

CLAIMS

1. A method for detecting violation of a driving-related law, the method comprising:
 - producing, by at least one camera, at least one image of a vehicle;
 - analyzing, by an analysis engine, the at least one image;
 - identifying, by the analysis engine, based on analyzing the at least one image, a physical position of a driver of the vehicle within the vehicle;
 - identifying, by the analysis engine, based on analyzing the at least one image, a direction of a gaze of the driver;
 - determining, by the analysis engine, that at least one of the physical position of the driver within the vehicle and the direction of the gaze of the driver are associated with a violation of a driving-related law; and
 - transmitting, by a citation management component, a notification of the association between the at least one of the physical position of the driver and the direction of the gaze of the driver and the violation, based upon the determination.
2. The method of claim 1, wherein producing further comprises producing at least one video of the vehicle.
3. The method of claim 1, wherein producing further comprises producing at least one still image of the vehicle.
4. The method of claim 1, wherein producing further comprises producing, by a light detection and ranging (LIDAR) camera, the at least one image of the vehicle.
5. The method of claim 1, wherein producing further comprises producing, by an infrared (IR) camera, the at least one image of the vehicle.
6. The method of claim 1, wherein producing further comprises producing, by the at least one camera, the at least one image of the vehicle upon receiving a signal from a triggering device.
7. The method of claim 1, wherein producing further comprises producing, by the at least one camera, the at least one image of the vehicle, the at least one

image including a view of the vehicle looking through a windshield of the vehicle and downwards towards a seat of the vehicle.

8. The method of claim 1 further comprising, before analyzing, by the analysis engine, the at least one image, combining, by the analysis engine, a plurality
5 of images of the vehicle.
9. The method of claim 1, wherein analyzing further comprises analyzing, by a machine learning component of the analysis engine, the at least one image.
10. The method of claim 1, wherein analyzing the at least one image further comprises identifying a portion of the at least one image associated with a
10 driver's position within the vehicle.
11. The method of claim 10, wherein analyzing the at least one image further comprises comparing the identified portion of the at least one image with an image of a driver placing at least one hand on a steering wheel of a second vehicle.
- 15 12. The method of claim 11, wherein comparing the identified portion of the at least one image with an image of the driver placing at least one hand on the steering wheel of the second vehicle further comprises performing a pixel-by-pixel comparison.
13. The method of claim 1, wherein identifying further comprises identifying a
20 location of an object within the vehicle.
14. The method of claim 13, wherein determining further comprises determining that a combination of the location of the object and the physical position of the driver within the vehicle is associated with a violation of a driving-related law.
15. The method of claim 13, wherein identifying further comprises identifying a
25 location of a mobile device within the vehicle.
16. The method of claim 13, wherein identifying further comprises identifying a location of a firearm within the vehicle.
17. The method of claim 1, wherein transmitting further comprises transmitting, by the citation management component, the notification further comprises
30 transmitting the notification to a law enforcement officer.
18. The method of claim 1, wherein transmitting further comprises transmitting, by the citation management component, the notification further comprises transmitting the notification to an owner of the vehicle.

19. The method of claim 1, wherein transmitting further comprises transmitting the notification further comprises modifying a display on a user interface of a device accessed by a law enforcement officer.
20. A method for detecting violation of a driving-related law, the method
- 5 comprising:
- producing, by at least one camera, at least one image of a vehicle;
- analyzing, by an analysis engine, the at least one image;
- identifying, by the analysis engine, based on analyzing the at least one
- 10 image, a pose of the driver of the vehicle within the vehicle;
- determining, by the analysis engine, that the pose of the driver is
- associated with a violation of a driving-related law; and
- transmitting, by a citation management component, a notification of
- the association between the pose of the driver and the violation, based upon
- the determination.