a client owns a depot). The app uses an image of the current millage (OCR) to compare and verify if a driver is making a reasonable, wasteful or questionable refill. The app further validates the vehicle's identity in numerous ways including license disk scanning & verification, before the vehicle can be serviced (filled with fuel).

Admin Dashboard (Back Office) :

The admin Dashboard is the complete face of the system. All data regarding an asset/vehicle can be found in the back-office system. The back-office system manages assets/vehicles records, generates reports, displays current and historical data regarding an asset.

GPS Tracking Unit :

The gps tracking usually uses a USSD service to communicate and provide real-time state information.

This protocol is what makes it possible to integrate with installed and existing tracking devices.

Optionally, a dedicated tracking unit that works quite well with the tech stack the IFFAMS uses.

MOBILE & USSD API : The USSD API is the central module of the system, it is a sole service that allows us to communicate with any (if not all) major manufacturer's tracking unit

SYSTEM INTEGRATION

Existing Fleet Management & Tracking API's : With the ongoing advancement and support of API's and integration tools, the IFFAMS utilizes an existing Cloud Application Program Interface called FLEET IO. Fleet IO is integrated to the IFMS and accurately handles location services, real time notifications from tracking devices and (optionally) a CRM if required.

Below is a diagram that illustrates the integration of the IFMS to existing tracking systems :

5. BACKGROUND, ABSTRACT AND RATIONALE STATEMENT OF THE INVENTION/PATENT

The power of mobile computing devices has lead to the convergence of multiple technologies in dedicated legacy platforms. This means that traditional fleet management systems are no longer restricted to fixed in-cab boxes (also known as 'black boxes').

Today we can integrate with various technologies such as Mobile technologies, Real-Time technologies and other dedicated systems/platforms to perform one common task to produce or accomplish an objective.

With the assistance of smart technology integration, we can now effectively and efficiently merge, trigger, measure & consume processes of different integrated systems on one centralized platform, to maximize the accuracy of reporting for more advanced decision support feedback.

SYSTEM BACKGROUND

A successful integrated fleet management solution must be a business tool for the customer, the business and the driver. The IFFAMS aims at achieving various objectives in a fixed and dynamic environment. Some of the **features** that make it possible to achieve the ultimate integration include :

-

6. IMAGES AND DRAWINGS OF THE EMBODIMENTS (including brief descriptions) :

INNOVATIVE INTEGRATED FLEET ASSET MANAGEMENT SOLUTION will be comprised of the following features :-

- *Location Management & Tracking*
- *- Incident Monitoring & Reporting*
- *- Service Maintenance Management*
- *- Scheduled Trip Management*
- *- Fuel Activity Validation & Logging*
- *- Advanced Decision Support*
- *- Automated Reporting*

THE DRAWING IS ATTACHED IN ANNEXURE “A”

Fig 1. I……
Fig 2. V……..
Fig 3. V……
Fig 4. M……
Fig 5. M……

7. NARRATIVE AND SUMMARY OF THE INVENTION :

INNOVATIVE INTEGRATED FLEET ASSET MANAGEMENT SOLUTION

Is a.. Value-added services main focus is in making sure that it increases law enforcement officer’s productivity, reduces crime as well as lost documents and the traffic department’s environmental impact.

With a **INNOVATIVE INTEGRATED FLEET ASSET MANAGEMENT SOLUTION** motorists will keep track of their offences, receive immediate alerts on how to reduce receiving more traffic fines and offenders can use **INNOVATIVE INTEGRATED FLEET ASSET MANAGEMENT SOLUTION**

FILING OF A PROVISIONAL PATENT: INNOVATIVE INTEGRATED FLEET ASSET MANAGEMENT SOLUTION ’s secure online payment solution that is directly settled into their account saving them both time and money

8. NON-CLAIMS:

The inventor is on record that there are only four (4) Non- Claims
8.1 M……..
8.2 O……
8.3 L…….
8.4 I…….
8.5 V…….

CLAIM(S)

The following parts in their separate form which comprises of the complete unit are themselves not new/novel but Novel and inventive when combined in the manner described : -

8.6 The integration of the IAMS to the existing Digitraffic System includes the LPR module (licence plate recognition) and OCR/QR module for the accurate tagging and retrieval of information of an asset using number plate scanning or license disk scanning technology. This will also allow the retrieval of outstanding infringement fines / notices of each asset/vehicle from eNatis and ensure compliance with AARTO for each asset.

8.7 The combined process of Digitraffic and IFFAMS allows the asset/vehicle to be scanned, and based on the input, all data relating to the vehicle and driver(s) of that

specific vehicle will be pulled in form of a report (see below figures). The pulled data/reports will include all information needed to manage the asset/vehicle as well as the motorist, history logs, and real-time traffic fines linked to the driver or/and the vehicle.

The relevance of validity and the claims is not in dispute and is sufficiently emphasized. The extent of the invention and or innovation of the combination of all described material will appeal to the human and commercial needs.

ANNEXURE B

Fig 1. **Back Office Dashboard**

The back office dashboard is the central control application of the entire system. The dashboard allows an overview of all assets (fleet registered through the asset registry) and provides analytics for each asset using a very rich graphical user interface. Analytics that the dashboard is able to pull from an individual asset includes :

- Fuel Wastage Estimate (Daily, Weekly, Monthly & Yearly)
- Estimated Idle Time of each vehicle/asset (Daily, Weekly, Monthly & Yearly)
- Distance travelled vs Fuel Consumed (Daily, Weekly, Monthly & Yearly)
- Harsh/Bad Driving Alerts (Daily, Weekly, Monthly & Yearly)
- High Speed Alerts (Daily, Weekly, Monthly & Yearly)
- Grouped Reporting (Average of the above for all Assets)

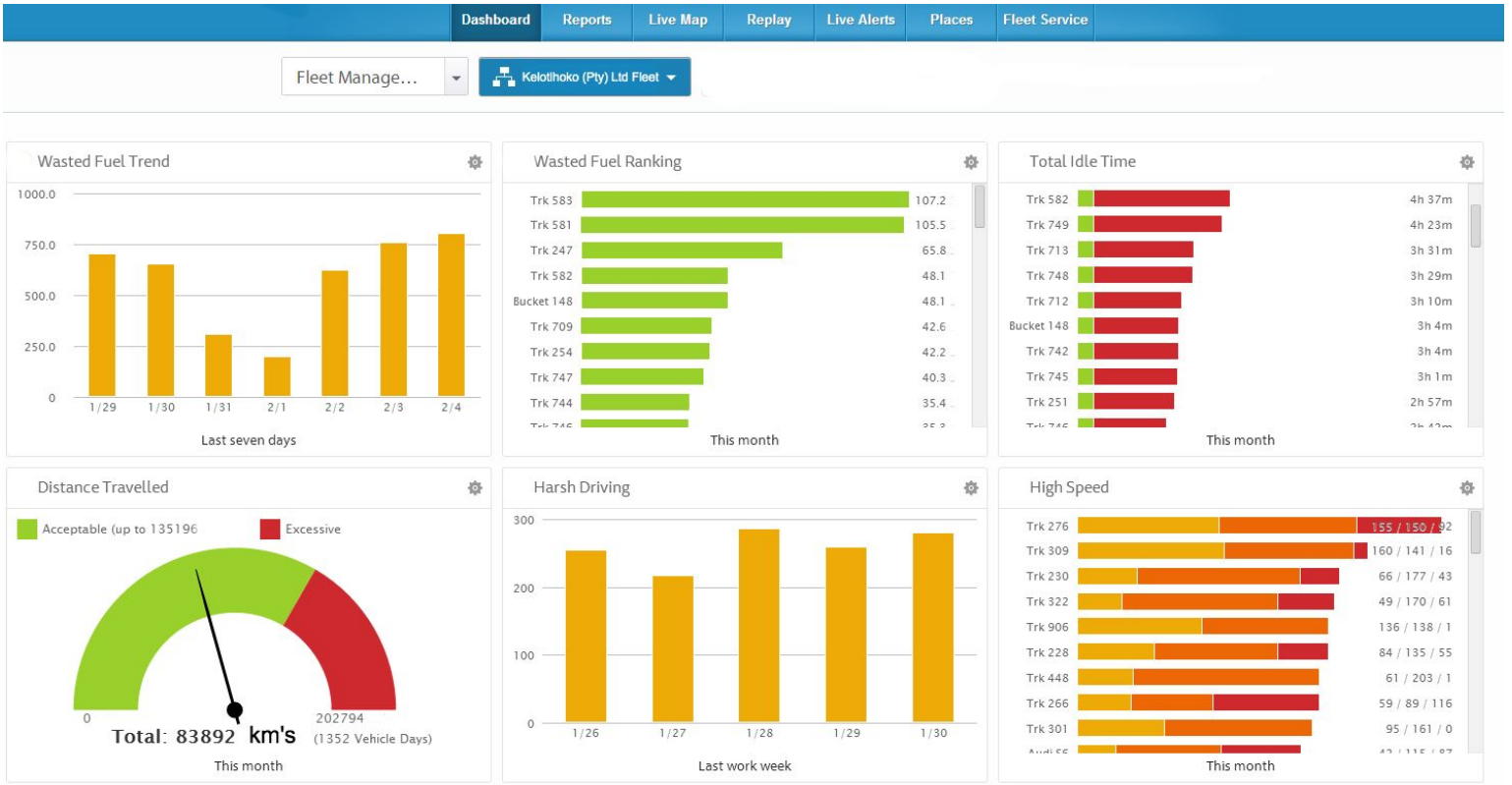

Fig 2. **Vehicle Detail Report**

The vehicle detail report displays a further breakdown and detailed information of an individual asset. The detailed report allows the viewing of certain logs including the Trips that a vehicle has made (geo-locates and provides a map view) , the events of the vehicle (a log of exactly where and when was the vehicle re-fueled) and a drill down of the fuel usage using complex algorithms to come up with the average fuel spend.

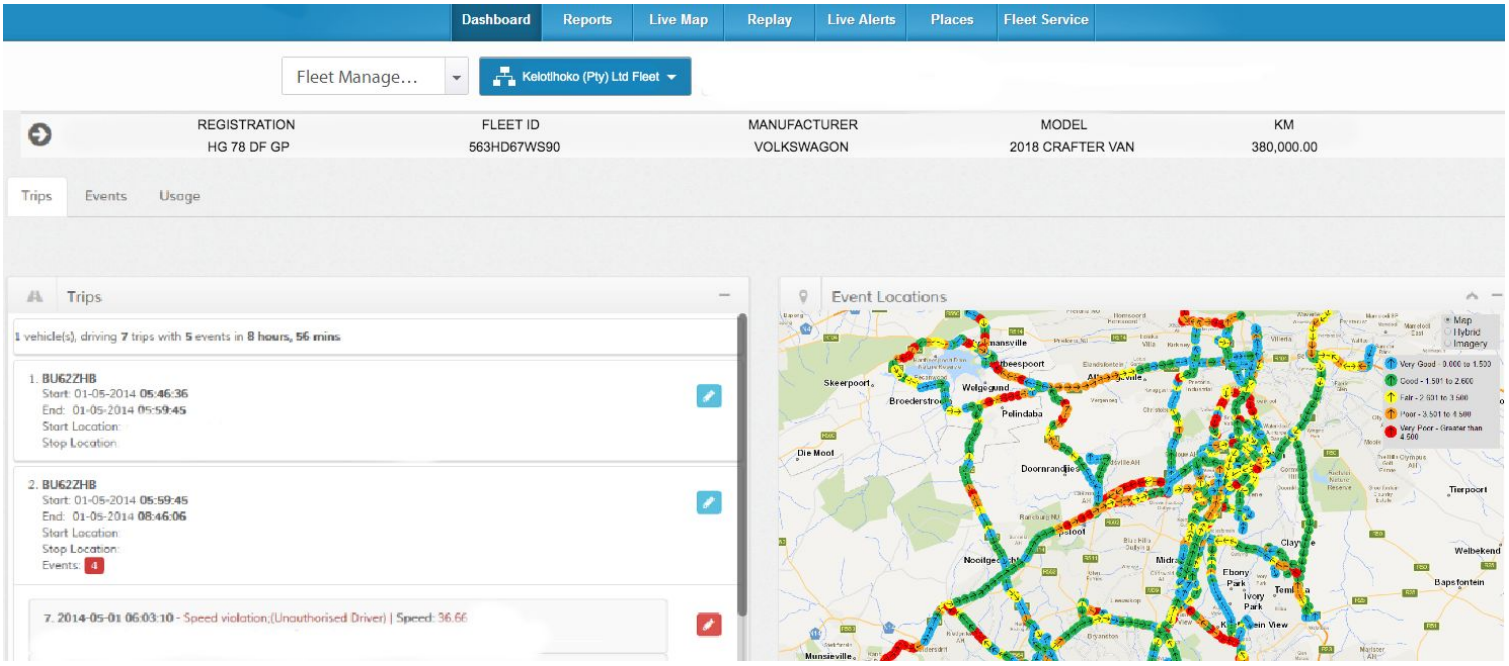

Fig 3. **Motorist/Driver Detail Report**

The motorist report is generated as per driver and is linked to a vehicle that the driver utilizes. The driver carries a mobile application which will present him with all his current reports (also viewable from the back office dashboard by the administrator).

The report is mainly centered around the driver and can measure the impact that the driver has towards the wellbeing of the vehicle/asset in question, using an inspection tool (which is embedded on the application) as well as other information such as Fuel Entries, Service Log, Issues and a driving status (Good, Fair or Bad) depending on the driving data logged.

Fig 4. **Asset Map**

Both the dashboard (back office system) and the mobile application offer a tracking map of either a specific asset (vehicle) and an overview of the entire collection of assets (fleet). The map allows the logging of distances travelled, real time gps tracking, alerts based on geo-fencing and restriction or danger zones, etc.

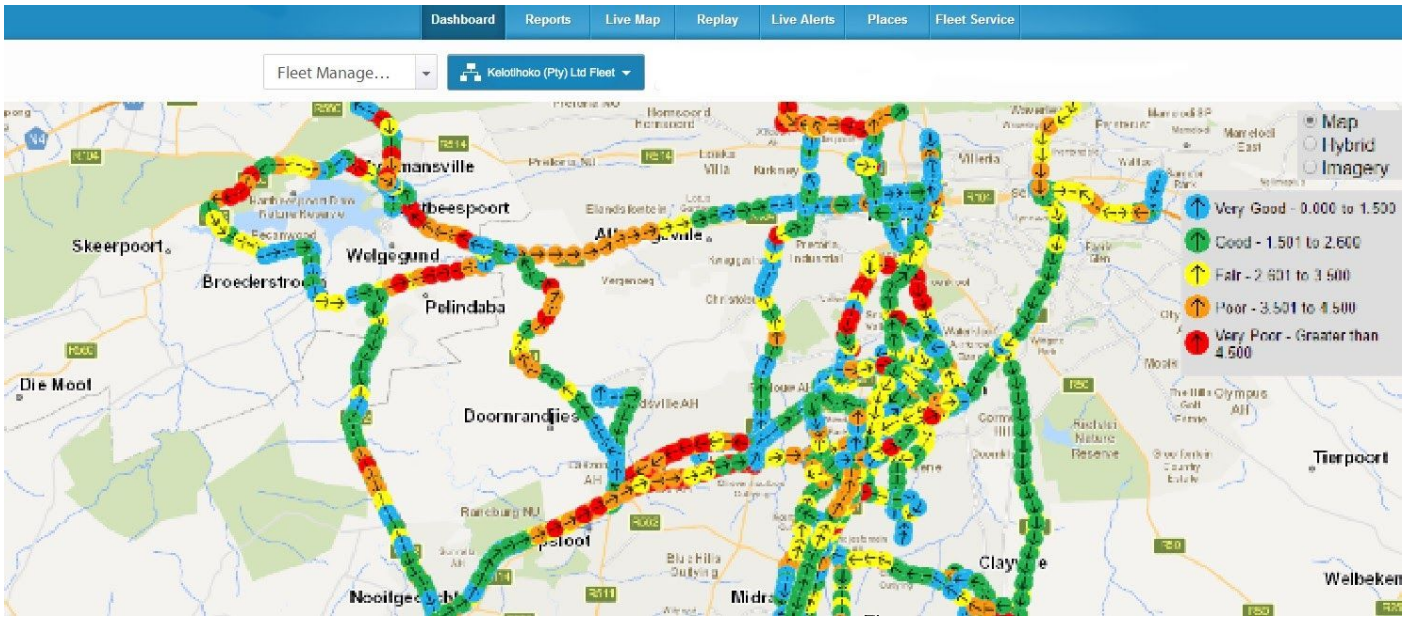

Fig 5. **Integrated Report (via Digitraffic Integration)**

With integration to the Digitraffic system, a vehicle and a driver will be able to be queried through the same **IFFAMS** to get a report of the current Disk Status (Expired or Not), drivers outstanding tickets and a log of the vehicle's outstanding tickets, of which payments can be made through the digitraffic portal.