CLAIMS

We Claim,

1. A system comprising:

   a vehicle unit (301) to determine a plurality of parameters relating to movement of a first vehicle (302);

   a wearable device (220A-220N) to store and append at least one health parameter of a wearer of the wearable device (220A-220N) to the plurality of parameters relating to the movement of the first vehicle (302);

   a mobile device (230A-230N) connected to the vehicle unit (301) and the wearable device (220A-220N) to store the health parameter and the plurality of parameters relating to the movement of the first vehicle (302);

   a central server (270) to process and generate a driver index and a comparison parameter of the first vehicle from the health parameters and the plurality of parameters relating to the movement of the first vehicle (302); and

   a data storage (280) to store the processed information from the central server (270), wherein the vehicle unit (301), the wearable device (220A-220N) and the mobile device (230A-230N) are connected through a first network (240) and a second network (250) while the central server (270) is connected through a third network (260) to set out indications and warnings related to characteristic, behavior and tendency of the first vehicle movement to nearby vehicles (160A-60N) in its vicinity.

2. The system of claim 1, wherein the vehicle unit (301) further comprising:

   a communication module (310) to transmit and receive a first data to and from the first, second and third networks (240, 250 and 260);

   a network or array of sensors (320) to sense and capture a signal that determines a motional behavior, a pattern and characteristic, a tendency parameter of the first vehicle (302);

   at least one vehicle built-in component (350) to detect a condition and a status of the first vehicle (302);

   a memory (330) to save a second data received from the vehicle built-in components (350);

   a controller (340) to process and transfer the first and second data to at least one of the wearable device (220A-220N), the mobile device (230A-230N) and the central server (270); and

   a communication bus (360) to interface the vehicle built-in components (350) to the vehicle unit (301).

3. The system of claim 2, wherein the plurality of parameters are determined through the array of sensors (320) mounted on the first vehicle (302) and are associated to a profile of the wearer of the wearable device (220A-220N) at a time of determination.
4. They system of claim 3, wherein the array of sensors (320) comprises at least one of an inertial avigation sensor, a proximity sensor, an accelerometer, a gyroscope, a motion sensor, an infrared sensor, a Lidar, a Radar and a camera to determine the plurality of parameters relating to the movement of the first vehicle (302).
5. The system of claim 4, wherein the condition and status of the first vehicle (302) comprises at least one of an ignition status, an engine rpm, a speed, a load, a cabin temperature, an occupancy, an engine temperature, a fuel and its type, an engine type, an engine make, a braking and gear assembly.
6. The system of claim 5, wherein the plurality of parameters comprises at least one of the motional behavior, the pattern and characteristics and the tendency parameters such as speed, brake, drift, jerks and swing of the first vehicle (302).
7. The system of claim 6, wherein the wearable device (220A-220N) and the mobile device (230A-230N) receives the driver index associated with other vehicles (160A-160N) to set out the indications and warnings to draw attention of the wearer of the approaching or nearby vehicle (160A-160N).
8. A method of determining a driver index comprising:
   determining a first set of value indexes (510) for a first set of parameters for each driver;
   determining a second set of value indexes of a first parameter (520) for all users and computing a median value;
   comparing the first set of indexes with the second set of indexes (530) associated with a first driver with the median of that index;
   generating a driver quality value (540) for the index;
   segregating the driver quality value (550) for the index with respect to a driver age value;
   assigning a risk index factor (560) to enhance or decrease the driver quality value of each age bucket; and
   triggering an action for a notification (570) when one or more driver in a system comes in vicinity of the other driver.
9. A method, system and apparatus providing one or more features as described in the paragraphs of this specification.

Claims

We Claim,

1. A system for connecting drivers of non-autonomous vehicles, said system comprising:

a vehicle unit (301) to determine a plurality of parameters relating to movement of a first vehicle (302), wherein the vehicle unit (301) comprising:

a communication module (310) configured to transmit and receive a first data to and from first, second and third networks (240, 250 and 260), characterized in that:

an array of sensors (320) configured to sense and capture a signal that determines a motional behavior, a pattern and characteristic, and a tendency parameter of the first vehicle (302),

a wearable device (220A-220N) to store and append at least one health parameter of a wearer of the wearable device (220A-220N) to the plurality of parameters relating to the movement of the first vehicle (302);

a mobile device (230A-230N) connected to the vehicle unit (301) and the wearable device (220A-220N) to store the health parameter and the plurality of parameters relating to the movement of the first vehicle (302);

a central server (270) to process and generate a driver index and a comparison parameter of the first vehicle from the health parameters and the plurality of parameters relating to the movement of the first vehicle (302), wherein the array of sensors (320) is configured to capture proximity of the vehicle and road characteristics in real-time manner, wherein one sensor from the array of sensors (320) is placed adjacent to another sensor to sense and capture the proximity value simultaneously and to assist a microcontroller (340) for determining the proximity between the vehicles; and

a data storage (280) to store the processed information from the central server (270), wherein the vehicle unit (301), the wearable device (220A-220N) and the mobile device (230A-230N) are connected through a first network (240) and a second network (250) while the central server (270) is connected through a third network (260) to set out indications and warnings related to characteristic, behavior and tendency of the first vehicle movement to nearby vehicles (160A-60N) in its vicinity.

2. The system of claim 1, wherein the vehicle unit (301) comprising:

a memory (330) to save a second data received from the vehicle built-in components (350); a controller (340) to process and transfer the first and second data to at least one of the wearable device (220A-220N), the mobile device (230A-230N) and the central server (270); and

a communication bus (360) to interface the vehicle built-in components (350) to the vehicle unit (301).

3. The system as claimed in claim 1, wherein the plurality of parameters is determined through the array of sensors (320) mounted on the first vehicle (302) and are associated to a profile of the wearer of the wearable device (220A-220N) at a time of determination.
4. The system as claimed in claim 3, wherein the array of sensors (320) comprises at least one of an inertial avigation sensor, a proximity sensor, an accelerometer, a gyroscope, a motion sensor, an infrared sensor, a Lidar, a Radar and a camera to determine the plurality of parameters relating to the movement of the first vehicle (302).
5. The system as claimed in claim 4, wherein the condition and status of the first vehicle (302) comprises at least one of an ignition status, an engine rpm, a speed, a load, a cabin temperature, an occupancy, an engine temperature, a fuel and its type, an engine type, an engine make, a braking and gear assembly.
6. The system as claimed in claim 5, wherein the plurality of parameters comprises at least one of the motional behaviors, the pattern and characteristics and the tendency parameters such as speed, brake, drift, jerks and swing of the first vehicle (302).
7. The system as claimed in claim 6, wherein the wearable device (220A-220N) and the mobile device (230A-230N) receives the driver index associated with other vehicles (160A-160N) to set out the indications and warnings to draw attention of the wearer of the approaching or nearby vehicle (160A-160N).
8. A method of determining a driver index, said method comprising:

determining a first set of value indexes (510) for a first set of parameters for each driver;

determining a second set of value indexes of a first parameter (520) for all users and computing a median value;

comparing the first set of indexes with the second set of indexes (530) associated with a first driver with the median of that index;

generating a driver quality value (540) for the index;

segregating the driver quality value (550) for the index with respect to a driver age value; assigning a risk index factor (560) to enhance or decrease the driver quality value of each age bucket; and

triggering an action for a notification (570) when one or more driver in a system comes in vicinity of the other driver.